

Anaheim Office May 11, 2023 Report 23-121-0030

Zanker Landscape Materials 675 Los Esteros Road San Jose, CA 95134

Attn: Beto

RE: Zanker Summer Blend processed on 05/01/2023

The first sheet is the actual test data and the second sheet is a calculated table showing the percent of each required nutrient that is readily available compared to the total present. Further decomposition of the organic fraction will release additional nutrients as available for plant utilization. The third sheet evaluates the potential rate limiting factors in the top table and in this case, there are no chemical characteristics that would limit the rate. The bottom table on that sheet uses an example rate of 43% that is based on the amount of organic matter generally required to amend soils of low organic content. At the example rate, the degree to which the material would satisfy the immediate requirement for each required nutrient is indicated.

Approximately 0.4% of the material is retained on a $\frac{1}{2}$ inch screen. Of the material passing the $\frac{1}{2}$ inch screen 88.8% of the amendment passes the 6.4 mm ($\frac{1}{4}$ inch) screen and 62.7% passes the 2.36 mm (about $\frac{1}{8}$ inch). Actual organic matter content is 159 pounds per cubic yard. Organic matter comprises 17% of product by dry weight. The moisture percentage is a little low at 16% and this material could be dusty when handled.

The carbon to nitrogen ratio at 18.9 is favorable and indicates the material is nitrogen stable.

At the example rate of 43% by volume this amendment would provide a favorable amount of organic matter to benefit soil structure and satisfy the organic matter need for most soil types. At this rate the amendment would also provide a significant nutrient contribution of immediately available potassium, magnesium, iron and organic matter. A moderate amount of copper, zinc and sulfate will also be contributed. These contributions at the example rate are noted on the last page. This volume rate is equivalent to 8 cubic yards per 1000 square feet for blending to a 6 inch depth. This would be adding 1272 pounds organic matter, which would increase organic content of a sandy loam soil by about 4.7% on a dry weight basis.

Reaction is slightly alkaline at a pH of 7.4 with a low level of free lime. Salinity and soluble levels of sodium, chloride and boron are safely low for use at the recommended rate. Sodium and chloride are slightly elevated if the material is used as a direct planting media and if used in this manner then initial irrigations should be thorough.

The table that follows the data page shows what nutrients are present in total amounts as well as what portion is immediately available. For convenience these results are expressed both on a cubic yard basis and as weight of nutrient and organic matter per as-received ton of Zanker Summer Blend. Further release from the organic complex will continue to help satisfy plant needs for many of the nutrients.

This material could be used as a direct planting media. Available nitrogen, phosphorus and manganese are fair. The remaining nutrients are well supplied. Nitrogen fertilization will need to occur shortly after planting.



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If we can be of any further assistance, please feel free to contact us.

Joe Kiefer, CCA

jkiefer@waypointanalytical.com

Emailed 5 pages: beto.ochoa@greenwaste.com



COMPOST / AMENDMENT EVALUATION

Send To:
Zanker Landscape Materials
675 Los Esteros Road
San Jose CA 95134

Project : Summer Blend Report Number : **23-121-0030**Customer Number : 01002
Date printed : 05/11/2023

Date received : 05/01/2023 Page : 1 of 3 Lab Number : 59399

Sample Id: Summer Blend

Nutrient	Total - Dry Weight	Extractable - Dry Weight	Saturation Extract	Sufficiency Factor
Nitrogen (N)	0.54 %	67 ppm		0.8
NH ₄ -N		46 ppm		
NO ₃ -N		20 ppm		
Phosphorus (P)	0.09 %	25 ppm		0.5
Phosphorus (P ₂ O ₅)	0.21 %	57 ppm		
Potassium (K)	0.28 %	720 ppm	5.1 meq/L	2.8
Potassium (K ₂ O)	0.34 %	871 ppm		
Calcium (Ca)	1.82 %	1583 ppm	8.3 meq/L	0.6
Magnesium (Mg)	1.25 %	686 ppm	7.7 meq/L	2.0
Sodium (Na)	0.07 %		17.8 meq/L	
Sulfur (S)	0.09 %			
Sulfate (SO ₄)			7.9 meq/L	2.6
Chloride (CI)			11.3 meq/L	
Copper (Cu)	43.5 ppm	1.8 ppm		0.9
Zinc (Zn)	88.2 ppm	10 ppm		1.3
Manganese (Mn)	500 ppm	6 ppm		0.4
Iron (Fe)	3430 ppm	144 ppm		1.9
Dilute Acid Fe		0.19 %		
Boron (B)	24.7 ppm		0.62 ppm	2.1

Test	Result
pH (sat paste)	7.4 s.u.
% Half Sat.	40
TEC	154 meq/kg
Qualitative Lime	Low
Salinity (EC of sat ext.)	2.5 dS/m
SAR (Sodium adsorption ratio)	6.31
Sodium as % of ECe	66 %
Bulk Density - Dry	934 lbs/yd³
Bulk Density - As Received	1112 lbs/yd ³
Moisture - As Received	16.0 %
Organic	17.0 %
Weight of organic / yd³	159 lbs/yd³
Weight of mineral / yd³	776 lbs/yd³
C/N Ratio	18.9

Gradation	
Wt Percent Retained 1"	0.0 %
Wt Percent Retained 1/2"	0.4 %
Fraction Passing 1/2 inch Screen	- Dry Weight Basis
Screen Opening	% Passing
Passing 9.5mm	97.7 %
Passing 6.4mm (1/4")	88.8 %
Passing 4.75mm	80.4 %
Passing 2.36mm	62.7 %
Passing 1.00mm	44.7 %
Passing 0.50mm	18.1 %



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Page : 2 of 3
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NUTRIENT SUMMARY

Test	Amount Per Cubic Yard				Am	Available as a			
	Т	otal	Avail	Available		al	Available		% Of Total
Nitrogen	5.04	lbs	0.06	lbs	9.07	lbs	0.11	lbs	1
Phosphorus (P)	0.88	lbs	0.02	lbs	1.59	lbs	0.04	lbs	3
Phosphorus (P ₂ O ₅)	2.02	lbs	0.05	lbs	3.63	lbs	0.1	lbs	3
Potassium (K)	2.6	lbs	0.67	lbs	4.68	lbs	1.21	lbs	26
Potassium (K ₂ O)	3.15	lbs	0.81	lbs	5.66	lbs	1.46	lbs	26
Calcium	17.02	lbs	1.48	lbs	30.61	lbs	2.66	lbs	9
Magnesium	11.7	lbs	0.64	lbs	21.04	lbs	1.15	lbs	5
Sulfur	0.87	lbs	0.09	lbs	1.56	lbs	0.17	lbs	11
Copper	0.65	ozs	0.03	ozs	1.17	ozs	0.05	ozs	4
Zinc	1.32	ozs	0.15	ozs	2.37	ozs	0.27	ozs	11
Manganese	7.47	ozs	0.09	ozs	13.44	ozs	0.16	ozs	1
Iron	51.26	ozs	2.15	ozs	92.2	ozs	3.87	ozs	4
Boron	0.37	ozs	0.01	ozs	0.66	ozs	0.01	ozs	2
Organic Matter	159	lbs			286	lbs			



COMPOST / AMENDMENT EVALUATION

Send To: Proiect: Report Number: 23-121-0030 Zanker Landscape Materials Summer Blend Customer Number: 01002 675 Los Esteros Road Date printed: 05/11/2023 05/01/2023 Date received : San Jose CA 95134 Page: 3 of 3 Lab Number: 59399

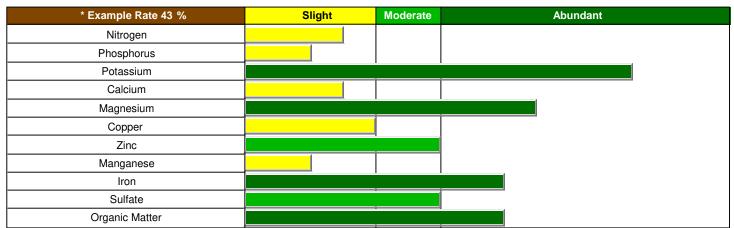
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POTENTIAL RATE LIMIT FACTORS

		Cubic yard amendment per 1000 sf to 6"									
		1	2	3	4	5	6	7	8		
Test	% Volume rate limit	Volume % amendment blend with sandy loam									
		5	11	16	22	27	32	38	43		
EC sat. ext.	No Limit										
Sodium sol.	100 %										
Chloride sol.	No Limit										
Boron sol.	No Limit										
NH ₄ -N	No Limit										
Available											
Nitrogen	No Limit										
PO ₄ P	No Limit										
Copper	No Limit										
Zinc	No Limit										

Rate limit estimates based on amending a non-problematic sandy loam

RELATIVE IMMEDIATE NUTRIENT AND ORGANIC VALUE



^{*} If no chemical characteristics are rate limiting, the example rate is based on organic content of the amendment (up to a max of 43%).



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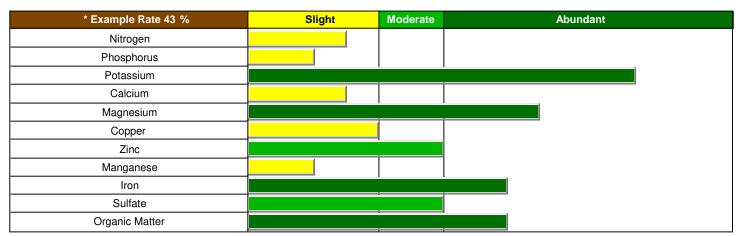
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