Anaheim Office
May 10, 2023
Report 23-121-0024

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

Attn: Marin & Beto

RE: Planter Mix processed 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 now readily available compared to the total present. 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 to less than normally employed for amendments. 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 compost would satisfy the immediate requirement for each required nutrient is indicated.

Approximately 97% of the material passes the 1/2 inch screen with 97.5% of that fraction passing the 6.4 mm (1/4 inch) screen and 71.4% passes the 2.36 mm (about 1/8 inch). The amount of very fine material present indicates this material will have the potential for issues with dustiness at the relatively low as-received moisture level. Actual organic matter content is 159 pounds per cubic yard. Organic content at 15.6% is low for an amendment material but favorable for mix intended for direct planting. The carbon to nitrogen ratio at 21.7 is favorable.

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 nitrogen, potassium, manganese and organic matter. The material will also supply a moderate amount of calcium, copper, zinc, iron and sulfate. 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 6 inches depth. This would be adding 1272 pounds organic matter, which would increase organic content of a sandy loam soil by about 4.5% on a dry weight basis.

Reaction of this material is slightly alkaline at a pH of 7.6 with a moderate level of qualitative lime present. Salinity and soluble levels of sodium, chloride and boron are safely low for use at the recommended rate. If this material will be used for direct planting it should receive several thorough initial leaching irrigations with good quality water in order to decrease the sodium and chloride to a safer range for sensitive plants.

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 Planter Mix. Further release from the organic complex will continue to help satisfy plant needs for many of the nutrients.

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

Joe Kiefer, CCA
jkiefer@waypointanalytical.com
Emailed 4 pages: marin.villalpando@greenwaste.com & beto.ochoa@greenwaste.com

Waypoint ANALYTICAL

4741 East Hunter Ave. Suite A
Anaheim, CA 92807
Main 714-282-8777 ° Fax 714-282-8575
www.waypointanalytical.com

COMPOST / AMENDMENT EVALUATION

Send To :	Project :	
Zanker Landscape Materials 675 Los Esteros Road San Jose CA 95134	Planter Mix	Report Number : **23-121-0024** Customer Number : 01002 Date printed : 05/08/2023 Date received : 05/01/2023 Page : 1 of 3 Lab Number : 59395

Sample Id : **Planter Mix**

Nutrient	Total - Dry Weight	Extractable - Dry Weight	Saturation Extract	Sufficiency Factor
Nitrogen (N)	0.43 %	157 ppm		1.8
NH_4-N		87 ppm		
NO_3-N		70 ppm		
Phosphorus (P)	0.09 %	28 ppm		0.5
Phosphorus (P_2O_5)	0.21 %	64 ppm		
Potassium (K)	0.25 %	884 ppm	9.3 meq/L	3.7
Potassium (K_2O)	0.3 %	1070 ppm		
Calcium (Ca)	2.06 %	1968 ppm	9.7 meq/L	1.1
Magnesium (Mg)	1.38 %	20 ppm	9.6 meq/L	0.1
Sodium (Na)	0.08 %		13.6 meq/L	
Sulfur (S)	0.08 %			
Sulfate (SO_4)			6.4 meq/L	2.1
Chloride (Cl)			16.0 meq/L	
Copper (Cu)	63.9 ppm	1.8 ppm		1.3
Zinc (Zn)	90.5 ppm	6 ppm		1.1
Manganese (Mn)	538 ppm	48 ppm		3.9
Iron (Fe)	3390 ppm	83 ppm		1.5
Dilute Acid Fe		0.23 %		
Boron (B)	29.1 ppm		0.93 ppm	3.1

Test	Result
pH (sat paste)	7.6 s.u.
% Half Sat.	43
TEC	110 meq/kg
Qualitative Lime	Medium
Salinity (EC of sat ext.)	3.1 dS/m
SAR (Sodium adsorption ratio)	4.38
Sodium as % of ECe	39 %
Bulk Density - Dry	1020 lbs/yd³
Bulk Density - As Received	1247 lbs/yd³
Moisture - As Received	18.2 %
Organic	15.6 %
Weight of organic / yd³	159 lbs/yd³
Weight of mineral / yd³	861 lbs/yd³
C/N Ratio	21.7

Gradation	
Wt Percent Retained 1"	0.1 %
Wt Percent Retained 1/2"	2.7 %

Fraction Passing 1/2 inch Screen - Dry Weight Basis	
Screen Opening	% Passing
Passing 9.5mm	99.8 %
Passing 6.4mm (1/4")	97.5 %
Passing 4.75mm	93.3 %
Passing 2.36mm	71.4 %
Passing 1.00mm	43.6 %
Passing 0.50mm	28.0 %

Waypoint ANALYTICAL

4741 East Hunter Ave. Suite A
Anaheim, CA 92807
Main 714-282-8777 ° Fax 714-282-8575
www.waypointanalytical.com

COMPOST / AMENDMENT EVALUATION

Send To :	Project :	
Zanker Landscape Materials 675 Los Esteros Road San Jose CA 95134	Planter Mix	Report Number : **23-121-0024** Customer Number : 01002 Date printed : 05/08/2023 Date received : 05/01/2023 Page : 2 of 3 Lab Number : 59395

Sample Id : **Planter Mix**

NUTRIENT SUMMARY

Test	Amount Per Cubic Yard				Amount Per Ton, As Rec'd				Available as a % Of Total
	Total		Available		Total		Available		
Nitrogen	4.39	lbs	0.16	lbs	7.03	lbs	0.26	lbs	4
Phosphorus (P)	0.9	lbs	0.03	lbs	1.45	lbs	0.05	lbs	3
Phosphorus (P_2O_5)	2.07	lbs	0.07	lbs	3.31	lbs	0.1	lbs	3
Potassium (K)	2.59	lbs	0.9	lbs	4.16	lbs	1.45	lbs	35
Potassium (K_2O)	3.14	lbs	1.09	lbs	5.03	lbs	1.75	lbs	35
Calcium	21.03	lbs	2.01	lbs	33.72	lbs	3.22	lbs	10
Magnesium	14.12	lbs	0.02	lbs	22.65	lbs	0.03	lbs	0
Sulfur	0.8	lbs	0.09	lbs	1.29	lbs	0.14	lbs	11
Copper	1.04	ozs	0.03	ozs	1.67	ozs	0.05	ozs	3
Zinc	1.48	ozs	0.1	ozs	2.37	ozs	0.16	ozs	7
Manganese	8.78	ozs	0.78	ozs	14.08	ozs	1.26	ozs	9
Iron	55.32	ozs	1.35	ozs	88.74	ozs	2.17	ozs	2
Boron	0.47	ozs	0.01	ozs	0.76	ozs	0.02	ozs	3
Organic Matter	159	lbs			255	lbs			

Waypoint ANALYTICAL

4741 East Hunter Ave. Suite A
Anaheim, CA 92807
Main 714-282-8777 ° Fax 714-282-8575
www.waypointanalytical.com

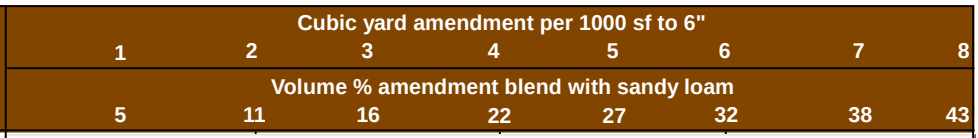
COMPOST / AMENDMENT EVALUATION

Send To :	Project :	
Zanker Landscape Materials 675 Los Esteros Road San Jose CA 95134	Planter Mix	Report Number : **23-121-0024** Customer Number : 01002 Date printed : 05/08/2023 Date received : 05/01/2023 Page : 3 of 3 Lab Number : 59395

Sample Id : **Planter Mix**

POTENTIAL RATE LIMIT FACTORS

Test	% Volume rate limit
EC sat. ext.	84 %
Sodium sol.	No Limit
Chloride sol.	No Limit
Boron sol.	95 %
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 43 %	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%).

Waypoint ANALYTICAL

4741 East Hunter Ave. Suite A
Anaheim, CA 92807
Main 714-282-8777 ° Fax 714-282-8575
www.waypointanalytical.com

COMPOST / AMENDMENT EVALUATION

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

Project :
Planter Mix

Report Number : **23-121-0024**
Customer Number : 01002
Date printed : 05/08/2023
Date received : 05/01/2023
Page : 1 of 3
Lab Number : 59395

Sample Id : **Planter Mix**

Nutrient	Total - Dry Weight	Extractable - Dry Weight	Saturation Extract	Sufficiency Factor
Nitrogen (N)	0.43 %	157 ppm		1.8
NH_4-N		87 ppm		
NO_3-N		70 ppm		
Phosphorus (P)	0.09 %	28 ppm		0.5
Phosphorus (P_2O_5)	0.21 %	64 ppm		
Potassium (K)	0.25 %	884 ppm	9.3 meq/L	3.7
Potassium (K_2O)	0.3 %	1070 ppm		
Calcium (Ca)	2.06 %	1968 ppm	9.7 meq/L	1.1
Magnesium (Mg)	1.38 %	20 ppm	9.6 meq/L	0.1
Sodium (Na)	0.08 %		13.6 meq/L	
Sulfur (S)	0.08 %			
Sulfate (SO_4)			6.4 meq/L	2.1
Chloride (Cl)			16.0 meq/L	
Copper (Cu)	63.9 ppm	1.8 ppm		1.3
Zinc (Zn)	90.5 ppm	6 ppm		1.1
Manganese (Mn)	538 ppm	48 ppm		3.9
Iron (Fe)	3390 ppm	83 ppm		1.5
Dilute Acid Fe		0.23 %		
Boron (B)	29.1 ppm		0.93 ppm	3.1

Test	Result
pH (sat paste)	7.6 s.u.
% Half Sat.	43
TEC	110 meq/kg
Qualitative Lime	Medium
Salinity (EC of sat ext.)	3.1 dS/m
SAR (Sodium adsorption ratio)	4.38
Sodium as % of ECe	39 %
Bulk Density - Dry	1020 lbs/yd³
Bulk Density - As Received	1247 lbs/yd³
Moisture - As Received	18.2 %
Organic	15.6 %
Weight of organic / yd³	159 lbs/yd³
Weight of mineral / yd³	861 lbs/yd³
C/N Ratio	21.7

Gradation	
Wt Percent Retained 1"	0.1 %
Wt Percent Retained 1/2"	2.7 %

Fraction Passing 1/2 inch Screen - Dry Weight Basis	
Screen Opening	% Passing
Passing 9.5mm	99.8 %
Passing 6.4mm (1/4")	97.5 %
Passing 4.75mm	93.3 %
Passing 2.36mm	71.4 %
Passing 1.00mm	43.6 %
Passing 0.50mm	28.0 %

Waypoint ANALYTICAL

4741 East Hunter Ave. Suite A
Anaheim, CA 92807
Main 714-282-8777 ° Fax 714-282-8575
www.waypointanalytical.com

COMPOST / AMENDMENT EVALUATION

Send To :	Project :	
Zanker Landscape Materials 675 Los Esteros Road San Jose CA 95134	Planter Mix	Report Number : **23-121-0024** Customer Number : 01002 Date printed : 05/08/2023 Date received : 05/01/2023 Page : 2 of 3 Lab Number : 59395

Sample Id : **Planter Mix**

NUTRIENT SUMMARY

Test	Amount Per Cubic Yard				Amount Per Ton, As Rec'd				Available as a % Of Total
	Total		Available		Total		Available		
Nitrogen	4.39	lbs	0.16	lbs	7.03	lbs	0.26	lbs	4
Phosphorus (P)	0.9	lbs	0.03	lbs	1.45	lbs	0.05	lbs	3
Phosphorus (P_2O_5)	2.07	lbs	0.07	lbs	3.31	lbs	0.1	lbs	3
Potassium (K)	2.59	lbs	0.9	lbs	4.16	lbs	1.45	lbs	35
Potassium (K_2O)	3.14	lbs	1.09	lbs	5.03	lbs	1.75	lbs	35
Calcium	21.03	lbs	2.01	lbs	33.72	lbs	3.22	lbs	10
Magnesium	14.12	lbs	0.02	lbs	22.65	lbs	0.03	lbs	0
Sulfur	0.8	lbs	0.09	lbs	1.29	lbs	0.14	lbs	11
Copper	1.04	ozs	0.03	ozs	1.67	ozs	0.05	ozs	3
Zinc	1.48	ozs	0.1	ozs	2.37	ozs	0.16	ozs	7
Manganese	8.78	ozs	0.78	ozs	14.08	ozs	1.26	ozs	9
Iron	55.32	ozs	1.35	ozs	88.74	ozs	2.17	ozs	2
Boron	0.47	ozs	0.01	ozs	0.76	ozs	0.02	ozs	3
Organic Matter	159	lbs			255	lbs			

Waypoint ANALYTICAL

4741 East Hunter Ave. Suite A
Anaheim, CA 92807
Main 714-282-8777 ° Fax 714-282-8575
www.waypointanalytical.com

COMPOST / AMENDMENT EVALUATION

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

Project :
Planter Mix

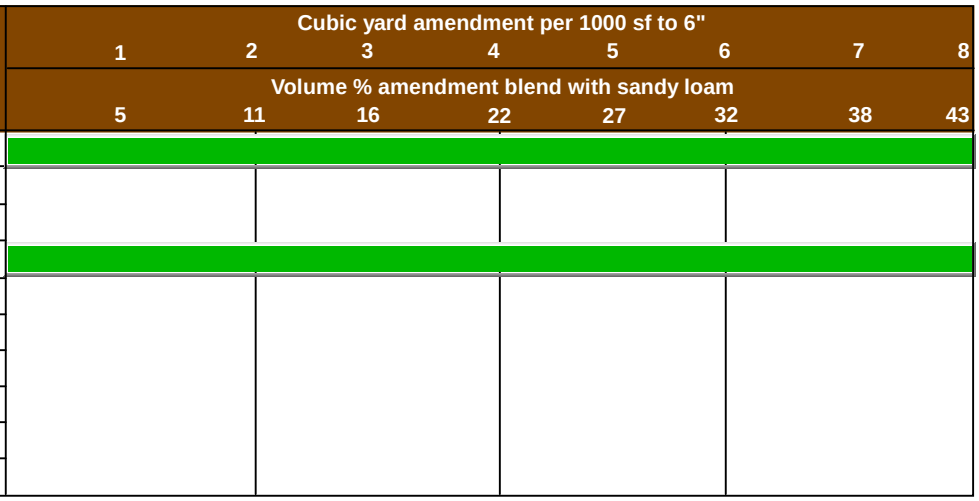
Report Number : **23-121-0024**
Customer Number : 01002
Date printed : 05/08/2023
Date received : 05/01/2023

Lab Number : 59395

Sample Id : **Planter Mix**

POTENTIAL RATE LIMIT FACTORS

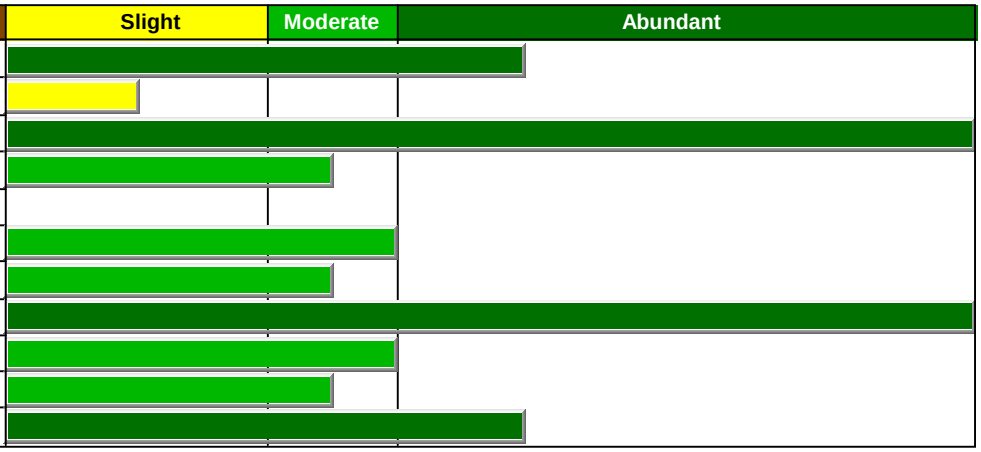
Test	% Volume rate limit
EC sat. ext.	84 %
Sodium sol.	No Limit
Chloride sol.	No Limit
Boron sol.	95 %
NH_4 -N	No Limit
Available	
Nitrogen	No Limit
PO_4 P	No Limit
Copper	No Limit
Zinc	No Limit



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

RELATIVE IMMEDIATE NUTRIENT AND ORGANIC VALUE

* Example Rate 43 %
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%).