

Report Number: 21-274-0582

Account Number: 11477

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7621 Whitepine Road, Richmond, VA 23237

Main 804-743-9401 ° Fax 804-271-6446

www.waypointanalytical.com

Send To: Soil Foundations  
 Ryan Reed  
 415 Holly Lane  
 Bluemont VA 20135

Grower: Laurel Grove Wine Farm (LGWF)

**SOIL ANALYSIS REPORT**

Analytical Method(s): Mehlich 3 SMP Buffer pH Loss On Ignition Water pH

Date Received: 10/01/2021

Date Of Analysis: 10/04/2021

Date Of Report: 10/04/2021

Sample ID Field ID	Lab Number	OM	W/V	ENR	Phosphorus			Potassium	Magnesium	Calcium	Sodium	pH		Acidity	C.E.C
		% Rate	Soil Class	lbs/A	M3 ppm Rate	ppm	Rate	K ppm Rate	Mg ppm Rate	Ca ppm Rate	Na ppm Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
1A	04083	9.5 VH		150	16 L			52 VL	44 VL	145 VL	6 VL	3.9	6.44	4.9	6.2
1B	04084	1.8 L		83	4 VL			57 L	22 L	97 VL	3 VL	4.5	6.82	1.1	1.9
2A	04085	11.4 VH		150	19 L			51 VL	105 VL	1230 L	5 VL	4.5	6.10	9.9	17.1
2B	04086	1.4 L		74	4 VL			63 L	53 H	158 VL	3 VL	4.7	6.79	1.4	2.8
3A	04087	8.5 VH		150	9 VL			62 L	51 L	140 VL	4 VL	4.2	6.63	3.0	4.3

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts		
	K %	Mg %	Ca %	Na %	H %	NO <sub>3</sub> N ppm Rate	S ppm Rate	Zn ppm Rate	Mn ppm Rate	Fe ppm Rate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate		
1A	2.2	5.9	11.7	0.4	79.0		9 VL	1.9 L	20 M	256 VH	0.5 L	0.4 L			
1B	7.7	9.6	25.5	0.7	57.9		50 VH	1.1 L	8 L	50 H	0.5 L	0.2 VL			
2A	0.8	5.1	36.0	0.1	57.9		12 L	5.1 H	235 VH	165 VH	0.8 L	0.4 L			
2B	5.8	15.8	28.2	0.5	50.0		20 M	0.8 VL	9 L	55 VH	0.6 L	0.1 VL			
3A	3.7	9.9	16.3	0.4	69.8		13 L	3.7 H	18 M	202 VH	0.5 L	0.4 L			

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: Waypoint Analytical Virginia, Inc.

by: *Paucic Mc Groary*

Paucic Mc Groary Ph.D., CPAg

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**Grower:** Laurel Grove Wine Farm (LGWF)**Date Received:** 10/01/2021**Date Of Report:** 10/04/2021**SOIL FERTILITY RECOMMENDATIONS**

Sample ID Field ID	Intended Crop	Yield Goal Tons	Lime Tons/A	Nitrogen N lb/A	Phosphate P <sub>2</sub> O <sub>5</sub> lb/A	Potash K <sub>2</sub> O lb/A	Magnesium Mg lb/A	Sulfur S lb/A	Zinc Zn lb/A	Manganese Mn lb/A	Iron Fe lb/A	Copper Cu lb/A	Boron B lb/A
1A	Grapes-Vinifera	4	3.0	**	140	0	18	31	2.1	2	0	0	3.0
1B	Grapes-Vinifera	4	1.3	**	140	0	24	0	2.5	3	0	0	3.0
2A	Grapes-Vinifera	4	3.0	**	137	0	0	28	0.5	0	0	1.8	3.0
2B	Grapes-Vinifera	4	1.5	**	140	0	12	19	2.6	3	0	0	3.0
3A	Grapes-Vinifera	4	3.0	**	140	0	13	27	1.2	2	0	0	3.0

**Comments:**

"The recommendations are based on research data and experience, but NO GUARANTEE or WARRANTY expressed or implied, concerning crop performance is made."

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		% Rate	Soil Class	lbs/A	M3 ppm Rate	ppm Rate	ppm Rate	K ppm Rate	Mg ppm Rate	Ca ppm Rate	Na ppm Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
3B	04088	1.1 L		70	5 VL			43 L	18 L	73 VL	1 VL	4.5	6.84	0.9	1.5
4A	04089	5.9 H		150	7 VL			42 L	24 L	92 VL	3 VL	4.3	6.78	1.5	2.3
4B	04091	1.7 L		78	3 VL			52 L	29 VL	82 VL	2 VL	3.8	6.57	3.6	4.4
5A	04092	6.5 H		150	6 VL			39 VL	31 L	152 VL	2 VL	4.1	6.62	3.1	4.2
5B	04093	1.7 L		81	3 VL			57 L	34 M	90 VL	2 VL	4.4	6.78	1.5	2.4

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts		
	K %	Mg %	Ca %	Na %	H %	NO <sub>3</sub> N ppm Rate	S ppm Rate	Zn ppm Rate	Mn ppm Rate	Fe ppm Rate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate		
3B	7.4	10.0	24.3	0.3	60.0		19 M	1.3 L	4 L	39 H	0.4 L	0.1 VL			
4A	4.7	8.7	20.0	0.6	65.2		13 L	1.2 L	8 L	438 VH	0.4 L	0.9 M			
4B	3.0	5.5	9.3	0.2	81.8		9 VL	1.2 L	2 VL	50 H	0.8 L	0.1 VL			
5A	2.4	6.2	18.1	0.2	73.8		6 VL	0.9 VL	38 H	142 VH	0.3 VL	0.3 VL			
5B	6.1	11.8	18.8	0.4	62.5		50 VH	0.9 VL	7 L	35 H	0.4 L	0.1 VL			

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

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3B	Grapes-Vinifera	4	1.3	**	140	0	25	20	2.4	3	0	0.2	3.0
4A	Grapes-Vinifera	4	1.5	**	140	0	23	27	2.4	3	0	0.2	2.0
4B	Grapes-Vinifera	4	2.5	**	140	0	21	31	2.4	4	0	0	3.0
5A	Grapes-Vinifera	4	2.3	**	140	150	19	34	2.6	0	0	0.5	3.0
5B	Grapes-Vinifera	4	1.5	**	140	0	18	0	2.6	3	0	0.2	3.0

**Comments:**

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		% Rate	Soil Class	lbs/A	M3 ppm Rate	ppm Rate	ppm Rate	K ppm Rate	Mg ppm Rate	Ca ppm Rate	Na ppm Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
6A	04094	5.4 H		150	7 VL			43 L	31 M	109 VL	5 VL	4.4	6.78	1.5	2.4
6B	04095	2.2 L		91	3 VL			63 L	28 L	87 VL	3 VL	4.3	6.77	1.6	2.4

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts		
	K %	Mg %	Ca %	Na %	H %	NO <sub>3</sub> N ppm Rate	S ppm Rate	Zn ppm Rate	Mn ppm Rate	Fe ppm Rate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate		
6A	4.6	10.8	22.7	0.9	62.5		15 L	1.8 L	72 VH	252 VH	0.5 L	0.5 L			
6B	6.7	9.7	18.1	0.5	66.7		37 VH	0.9 VL	9 L	50 H	0.4 L	0.1 VL			

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6A	Grapes-Vinifera	4	1.5	**	140	0	19	25	2.1	0	0	0	2.5
6B	Grapes-Vinifera	4	1.5	**	140	0	21	0	2.6	3	0	0.2	3.0

**Comments:**

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