



Anaheim Office
May 3, 2021
Report 21-112-0028

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

Attn: Marin

RE: Landscape Compost processed 4/22/2021

The first sheet is the actual test data and the second sheet evaluates the potential rate limiting factors in the top table. In this case there are no rate limiting factors. The bottom table on that sheet uses an example rate of 33% based on organic content. At the example rate, the degree to which the compost would satisfy the immediate requirement for each required nutrient is indicated.

Approximately 89% of the amendment passes the 6.4 mm (1/4 inch) screen and 53% passes the 2.36 mm (about 1/8 inch). Actual organic matter content is favorable at 299 pounds per cubic yard. Organic content at 70% is favorable. The as-received moisture level is favorable at 38%.

The carbon to nitrogen ratio at 42 is slightly higher than ideal to meet the anticipated decomposition requirement and there will be a consumption of nitrogen as the microbes break down the less resistant organic matter. To ensure that this does not compete with the plants for nitrogen this could be dealt with at the time of use by simultaneously incorporating Ureaform 38-0-0 (27% water insoluble nitrogen) at a rate of 1 pound per cubic yard of amendment. This slow release product should offset the requirement of the amendment but the planting should still be on a regular nitrogen fertilization program.

Reaction is moderately alkaline at a pH of 7.8 with low lime present. Salinity, sodium and boron are all favorably low.

At the example rate of 33% volume this material would provide an abundant amount of potassium and moderate levels of magnesium, zinc and manganese. This volume rate is equivalent to about 6 cubic yards per 1000 square feet for blending to 6 inches depth. This would be adding 1794 pounds organic matter, which would increase organic content of a sandy loam soil by about 6.9% on a dry weight basis. Typical use rates as an incorporated amendment will be 2-6 yd.³ per 1000 ft.² incorporated to a 6 inch depth.

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

A handwritten signature in black ink that reads "William Darlington".

William Darlington, M.S., CCA

wdarlington@wpacorp.com

COMPOST / AMENDMENT EVALUATION

Send To : Zanker Landscape Materials 675 Los Esteros Road San Jose CA 95134	Project : Landscape Compost	Report Number : 21-112-0028 Customer Number : 01002 Date printed : 04/27/2021 Date received : 04/22/2021 Page : 1 of 2 Lab Number : 90538
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Sample Id : **Landscape Compost**

Nutrient	Total - Dry Weight	Extractable - Dry Weight	Saturation Extract	Sufficiency Factor
Nitrogen (N)	1 %	19 ppm		0.1
NH ₄ -N		11 ppm		
NO ₃ -N		8 ppm		
Phosphorus (P)		133 ppm		0.7
Phosphorus (P ₂ O ₅)		305 ppm		
Potassium (K)		3706 ppm	11.6 meq/L	4.7
Potassium (K ₂ O)		4484 ppm		
Calcium (Ca)		3625 ppm	5.1 meq/L	0.6
Magnesium (Mg)		1421 ppm	4.0 meq/L	1.7
Sodium (Na)			3.8 meq/L	
Sulfur (S)				
Sulfate (SO ₄)			7.4 meq/L	2.5
Chloride (Cl)				
Copper (Cu)		1.6 ppm		0.4
Zinc (Zn)		26 ppm		1.5
Manganese (Mn)		55 ppm		1.5
Iron (Fe)		26 ppm		0.2
Dilute Acid Fe		0.22 %		
Boron (B)			0.68 ppm	2.3

Test	Result
pH (sat paste)	7.8 s.u.
% Half Sat.	158
TEC	335 meq/kg
Qualitative Lime	Low
Salinity (EC of sat ext.)	1.6 dS/m
SAR (Sodium adsorption ratio)	1.78
Sodium as % of ECe	21 %
Bulk Density - Dry	427 lbs/yd ³
Bulk Density - As Received	691 lbs/yd ³
Moisture - As Received	38.2 %
Organic	70.0 %
Weight of organic / yd ³	299 lbs/yd ³
Weight of mineral / yd ³	128 lbs/yd ³
C/N Ratio	41.9

Gradation	
Wt Percent Retained 1"	0.0 %
Wt Percent Retained 1/2"	0.7 %
Fraction Passing 1/2 inch Screen - Dry Weight Basis	
Screen Opening	% Passing
Passing 9.5mm	97.6 %
Passing 6.4mm (1/4")	89.1 %
Passing 4.75mm	78.1 %
Passing 2.36mm	53.4 %
Passing 1.00mm	31.7 %
Passing 0.50mm	17.4 %

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POTENTIAL RATE LIMIT FACTORS

Test	% Volume rate limit	Cubic yard amendment per 1000 sf to 6"							
		1	2	3	4	5	6	7	8
		Volume % amendment blend with sandy loam							
		5	11	16	22	27	32	38	43
EC sat. ext.	No Limit								
Sodium sol.	No Limit								
Chloride sol.									
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

* Example Rate 33 %	Slight	Moderate	Abundant
Nitrogen			
Phosphorus	■		
Potassium			■
Calcium	■		
Magnesium		■	
Copper	■		
Zinc		■	
Manganese		■	
Iron	■		
Sulfate	■		
Organic Matter			■

* 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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Zinc		■	
Manganese		■	
Iron	■		
Sulfate	■		
Organic Matter			■

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