17-174-0017



7621 Whitepine Road, Richmond, VA 23237 Main 804-743-9401 ° Fax 804-271-6446 www.waypointanalytical.com

Lab No: **174037** 

PLANT ANALYSIS

Grower:

Customer Account Number:

Send To:

Report Date: 6/26/2017

Page 1 of 5

Field id: Crop: Apple

Sample Id: 112-1 Growth Stage: Mid-season Plant Part: Mid-terminal leaves on new growth (50+)

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	Nitrogen %	Sulfur %	Phosphorus %	Potassium %	Magnesium %	Calcium %	Sodium %	Boron ppm	Zinc ppm	Manganese ppm	Iron ppm	Copper ppm	Aluminum ppm		
Analysis	1.66	0.18	0.07	1.11	0.20	0.65	0.03	40	53	319	93	14	35		
Normal	1.90	0.16	0.15	1.25	0.20	1.00	0.00	25	20	25	50	5	0		
Range	2.29	0.29	0.49	1.79	0.49	1.99	0.19	60	50	200	400	20	200		
	N/S	N/K	P/S	P/Zn	K/Mg	K/Mn	Ca/B	Fe/Mn	Ca/K	Ca/Mg					
Actual Ratio	9.2	1.5	0.4	13.2	5.6	34.8	162.5	0.3	0.6	3.3					
Expected Ratio	9.3	1.4	1.4	91.4	4.4	135.1	351.8	2.0	1.0	4.3					
Very High															
High															
Sufficient															
Low															
Deficient															
	N	S	Р	K	Mg	Ca	Na	В	Zn	Mn	Fe	Cu	Al		

# Comments:

02018)

02022) CALCIUM - Less than sufficient due to low soil pH or excess soil K or Mg levels. Calcium deficiency is not likely to occur on soils maintained at the proper soil pH. For succeeding crops, soil test and apply calcitic limestone to correct soil acidity and low soil Ca. A foliar application of 1 to 2# per acre of Ca using calcium nitrate in 30 gal. of water may help alleviate the deficiency.

- Plants are low in POTASSIUM, foliar application of 5-7# of potassium nitrate per acre in a minimum of 20-30 gallons of water. Repeated applications may be necessary."

02019) MAGNESIUM - Less than sufficient due to low soil pH (less than 5.4) and/or low soil Mg levels. Broadcast 25# of Mg per acre or apply a foliar application using ¼ to ½# of Mg per acre in 30 gal. of water. Repeat the foliar application in 10 to 14 days if symptoms persist.

02015) NITROGEN - Deficient or low due to inadequate N fertilization, excessive rainfall, and/or ineffective N application. Additional nitrogen may be supplied to the crop with sidedress or topdress applications or in irrigation water. Refer to local/state recommendations or contact the lab for supplemental N recommendations.

O2084) Additional nitrogen may be supplied to the crop with sidedress or topdress applications or in irrigation water. Apply at the rate of 20 to 50# per acre. Repeated applications may be necessary.

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Lab No: **174038** 

PLANT ANALYSIS

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Field id: Crop : Apple

Sample Id: 112-2 Growth Stage: Mid-season Plant Part: Mid-terminal leaves on new growth (50+)

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	Nitrogen %	Sulfur %	Phosphorus %	Potassium %	Magnesium %	Calcium %	Sodium %	Boron ppm	Zinc ppm	Manganese ppm	Iron ppm	Copper ppm	Aluminum ppm	
Analysis	1.67	0.17	0.05	1.13	0.21	0.63	0.03	42	60	348	61	15	24	
Normal	1.90	0.16	0.15	1.25	0.20	1.00	0.00	25	20	25	50	5	0	
Range	2.29	0.29	0.49	1.79	0.49	1.99	0.19	60	50	200	400	20	200	
	N/S	N/K	P/S	P/Zn	K/Mg	K/Mn	Ca/B	Fe/Mn	Ca/K	Ca/Mg				
Actual Ratio	9.8	1.5	0.3	8.3	5.4	32.5	150.0	0.2	0.6	3.0				
Expected Ratio	9.3	1.4	1.4	91.4	4.4	135.1	351.8	2.0	1.0	4.3				
												T	,	
Very High														
High														
Sufficient														
Low														
Deficient														
	N	S	Р	K	Mg	Ca	Na	В	Zn	Mn	Fe	Cu	Al	

# Comments:

02022) CALCIUM - Less than sufficient due to low soil pH or excess soil K or Mg levels. Calcium deficiency is not likely to occur on soils maintained at the proper soil pH. For succeeding crops, soil test and apply calcitic limestone to correct soil acidity and low soil Ca. A foliar application of 1 to 2# per acre of Ca using calcium nitrate in 30 gal. of water may help alleviate the deficiency.

- Plants are low in POTASSIUM, foliar application of 5-7# of potassium nitrate per acre in a minimum of 20-30 gallons of water. Repeated applications may be necessary."

02015) NITROGEN - Deficient or low due to inadequate N fertilization, excessive rainfall, and/or ineffective N application. Additional nitrogen may be supplied to the crop with sidedress or topdress applications or in irrigation water. Refer to local/state recommendations or contact the lab for supplemental N recommendations.

O2084) Additional nitrogen may be supplied to the crop with sidedress or topdress applications or in irrigation water. Apply at the rate of 20 to 50# per acre. Repeated applications may be necessary.

02017) PHOSPHORUS - Phosphorus deficiency may be due to low P levels, low or high pH, root damage and/or cool soil temperatures. Soil test and follow soil test recommendations of future plantings.

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Lab No: 174039

PLANT ANALYSIS

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Report Date: 6/26/2017

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Field id: Crop: Apple

Sample Id: 112-3 Growth Stage: Mid-season Plant Part: Mid-terminal leaves on new growth (50+)

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	Nitrogen %	Sulfur %	Phosphorus %	Potassium %	Magnesium %	Calcium %	Sodium %	Boron ppm	Zinc ppm	Manganese ppm	Iron ppm	Copper ppm	Aluminum ppm	
Analysis	1.73	0.16	0.06	1.06	0.22	0.71	0.03	41	53	347	28	14	34	
Normal	1.90	0.16	0.15	1.25	0.20	1.00	0.00	25	20	25	50	5	0	
Range	2.29	0.29	0.49	1.79	0.49	1.99	0.19	60	50	200	400	20	200	
	N/S	N/K	P/S	P/Zn	K/Mg	K/Mn	Ca/B	Fe/Mn	Ca/K	Ca/Mg				
Actual Ratio	10.8	1.6	0.4	11.3	4.8	30.5	173.2	0.1	0.7	3.2				
Expected Ratio	9.3	1.4	1.4	91.4	4.4	135.1	351.8	2.0	1.0	4.3				
Very High														
High														
Sufficient														
Low														
Deficient														
	N	S	Р	K	Mg	Ca	Na	В	Zn	Mn	Fe	Cu	Al	

# Comments:

02022) CALCIUM - Less than sufficient due to low soil pH or excess soil K or Mg levels. Calcium deficiency is not likely to occur on soils maintained at the proper soil pH. For succeeding crops, soil test and apply calcitic limestone to correct soil acidity and low soil Ca. A foliar application of 1 to 2# per acre of Ca using calcium nitrate in 30 gal. of water may help alleviate the deficiency.

02027) IRON - Low/deficient apply a foliar application of Fe at the rate of 1/4 to 1# Fe per acre in 30 gal. of water. If chelated material is used, apply according to manufacture specifications. 02018)

- Plants are low in POTASSIUM, foliar application of 5-7# of potassium nitrate per acre in a minimum of 20-30 gallons of water. Repeated applications may be necessary."

NITROGEN - Deficient or low due to inadequate N fertilization, excessive rainfall, and/or ineffective N application. Additional nitrogen may be supplied to the crop with sidedress or topdress 02015) applications or in irrigation water. Refer to local/state recommendations or contact the lab for supplemental N recommendations.

02084) Additional nitrogen may be supplied to the crop with sidedress or topdress applications or in irrigation water. Apply at the rate of 20 to 50# per acre. Repeated applications may be necessary.

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Lab No: **174040** 

**PLANT ANALYSIS** 

Grower:

**Customer Account Number:** 

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Report Date : 6/26/2017

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Field id: Crop : Apple

Sample Id: 132-1 Growth Stage: Mid-season Plant Part: Mid-terminal leaves on new growth (50+)

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	Nitrogen %	Sulfur %	Phosphorus %	Potassium %	Magnesium %	Calcium %	Sodium %	Boron ppm	Zinc ppm	Manganese ppm	Iron ppm	Copper ppm	Aluminum ppm		
Analysis	1.44	0.13	0.06	1.19	0.20	0.47	0.03	50	48	301	45	12	9		
Normal	1.90	0.16	0.15	1.25	0.20	1.00	0.00	25	20	25	50	5	0		
Range	2.29	0.29	0.49	1.79	0.49	1.99	0.19	60	50	200	400	20	200		
	N/S	N/K	P/S	P/Zn	K/Mg	K/Mn	Ca/B	Fe/Mn	Ca/K	Ca/Mg					
Actual Ratio	11.1	1.2	0.5	12.5	6.0	39.5	94.0	0.1	0.4	2.4					
Expected Ratio	9.3	1.4	1.4	91.4	4.4	135.1	351.8	2.0	1.0	4.3					
Very High															
High															
Sufficient															
Low															
Deficient															
	N	S	Р	K	Mg	Ca	Na	В	Zn	Mn	Fe	Cu	Al		

# Comments:

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02027) IRON - Low/deficient apply a foliar application of Fe at the rate of ¼ to 1# Fe per acre in 30 gal. of water. If chelated material is used, apply according to manufacture specifications.

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Lab No: **174041** 

**PLANT ANALYSIS** 

Grower:

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Field id: Crop : Apple

Sample Id: 132-2 Growth Stage: Mid-season Plant Part: Mid-terminal leaves on new growth (50+)

ample la . I	0L L			Oi.	owiii Stage	, . WIIG-3CC	25011		Trant ratt. Wid-terminarieaves of flew growth (50+)						
	Nitrogen %	Sulfur %	Phosphorus %	Potassium %	Magnesium %	Calcium %	Sodium %	Boron ppm	Zinc ppm	Manganese ppm	Iron ppm	Copper ppm	Aluminum ppm		
Analysis	1.57	0.16	0.06	1.18	0.22	0.45	0.03	61	64	371	46	13	20		
Normal	1.90	0.16	0.15	1.25	0.20	1.00	0.00	25	20	25	50	5	0		
Range	2.29	0.29	0.49	1.79	0.49	1.99	0.19	60	50	200	400	20	200		
	N/S	N/K	P/S	P/Zn	K/Mg	K/Mn	Ca/B	Fe/Mn	Ca/K	Ca/Mg					
Actual Ratio	9.8	1.3	0.4	9.4	5.4	31.8	73.8	0.1	0.4	2.0					
Expected Ratio	9.3	1.4	1.4	91.4	4.4	135.1	351.8	2.0	1.0	4.3					
Very High															
High															
Sufficient															
Low															
Deficient															
	N	S	Р	K	Mg	Ca	Na	В	Zn	Mn	Fe	Cu	Al		

## Comments:

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