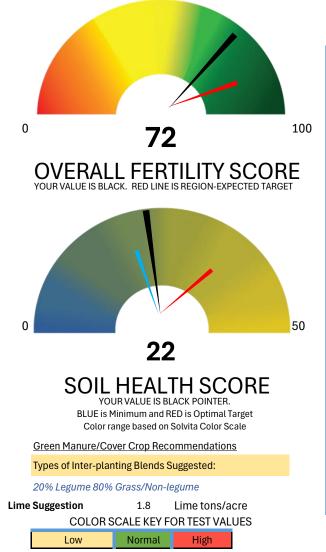




Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	88.8	Optimal
Solvita Response	(0-5)	4.15	Medium
Soil Amino-N	ppm	55	Medium
Crumb Aggregates	Vol %	24	Low
Scoop Bulk Density	g/cc	0.87	Optimal
Total Carbon	%	0.627	Low



Account / Sample ID:	3433 / 12514.0
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *
Your Sample:	Soil: Tree2 T1 R7 Z1
Received / Reported:	09/Apr/24 28/May/24
Intended Crop:	General Crops

Nutrients as: lb/a	Interpretative Guidelines		Est Carbon:	
	<u>N</u>	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	107	108	543	
Crop Use:	75	35	35	10,868
Difference:	0	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	16.3

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	3
Est. Seasonal Biological N-Release	lb/a	102
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	107
Likelihood of N-Response based on Org-N	Rating	Likely

Extractable Nutrier	nts	
Phosphorus , Extractable P	mg kg	27
Phosphorus - Carbonate Ext-P	mg kg	3.6
Potassium - Extractable K	mg kg	261
Calcium - Extractable Ca	mg kg	1290
Magnesium - Extractable Mg	mg kg	198
Sodium - Extractable Na	mg kg	70
Rating Factors		
Nutrient Index, Scale 0 - 100	Rating	100%
Most Limiting Factor		None
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	8.3%

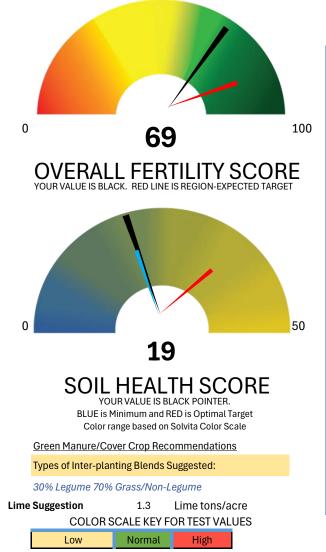
Other Factors				
pH in water 1:1	Unit	5.988		
Optional test (buffer pH)	Unit	6.281		
Water Soluble Carbon	mg kg	365		
Water Soluble C:N (WSOC:NO3-N)	Unit	132		
Aluminum, Extractable	mg kg	280		
Iron, Extractable (Optional)	mg kg	90		

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	61.0	Optimal
Solvita Response	(0 - 5)	3.75	Medium
Soil Amino-N	ppm	36	Low
Crumb Aggregates	Vol %	25	Medium
Scoop Bulk Density	g/cc	0.89	Optimal
Total Carbon	%	0.330	Low



3433 / 12514.1
40 / APPALACHIAN HIGHLANDS
Inceptisol-Udepts / Alfisol-Aqualfs / *
Soil: Tree6 T2 R8 Z2
09/Apr/24 28/May/24

Nutrients as: lb/a	Interpretative Guidelines		Est Carbon:	
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	74	114	529	
Crop Use:	75	35	35	5,896
Difference:	1	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	13.0

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	2
Est. Seasonal Biological N-Release	lb/a	70
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	74
Likelihood of N-Response based on Org-N	Rating	Likely

Extractable Nutrients				
mg kg	28			
mg kg	2.8			
mg kg	247			
mg kg	1122			
mg kg	137			
mg kg	39			
Rating	100%			
	Ν			
Marginal	9.4%			
	mg kg mg kg mg kg mg kg mg kg mg kg Rating			

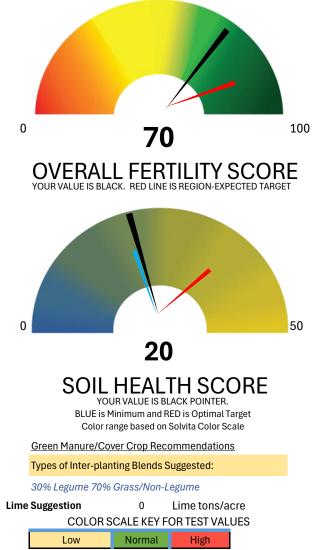
Other Factors				
pH in water 1:1	Unit	5.962		
Optional test (buffer pH)	Unit	6.453		
Water Soluble Carbon	mg kg	336		
Water Soluble C:N (WSOC:NO3-N)	Unit	150		
Aluminum, Extractable	mg kg	305		
Iron, Extractable (Optional)	mg kg	72		

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	64.1	Optimal
Solvita Response	(0 - 5)	3.83	Medium
Soil Amino-N	ppm	0	Low
Crumb Aggregates	Vol %	23	Low
Scoop Bulk Density	g/cc	0.91	Optimal
Total Carbon	%	0.561	Low



Account / Sample ID:	3433 / 12514.2
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *
Your Sample:	Soil: Tree10 T2 R7 Z2
Received / Reported:	09/Apr/24 28/May/24
Intended Crop:	General Crops

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	80	100	509	
Crop Use:	75	35	35	10,173
Difference:	0	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	11.6

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	3
Est. Seasonal Biological N-Release	lb/a	74
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	80
Likelihood of N-Response based on Org-N	Rating	Likely

	_		
Extractable Nutrien	ts		
Phosphorus , Extractable P	mg kg	24	
Phosphorus - Carbonate Ext-P	mg kg	3.6	
Potassium - Extractable K	mg kg	234	
Calcium - Extractable Ca	mg kg	1129	
Magnesium - Extractable Mg	mg kg	172	
Sodium - Extractable Na	mg kg	50	
Rating Factors			
Nutrient Index, Scale 0 - 100	Rating	100%	
Most Limiting Factor		None	
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	8.5%	

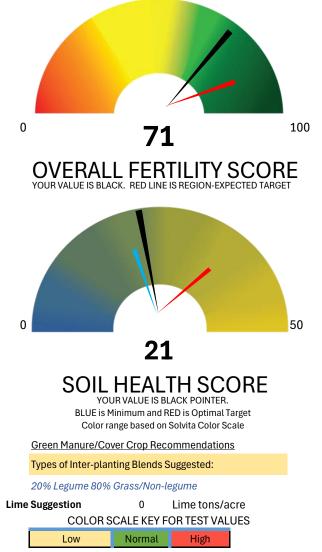
Other Factors			
pH in water 1:1	Unit	6.445	
Optional test (buffer pH)	Unit	6.630	
Water Soluble Carbon	mg kg	386	
Water Soluble C:N (WSOC:NO3-N)	Unit	117	
Aluminum, Extractable	mg kg	229	
Iron, Extractable (Optional)	mg kg	71	

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	59.1	Med-Low
Solvita Response	(0-5)	3.83	Medium
Soil Amino-N	ppm	61	Medium
Crumb Aggregates	Vol %	22	Low
Scoop Bulk Density	g/cc	0.98	Optimal
Total Carbon	%	1.130	Med-Low



Account / Sample ID:	3433 / 12514.3
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *
Very Commission	
Your Sample:	Soil: Tree14 T3 R9 Z3
Received / Reported:	09/Apr/24 28/May/24

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	N	<u>P2O5</u>	<u>K2O</u>	lb/a
Soil Supply:	74	180	959	
Crop Use:	75	35	35	22,223
Difference:	1	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	12.3

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	3
Est. Seasonal Biological N-Release	lb/a	68
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	74
Likelihood of N-Response based on Org-N	Rating	Likely

Extractable Nutrients				
Phosphorus , Extractable P	mg kg	40		
Phosphorus - Carbonate Ext-P	mg kg	3.4		
Potassium - Extractable K	mg kg	406		
Calcium - Extractable Ca	mg kg	1283		
Magnesium - Extractable Mg	mg kg	138		
Sodium - Extractable Na	mg kg	30		
Rating Factors				
Nutrient Index, Scale 0 - 100	Rating	99%		
Most Limiting Factor		N		
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	13.8%		

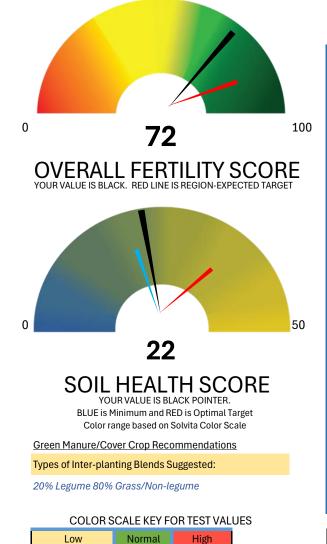
Other Factors			
pH in water 1:1	Unit	6.416	
Optional test (buffer pH)	Unit	6.639	
Water Soluble Carbon	mg kg	345	
Water Soluble C:N (WSOC:NO3-N)	Unit	109	
Aluminum, Extractable	mg kg	327	
Iron, Extractable (Optional)	mg kg	62	

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	79.3	Optimal
Solvita Response	(0-5)	4.07	Medium
Soil Amino-N	ppm	14	Low
Crumb Aggregates	Vol %	25	Medium
Scoop Bulk Density	g/cc	0.91	Optimal
Total Carbon	%	0.522	Low



Account / Sample ID:3433 / 12514.4Rainfall / Zone:40 / APPALACHIAN HIGHLANDSSoil Orders:Inceptisol-Udepts / Alfisol-Aqualfs / *Your Sample:Soil: Tree18 T3 R8 Z3Received / Reported:09/Apr/24 | 28/May/24Intended Crop:General Crops

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	97	141	701	
Crop Use:	75	35	35	9,500
Difference:	0	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	12.7

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	3
Est. Seasonal Biological N-Release	lb/a	91
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	97
Likelihood of N-Response based on Org-N	Rating	Likely

Extractable Nutrients	S		
Phosphorus , Extractable P	mg kg	34	
Phosphorus - Carbonate Ext-P	mg kg	3.4	
Potassium - Extractable K	mg kg	321	
Calcium - Extractable Ca	mg kg	1557	
Magnesium - Extractable Mg	mg kg	210	
Sodium - Extractable Na	mg kg	72	
Rating Factors			
Nutrient Index, Scale 0 - 100	Rating	100%	
Most Limiting Factor		None	
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	8.6%	

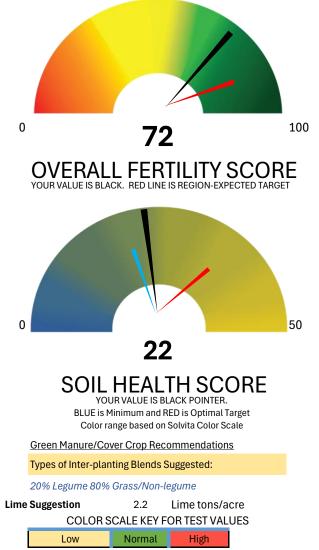
Other Factors			
pH in water 1:1	Unit	6.683	
Optional test (buffer pH)	Unit	6.793	
Water Soluble Carbon	mg kg	411	
Water Soluble C:N (WSOC:NO3-N)	Unit	125	
Aluminum, Extractable	mg kg	331	
Iron, Extractable (Optional)	mg kg	81	

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	59.3	Med-Low
Solvita Response	(0-5)	3.83	Medium
Soil Amino-N	ppm	26	Low
Crumb Aggregates	Vol %	26	Medium
Scoop Bulk Density	g/cc	0.98	Optimal
Total Carbon	%	1.180	Med-Low



Account / Sample ID:	3433 / 12514.5		
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS		
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *		
Your Sample:	Soil: Tree22 T3 R7 Z3		
Received / Reported:	09/Apr/24 28/May/24		
Intended Crop:	General Crops		

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	<u>N</u>	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	72	126	648	
Crop Use:	75	35	35	23,128
Difference:	3	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	16.8

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	2
Est. Seasonal Biological N-Release	lb/a	68
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	72
Likelihood of N-Response based on Org-N	Rating	Likely

Extractable Nutrien	ts		
Phosphorus , Extractable P	mg kg	28	
Phosphorus - Carbonate Ext-P	mg kg	3.3	
Potassium - Extractable K	mg kg	275	
Calcium - Extractable Ca	mg kg	1122	
Magnesium - Extractable Mg	mg kg	163	
Sodium - Extractable Na	mg kg	74	
Rating Factors			
Nutrient Index, Scale 0 - 100	Rating	99%	
Most Limiting Factor		N	
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	10.1%	

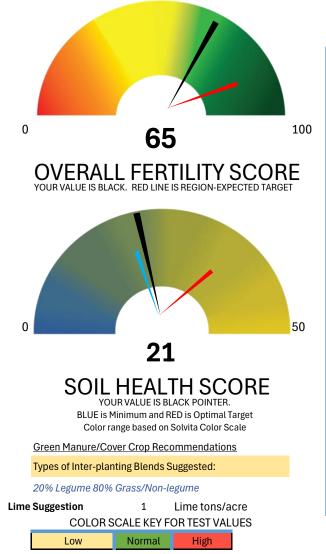
Other Factors			
pH in water 1:1	Unit	5.761	
Optional test (buffer pH)	Unit	6.122	
Water Soluble Carbon	mg kg	401	
Water Soluble C:N (WSOC:NO3-N)	Unit	179	
Aluminum, Extractable	mg kg	292	
Iron, Extractable (Optional)	mg kg	86	

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	39.6	Med-Low
Solvita Response	(0-5)	3.32	Medium
Soil Amino-N	ppm	61	Medium
Crumb Aggregates	Vol %	29	Medium
Scoop Bulk Density	g/cc	0.94	Optimal
Total Carbon	%	0.771	Low



Account / Sample ID:	3433 / 12514.6		
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS		
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *		
Your Sample:	Soil: Tree26 T4 R9 Z4		
Received / Reported:	09/Apr/24 28/May/24		
Intended Crop:	General Crops		

Nutrients as: lb/a	Interpretative Guidelines		Est Carbon:	
	<u>N</u>	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	49	85	451	
Crop Use:	75	35	35	14,546
Difference:	26	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	11.7

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	2
Est. Seasonal Biological N-Release	lb/a	46
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	49
Likelihood of N-Response based on Org-N	Rating	Likely

Extractable Nutrients				
mg kg	20			
mg kg	3.2			
mg kg	199			
mg kg	1084			
mg kg	145			
mg kg	67			
Rating Factors				
Rating	89%			
	Ν			
Marginal	7.7%			
	mg kg mg kg mg kg mg kg mg kg mg kg Rating			

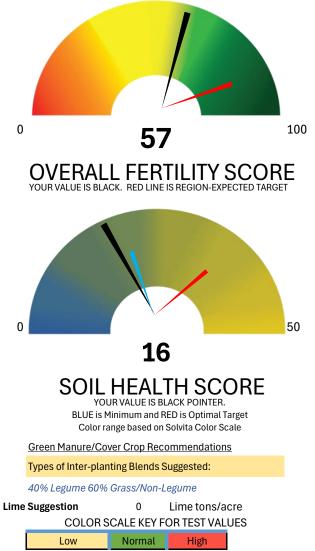
Other Factors			
pH in water 1:1	Unit	6.090	
Optional test (buffer pH)	Unit	6.572	
Water Soluble Carbon	mg kg	391	
Water Soluble C:N (WSOC:NO3-N)	Unit	184	
Aluminum, Extractable	mg kg	277	
Iron, Extractable (Optional)	mg kg	72	

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	28.0	V Low
Solvita Response	(0-5)	2.97	Low
Soil Amino-N	ppm	0	Low
Crumb Aggregates	Vol %	21	Low
Scoop Bulk Density	g/cc	0.98	Optimal
Total Carbon	%	0.331	Low



Account / Sample ID:	3433 / 12514.7		
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS		
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *		
Your Sample:	Soil: Tree30 T4 R8 Z4		
Received / Reported:	09/Apr/24 28/May/24		
Intended Crop:	General Crops		

Nutrients as: lb/a	Interpretative Guidelines		Est Carbon:	
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	35	76	365	
Crop Use:	75	35	35	6,510
Difference:	40	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Normal	10.7

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	2
Est. Seasonal Biological N-Release	lb/a	32
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	35
Likelihood of N-Response based on Org-N	Rating	Likely

Extractable Nutrien	ts			
Phosphorus , Extractable P	mg kg	17		
Phosphorus - Carbonate Ext-P	mg kg	3.1		
Potassium - Extractable K	mg kg	154		
Calcium - Extractable Ca	mg kg	1082		
Magnesium - Extractable Mg	mg kg	144		
Sodium - Extractable Na	mg kg	47		
Rating Factors				
Nutrient Index, Scale 0 - 100	Rating	82%		
Most Limiting Factor		N		
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Optimal	6.0%		

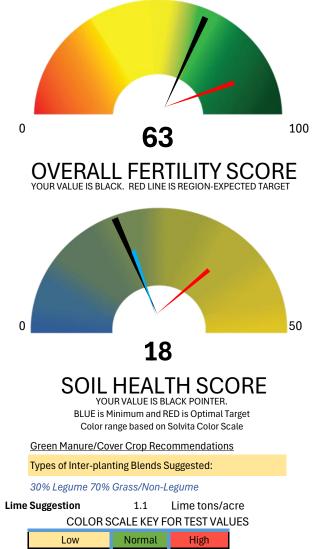
Other Factors				
pH in water 1:1	Unit	6.408		
Optional test (buffer pH)	Unit	6.655		
Water Soluble Carbon	mg kg	367		
Water Soluble C:N (WSOC:NO3-N)	Unit	226		
Aluminum, Extractable	mg kg	254		
Iron, Extractable (Optional)	mg kg	68		

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	41.8	Med-Low
Solvita Response	(0-5)	3.52	Medium
Soil Amino-N	ppm	0	Low
Crumb Aggregates	Vol %	16	Low
Scoop Bulk Density	g/cc	1.06	Optimal
Total Carbon	%	0.834	Low



(warning may be either too high or too low)

Account / Sample ID:	3433 / 12514.8			
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS			
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *			
Your Sample:	Soil: Tree34 T4 R7 Z4			
Your Sample: Received / Reported:	Soil: Tree34 T4 R7 Z4 09/Apr/24 28/May/24			

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	51	109	571	
Crop Use:	75	35	35	17,625
Difference:	24	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	12.2

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	2
Est. Seasonal Biological N-Release	lb/a	48
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	51
Likelihood of N-Response based on Org-N	Rating	Likely

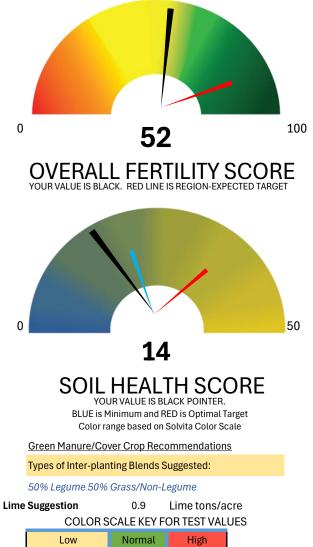
s			
mg kg	23		
mg kg	2.5		
mg kg	225		
mg kg	1134		
mg kg	143		
mg kg	48		
Rating Factors			
Rating	89%		
	Ν		
Marginal	8.4%		
	mg kg mg kg mg kg mg kg mg kg Rating		

Other Factors				
pH in water 1:1	Unit	6.289		
Optional test (buffer pH)	Unit	6.542		
Water Soluble Carbon	mg kg	346		
Water Soluble C:N (WSOC:NO3-N)	Unit	192		
Aluminum, Extractable	mg kg	308		
Iron, Extractable (Optional)	mg kg	89		





Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	14.1	V Low
Solvita Response	(0-5)	2.38	Low
Soil Amino-N	ppm	0	Low
Crumb Aggregates	Vol %	12	Low
Scoop Bulk Density	g/cc	1.17	Optimal
Total Carbon	%	1.260	Med-Low



Account / Sample ID:	3433 / 12514.9		
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS		
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *		
Your Sample:	Soil: Tree38 T5 R9 Z5		
Received / Reported:	09/Apr/24 28/May/24		
Intended Crop:	General Crops		

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	<u>N</u>	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	21	104	561	
Crop Use:	75	35	35	29,400
Difference:	54	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	10.5

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	3
Est. Seasonal Biological N-Release	lb/a	16
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	21
Likelihood of N-Response based on Org-N	Rating	Likely

Extractable Nutrients	i	
Phosphorus , Extractable P	mg kg	19
Phosphorus - Carbonate Ext-P	mg kg	2.6
Potassium - Extractable K	mg kg	200
Calcium - Extractable Ca	mg kg	923
Magnesium - Extractable Mg	mg kg	141
Sodium - Extractable Na	mg kg	36
Rating Factors		
Nutrient Index, Scale 0 - 100	Rating	76%
Most Limiting Factor		Ν
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	8.9%

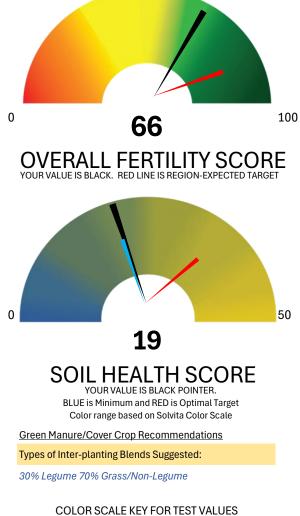
Other Factors				
pH in water 1:1	Unit	6.165		
Optional test (buffer pH)	Unit	6.591		
Water Soluble Carbon	mg kg	271		
Water Soluble C:N (WSOC:NO3-N)	Unit	102		
Aluminum, Extractable	mg kg	235		
Iron, Extractable (Optional)	mg kg	80		

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	47.2	Med-Low
Solvita Response	(0-5)	3.64	Medium
Soil Amino-N	ppm	62	Medium
Crumb Aggregates	Vol %	19	Low
Scoop Bulk Density	g/cc	1.05	Optimal
Total Carbon	%	0.545	Low



Low Normal High

(warning may be either too high or too low)

40 / APPALACHIAN HIGHLANDS		
s / *		

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	<u>N</u>	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	60	83	422	
Crop Use:	75	35	35	,445
Difference:	15	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	12.3

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	3
Est. Seasonal Biological N-Release	lb/a	54
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	60
Likelihood of N-Response based on Org-N	Rating	Likely

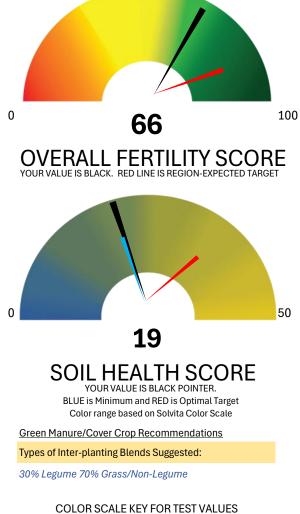
Extractable Nutrients				
mg kg	17			
mg kg	3.1			
mg kg	167			
mg kg	1185			
mg kg	175			
mg kg	20			
Rating Factors				
Rating	93%			
	N			
Optimal	5.8%			
	mg kg mg kg mg kg mg kg mg kg mg kg Rating			

Other Factors				
pH in water 1:1	Unit	6.557		
Optional test (buffer pH)	Unit	6.559		
Water Soluble Carbon	mg kg	352		
Water Soluble C:N (WSOC:NO3-N)	Unit	119		
Aluminum, Extractable	mg kg	262		
Iron, Extractable (Optional)	mg kg	77		





Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	45.1	Med-Low
Solvita Response	(0 - 5)	3.48	Medium
Soil Amino-N	ppm	0	Low
Crumb Aggregates	Vol %	21	Low
Scoop Bulk Density	g/cc	0.95	Optimal
Total Carbon	%	0.769	Low



Low Normal High

(warning may be either too high or too low)

3433 / 12515.1		
40 / APPALACHIAN HIGHLANDS		
Inceptisol-Udepts / Alfisol-Aqualfs / *		
Soil: Tree46 T5 R7 Z5		
09/Apr/24 28/May/24		
General Crops		

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	<u>N</u>	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	58	95	506	
Crop Use:	75	35	35	4,6
Difference:	17	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	11.2

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	4
Est. Seasonal Biological N-Release	lb/a	52
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	58
Likelihood of N-Response based on Org-N	Rating	Likely

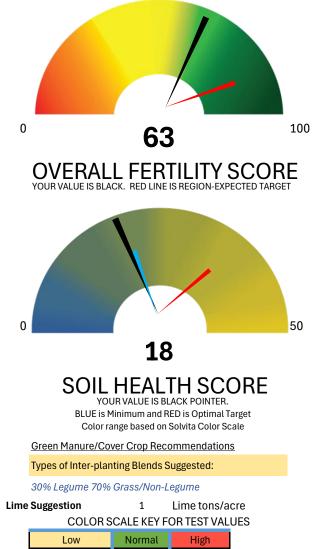
Extractable Nutrients				
Phosphorus , Extractable P	mg kg	22		
Phosphorus - Carbonate Ext-P	mg kg	3.2		
Potassium - Extractable K	mg kg	222		
Calcium - Extractable Ca	mg kg	1156		
Magnesium - Extractable Mg	mg kg	219		
Sodium - Extractable Na	mg kg	46		
Rating Factors				
Nutrient Index, Scale 0 - 100	Rating	93%		
Most Limiting Factor		Ν		
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	7.5%		

Other Factors				
pH in water 1:1	Unit	6.799		
Optional test (buffer pH)	Unit	6.716		
Water Soluble Carbon	mg kg	395		
Water Soluble C:N (WSOC:NO3-N)	Unit	110		
Aluminum, Extractable	mg kg	255		
Iron, Extractable (Optional)	mg kg	65		





Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	41.3	Med-Low
Solvita Response	(0-5)	3.40	Medium
Soil Amino-N	ppm	0	Low
Crumb Aggregates	Vol %	21	Low
Scoop Bulk Density	g/cc	0.97	Optimal
Total Carbon	%	0.712	Low



(warning may be either too high or too low)

Account / Sample ID:	3433 / 12515.2		
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS		
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *		
Your Sample:	Soil: Tree50 T1 R9 Z6		
Your Sample: Received / Reported:	Soil: Tree50 T1 R9 Z6 09/Apr/24 28/May/24		

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	51	96	489	
Crop Use:	75	35	35	3,8 3
Difference:	24	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	11.9

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	2
Est. Seasonal Biological N-Release	lb/a	48
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	51
Likelihood of N-Response based on Org-N	Rating	Likely

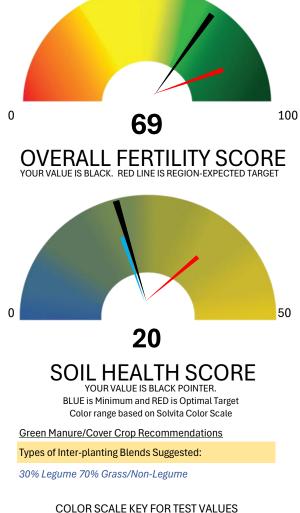
Extractable Nutrients				
Phosphorus , Extractable P	mg kg	22		
Phosphorus - Carbonate Ext-P	mg kg	2.7		
Potassium - Extractable K	mg kg	210		
Calcium - Extractable Ca	mg kg	1064		
Magnesium - Extractable Mg	mg kg	146		
Sodium - Extractable Na	mg kg	74		
Rating Factors				
Nutrient Index, Scale 0 - 100	Rating	90%		
Most Limiting Factor		Ν		
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	8.2%		

Other Factors				
pH in water 1:1	Unit	6.115		
Optional test (buffer pH)	Unit	6.553		
Water Soluble Carbon	mg kg	340		
Water Soluble C:N (WSOC:NO3-N)	Unit	157		
Aluminum, Extractable	mg kg	270		
Iron, Extractable (Optional)	mg kg	94		





Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	56.9	Med-Low
Solvita Response	(0-5)	3.79	Medium
Soil Amino-N	ppm	35	Low
Crumb Aggregates	Vol %	19	Low
Scoop Bulk Density	g/cc	0.99	Optimal
Total Carbon	%	0.596	Low



COLONS	CALL KLIT	ON ILSI VAL	UL
Low	Normal	High	

(warning may be either too high or too low)

Account / Sample ID:	3433 / 12515.3
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *
Your Sample:	Soil: Tree54 T1 R8 Z6
Received / Reported:	09/Apr/24 28/May/24
Intended Crop:	General Crops

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	<u>N</u>	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	70	103	522	
Crop Use:	75	35	35	,80
Difference:	5	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	11.4

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	3
Est. Seasonal Biological N-Release	lb/a	65
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	70
Likelihood of N-Response based on Org-N	Rating	Likely

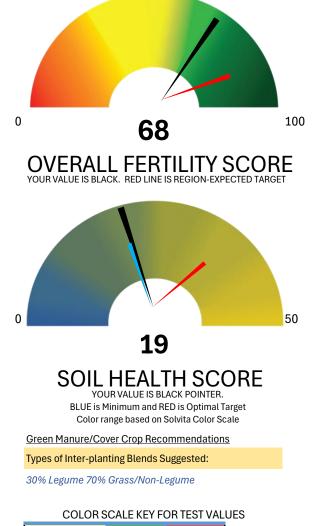
Extractable Nutrients				
mg kg	23			
mg kg	2.9			
mg kg	220			
mg kg	1236			
mg kg	164			
mg kg	90			
Rating Factors				
Rating	98%			
	N			
Marginal	7.5%			
	mg kg mg kg mg kg mg kg mg kg mg kg Rating			

Other Factors				
pH in water 1:1	Unit	6.560		
Optional test (buffer pH)	Unit	6.714		
Water Soluble Carbon	mg kg	373		
Water Soluble C:N (WSOC:NO3-N)	Unit	137		
Aluminum, Extractable	mg kg	273		
Iron, Extractable (Optional)	mg kg	67		





Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	54.5	Med-Low
Solvita Response	(0 - 5)	3.71	Medium
Soil Amino-N	ppm	47	Low
Crumb Aggregates	Vol %	24	Low
Scoop Bulk Density	g/cc	0.97	Optimal
Total Carbon	%	0.311	Low



Low Normal High

(warning may be either too high or too low)

3433 / 12515.4
40 / APPALACHIAN HIGHLANDS
Inceptisol-Udepts / Alfisol-Aqualfs / *
Soil: Tree58 T1 R7 Z6
09/Apr/24 28/May/24
General Crops

Nutrients as: lb/a	Interpretative Guidelines		Est Carbon:	
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	68	100	540	
Crop Use:	75	35	35	6,013
Difference:	7	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	11.3

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	3
Est. Seasonal Biological N-Release	lb/a	63
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	68
Likelihood of N-Response based on Org-N	Rating	Likely

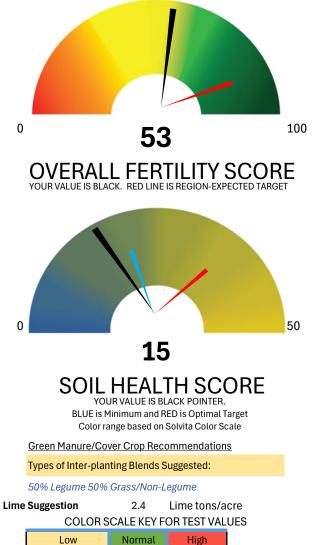
Extractable Nutrien	its		
Phosphorus , Extractable P	mg kg	22	
Phosphorus - Carbonate Ext-P	mg kg	3.3	
Potassium - Extractable K	mg kg	233	
Calcium - Extractable Ca	mg kg	1242	
Magnesium - Extractable Mg	mg kg	199	
Sodium - Extractable Na	mg kg	72	
Rating Factors			
Nutrient Index, Scale 0 - 100	Rating	97%	
Most Limiting Factor		N	
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	7.6%	

Other Factors			
pH in water 1:1	Unit	6.762	
Optional test (buffer pH)	Unit	6.745	
Water Soluble Carbon	mg kg	362	
Water Soluble C:N (WSOC:NO3-N)	Unit	113	
Aluminum, Extractable	mg kg	259	
Iron, Extractable (Optional)	mg kg	65	





Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	17.2	V Low
Solvita Response	(0-5)	2.50	Low
Soil Amino-N	ppm	0	Low
Crumb Aggregates	Vol %	20	Low
Scoop Bulk Density	g/cc	1.05	Optimal
Total Carbon	%	0.830	Low



(warning may be either too high or too low)

Account / Sample ID:	3433 / 12515.5
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *
Your Sample:	Soil: Tree62 T2 R9 Z7
Your Sample: Received / Reported:	Soil: Tree62 T2 R9 Z7 09/Apr/24 28/May/24

Nutrients as: lb/a	Interpretative Guidelines		Est Carbon:	
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	22	105	536	
Crop Use:	75	35	35	17,430
Difference:	53	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	16.4

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	1
Est. Seasonal Biological N-Release	lb/a	20
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	22
Likelihood of N-Response based on Org-N	Rating	Likely

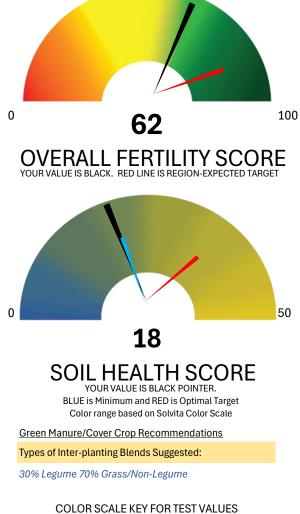
ŝ	
mg kg	22
mg kg	2.9
mg kg	213
mg kg	999
mg kg	144
mg kg	79
Rating	76%
	Ν
Marginal	8.8%
	mg kg mg kg mg kg mg kg mg kg Rating

Other Factors			
pH in water 1:1	Unit	6.152	
Optional test (buffer pH)	Unit	6.072	
Water Soluble Carbon	mg kg	292	
Water Soluble C:N (WSOC:NO3-N)	Unit	236	
Aluminum, Extractable	mg kg	248	
Iron, Extractable (Optional)	mg kg	79	





Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	38.0	Med-Low
Solvita Response	(0-5)	3.32	Medium
Soil Amino-N	ppm	0	Low
Crumb Aggregates	Vol %	20	Low
Scoop Bulk Density	g/cc	0.98	Optimal
Total Carbon	%	0.556	Low



Low Normal High

(warning may be either too high or too low)

3433 / 12515.6
40 / APPALACHIAN HIGHLANDS
Inceptisol-Udepts / Alfisol-Aqualfs / *
Soil: Tree66 T2 R8 Z7
09/Apr/24 28/May/24
General Crops

Nutrients as: lb/a	Interpretative Guidelines		Est Carbon:	
	<u>N</u>	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	46	104	548	
Crop Use:	75	35	35	10,935
Difference:	29	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	12.5

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	1
Est. Seasonal Biological N-Release	lb/a	44
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	46
Likelihood of N-Response based on Org-N	Rating	Likely

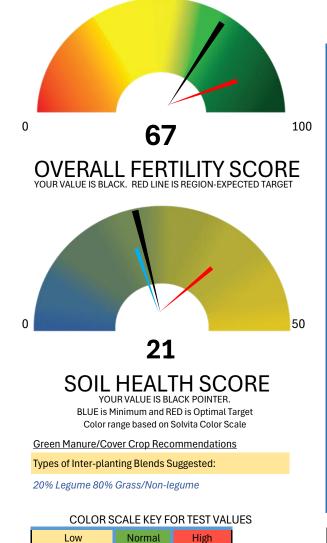
its	
mg kg	23
mg kg	2.8
mg kg	232
mg kg	1212
mg kg	205
mg kg	51
Rating	87%
	N
Marginal	7.7%
	mg kg mg kg mg kg mg kg mg kg mg kg Rating

Other Factors		
pH in water 1:1	Unit	6.553
Optional test (buffer pH)	Unit	6.610
Water Soluble Carbon	mg kg	430
Water Soluble C:N (WSOC:NO3-N)	Unit	302
Aluminum, Extractable	mg kg	281
Iron, Extractable (Optional)	mg kg	91





Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	49.8	Med-Low
Solvita Response	(0 - 5)	3.56	Medium
Soil Amino-N	ppm	0	Low
Crumb Aggregates	Vol %	28	Medium
Scoop Bulk Density	g/cc	0.92	Optimal
Total Carbon	%	0.866	Low



Account / Sample ID:3433 / 12515.7Rainfall / Zone:40 / APPALACHIAN HIGHLANDSSoil Orders:Inceptisol-Udepts / Alfisol-Aqualfs / *Your Sample:Soil: Tree70 T2 R7 Z7Received / Reported:09/Apr/24 | 28/May/24Intended Crop:General Crops

Nutrients as: lb/a	Interpretative Guidelines		Est Carbon:	
	<u>N</u>	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	60	108	580	
Crop Use:	75	35	35	15,992
Difference:	15	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	13.1

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	2
Est. Seasonal Biological N-Release	lb/a	57
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	60
Likelihood of N-Response based on Org-N	Rating	Likely

Extractable Nutrients			
mg kg	25		
mg kg	3.4		
mg kg	262		
mg kg	1168		
mg kg	252		
mg kg	36		
Rating	93%		
	N		
Marginal	8.5%		
	mg kg mg kg mg kg mg kg mg kg mg kg Rating		

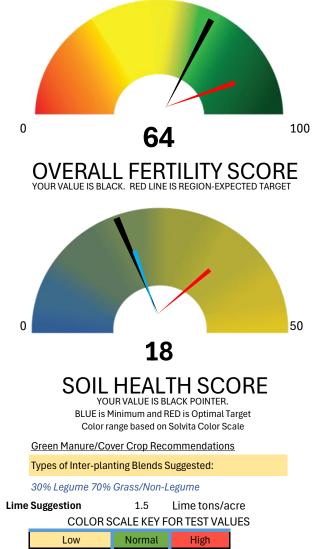
Other Factors		
pH in water 1:1	Unit	6.842
Optional test (buffer pH)	Unit	6.571
Water Soluble Carbon	mg kg	434
Water Soluble C:N (WSOC:NO3-N)	Unit	267
Aluminum, Extractable	mg kg	277
Iron, Extractable (Optional)	mg kg	83

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	48.9	Med-Low
Solvita Response	(0-5)	3.64	Medium
Soil Amino-N	ppm	0	Low
Crumb Aggregates	Vol %	10	Low
Scoop Bulk Density	g/cc	1.01	Optimal
Total Carbon	%	0.745	Low



Account / Sample ID:	3433 / 12515.8		
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS		
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *		
Your Sample:	Soil: Tree74 T3 R9 Z8		
Your Sample: Received / Reported:	Soil: Tree74 T3 R9 Z8 09/Apr/24 28/May/24		

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	58	106	568	
Crop Use:	75	35	35	15,099
Difference:	17	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	14.2

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	1
Est. Seasonal Biological N-Release	lb/a	56
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	58
Likelihood of N-Response based on Org-N	Rating	Likely

Extractable Nutrients			
Phosphorus , Extractable P	mg kg	23	
Phosphorus - Carbonate Ext-P	mg kg	3.1	
Potassium - Extractable K	mg kg	233	
Calcium - Extractable Ca	mg kg	1146	
Magnesium - Extractable Mg	mg kg	157	
Sodium - Extractable Na	mg kg	64	
Rating Factors			
Nutrient Index, Scale 0 - 100	Rating	93%	
Most Limiting Factor		Ν	
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	8.5%	

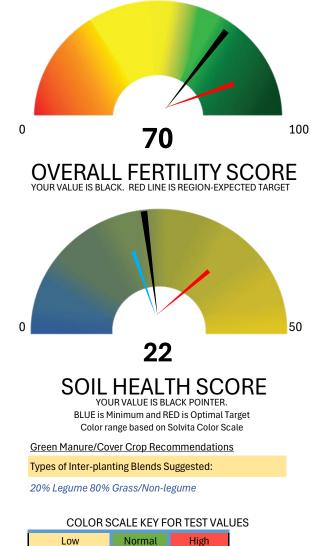
Other Factors				
pH in water 1:1	Unit	6.166		
Optional test (buffer pH)	Unit	6.371		
Water Soluble Carbon	mg kg	371		
Water Soluble C:N (WSOC:NO3-N)	Unit	342		
Aluminum, Extractable	mg kg	259		
Iron, Extractable (Optional)	mg kg	74		

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	53.0	Med-Low
Solvita Response	(0-5)	3.64	Medium
Soil Amino-N	ppm	80	Medium
Crumb Aggregates	Vol %	26	Medium
Scoop Bulk Density	g/cc	0.94	Optimal
Total Carbon	%	0.923	Low



Account / Sample ID:	3433 / 12515.9		
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS		
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *		
Your Sample:	Soil: Tree78 T3 R8 Z8		
Received / Reported:	09/Apr/24 28/May/24		
Intended Crop:	General Crops		

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	64	108	539	
Crop Use:	75	35	35	17,291
Difference:	11	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	12.6

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	2
Est. Seasonal Biological N-Release	lb/a	61
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	64
Likelihood of N-Response based on Org-N	Rating	Likely

Extractable Nutrients				
Phosphorus , Extractable P	mg kg	25		
Phosphorus - Carbonate Ext-P	mg kg	3.0		
Potassium - Extractable K	mg kg	240		
Calcium - Extractable Ca	mg kg	1391		
Magnesium - Extractable Mg	mg kg	218		
Sodium - Extractable Na	mg kg	88		
Rating Factors				
Nutrient Index, Scale 0 - 100	Rating	95%		
Most Limiting Factor		N		
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	7.0%		
0	Marginal	7.0%		

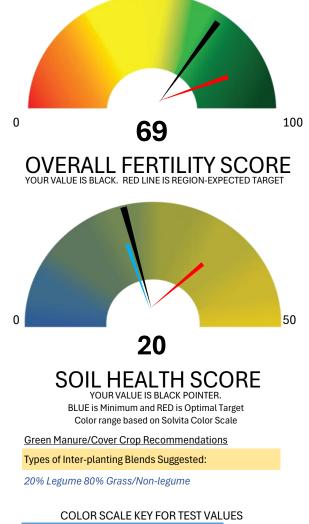
Other Factors			
pH in water 1:1	Unit	6.693	
Optional test (buffer pH)	Unit	6.720	
Water Soluble Carbon	mg kg	418	
Water Soluble C:N (WSOC:NO3-N)	Unit	230	
Aluminum, Extractable	mg kg	304	
Iron, Extractable (Optional)	mg kg	72	

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	57.4	Med-Low
Solvita Response	(0 - 5)	3.79	Medium
Soil Amino-N	ppm	48	Low
Crumb Aggregates	Vol %	21	Low
Scoop Bulk Density	g/cc	0.98	Optimal
Total Carbon	%	0.882	Low



Low Normal High

(warning may be either too high or too low)

Account / Sample ID:	3433 / 12516.0			
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS			
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *			
Your Sample:	Soil: Tree82 T3 R7 Z8			
Received / Reported:	09/Apr/24 28/May/24			
Intended Crop:	General Crops			

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	<u>N</u>	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	70	115	544	
Crop Use:	75	35	35	17,287
Difference:	5	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	12.3

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	2
Est. Seasonal Biological N-Release	lb/a	66
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	70
Likelihood of N-Response based on Org-N	Rating	Likely

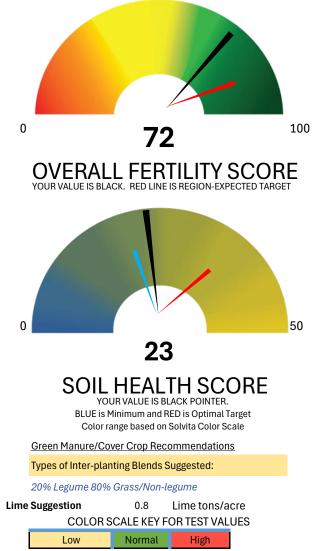
Extractable Nutrients				
mg kg	26			
mg kg	3.1			
mg kg	231			
mg kg	1304			
mg kg	205			
mg kg	54			
Rating Factors				
Rating	98%			
	Ν			
Marginal	7.2%			
	mg kg mg kg mg kg mg kg mg kg mg kg Rating			

Other Factors			
pH in water 1:1	Unit	6.583	
Optional test (buffer pH)	Unit	6.679	
Water Soluble Carbon	mg kg	335	
Water Soluble C:N (WSOC:NO3-N)	Unit	157	
Aluminum, Extractable	mg kg	277	
Iron, Extractable (Optional)	mg kg	74	





Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	57.9	Med-Low
Solvita Response	(0-5)	3.64	Medium
Soil Amino-N	ppm	0	Low
Crumb Aggregates	Vol %	34	Medium
Scoop Bulk Density	g/cc	0.86	Optimal
Total Carbon	%	1.260	Med-Low



3433 / 12516.1		
40 / APPALACHIAN HIGHLANDS		
Inceptisol-Udepts / Alfisol-Aqualfs / *		
Soil: Tree86 T4 R9 Z9		
09/Apr/24 28/May/24		
General Crops		

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	71	177	923	
Crop Use:	75	35	35	21,588
Difference:	4	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	14.6

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	2
Est. Seasonal Biological N-Release	lb/a	67
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	71
Likelihood of N-Response based on Org-N	Rating	Likely

Extractable Nutrients				
Phosphorus , Extractable P	mg kg	45		
Phosphorus - Carbonate Ext-P	mg kg	3.6		
Potassium - Extractable K	mg kg	449		
Calcium - Extractable Ca	mg kg	1546		
Magnesium - Extractable Mg	mg kg	232		
Sodium - Extractable Na	mg kg	37		
Rating Factors				
Nutrient Index, Scale 0 - 100	Rating	98%		
Most Limiting Factor		N		
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	11.9%		

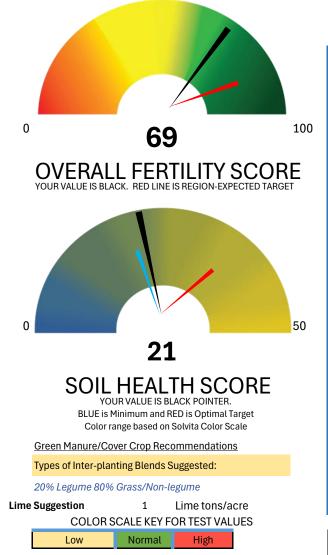
Other Factors			
pH in water 1:1	Unit	6.384	
Optional test (buffer pH)	Unit	6.637	
Water Soluble Carbon	mg kg	409	
Water Soluble C:N (WSOC:NO3-N)	Unit	175	
Aluminum, Extractable	mg kg	303	
Iron, Extractable (Optional)	mg kg	89	

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	46.5	Med-Low
Solvita Response	(0-5)	3.48	Medium
Soil Amino-N	ppm	33	Low
Crumb Aggregates	Vol %	28	Medium
Scoop Bulk Density	g/cc	0.92	Optimal
Total Carbon	%	0.848	Low



(warning may be either too high or too low)

Account / Sample ID:	3433 / 12516.2
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *
Your Sample:	Soil: Tree90 T4 R8 Z9
Received / Reported:	09/Apr/24 28/May/24
Intended Crop:	General Crops
intended Crop.	Oeneral Crops

Nutrients as: lb/a	Interpretative Guidelines		Est Carbon:	
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	67	114	569	
Crop Use:	75	35	35	15,603
Difference:	8	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	12.7

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	8
Est. Seasonal Biological N-Release	lb/a	54
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	67
Likelihood of N-Response based on Org-N	Rating	Likely

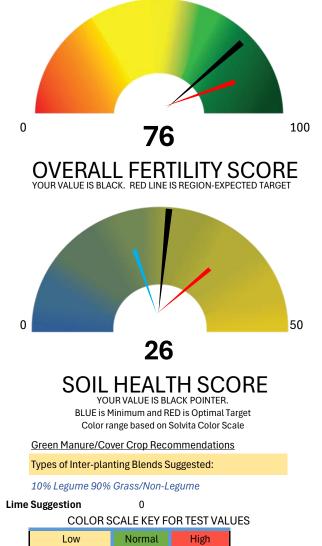
Extractable Nutrier	nts		
Phosphorus , Extractable P	mg kg	27	
Phosphorus - Carbonate Ext-P	mg kg	3.2	
Potassium - Extractable K	mg kg	258	
Calcium - Extractable Ca	mg kg	1199	
Magnesium - Extractable Mg	mg kg	168	
Sodium - Extractable Na	mg kg	96	
Rating Factors			
Nutrient Index, Scale 0 - 100	Rating	97%	
Most Limiting Factor		Ν	
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	8.9%	

Other Factors			
pH in water 1:1	Unit	6.211	
Optional test (buffer pH)	Unit	6.579	
Water Soluble Carbon	mg kg	622	
Water Soluble C:N (WSOC:NO3-N)	Unit	82	
Aluminum, Extractable	mg kg	294	
Iron, Extractable (Optional)	mg kg	82	





Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	100.6	High
Solvita Response	(0-5)	4.38	Medium
Soil Amino-N	ppm	90	Medium
Crumb Aggregates	Vol %	24	Low
Scoop Bulk Density	g/cc	0.94	Optimal
Total Carbon	%	1.300	Med-Low



Account / Sample ID:	3433 / 12516.3
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *
Your Sample:	Soil: Tree94 T4 R7 Z9
Received / Reported:	09/Apr/24 28/May/24
Intended Crop:	General Crops

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	<u>N</u>	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	132	107	520	
Crop Use:	75	35	35	24,527
Difference:	0	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	13.9

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	9
Est. Seasonal Biological N-Release	lb/a	116
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	132
Likelihood of N-Response based on Org-N	Rating	Likely

Extractable Nutrient	s		
Phosphorus , Extractable P	mg kg	25	
Phosphorus - Carbonate Ext-P	mg kg	3.1	
Potassium - Extractable K	mg kg	230	
Calcium - Extractable Ca	mg kg	1261	
Magnesium - Extractable Mg	mg kg	219	
Sodium - Extractable Na	mg kg	60	
Rating Factors			
Nutrient Index, Scale 0 - 100	Rating	100%	
Most Limiting Factor		None	
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	7.2%	

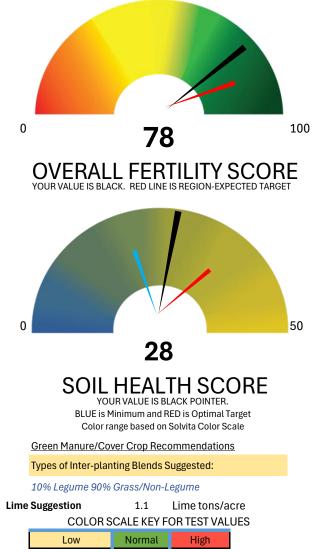
Other Factors			
pH in water 1:1	Unit	6.515	
Optional test (buffer pH)	Unit	6.508	
Water Soluble Carbon	mg kg	649	
Water Soluble C:N (WSOC:NO3-N)	Unit	70	
Aluminum, Extractable	mg kg	303	
Iron, Extractable (Optional)	mg kg	62	

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	111.8	High
Solvita Response	(0 - 5)	4.50	High
Soil Amino-N	ppm	105	Medium
Crumb Aggregates	Vol %	29	Medium
Scoop Bulk Density	g/cc	0.93	Optimal
Total Carbon	%	1.310	Med-Low



Account / Sample ID:	3433 / 12516.4		
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS		
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *		
Your Sample:	Soil: Tree98 T5 R9 Z10		
Received / Reported:	09/Apr/24 28/May/24		
Receiveu / Reputteu.	03/Api/24 20/11ay/24		
Intended Crop:	General Crops		

Nutrients as: lb/a	Interp	retative Guide	elines	Est Carbon:
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	151	161	832	
Crop Use:	75	35	35	24,366
Difference:	0	0	0	
Suggested Need	25	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	14.3

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	13
Est. Seasonal Biological N-Release	lb/a	129
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	151
Likelihood of N-Response based on Org-N	Rating	<u>Moderate</u>

Extractable Nutrients				
Phosphorus , Extractable P	mg kg	38		
Phosphorus - Carbonate Ext-P	mg kg	3.1		
Potassium - Extractable K	mg kg	373		
Calcium - Extractable Ca	mg kg	1363		
Magnesium - Extractable Mg	mg kg	223		
Sodium - Extractable Na	mg kg	25		
Rating Factors				
Nutrient Index, Scale 0 - 100	Rating	100%		
Most Limiting Factor		None		
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	11.0%		

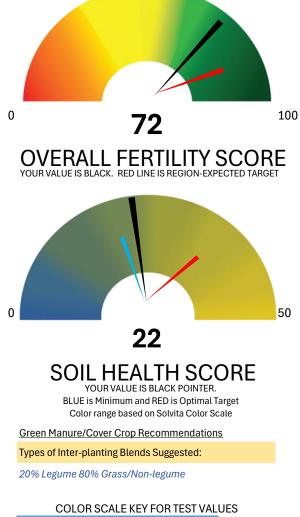
Other Factors				
pH in water 1:1	Unit	6.321		
Optional test (buffer pH)	Unit	6.546		
Water Soluble Carbon	mg kg	490		
Water Soluble C:N (WSOC:NO3-N)	Unit	39		
Aluminum, Extractable	mg kg	255		
Iron, Extractable (Optional)	mg kg	66		

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	73.8	Optimal
Solvita Response	(0-5)	4.15	Medium
Soil Amino-N	ppm	31	Low
Crumb Aggregates	Vol %	22	Low
Scoop Bulk Density	g/cc	1.04	Optimal
Total Carbon	%	0.803	Low



Low Normal High

(warning may be either too high or too low)

Account / Sample ID:	3433 / 12516.5
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *
Your Sample:	Soil: Tree102 T5 R8 Z10
Received / Reported:	09/Apr/24 28/May/24
Intended Crop:	General Crops

Nutrients as: lb/a	Interp	retative Guide	elines	Est Carbon:
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	99	234	1214	
Crop Use:	75	35	35	16,756
Difference:	0	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	13.8

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	8
Est. Seasonal Biological N-Release	lb/a	85
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	99
Likelihood of N-Response based on Org-N	Rating	Likely

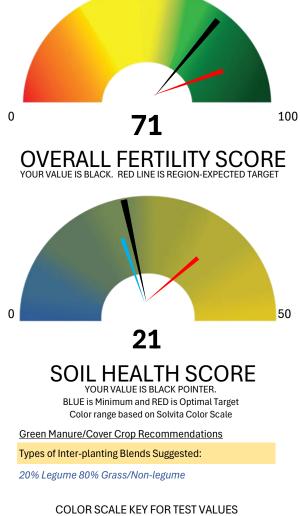
Extractable Nutrient	ts			
Phosphorus , Extractable P	mg kg	49		
Phosphorus - Carbonate Ext-P	mg kg	2.9		
Potassium - Extractable K	mg kg	485		
Calcium - Extractable Ca	mg kg	1257		
Magnesium - Extractable Mg	mg kg	196		
Sodium - Extractable Na	mg kg	44		
Rating Factors				
Nutrient Index, Scale 0 - 100	Rating	100%		
Most Limiting Factor		None		
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	15.7%		

Other Factors				
pH in water 1:1	Unit	6.587		
Optional test (buffer pH)	Unit	6.552		
Water Soluble Carbon	mg kg	698		
Water Soluble C:N (WSOC:NO3-N)	Unit	92		
Aluminum, Extractable	mg kg	236		
Iron, Extractable (Optional)	mg kg	54		





Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	59.5	Med-Low
Solvita Response	(0 - 5)	3.79	Medium
Soil Amino-N	ppm	69	Medium
Crumb Aggregates	Vol %	11	Low
Scoop Bulk Density	g/cc	0.95	Optimal
Total Carbon	%	0.896	Low



Low Normal High

(warning may be either too high or too low)

3433 / 12516.6
40 / APPALACHIAN HIGHLANDS
Inceptisol-Udepts / Alfisol-Aqualfs / *
Soil: Tree106 T5 R7 Z10
09/Apr/24 28/May/24
General Crops

Nutrients as: lb/a	Interpretative Guidelines		Est Carbon:	
	<u>N</u>	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	90	126	626	
Crop Use:	75	35	35	16,964
Difference:	0	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	13.1

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	12
Est. Seasonal Biological N-Release	lb/a	68
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	90
Likelihood of N-Response based on Org-N	Rating	Likely

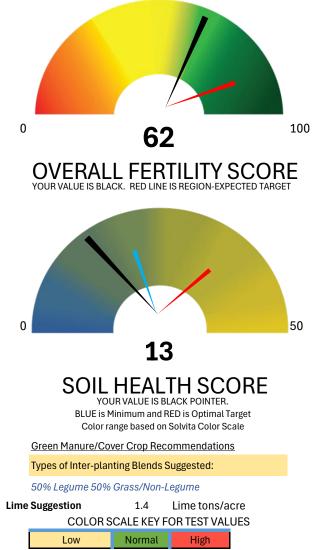
Extractable Nutrients				
mg kg	29			
mg kg	3.3			
mg kg	275			
mg kg	1173			
mg kg	184			
mg kg	56			
Rating Factors				
Rating	100%			
	None			
Marginal	9.6%			
	mg kg mg kg mg kg mg kg mg kg mg kg Rating			

Other Factors			
pH in water 1:1	Unit	6.571	
Optional test (buffer pH)	Unit	6.524	
Water Soluble Carbon	mg kg	686	
Water Soluble C:N (WSOC:NO3-N)	Unit	57	
Aluminum, Extractable	mg kg	274	
Iron, Extractable (Optional)	mg kg	67	





Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	59.7	Med-Low
Solvita Response	(0-5)	3.87	Medium
Soil Amino-N	ppm	47	Low
Crumb Aggregates	Vol %	13	Low
Scoop Bulk Density	g/cc	1.01	Optimal
Total Carbon	%	0.826	Low



(warning may be either too high or too low)

Account / Sample ID:	3433 / 12516.7
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *
Your Sample:	Soil: Tree110 T1 R9 Z11
Received / Reported:	09/Apr/24 28/May/24
Intended Crop:	General Crops

Nutrients as: lb/a	Interpretative Guidelines		Est Carbon:	
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	74	82	420	
Crop Use:	75	35	35	16,685
Difference:	1	0	0	
Suggested Need	53	35	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	12.6

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	3
Est. Seasonal Biological N-Release	lb/a	69
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	74
Likelihood of N-Response based on Org-N	Rating	Likely

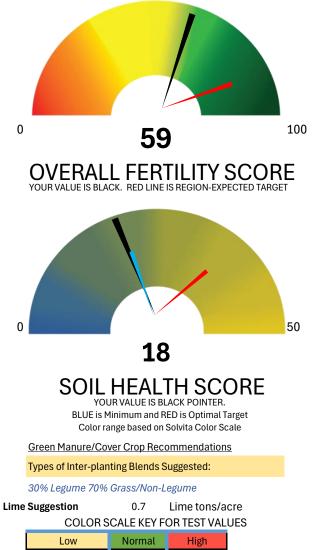
Extractable Nutrie	nts			
Phosphorus , Extractable P	mg kg	18		
Phosphorus - Carbonate Ext-P	mg kg	2.5		
Potassium - Extractable K	mg kg	173		
Calcium - Extractable Ca	mg kg	1006		
Magnesium - Extractable Mg	mg kg	148		
Sodium - Extractable Na	mg kg	44		
Rating Factors				
Nutrient Index, Scale 0 - 100	Rating	99%		
Most Limiting Factor		N		
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	7.1%		

Other Factors			
pH in water 1:1	Unit	6.312	
Optional test (buffer pH)	Unit	6.433	
Water Soluble Carbon	mg kg	6	
Water Soluble C:N (WSOC:NO3-N)	Unit	2	
Aluminum, Extractable	mg kg	265	
Iron, Extractable (Optional)	mg kg	50	





Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	25.9	V Low
Solvita Response	(0-5)	2.97	Low
Soil Amino-N	ppm	17	Low
Crumb Aggregates	Vol %	24	Low
Scoop Bulk Density	g/cc	1.06	Optimal
Total Carbon	%	0.599	Low



Account / Sample ID:	3433 / 12516.8
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *
Your Sample:	Soil: Tree118 T1 R7 Z11
Received / Reported:	09/Apr/24 28/May/24
Intended Crop:	General Crops

Nutrients as: lb/a	Interpretative Guidelines		Est Carbon:	
	<u>N</u>	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	33	105	538	
Crop Use:	75	35	35	12,699
Difference:	42	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	9.9

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	2
Est. Seasonal Biological N-Release	lb/a	30
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	33
Likelihood of N-Response based on Org-N	Rating	Likely

Extractable Nutrients				
Phosphorus , Extractable P	mg kg	22		
Phosphorus - Carbonate Ext-P	mg kg	3.0		
Potassium - Extractable K	mg kg	212		
Calcium - Extractable Ca	mg kg	923		
Magnesium - Extractable Mg	mg kg	174		
Sodium - Extractable Na	mg kg	10		
Rating Factors				
Nutrient Index, Scale 0 - 100	Rating	82%		
Most Limiting Factor		N		
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	9.0%		

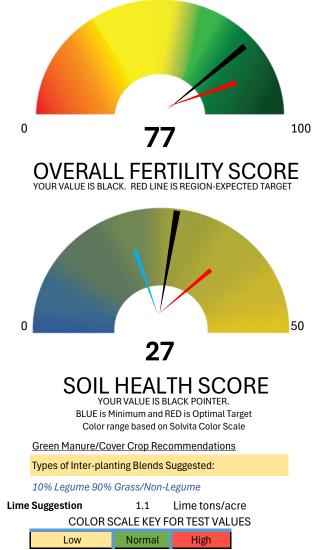
Other Factors			
pH in water 1:1	Unit	6.271	
Optional test (buffer pH)	Unit	6.670	
Water Soluble Carbon	mg kg	426	
Water Soluble C:N (WSOC:NO3-N)	Unit	215	
Aluminum, Extractable	mg kg	234	
Iron, Extractable (Optional)	mg kg	53	

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	96.2	Optimal
Solvita Response	(0-5)	4.18	Medium
Soil Amino-N	ppm	61	Medium
Crumb Aggregates	Vol %	35	Medium
Scoop Bulk Density	g/cc	0.82	Optimal
Total Carbon	%	1.720	Medium



(warning may be either too high or too low)

Account / Sample ID:	3433/12516.9
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *
Your Sample:	Soil: Tree114 T1 R8 Z11
Your Sample: Received / Reported:	Soil: Tree114 T1 R8 Z11 09/Apr/24 28/May/24
-	

Nutrients as: lb/a	Interpretative Guidelines		Est Carbon:	
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	118	95	526	
Crop Use:	75	35	35	28,323
Difference:	0	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	14.8

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	4
Est. Seasonal Biological N-Release	lb/a	111
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	118
Likelihood of N-Response based on Org-N	Rating	Likely

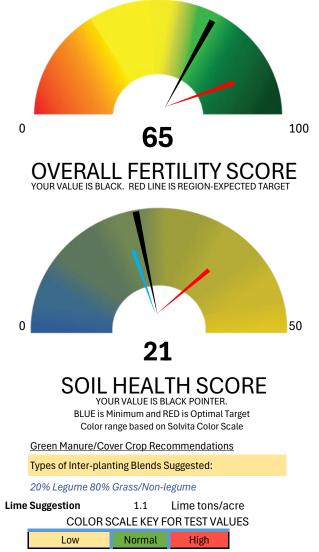
ts	
mg kg	25
mg kg	3.6
mg kg	266
mg kg	1411
mg kg	238
mg kg	59
Rating	100%
	None
Marginal	7.6%
	mg kg mg kg mg kg mg kg mg kg Rating

Other Factors			
pH in water 1:1	Unit	6.260	
Optional test (buffer pH)	Unit	6.516	
Water Soluble Carbon	mg kg	564	
Water Soluble C:N (WSOC:NO3-N)	Unit	133	
Aluminum, Extractable	mg kg	257	
Iron, Extractable (Optional)	mg kg	51	





Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	36.1	Med-Low
Solvita Response	(0 - 5)	3.24	Low
Soil Amino-N	ppm	73	Medium
Crumb Aggregates	Vol %	23	Low
Scoop Bulk Density	g/cc	0.96	Optimal
Total Carbon	%	1.090	Med-Low



Account / Sample ID:	3433 / 12517.0
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *
Your Sample:	Soil: Tree122 T2 R9 Z12
Received / Reported:	09/Apr/24 28/May/24
Intended Crop:	General Crops

Nutrients as: lb/a	Interpretative Guidelines		Est Carbon:	
	<u>N</u>	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	47	96	496	
Crop Use:	75	35	35	20,928
Difference:	28	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	11.8

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	3
Est. Seasonal Biological N-Release	lb/a	42
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	47
Likelihood of N-Response based on Org-N	Rating	Likely

Extractable Nutrients			
Phosphorus , Extractable P	mg kg	22	
Phosphorus - Carbonate Ext-P	mg kg	3.0	
Potassium - Extractable K	mg kg	215	
Calcium - Extractable Ca	mg kg	1047	
Magnesium - Extractable Mg	mg kg	133	
Sodium - Extractable Na	mg kg	20	
Rating Factors			
Nutrient Index, Scale 0 - 100	Rating	88%	
Most Limiting Factor		Ν	
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	8.7%	

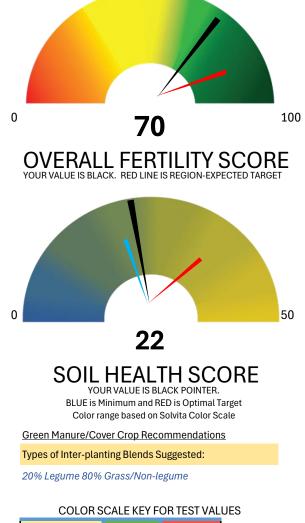
Other Factors			
pH in water 1:1	Unit	6.253	
Optional test (buffer pH)	Unit	6.515	
Water Soluble Carbon	mg kg	545	
Water Soluble C:N (WSOC:NO3-N)	Unit	181	
Aluminum, Extractable	mg kg	334	
Iron, Extractable (Optional)	mg kg	45	

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	52.7	Med-Low
Solvita Response	(0 - 5)	3.75	Medium
Soil Amino-N	ppm	60	Medium
Crumb Aggregates	Vol %	22	Low
Scoop Bulk Density	g/cc	1.03	Optimal
Total Carbon	%	0.849	Low



Low Normal High

(warning may be either too high or too low)

3433 / 12517.1
40 / APPALACHIAN HIGHLANDS
Inceptisol-Udepts / Alfisol-Aqualfs / *
Soil: Tree126 T2 R8 Z12
09/Apr/24 28/May/24
General Crops

Nutrients as: lb/a	Interpretative Guidelines		Est Carbon:	
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	67	91	470	
Crop Use:	75	35	35	17,546
Difference:	8	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	10.3

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	4
Est. Seasonal Biological N-Release	lb/a	61
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	67
Likelihood of N-Response based on Org-N	Rating	Likely

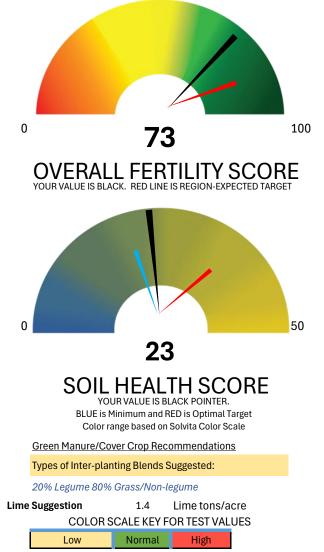
Extractable Nutrients			
Phosphorus , Extractable P	mg kg	19	
Phosphorus - Carbonate Ext-P	mg kg	3.0	
Potassium - Extractable K	mg kg	190	
Calcium - Extractable Ca	mg kg	917	
Magnesium - Extractable Mg	mg kg	150	
Sodium - Extractable Na	mg kg	47	
Rating Factors			
Nutrient Index, Scale 0 - 100	Rating	97%	
Most Limiting Factor		Ν	
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	8.3%	

Other Factors			
pH in water 1:1	Unit	6.642	
Optional test (buffer pH)	Unit	6.619	
Water Soluble Carbon	mg kg	596	
Water Soluble C:N (WSOC:NO3-N)	Unit	158	
Aluminum, Extractable	mg kg	245	
Iron, Extractable (Optional)	mg kg	48	





Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	82.5	Optimal
Solvita Response	(0 - 5)	4.26	Medium
Soil Amino-N	ppm	55	Medium
Crumb Aggregates	Vol %	19	Low
Scoop Bulk Density	g/cc	1.04	Optimal
Total Carbon	%	0.804	Low



Account / Sample ID:	3433 / 12517.2
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *
Your Sample:	Soil: Tree130 T2 R7 Z12
Received / Reported:	09/Apr/24 28/May/24

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	100	87	462	
Crop Use:	75	35	35	16,670
Difference:	0	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	12.6

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	3
Est. Seasonal Biological N-Release	lb/a	95
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	100
Likelihood of N-Response based on Org-N	Rating	Likely

Extractable Nutrients				
Phosphorus , Extractable P	mg kg	18		
Phosphorus - Carbonate Ext-P	mg kg	2.8		
Potassium - Extractable K	mg kg	186		
Calcium - Extractable Ca	mg kg	973		
Magnesium - Extractable Mg	mg kg	158		
Sodium - Extractable Na	mg kg	61		
Rating Factors				
Nutrient Index, Scale 0 - 100	Rating	100%		
Most Limiting Factor		None		
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	7.7%		

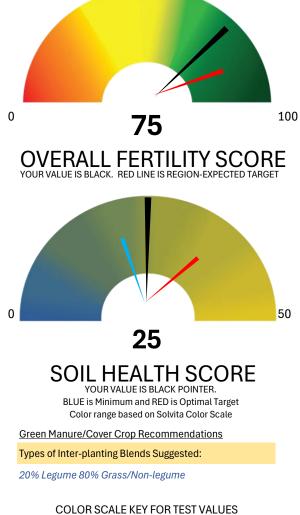
Other Factors			
pH in water 1:1	Unit	6.244	
Optional test (buffer pH)	Unit	6.433	
Water Soluble Carbon	mg kg	723	
Water Soluble C:N (WSOC:NO3-N)	Unit	268	
Aluminum, Extractable	mg kg	250	
Iron, Extractable (Optional)	mg kg	53	

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	84.6	Optimal
Solvita Response	(0 - 5)	4.30	Medium
Soil Amino-N	ppm	86	Medium
Crumb Aggregates	Vol %	20	Low
Scoop Bulk Density	g/cc	1.05	Optimal
Total Carbon	%	1.210	Med-Low



COLOR S	CALE KEY F	OR TEST VAL	UES
Low	Normal	High	

(warning may be either too high or too low)

3433 / 12517.3
40 / APPALACHIAN HIGHLANDS
Inceptisol-Udepts / Alfisol-Aqualfs / *
Soil: Tree134 T3 R9 Z13
09/Apr/24 28/May/24
General Crops

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	116	135	717	
Crop Use:	75	35	35	25,329
Difference:	0	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	13.3

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	10
Est. Seasonal Biological N-Release	lb/a	97
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	116
Likelihood of N-Response based on Org-N	Rating	Likely

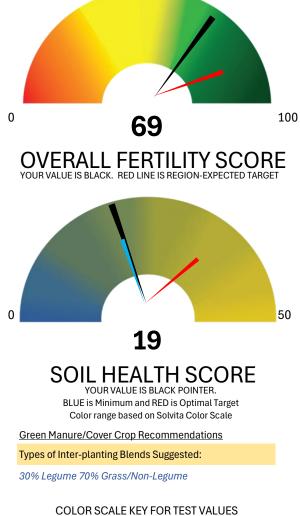
Extractable Nutrients				
Phosphorus , Extractable P	mg kg	28		
Phosphorus - Carbonate Ext-P	mg kg	2.9		
Potassium - Extractable K	mg kg	285		
Calcium - Extractable Ca	mg kg	1339		
Magnesium - Extractable Mg	mg kg	178		
Sodium - Extractable Na	mg kg	98		
Rating Factors				
Nutrient Index, Scale 0 - 100	Rating	100%		
Most Limiting Factor	None			
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	8.9%		

Other Factors			
pH in water 1:1	Unit	6.672	
Optional test (buffer pH)	Unit	6.609	
Water Soluble Carbon	mg kg	428	
Water Soluble C:N (WSOC:NO3-N)	Unit	41	
Aluminum, Extractable	mg kg	271	
Iron, Extractable (Optional)	mg kg	52	





Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	83.4	Optimal
Solvita Response	(0 - 5)	4.22	Medium
Soil Amino-N	ppm	99	Medium
Crumb Aggregates	Vol %	36	Medium
Scoop Bulk Density	g/cc	0.99	Optimal
Total Carbon	%	1.560	Medium



Low Normal High

(warning may be either too high or too low)

3433 / 12517.4
40 / APPALACHIAN HIGHLANDS
Inceptisol-Udepts / Alfisol-Aqualfs / *
Soil: Tree138 T3 R8 Z13
09/Apr/24 28/May/24
General Crops

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	<u>N</u>	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	110	98	513	
Crop Use:	75	35	35	30,784
Difference:	0	0	0	
Suggested Need	25	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	14.0

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	8
Est. Seasonal Biological N-Release	lb/a	96
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	110
Likelihood of N-Response based on Org-N	Rating	Moderate

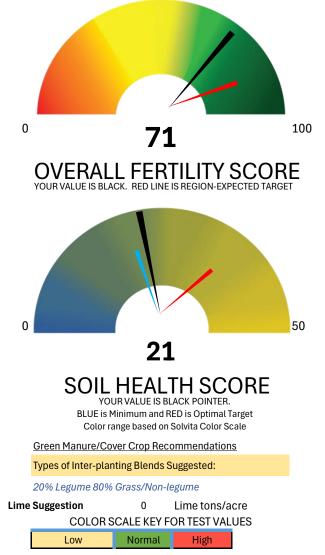
Extractable Nutrients			
Phosphorus , Extractable P	mg kg	22	
Phosphorus - Carbonate Ext-P	mg kg	3.3	
Potassium - Extractable K	mg kg	216	
Calcium - Extractable Ca	mg kg	1194	
Magnesium - Extractable Mg	mg kg	197	
Sodium - Extractable Na	mg kg	54	
Rating Factors			
Nutrient Index, Scale 0 - 100	Rating	100%	
Most Limiting Factor		None	
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	7.3%	

Other Factors			
pH in water 1:1	Unit	6.573	
Optional test (buffer pH)	Unit	6.445	
Water Soluble Carbon	mg kg	6	
Water Soluble C:N (WSOC:NO3-N)	Unit	1	
Aluminum, Extractable	mg kg	295	
Iron, Extractable (Optional)	mg kg	38	





Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	60.8	Optimal
Solvita Response	(0 - 5)	3.95	Medium
Soil Amino-N	ppm	42	Low
Crumb Aggregates	Vol %	17	Low
Scoop Bulk Density	g/cc	1.07	Optimal
Total Carbon	%	0.830	Low



Account / Sample ID:	3433 / 12517.5		
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS		
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *		
Your Sample:	Soil: Tree142 T3 R7 Z13		
Received / Reported:	09/Apr/24 28/May/24		
Intended Crop:	General Crops		

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	<u>N</u>	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	79	140	698	
Crop Use:	75	35	35	17,762
Difference:	0	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	10.7

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	5
Est. Seasonal Biological N-Release	lb/a	70
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	79
Likelihood of N-Response based on Org-N	Rating	Likely

Extractable Nutrients		
Phosphorus , Extractable P	mg kg	28
Phosphorus - Carbonate Ext-P	mg kg	2.8
Potassium - Extractable K	mg kg	272
Calcium - Extractable Ca	mg kg	1012
Magnesium - Extractable Mg	mg kg	171
Sodium - Extractable Na	mg kg	59
Rating Factors		
Nutrient Index, Scale 0 - 100	Rating	100%
Most Limiting Factor		None
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	10.7%

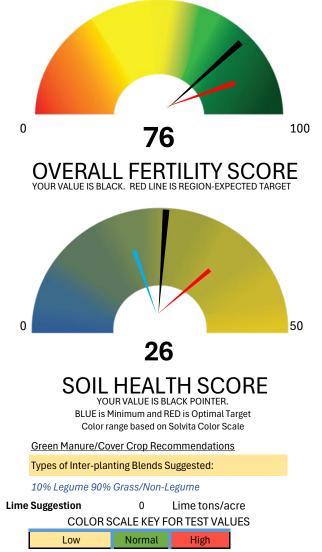
Other Factors		
pH in water 1:1	Unit	6.488
Optional test (buffer pH)	Unit	6.669
Water Soluble Carbon	mg kg	546
Water Soluble C:N (WSOC:NO3-N)	Unit	115
Aluminum, Extractable	mg kg	247
Iron, Extractable (Optional)	mg kg	40

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	77.8	Optimal
Solvita Response	(0 - 5)	4.15	Medium
Soil Amino-N	ppm	76	Medium
Crumb Aggregates	Vol %	37	Medium
Scoop Bulk Density	g/cc	0.99	Optimal
Total Carbon	%	1.140	Med-Low



(warning may be either too high or too low)

Account / Sample ID:	3433 / 12517.6		
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS		
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *		
Your Sample:	Soil: Tree146 T4 R9 Z14		
Received / Reported:	09/Apr/24 28/May/24		
Intended Crop:	General Crops		

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	105	106	615	
Crop Use:	75	35	35	22,572
Difference:	0	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	13.5

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	9
Est. Seasonal Biological N-Release	lb/a	89
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	105
Likelihood of N-Response based on Org-N	Rating	Likely

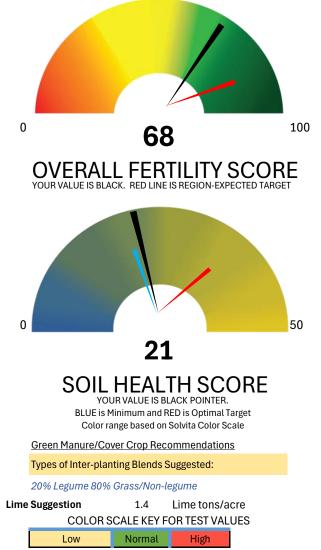
Extractable Nutrients				
Phosphorus , Extractable P	mg kg	23		
Phosphorus - Carbonate Ext-P	mg kg	3.0		
Potassium - Extractable K	mg kg	259		
Calcium - Extractable Ca	mg kg	1129		
Magnesium - Extractable Mg	mg kg	175		
Sodium - Extractable Na	mg kg	72		
Rating Factors				
Nutrient Index, Scale 0 - 100	Rating	100%		
Most Limiting Factor		None		
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	9.3%		

Other Factors				
pH in water 1:1	Unit	6.437		
Optional test (buffer pH)	Unit	6.460		
Water Soluble Carbon	mg kg	510		
Water Soluble C:N (WSOC:NO3-N)	Unit	59		
Aluminum, Extractable	mg kg	306		
Iron, Extractable (Optional)	mg kg	38		





Units		RANKING:	
ppm	45.5	Med-Low	
(0-5)	3.56	Medium	
ppm	22	Low	
Vol %	20	Low	
g/cc	1.01	Optimal	
%	1.370	Med-Low	
	ppm (0 - 5) ppm Vol %	ppm 45.5 (0-5) 3.56 ppm 22 Vol % 20 g/cc 1.01	



Account / Sample ID:	3433 / 12517.7
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *
Your Sample:	Soil: Tree150 T4 R8 Z14
Received / Reported:	09/Apr/24 28/May/24
Intended Crop:	General Crops

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	63	75	821	
Crop Use:	75	35	35	27,674
Difference:	12	0	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	10.3

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	6
Est. Seasonal Biological N-Release	lb/a	52
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	63
Likelihood of N-Response based on Org-N	Rating	Likely

g 16				
16				
,				
g 3.0				
g 339				
g 559				
g 104				
g 25				
Rating Factors				
g 95%				
N				
1 23.7%				

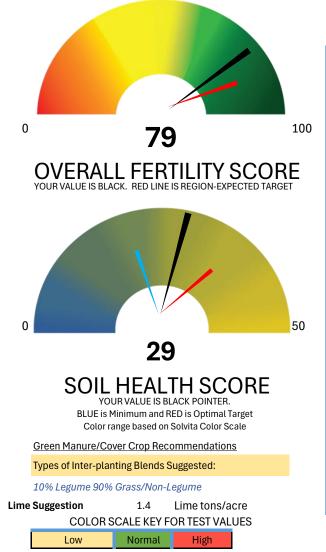
Other Factors				
pH in water 1:1	Unit	6.286		
Optional test (buffer pH)	Unit	6.435		
Water Soluble Carbon	mg kg	367		
Water Soluble C:N (WSOC:NO3-N)	Unit	63		
Aluminum, Extractable	mg kg	239		
Iron, Extractable (Optional)	mg kg	41		

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	82.7	Optimal
Solvita Response	(0-5)	4.07	Medium
Soil Amino-N	ppm	129	Medium
Crumb Aggregates	Vol %	39	Medium
Scoop Bulk Density	g/cc	0.87	Optimal
Total Carbon	%	1.880	Medium



Account / Sample ID:	3433 / 12517.8
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *
Your Sample:	Soil: Tree154 T4 R7 Z14
Received / Reported:	09/Apr/24 28/May/24
Intended Crop:	General Crops

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	113	43	414	
Crop Use:	75	35	35	32,837
Difference:	0	0	0	
Suggested Need	25	18	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	11.7

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	10
Est. Seasonal Biological N-Release	lb/a	95
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	113
Likelihood of N-Response based on Org-N	Rating	<u>Moderate</u>

Extractable Nutrients				
Phosphorus , Extractable P	mg kg	11		
Phosphorus - Carbonate Ext-P	mg kg	5.0		
Potassium - Extractable K	mg kg	197		
Calcium - Extractable Ca	mg kg	836		
Magnesium - Extractable Mg	mg kg	133		
Sodium - Extractable Na	mg kg	23		
Rating Factors				
Nutrient Index, Scale 0 - 100	Rating	100%		
Most Limiting Factor		None		
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	9.6%		

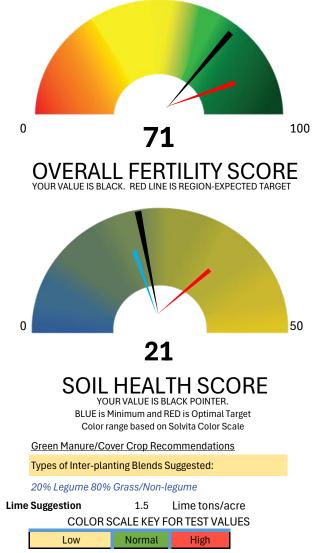
Other Factors			
pH in water 1:1	Unit	6.325	
Optional test (buffer pH)	Unit	6.419	
Water Soluble Carbon	mg kg	414	
Water Soluble C:N (WSOC:NO3-N)	Unit	42	
Aluminum, Extractable	mg kg	197	
Iron, Extractable (Optional)	mg kg	22	

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	59.0	Med-Low
Solvita Response	(0 - 5)	3.91	Medium
Soil Amino-N	ppm	54	Medium
Crumb Aggregates	Vol %	12	Low
Scoop Bulk Density	g/cc	1.06	Optimal
Total Carbon	%	1.340	Med-Low



Account / Sample ID:	3433 / 12517.9
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *
Your Sample:	Soil: Tree158 T5 R9 Z15
Received / Reported:	09/Apr/24 28/May/24

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	79	58	1893	
Crop Use:	75	35	35	28,497
Difference:	0	0	0	
Suggested Need	53	18	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	12.0

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	6
Est. Seasonal Biological N-Release	lb/a	68
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	79
Likelihood of N-Response based on Org-N	Rating	Likely

Extractable Nutrients			
Phosphorus , Extractable P	mg kg	12	
Phosphorus - Carbonate Ext-P	mg kg	5.1	
Potassium - Extractable K	mg kg	742	
Calcium - Extractable Ca	mg kg	610	
Magnesium - Extractable Mg	mg kg	107	
Sodium - Extractable Na	mg kg	14	
Rating Factors			
Nutrient Index, Scale 0 - 100	Rating	100%	
Most Limiting Factor		None	
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	V High	48.2%	

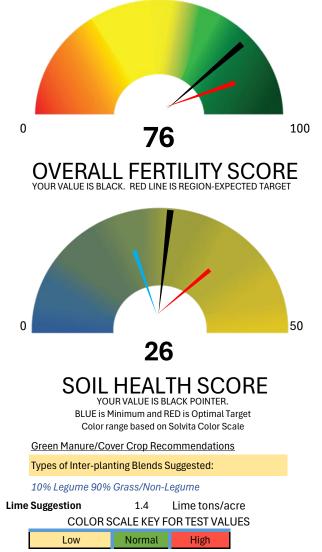
Other Factors			
pH in water 1:1	Unit	6.265	
Optional test (buffer pH)	Unit	6.390	
Water Soluble Carbon	mg kg	367	
Water Soluble C:N (WSOC:NO3-N)	Unit	57	
Aluminum, Extractable	mg kg	318	
Iron, Extractable (Optional)	mg kg	34	

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	72.4	Optimal
Solvita Response	(0 - 5)	4.07	Medium
Soil Amino-N	ppm	156	Optimal
Crumb Aggregates	Vol %	25	Medium
Scoop Bulk Density	g/cc	1.00	Optimal
Total Carbon	%	1.370	Med-Low



(warning may be either too high or too low)

Account / Sample ID:	3433 / 12518.0
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *
Your Sample:	Soil: Tree162 T5 R8 Z15
Your Sample: Received / Reported:	Soil: Tree162 T5 R8 Z15 09/Apr/24 28/May/24

Nutrients as: lb/a	Interpretative Guidelines		Est Carbon:	
	<u>N</u>	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	100	55	857	
Crop Use:	75	35	35	27,309
Difference:	0	0	0	
Suggested Need	25	26	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	10.7

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	9
Est. Seasonal Biological N-Release	lb/a	83
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	100
Likelihood of N-Response based on Org-N	Rating	<u>Moderate</u>

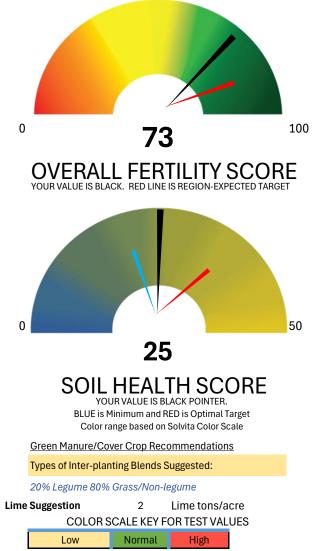
Extractable Nutrients			
Phosphorus , Extractable P	mg kg	12	
Phosphorus - Carbonate Ext-P	mg kg	3.5	
Potassium - Extractable K	mg kg	358	
Calcium - Extractable Ca	mg kg	629	
Magnesium - Extractable Mg	mg kg	89	
Sodium - Extractable Na	mg kg	18	
Rating Factors			
Nutrient Index, Scale 0 - 100	Rating	100%	
Most Limiting Factor		None	
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	V High	23.6%	

Other Factors			
pH in water 1:1	Unit	6.319	
Optional test (buffer pH)	Unit	6.422	
Water Soluble Carbon	mg kg	457	
Water Soluble C:N (WSOC:NO3-N)	Unit	51	
Aluminum, Extractable	mg kg	248	
Iron, Extractable (Optional)	mg kg	44	





Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	74.6	Optimal
Solvita Response	(0 - 5)	4.11	Medium
Soil Amino-N	ppm	95	Medium
Crumb Aggregates	Vol %	26	Medium
Scoop Bulk Density	g/cc	1.00	Optimal
Total Carbon	%	1.220	Med-Low



Account / Sample ID:	3433 / 12518.1
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *
Your Sample:	Soil: Tree166 T5 R7 Z15
Received / Reported:	09/Apr/24 28/May/24

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	N	<u>P2O5</u>	<u>K2O</u>	lb/a
Soil Supply:	96	31	1448	
Crop Use:	75	35	35	24,400
Difference:	0	4	0	
Suggested Need	53	26	0	Est CEC, meq
Other Notations	Low Status	Ex Low	Excess	13.6

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	6
Est. Seasonal Biological N-Release	lb/a	86
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	96
Likelihood of N-Response based on Org-N	Rating	Likely

Extractable Nutrients			
mg kg	7		
mg kg	3.1		
mg kg	604		
mg kg	609		
mg kg	112		
mg kg	23		
Rating Factors			
Rating	96%		
	Р		
V High	38.9%		
	mg kg mg kg mg kg mg kg mg kg mg kg Rating		

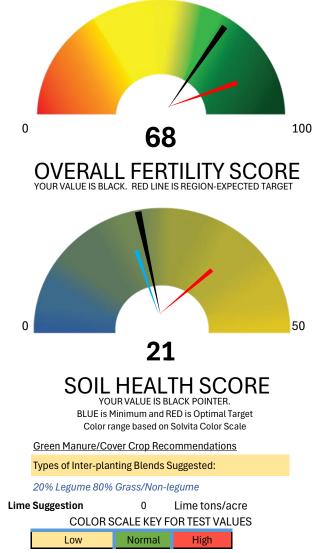
Other Factors			
pH in water 1:1	Unit	6.354	
Optional test (buffer pH)	Unit	6.207	
Water Soluble Carbon	mg kg	422	
Water Soluble C:N (WSOC:NO3-N)	Unit	74	
Aluminum, Extractable	mg kg	271	
Iron, Extractable (Optional)	mg kg	27	

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	59.1	Med-Low
Solvita Response	(0-5)	3.83	Medium
Soil Amino-N	ppm	31	Low
Crumb Aggregates	Vol %	17	Low
Scoop Bulk Density	g/cc	0.98	Optimal
Total Carbon	%	0.966	Low



Account / Sample ID:	3433 / 12518.2
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *
Your Sample:	Soil: Tree170 T1 R9 Z16
Received / Reported:	09/Apr/24 28/May/24
Intended Crop:	General Crops

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	81	29	888	
Crop Use:	75	35	35	18,998
Difference:	0	6	0	
Suggested Need	53	35	0	Est CEC, meq
Other Notations	Low Status	Ex Low	Excess	10.6

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	7
Est. Seasonal Biological N-Release	lb/a	68
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	81
Likelihood of N-Response based on Org-N	Rating	Likely

Extractable Nutrients			
Phosphorus , Extractable P	mg kg	6	
Phosphorus - Carbonate Ext-P	mg kg	1.8	
Potassium - Extractable K	mg kg	376	
Calcium - Extractable Ca	mg kg	616	
Magnesium - Extractable Mg	mg kg	93	
Sodium - Extractable Na	mg kg	11	
Rating Factors			
Nutrient Index, Scale 0 - 100	Rating	94%	
Most Limiting Factor		Р	
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	V High	25.1%	

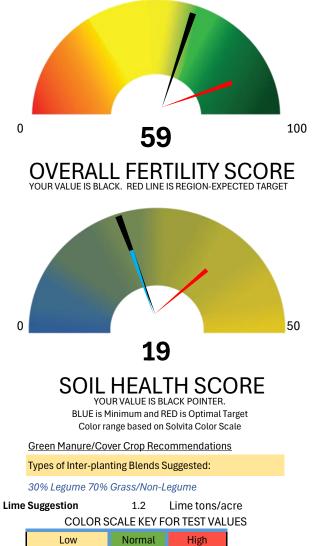
Other Factors				
pH in water 1:1	Unit	6.442		
Optional test (buffer pH)	Unit	6.426		
Water Soluble Carbon	mg kg	538		
Water Soluble C:N (WSOC:NO3-N)	Unit	73		
Aluminum, Extractable	mg kg	311		
Iron, Extractable (Optional)	mg kg	46		

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	39.3	Med-Low
Solvita Response	(0-5)	3.44	Medium
Soil Amino-N	ppm	47	Low
Crumb Aggregates	Vol %	9	Low
Scoop Bulk Density	g/cc	1.06	Optimal
Total Carbon	%	0.888	Low



(warning may be either too high or too low)

Account / Sample ID:	3433 / 12518.3
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *
Your Sample:	Soil: Tree174 T1 R8 Z16
Received / Reported:	09/Apr/24 28/May/24
Intended Crop:	General Crops

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	N	<u>P2O5</u>	<u>K2O</u>	lb/a
Soil Supply:	50	27	369	
Crop Use:	75	35	35	18,766
Difference:	25	8	0	
Suggested Need	53	35	0	Est CEC, meq
Other Notations	Low Status	Ex Low	Excess	8.3

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	2
Est. Seasonal Biological N-Release	lb/a	45
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	50
Likelihood of N-Response based on Org-N	Rating	Likely

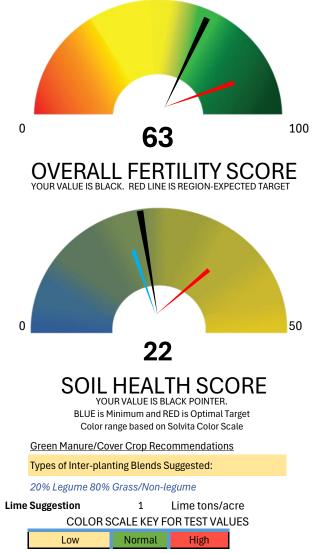
Extractable Nutrients			
Phosphorus , Extractable P	mg kg	5	
Phosphorus - Carbonate Ext-P	mg kg	1.0	
Potassium - Extractable K	mg kg	146	
Calcium - Extractable Ca	mg kg	426	
Magnesium - Extractable Mg	mg kg	83	
Sodium - Extractable Na	mg kg	13	
Rating Factors			
Nutrient Index, Scale 0 - 100	Rating	81%	
Most Limiting Factor		N	
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	13.2%	

Other Factors			
pH in water 1:1	Unit	6.143	
Optional test (buffer pH)	Unit	6.496	
Water Soluble Carbon	mg kg	382	
Water Soluble C:N (WSOC:NO3-N)	Unit	155	
Aluminum, Extractable	mg kg	280	
Iron, Extractable (Optional)	mg kg	41	





Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	60.3	Optimal
Solvita Response	(0-5)	3.87	Medium
Soil Amino-N	ppm	30	Low
Crumb Aggregates	Vol %	24	Low
Scoop Bulk Density	g/cc	1.00	Optimal
Total Carbon	%	0.937	Low



Account / Sample ID:	3433 / 12518.4		
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS		
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *		
Your Sample:	Soil: Tree178 T1 R7 Z16		
Received / Reported:	09/Apr/24 28/May/24		
Intended Crop:	General Crops		

Nutrients as: lb/a	Interpretative Guidelines		Est Carbon:	
	N	<u>P2O5</u>	<u>K2O</u>	lb/a
Soil Supply:	74	17	1096	
Crop Use:	75	35	35	18,740
Difference:	1	18	0	
Suggested Need	53	35	0	Est CEC, meq
Other Notations	Low Status	Ex Low	Excess	9.7

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	3
Est. Seasonal Biological N-Release	lb/a	69
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	74
Likelihood of N-Response based on Org-N	Rating	Likely

Extractable Nutrients			
Phosphorus , Extractable P	mg kg	4	
Phosphorus - Carbonate Ext-P	mg kg	0.6	
Potassium - Extractable K	mg kg	457	
Calcium - Extractable Ca	mg kg	601	
Magnesium - Extractable Mg	mg kg	117	
Sodium - Extractable Na	mg kg	17	
Rating Factors			
Nutrient Index, Scale 0 - 100	Rating	83%	
Most Limiting Factor		Р	
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	V High	29.4%	

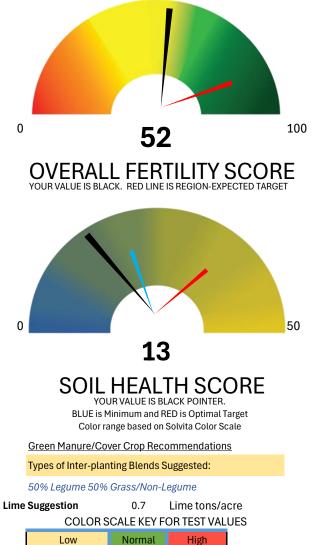
Other Factors			
pH in water 1:1	Unit	6.336	
Optional test (buffer pH)	Unit	6.557	
Water Soluble Carbon	mg kg	475	
Water Soluble C:N (WSOC:NO3-N)	Unit	190	
Aluminum, Extractable	mg kg	280	
Iron, Extractable (Optional)	mg kg	26	

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	18.3	V Low
Solvita Response	(0-5)	2.65	Low
Soil Amino-N	ppm	0	Low
Crumb Aggregates	Vol %	6	Low
Scoop Bulk Density	g/cc	1.13	Optimal
Total Carbon	%	0.496	Low



Account / Sample ID:3433 / 12518.5Rainfall / Zone:40 / APPALACHIAN HIGHLANDSSoil Orders:Inceptisol-Udepts / Alfisol-Aqualfs / *Your Sample:Soil: Tree182 T2 R9 Z17Received / Reported:09/Apr/24 | 28/May/24Intended Crop:General Crops

Nutrients as: lb/a	Interpretative Guidelines		Est Carbon:	
	N	<u>P2O5</u>	<u>K2O</u>	lb/a
Soil Supply:	24	41	225	
Crop Use:	75	35	35	,243
Difference:	51	0	0	
Suggested Need	53	35	0	Est CEC, meq
Other Notations	Low Status	Ex Low	Normal	7.2

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	2
Est. Seasonal Biological N-Release	lb/a	21
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	24
Likelihood of N-Response based on Org-N	Rating	Likely

S			
mg kg	8		
mg kg	0.5		
mg kg	83		
mg kg	577		
mg kg	94		
mg kg	10		
Rating Factors			
Rating	77%		
	Ν		
Optimal	5.8%		
	mg kg mg kg mg kg mg kg mg kg Rating		

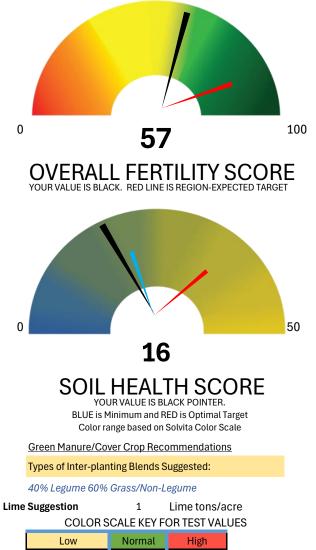
Other Factors			
pH in water 1:1	Unit	6.292	
Optional test (buffer pH)	Unit	6.674	
Water Soluble Carbon	mg kg	316	
Water Soluble C:N (WSOC:NO3-N)	Unit	210	
Aluminum, Extractable	mg kg	179	
Iron, Extractable (Optional)	mg kg	44	

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	26.7	V Low
Solvita Response	(0-5)	3.05	Low
Soil Amino-N	ppm	34	Low
Crumb Aggregates	Vol %	7	Low
Scoop Bulk Density	g/cc	1.10	Optimal
Total Carbon	%	0.644	Low



Account / Sample ID:	3433 / 12518.6		
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS		
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *		
Your Sample:	Soil: Tree186 T2 R8 Z17		
Received / Reported:	09/Apr/24 28/May/24		
Intended Crop:	General Crops		

Nutrients as: lb/a	Interpretative Guidelines		Est Carbon:	
	<u>N</u>	<u>P2O5</u>	<u>K2O</u>	lb/a
Soil Supply:	36	498	209	
Crop Use:	75	35	35	4,2
Difference:	39	0	0	
Suggested Need	53	0	13	Est CEC, meq
Other Notations	Low Status	Excess	Normal	15.7

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	3
Est. Seasonal Biological N-Release	lb/a	31
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	36
Likelihood of N-Response based on Org-N	Rating	Likely

Extractable Nutrients			
Phosphorus , Extractable P	mg kg	98	
Phosphorus - Carbonate Ext-P	mg kg	0.5	
Potassium - Extractable K	mg kg	79	
Calcium - Extractable Ca	mg kg	1881	
Magnesium - Extractable Mg	mg kg	206	
Sodium - Extractable Na	mg kg	19	
Rating Factors			
Nutrient Index, Scale 0 - 100	Rating	83%	
Most Limiting Factor		Ν	
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Optimal	1.8%	

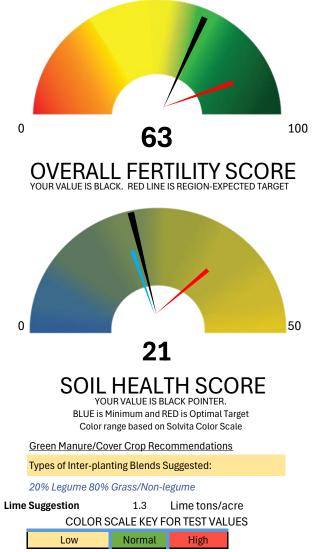
Other Factors			
pH in water 1:1	Unit	6.230	
Optional test (buffer pH)	Unit	6.569	
Water Soluble Carbon	mg kg	352	
Water Soluble C:N (WSOC:NO3-N)	Unit	130	
Aluminum, Extractable	mg kg	241	
Iron, Extractable (Optional)	mg kg	137	

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	59.3	Med-Low
Solvita Response	(0 - 5)	3.87	Medium
Soil Amino-N	ppm	57	Medium
Crumb Aggregates	Vol %	15	Low
Scoop Bulk Density	g/cc	1.02	Optimal
Total Carbon	%	1.240	Med-Low



Account / Sample ID:	3433 / 12518.7		
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS		
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *		
Your Sample:	Soil: Tree190 T2 R7 Z17		
Received / Reported:	09/Apr/24 28/May/24		
	General Crops		

Nutrients as: lb/a	Interpretative Guidelines		Est Carbon:	
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	71	20	452	
Crop Use:	75	35	35	25,213
Difference:	4	15	0	
Suggested Need	53	35	0	Est CEC, meq
Other Notations	Low Status	Ex Low	Excess	8.9

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	2
Est. Seasonal Biological N-Release	lb/a	68
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	71
Likelihood of N-Response based on Org-N	Rating	Likely

Extractable Nutrients			
Phosphorus , Extractable P	mg kg	4	
Phosphorus - Carbonate Ext-P	mg kg	0.5	
Potassium - Extractable K	mg kg	185	
Calcium - Extractable Ca	mg kg	484	
Magnesium - Extractable Mg	mg kg	62	
Sodium - Extractable Na	mg kg	34	
Rating Factors			
Nutrient Index, Scale 0 - 100	Rating	84%	
Most Limiting Factor		Р	
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	16.2%	

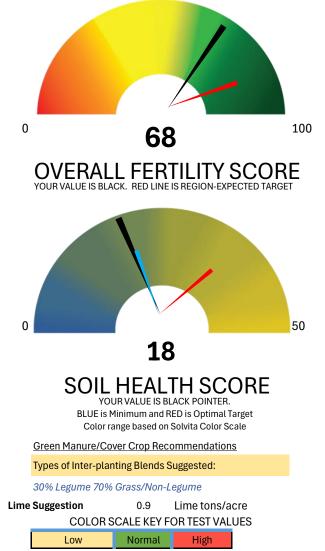
Other Factors			
pH in water 1:1	Unit	6.155	
Optional test (buffer pH)	Unit	6.463	
Water Soluble Carbon	mg kg	325	
Water Soluble C:N (WSOC:NO3-N)	Unit	183	
Aluminum, Extractable	mg kg	259	
Iron, Extractable (Optional)	mg kg	29	

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	66.2	Optimal
Solvita Response	(0-5)	4.03	Medium
Soil Amino-N	ppm	0	Low
Crumb Aggregates	Vol %	4	Low
Scoop Bulk Density	g/cc	1.06	Optimal
Total Carbon	%	0.913	Low



Account / Sample ID:	3433 / 12518.8		
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS		
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *		
Your Sample:	Soil: Tree194 T3 R9 Z18		
Received / Reported:	09/Apr/24 28/May/24		
Intended Crop:	General Crops		

Nutrients as: lb/a	Interpretative Guidelines		Est Carbon:	
	<u>N</u>	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	79	94	963	
Crop Use:	75	35	35	19,295
Difference:	0	0	0	
Suggested Need	53	35	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	8.6

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	2
Est. Seasonal Biological N-Release	lb/a	76
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	79
Likelihood of N-Response based on Org-N	Rating	Likely

Extractable Nutrients				
Phosphorus , Extractable P	mg kg	19		
Phosphorus - Carbonate Ext-P	mg kg	0.4		
Potassium - Extractable K	mg kg	380		
Calcium - Extractable Ca	mg kg	573		
Magnesium - Extractable Mg	mg kg	77		
Sodium - Extractable Na	mg kg	38		
Rating Factors				
Nutrient Index, Scale 0 - 100	Rating	100%		
Most Limiting Factor		None		
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	V High	27.7%		

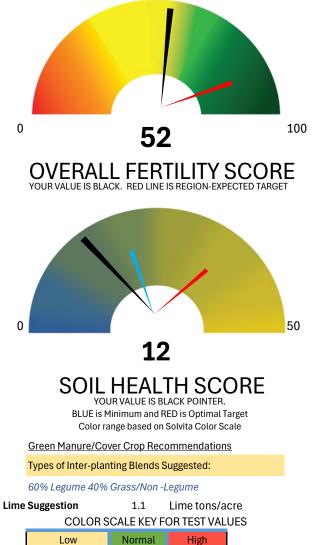
Other Factors			
pH in water 1:1	Unit	6.258	
Optional test (buffer pH)	Unit	6.604	
Water Soluble Carbon	mg kg	325	
Water Soluble C:N (WSOC:NO3-N)	Unit	181	
Aluminum, Extractable	mg kg	269	
Iron, Extractable (Optional)	mg kg	57	

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	22.1	V Low
Solvita Response	(0-5)	2.81	Low
Soil Amino-N	ppm	12	Low
Crumb Aggregates	Vol %	8	Low
Scoop Bulk Density	g/cc	1.08	Optimal
Total Carbon	%	0.573	Low



(warning may be either too high or too low)

Account / Sample ID:	3433 / 12518.9		
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS		
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *		
Your Sample:	Soil: Tree198 T3 R8 Z18		
Received / Reported:	09/Apr/24 28/May/24		

Nutrients as: lb/a	Interpretative Guidelines		Est Carbon:	
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	28	198	432	
Crop Use:	75	35	35	12,339
Difference:	47	0	0	
Suggested Need	53	35	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	8.8

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	2
Est. Seasonal Biological N-Release	lb/a	25
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	28
Likelihood of N-Response based on Org-N	Rating	Likely

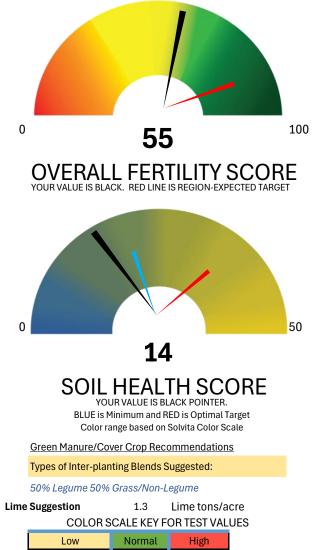
Extractable Nutrients				
mg kg	40			
mg kg	0.5			
mg kg	167			
mg kg	586			
mg kg	85			
mg kg	16			
Rating Factors				
Rating	79%			
Most Limiting Factor				
Marginal	11.8%			
	mg kg mg kg mg kg mg kg mg kg mg kg Rating			

Other Factors			
pH in water 1:1	Unit	5.992	
Optional test (buffer pH)	Unit	6.538	
Water Soluble Carbon	mg kg	228	
Water Soluble C:N (WSOC:NO3-N)	Unit	136	
Aluminum, Extractable	mg kg	245	
Iron, Extractable (Optional)	mg kg	68	





Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	28.9	V Low
Solvita Response	(0-5)	3.05	Low
Soil Amino-N	ppm	20	Low
Crumb Aggregates	Vol %	8	Low
Scoop Bulk Density	g/cc	1.02	Optimal
Total Carbon	%	0.644	Low



Account / Sample ID:	3433 / 12519.0		
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS		
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *		
Your Sample:	Soil: Tree202 T3 R7 Z18		
Received / Reported:	09/Apr/24 28/May/24		
Intended Crop:	General Crops		

Nutrients as: lb/a	Interpretative Guidelines		Est Carbon:	
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	35	41	1375	
Crop Use:	75	35	35	13,138
Difference:	40	0	0	
Suggested Need	53	35	0	Est CEC, meq
Other Notations	Low Status	Ex Low	Excess	9.8

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	1
Est. Seasonal Biological N-Release	lb/a	33
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	35
Likelihood of N-Response based on Org-N	Rating	Likely

Extractable Nutrients				
Phosphorus , Extractable P	mg kg	9		
Phosphorus - Carbonate Ext-P	mg kg	0.4		
Potassium - Extractable K	mg kg	562		
Calcium - Extractable Ca	mg kg	519		
Magnesium - Extractable Mg	mg kg	59		
Sodium - Extractable Na	mg kg	15		
Rating Factors				
Nutrient Index, Scale 0 - 100	Rating	82%		
Most Limiting Factor		Ν		
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	V High	46.7 %		

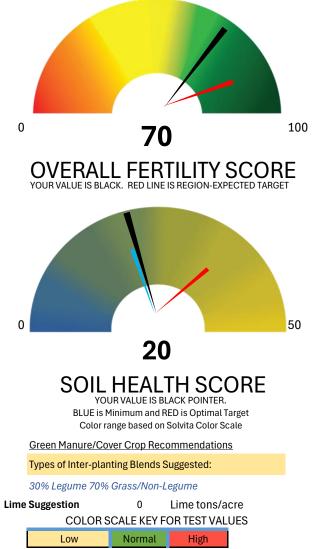
Other Factors			
pH in water 1:1	Unit	5.922	
Optional test (buffer pH)	Unit	6.477	
Water Soluble Carbon	mg kg	265	
Water Soluble C:N (WSOC:NO3-N)	Unit	226	
Aluminum, Extractable	mg kg	265	
Iron, Extractable (Optional)	mg kg	48	

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	90.6	Optimal
Solvita Response	(0 - 5)	4.34	Medium
Soil Amino-N	ppm	69	Medium
Crumb Aggregates	Vol %	17	Low
Scoop Bulk Density	g/cc	1.01	Optimal
Total Carbon	%	1.080	Med-Low



Account / Sample ID:	3433 / 12519.1		
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS		
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *		
Your Sample:	Soil: Tree206 T4 R9 Z19		
Received / Reported:	09/Apr/24 28/May/24		
Intended Crop:	General Crops		

Nutrients as: lb/a	Interpretative Guidelines		Est Carbon:	
	N	<u>P2O5</u>	<u>K2O</u>	lb/a
Soil Supply:	109	86	149	
Crop Use:	75	35	35	21,888
Difference:	0	0	0	
Suggested Need	53	35	0	Est CEC, meq
Other Notations	Low Status	Normal	Normal	9.1

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	2
Est. Seasonal Biological N-Release	lb/a	104
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	109
Likelihood of N-Response based on Org-N	Rating	Likely

ts				
mg kg	19			
mg kg	0.5			
mg kg	61			
mg kg	823			
mg kg	144			
mg kg	15			
Rating Factors				
Rating	100%			
	None			
Optimal	3.0%			
	mg kg mg kg mg kg mg kg mg kg mg kg Rating			

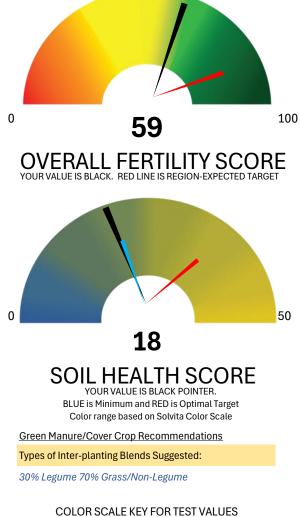
Other Factors				
pH in water 1:1	Unit	6.410		
Optional test (buffer pH)	Unit	6.648		
Water Soluble Carbon	mg kg	203		
Water Soluble C:N (WSOC:NO3-N)	Unit	82		
Aluminum, Extractable	mg kg	208		
Iron, Extractable (Optional)	mg kg	35		

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	35.2	Med-Low
Solvita Response	(0-5)	3.32	Medium
Soil Amino-N	ppm	71	Medium
Crumb Aggregates	Vol %	13	Low
Scoop Bulk Density	g/cc	1.06	Optimal
Total Carbon	%	0.817	Low



Low Normal High

(warning may be either too high or too low)

3433 / 12519.2
40 / APPALACHIAN HIGHLANDS
Inceptisol-Udepts / Alfisol-Aqualfs / *
Soil: Tree210 T4 R8 Z19
09/Apr/24 28/May/24
General Crops

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	43	31	900	
Crop Use:	75	35	35	17,375
Difference:	32	4	0	
Suggested Need	53	35	0	Est CEC, meq
Other Notations	Low Status	Ex Low	Excess	8.3

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	2
Est. Seasonal Biological N-Release	lb/a	40
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	43
Likelihood of N-Response based on Org-N	Rating	Likely

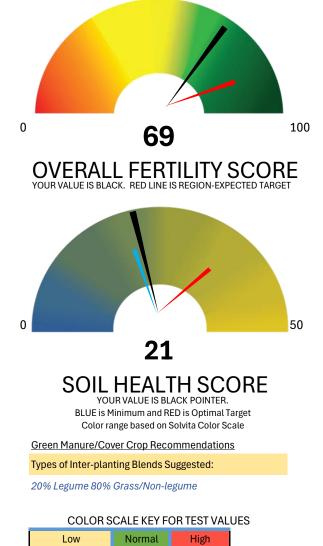
Extractable Nutrients				
mg kg	6			
mg kg	0.2			
mg kg	353			
mg kg	608			
mg kg	115			
mg kg	24			
Rating Factors				
Rating	82%			
	N			
V High	22.6%			
	mg kg mg kg mg kg mg kg mg kg mg kg Rating			

Other Factors				
pH in water 1:1	Unit	6.698		
Optional test (buffer pH)	Unit	6.666		
Water Soluble Carbon	mg kg	333		
Water Soluble C:N (WSOC:NO3-N)	Unit	197		
Aluminum, Extractable	mg kg	227		
Iron, Extractable (Optional)	mg kg	44		





Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	66.6	Optimal
Solvita Response	(0-5)	3.99	Medium
Soil Amino-N	ppm	37	Low
Crumb Aggregates	Vol %	12	Low
Scoop Bulk Density	g/cc	1.01	Optimal
Total Carbon	%	1.050	Med-Low



Account / Sample ID:	3433 / 12519.3		
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS		
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *		
Your Sample:	Soil: Tree214 T4 R7 Z19		
Received / Reported:	09/Apr/24 28/May/24		
Intended Crop:	General Crops		

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	81	32	948	
Crop Use:	75	35	35	21,280
Difference:	0	3	0	
Suggested Need	53	35	0	Est CEC, meq
Other Notations	Low Status	Ex Low	Excess	8.9

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	2
Est. Seasonal Biological N-Release	lb/a	77
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	81
Likelihood of N-Response based on Org-N	Rating	Likely

Extractable Nutrients				
Phosphorus , Extractable P	mg kg	7		
Phosphorus - Carbonate Ext-P	mg kg	0.6		
Potassium - Extractable K	mg kg	390		
Calcium - Extractable Ca	mg kg	677		
Magnesium - Extractable Mg	mg kg	118		
Sodium - Extractable Na	mg kg	22		
Rating Factors				
Nutrient Index, Scale 0 - 100	Rating	97%		
Most Limiting Factor		Р		
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	V High	22.9%		

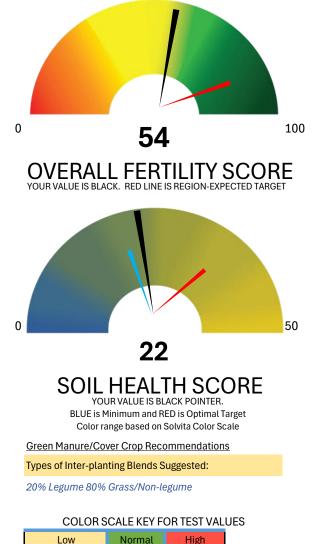
Other Factors				
pH in water 1:1	Unit	6.558		
Optional test (buffer pH)	Unit	6.661		
Water Soluble Carbon	mg kg	359		
Water Soluble C:N (WSOC:NO3-N)	Unit	146		
Aluminum, Extractable	mg kg	301		
Iron, Extractable (Optional)	mg kg	31		

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	64.5	Optimal
Solvita Response	(0-5)	3.95	Medium
Soil Amino-N	ppm	69	Medium
Crumb Aggregates	Vol %	16	Low
Scoop Bulk Density	g/cc	1.01	Optimal
Total Carbon	%	1.180	Med-Low



Low Normal High

(warning may be either too high or too low)

3433 / 12519.4
40 / APPALACHIAN HIGHLANDS
Inceptisol-Udepts / Alfisol-Aqualfs / *
Soil: Tree218 T5 R9 Z20
09/Apr/24 28/May/24
General Crops

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	N	<u>P2O5</u>	<u>K2O</u>	lb/a
Soil Supply:	79	29	4	
Crop Use:	75	35	35	23,836
Difference:	0	6	31	
Suggested Need	53	35	49	Est CEC, meq
Other Notations	Low Status	Ex Low	Normal	8.7

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	3
Est. Seasonal Biological N-Release	lb/a	74
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	79
Likelihood of N-Response based on Org-N	Rating	Likely

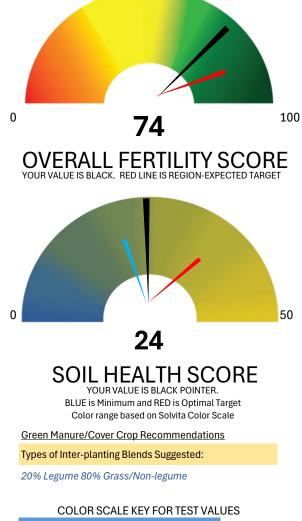
Extractable Nutrianta				
Extractable Nutrients				
Phosphorus , Extractable P	mg kg	6		
Phosphorus - Carbonate Ext-P	mg kg	0.4		
Potassium - Extractable K	mg kg	2		
Calcium - Extractable Ca	mg kg	664		
Magnesium - Extractable Mg	mg kg	96		
Sodium - Extractable Na	mg kg	13		
Rating Factors				
Nutrient Index, Scale 0 - 100	Rating	65%		
Most Limiting Factor		К		
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Optimal	0.1%		

Other Factors				
pH in water 1:1	Unit	6.592		
Optional test (buffer pH)	Unit	6.551		
Water Soluble Carbon	mg kg	367		
Water Soluble C:N (WSOC:NO3-N)	Unit	133		
Aluminum, Extractable	mg kg	189		
Iron, Extractable (Optional)	mg kg	22		





Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	64.9	Optimal
Solvita Response	(0 - 5)	3.91	Medium
Soil Amino-N	ppm	103	Medium
Crumb Aggregates	Vol %	19	Low
Scoop Bulk Density	g/cc	0.97	Optimal
Total Carbon	%	1.670	Medium



Low	Normal	High	

(warning may be either too high or too low)

Account / Sample ID:	3433 / 12519.5
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *
Your Sample:	Soil: Tree222 T5 R8 Z20
Received / Reported:	09/Apr/24 28/May/24
Intended Crop:	General Crops

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	<u>N</u>	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	80	54	821	
Crop Use:	75	35	35	32,287
Difference:	0	0	0	
Suggested Need	25	35	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	10.6

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	3
Est. Seasonal Biological N-Release	lb/a	75
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	80
Likelihood of N-Response based on Org-N	Rating	<u>Moderate</u>

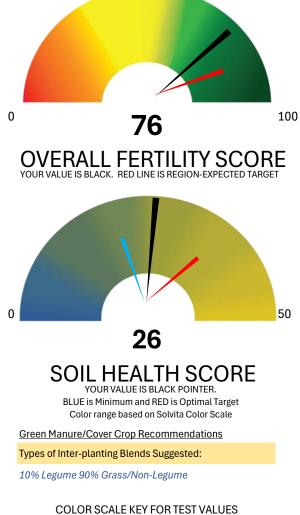
Extractable Nutrients				
Phosphorus , Extractable P	mg kg	12		
Phosphorus - Carbonate Ext-P	mg kg	0.8		
Potassium - Extractable K	mg kg	354		
Calcium - Extractable Ca	mg kg	959		
Magnesium - Extractable Mg	mg kg	168		
Sodium - Extractable Na	mg kg	17		
Rating Factors				
Nutrient Index, Scale 0 - 100	Rating	100%		
Most Limiting Factor		None		
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	14.6%		

Other Factors				
pH in water 1:1	Unit	6.805		
Optional test (buffer pH)	Unit	6.653		
Water Soluble Carbon	mg kg	369		
Water Soluble C:N (WSOC:NO3-N)	Unit	115		
Aluminum, Extractable	mg kg	256		
Iron, Extractable (Optional)	mg kg	33		





Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	115.3	High
Solvita Response	(0-5)	4.58	High
Soil Amino-N	ppm	59	Medium
Crumb Aggregates	Vol %	20	Low
Scoop Bulk Density	g/cc	0.98	Optimal
Total Carbon	%	1.340	Med-Low



COLOR SCALE KEY FOR TEST VALUES

(warning may be either too high or too low)

Account / Sample ID:	3433 / 12519.6		
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS		
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *		
Your Sample:	Soil: Tree230 T1 R9 Z1		
Received / Reported:	09/Apr/24 28/May/24		
Intended Crop:	General Crops		

Nutrients as: lb/a	Interpretative Guidelines		Est Carbon:	
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	137	68	798	
Crop Use:	75	35	35	26,264
Difference:	0	0	0	
Suggested Need	53	35	0	Est CEC, meq
Other Notations	Low Status	Normal	Excess	11.7

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	3
Est. Seasonal Biological N-Release	lb/a	133
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	137
Likelihood of N-Response based on Org-N	Rating	Likely

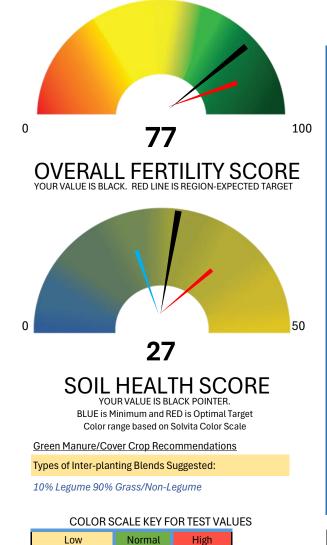
Extractable Nutrien	its	
Phosphorus , Extractable P	mg kg	15
Phosphorus - Carbonate Ext-P	mg kg	1.1
Potassium - Extractable K	mg kg	339
Calcium - Extractable Ca	mg kg	1066
Magnesium - Extractable Mg	mg kg	158
Sodium - Extractable Na	mg kg	16
Rating Factors		
Nutrient Index, Scale 0 - 100	Rating	100%
Most Limiting Factor		None
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	13.1%

Other Factors			
pH in water 1:1	Unit	6.645	
Optional test (buffer pH)	Unit	6.593	
Water Soluble Carbon	mg kg	406	
Water Soluble C:N (WSOC:NO3-N)	Unit	159	
Aluminum, Extractable	mg kg	270	
Iron, Extractable (Optional)	mg kg	58	





Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	102.2	High
Solvita Response	(0 - 5)	4.42	High
Soil Amino-N	ppm	120	Medium
Crumb Aggregates	Vol %	31	Medium
Scoop Bulk Density	g/cc	0.96	Optimal
Total Carbon	%	1.740	Medium



 Account / Sample ID:
 3433 / 12519.7

 Rainfall / Zone:
 40 / APPALACHIAN HIGHLANDS

 Soil Orders:
 Inceptisol-Udepts / Alfisol-Aqualfs / *

 Your Sample:
 Soil: Tree234 T1 R8 Z1

 Received / Reported:
 09/Apr/24 | 28/May/24

 Intended Crop:
 General Crops

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	N	P205	<u>K2O</u>	lb/a
Soil Supply:	125	629	210	
Crop Use:	75	35	35	33,408
Difference:	0	0	0	
Suggested Need	25	0	0	Est CEC, meq
Other Notations	Low Status	Excess	Normal	12.7

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	4
Est. Seasonal Biological N-Release	lb/a	118
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	125
Likelihood of N-Response based on Org-N	Rating	Moderate

Extractable Nutrients	S	
Phosphorus , Extractable P	mg kg	142
Phosphorus - Carbonate Ext-P	mg kg	1.0
Potassium - Extractable K	mg kg	91
Calcium - Extractable Ca	mg kg	1411
Magnesium - Extractable Mg	mg kg	246
Sodium - Extractable Na	mg kg	19
Rating Factors		
Nutrient Index, Scale 0 - 100	Rating	100%
Most Limiting Factor		None
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Optimal	2.6%

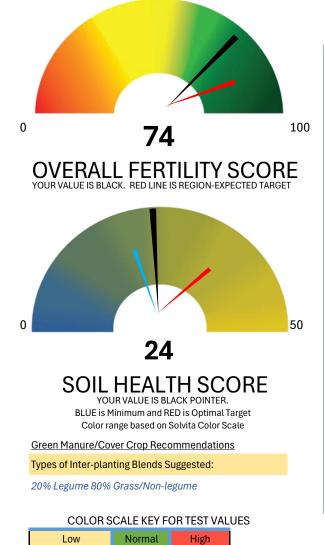
Other Factors			
pH in water 1:1	Unit	6.670	
Optional test (buffer pH)	Unit	6.673	
Water Soluble Carbon	mg kg	333	
Water Soluble C:N (WSOC:NO3-N)	Unit	84	
Aluminum, Extractable	mg kg	276	
Iron, Extractable (Optional)	mg kg	90	

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Soil Health Panel	Units		RANKING:
Microbial Rate	ppm	100.1	High
Solvita Response	(0-5)	4.42	High
Soil Amino-N	ppm	107	Medium
Crumb Aggregates	Vol %	22	Low
Scoop Bulk Density	g/cc	0.98	Optimal
Total Carbon	%	1.470	Med-Low



Account / Sample ID:	3433 / 12519.8	
Rainfall / Zone:	40 / APPALACHIAN HIGHLANDS	
Soil Orders:	Inceptisol-Udepts / Alfisol-Aqualfs / *	
Your Sample:	Soil: Tree238 T2 R9 Z2	
Received / Reported:	09/Apr/24 28/May/24	
Intended Crop:	General Crops	

Nutrients as: lb/a	Interpretative Guidelines			Est Carbon:
	N	<u>P205</u>	<u>K2O</u>	lb/a
Soil Supply:	121	37	867	
Crop Use:	75	35	35	28,812
Difference:	0	0	0	
Suggested Need	25	35	0	Est CEC, meq
Other Notations	Low Status	Ex Low	Excess	10.7

NUTRIENT PANEL

Analysis	Units	RESULT
Climate Zone at this Location	ZONE	5
Nitrogen as readily soluble NO3-N	ppm	3
Est. Seasonal Biological N-Release	lb/a	115
PMN (Avail. + N-Min) Nitrogen Potential	lb/a	121
Likelihood of N-Response based on Org-N	Rating	<u>Moderate</u>

Extractable Nutrients				
Phosphorus , Extractable P	mg kg	8		
Phosphorus - Carbonate Ext-P	mg kg	0.9		
Potassium - Extractable K	mg kg	369		
Calcium - Extractable Ca	mg kg	898		
Magnesium - Extractable Mg	mg kg	133		
Sodium - Extractable Na	mg kg	40		
Rating Factors				
Nutrient Index, Scale 0 - 100	Rating	100%		
Most Limiting Factor		None		
Cation Balance (Molar Ratio: K ÷ [Ca + Mg])	Marginal	16.9%		

Other Factors				
pH in water 1:1	Unit	6.578		
Optional test (buffer pH)	Unit	6.601		
Water Soluble Carbon	mg kg	252		
Water Soluble C:N (WSOC:NO3-N)	Unit	82		
Aluminum, Extractable	mg kg	80		
Iron, Extractable (Optional)	mg kg	23		

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