

Wilson, Donna

From: Steve Cockman <scockman@mcgillcompost.com>
Sent: Monday, January 28, 2013 11:15 AM
To: Patrone, John
Cc: Wilson, Donna
Subject: Merry Oaks STA
Attachments: Merry Oaks STA 2012.pdf

John,

As requested please find the results of compost testing at the Merry Oaks facility from January 2012—January 2013. We have updated our protocol as of December 2012 that includes preserving our samples on ice after sample collection and during travel to the lab to ensure accurate lab results. Feel free to contact me if you need additional information.

Thanks,

Steve

Steve Cockman

Operations Manager
(M) 919-542-8903
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(O) 919-362-1161 ext. 7003
www.mcgillcompost.com





US COMPOSTING COUNCIL

Seal of Testing Assurance

McGill Environmental (New Hill)
Steve Cockman
634 Christian Chapel Church Road
New Hill
NC 27562 (919) 362-1161

Date Sampled/Received: 16 Jan. 12 / 19 Jan. 12

Product Identification Compost
Merry Oaks Soil Builder

COMPOST TECHNICAL DATA SHEET

LABORATORY: Soil Control Lab; 42 Hangar Way; Watsonville, CA 95076 tel: 831.724.5422 fax: 831.724.3188			
Compost Parameters	Reported as (units of measure)	Test Results	Test Results
Plant Nutrients:	%, weight basis	Not reported	Not reported
Moisture Content	%, wet weight basis	41.8	
Organic Matter Content	%, dry weight basis	45.1	
pH	units	7.16	
Soluble Salts <i>(electrical conductivity EC₅)</i>	dS/m (mmhos/cm)	6.6	
Particle Size or Sieve Size	maxium aggregate size, inches	0.38	
Stability Indicator (<i>respirometry</i>)		Stability Rating:	
CO ₂ Evolution	mg CO ₂ -C/g OM/day	1.9	Very Stable
	mg CO ₂ -C/g TS/day	0.85	
Maturity Indicator (bioassay)			
Percent Emergence	average % of control	100.0	
Relative Seedling Vigor	average % of control	100.0	
Select Pathogens	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.32(a)	Pass	<i>Fecal coliform</i>
		Pass	<i>Salmonella</i>
Trace Metals	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.13, Tables 1 and 3.	Pass	<i>As,Cd,Cr,Cu,Pb,Hg</i>
			<i>Mo,Ni,Se,Zn</i>

Participants in the US Composting Council's Seal of Testing Assurance Program have shown the commitment to test their compost products on a prescribed basis and provide this data, along with compost end use instructions, as a means to better serve the needs of their compost customers.

Laboratory Group:	Jan.12 C	Laboratory Number:	2010434-1/1
Analyst: Assaf Sadeh		www.compostlab.com	

JAN 2012



US COMPOSTING COUNCIL

Seal of Testing Assurance

McGill Environmental (New Hill)
Steve Cockman
634 Christian Chapel Church Road
New Hill
NC 27562 (919) 362-1161

Date Sampled/Received: 13 Feb. 12 / 15 Feb. 12

Product Identification Compost
Merry Oaks Soil Builder

COMPOST TECHNICAL DATA SHEET

LABORATORY: Soil Control Lab; 42 Hangar Way; Watsonville, CA 95076 tel: 831.724.5422 fax: 831.724.3188			
Compost Parameters	Reported as (units of measure)	Test Results	Test Results
Plant Nutrients:	%, weight basis	Not reported	Not reported
Moisture Content	%, wet weight basis	43.5	
Organic Matter Content	%, dry weight basis	44.3	
pH	units	7.40	
Soluble Salts <i>(electrical conductivity EC_s)</i>	dS/m (mmhos/cm)	6.0	
Particle Size or Sieve Size	maxium aggregate size, inches	0.38	
Stability Indicator (<i>respirometry</i>)		Stability Rating:	
CO ₂ Evolution	mg CO ₂ -C/g OM/day	2.7	Stable
	mg CO ₂ -C/g TS/day	1.2	
Maturity Indicator (bioassay)			
Percent Emergence	average % of control	100.0	
Relative Seedling Vigor	average % of control	100.0	
Select Pathogens	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.32(a)	Pass	<i>Salmonella</i>
Trace Metals	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.13, Tables 1 and 3.	Pass	<i>As,Cd,Cr,Cu,Pb,Hg</i> <i>Mo,Ni,Se,Zn</i>

Participants in the US Composting Council's Seal of Testing Assurance Program have shown the commitment to test their compost products on a prescribed basis and provide this data, along with compost end use instructions, as a means to better serve the needs of their compost customers.

Laboratory Group:	Feb.12 C	Laboratory Number:	2020421-1/1
Analyst: Assaf Sadeh		www.compostlab.com	

FEB 2012

SOIL CONTROL LAB

42 HANGAR WAY
WATSONVILLE
CALIFORNIA
95076
USA

Account #: 2020421-1/1-6691
Group: Feb.12 C #15
Reporting Date: February 28, 2012

McGill Environmental (New Hill)
634 Christian Chapel Church Road
New Hill, NC 27562
Attn: Steve Cockman

Date Received: 15 Feb. 12
Sample Identification: Merry Oaks Soil Builder
Sample ID #: 2020421 - 1/1

Nutrients	Dry wt.	As Rcvd.	units	Stability Indicator:	Respirometry	Biologically Available C	
Total Nitrogen:	1.4	0.80	%	CO2 Evolution			
Ammonia (NH ₄ -N):	740	420	mg/kg	mg CO ₂ -C/g OM/day	2.7	2.8	
Nitrate (NO ₃ -N):	7.6	4.3	mg/kg	mg CO ₂ -C/g TS/day	1.2	1.2	
Org. Nitrogen (Org.-N):	1.3	0.73	%	Stability Rating	stable	stable	
Phosphorus (as P ₂ O ₅):	1.5	0.84	%				
Phosphorus (P):	6500	3700	mg/kg	Maturity Indicator: Cucumber Bioassay			
Potassium (as K ₂ O):	0.67	0.38	%	Compost:Vermiculite(v:v)	1:1	1:3	
Potassium (K):	5500	3100	mg/kg	Emergence (%)	100	100	
Calcium (Ca):	5.5	3.1	%	Seedling Vigor (%)	100	100	
Magnesium (Mg):	0.43	0.24	%	Description of Plants	healthy	healthy	
Sulfate (SO ₄ -S):	3000	1700	mg/kg				
Boron (Total B):	28	16	mg/kg	Pathogens	Results	Units	Rating
Moisture:	0	43.5	%	Fecal Coliform	> 1500	MPN/g	fail
Sodium (Na):	0.21	0.12	%	Salmonella	< 3	MPN/4g	pass
Chloride (Cl):	0.18	0.1	%	Date Tested: 15 Feb. 12			
pH Value:	NA	7.40	unit				
Bulk Density :	25	44	lb/cu ft	Inerts	% by weight		
Carbonates (CaCO ₃):	130	76	lb/ton	Plastic	< 0.5		
Conductivity (EC5):	6.0	NA	mmhos/cm	Glass	< 0.5		
Organic Matter:	44.3	25.0	%	Metal	< 0.5		
Organic Carbon:	26.0	14.0	%	Sharps	ND		
Ash:	55.7	31.5	%				
C/N Ratio	18	18	ratio	Size & Volume Distribution			
AgIndex	9	9	ratio	MM	% by weight	% by volume	BD g/cc
				> 50	0.0	0.0	0.00
				25 to 50	0.0	0.0	0.00
				16 to 25	0.0	0.0	0.00
				9.5 to 16	0.0	0.0	0.00
				6.3 to 9.5	0.4	0.3	0.68
				4.0 to 6.3	2.0	2.1	0.49
				2.0 to 4.0	23.0	31.5	0.37
				< 2.0	74.6	66.1	0.57
				Bulk Density Description:<.35 Light Materials, .35-.60 medium weight materials, >.60 Heavy Materials			
				Analyst: Assaf Sadeh			

*Sample was received and handled in accordance with TMECC procedures.

FEB 2012



US COMPOSTING COUNCIL

Seal of Testing Assurance

McGill Environmental (New Hill)
Steve Cockman
634 Christian Chapel Church Road
New Hill
NC 27562 (919) 362-1161

Date Sampled/Received: 08 Mar. 12 / 15 Mar. 12

Product Identification Compost
Merry Oaks Soil Builder

COMPOST TECHNICAL DATA SHEET

LABORATORY: Soil Control Lab; 42 Hangar Way; Watsonville, CA 95076 tel: 831.724.5422 fax: 831.724.3188			
Compost Parameters	Reported as (units of measure)	Test Results	Test Results
Plant Nutrients:	%, weight basis	Not reported	Not reported
Moisture Content	%, wet weight basis	39.4	
Organic Matter Content	%, dry weight basis	36.7	
pH	units	7.57	
Soluble Salts <i>(electrical conductivity EC_s)</i>	dS/m (mmhos/cm)	6.5	
Particle Size or Sieve Size	maxium aggregate size, inches	0.64	
Stability Indicator (<i>respirometry</i>)		Stability Rating:	
CO ₂ Evolution	mg CO ₂ -C/g OM/day	2.1	Stable
	mg CO ₂ -C/g TS/day	0.76	
Maturity Indicator (bioassay)			
Percent Emergence	average % of control	100.0	
Relative Seedling Vigor	average % of control	100.0	
Select Pathogens	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.32(a)	Pass	Salmonella
Trace Metals	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.13, Tables 1 and 3.	Pass	As,Cd,Cr,Cu,Pb,Hg Mo,Ni,Se,Zn

Participants in the US Composting Council's Seal of Testing Assurance Program have shown the commitment to test their compost products on a prescribed basis and provide this data, along with compost end use instructions, as a means to better serve the needs of their compost customers.

Laboratory Group: Mar.12 C	Laboratory Number: 2030447-1/1
Analyst: Assaf Sadeh 	www.compostlab.com

MARCH 2012

SOIL CONTROL LAB

42 HANGAR WAY
WATSONVILLE
CALIFORNIA
95076
USA

Account #: 2030447-1/1-6691
Group: Mar.12 C #26
Reporting Date: March 28, 2012

McGill Environmental (New Hill)
634 Christian Chapel Church Road
New Hill, NC 27562
Attn: Steve Cockman

Date Received: 15 Mar. 12
Sample Identification: Merry Oaks Soil Builder
Sample ID #: 2030447 - 1/1

Nutrients	Dry wt.	As Rcvd.	units	Stability Indicator:	Respirometry	Biologically Available C	
Total Nitrogen:	1.3	0.80	%	CO2 Evolution			
Ammonia (NH ₄ -N):	370	220	mg/kg	mg CO ₂ -C/g OM/day	2.1	2.1	
Nitrate (NO ₃ -N):	120	75	mg/kg	mg CO ₂ -C/g TS/day	0.76	0.79	
Org. Nitrogen (Org.-N):	1.3	0.79	%	Stability Rating	stable	stable	
Phosphorus (as P ₂ O ₅):	1.6	0.98	%				
Phosphorus (P):	7100	4300	mg/kg				
Potassium (as K ₂ O):	0.74	0.45	%	Maturity Indicator: Cucumber Bioassay			
Potassium (K):	6200	3700	mg/kg	Compost:Vermiculite(v:v)	1:1	1:3	
Calcium (Ca):	6.5	4.0	%	Emergence (%)	100	100	
Magnesium (Mg):	0.45	0.27	%	Seedling Vigor (%)	100	100	
Sulfate (SO ₄ -S):	3100	1900	mg/kg	Description of Plants	healthy	healthy	
Boron (Total B):	24	14	mg/kg				
Moisture:	0	39.4	%	Pathogens	Results	Units	Rating
Sodium (Na):	0.22	0.13	%	Fecal Coliform	1300	MPN/g	fail
Chloride (Cl):	0.19	0.11	%	Salmonella	< 3	MPN/4g	pass
pH Value:	NA	7.57	unit	Date Tested:	15 Mar. 12		
Bulk Density :	29	48	lb/cu ft				
Carbonates (CaCO ₃):	140	88	lb/ton	Inerts	% by weight		
Conductivity (EC5):	6.5	NA	mmhos/cm	Plastic	< 0.5		
Organic Matter:	36.7	22.2	%	Glass	< 0.5		
Organic Carbon:	20.0	12.0	%	Metal	< 0.5		
Ash:	63.3	38.4	%	Sharps	ND		
C/N Ratio	15	15	ratio				
AgIndex	9	9	ratio	Size & Volume Distribution			
				MM	% by weight	% by volume	BD g/cc
				> 50	0.0	0.0	0.00
				25 to 50	0.0	0.0	0.00
				16 to 25	0.0	0.0	0.00
				9.5 to 16	0.4	0.8	0.28
				6.3 to 9.5	3.0	3.5	0.50
				4.0 to 6.3	8.4	11.6	0.41
				2.0 to 4.0	17.5	26.1	0.38
				< 2.0	70.7	58.0	0.69
				Bulk Density Description: <.35 Light Materials, >.35-.60 medium weight materials, >.60 Heavy Materials			

Analyst: Assaf Sadeh



*Sample was received and handled in accordance with TMECC procedures.

MARCH 2012



US COMPOSTING COUNCIL

Seal of Testing Assurance

McGill Environmental (New Hill)
Gary Gittere
634 Christian Chapel Church Road
New Hill
NC 27562 (919) 362-1161

Date Sampled/Received: 21 Mar. 12 / 22 Mar. 12

Product Identification Compost
McGill Landscape Mix: Merry Oaks

COMPOST TECHNICAL DATA SHEET

LABORATORY: Soil Control Lab; 42 Hangar Way; Watsonville, CA 95076 tel: 831.724.5422 fax: 831.724.3188			
Compost Parameters	Reported as (units of measure)	Test Results	Test Results
Plant Nutrients:	%, weight basis	Not reported	Not reported
Moisture Content	%, wet weight basis	53.4	
Organic Matter Content	%, dry weight basis	39.4	
pH	units	7.23	
Soluble Salts <i>(electrical conductivity EC_s)</i>	dS/m (mmhos/cm)	5.8	
Particle Size or Sieve Size	maxium aggregate size, inches	0.38	
Stability Indicator (<i>respirometry</i>)		Stability Rating:	
CO ₂ Evolution	mg CO ₂ -C/g OM/day	1.5	Very Stable
	mg CO ₂ -C/g TS/day	0.59	
Maturity Indicator (bioassay)			
Percent Emergence	average % of control	100.0	
Relative Seedling Vigor	average % of control	100.0	
Select Pathogens	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.32(a)	Pass	<i>Fecal coliform</i>
		Pass	<i>Salmonella</i>
Trace Metals	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.13, Tables 1 and 3.	Pass	<i>As,Cd,Cr,Cu,Pb,Hg</i>
			<i>Mo,Ni,Se,Zn</i>

Participants in the US Composting Council's Seal of Testing Assurance Program have shown the commitment to test their compost products on a prescribed basis and provide this data, along with compost end use instructions, as a means to better serve the needs of their compost customers.

Laboratory Group: Mar12.D	Laboratory Number: 2030601-1/1
Analyst: Assaf Sadeh 	www.compostlab.com

APRIL 2012



US COMPOSTING COUNCIL

Seal of Testing Assurance

McGill Environmental (New Hill)
Steve Cockman
634 Christian Chapel Church Road
New Hill
NC 27562 (919) 362-1161

Date Sampled/Received: 16 Apr. 12 / 02 May. 12

Product Identification Compost
Merry Oaks Soil Builder

COMPOST TECHNICAL DATA SHEET

LABORATORY: Soil Control Lab; 42 Hangar Way; Watsonville, CA 95076 tel: 831.724.5422 fax: 831.724.3188			
Compost Parameters	Reported as (units of measure)	Test Results	Test Results
Plant Nutrients:	% weight basis	Not reported	Not reported
Moisture Content	% wet weight basis	43.7	
Organic Matter Content	% dry weight basis	42.4	
pH	units	7.02	
Soluble Salts <i>(electrical conductivity EC_s)</i>	dS/m (mmhos/cm)	7.0	
Particle Size or Sieve Size	maxium aggregate size, inches	0.38	
Stability Indicator (<i>respirometry</i>)		Stability Rating:	
CO ₂ Evolution	mg CO ₂ -C/g OM/day	1.6	Very Stable
	mg CO ₂ -C/g TS/day	0.67	
Maturity Indicator (bioassay)			
Percent Emergence	average % of control	100.0	
Relative Seedling Vigor	average % of control	100.0	
Select Pathogens	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.32(a)	Pass	<i>Salmonella</i>
Trace Metals	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.13, Tables 1 and 3.	Pass	<i>As,Cd,Cr,Cu,Pb,Hg</i> <i>Mo,Ni,Se,Zn</i>

Participants in the US Composting Council's Seal of Testing Assurance Program have shown the commitment to test their compost products on a prescribed basis and provide this data, along with compost end use instructions, as a means to better serve the needs of their compost customers.

Laboratory Group:	May.12 A	Laboratory Number:	2050095-1/1
Analyst: Assaf Sadeh		www.compostlab.com	

MAY 2012

SOIL CONTROL LAB

42 HANGAR WAY
WATSONVILLE
CALIFORNIA
95076
USA

Account #: 2050095-1/1-6691
Group: May.12 A #28
Reporting Date: May 18, 2012

McGill Environmental (New Hill)
634 Christian Chapel Church Road
New Hill, NC 27562
Attn: Steve Cockman

Date Received: 02 May. 12
Sample Identification: Merry Oaks Soil Builder
Sample ID #: 2050095 - 1/1

Nutrients	Dry wt.	As Rcvd.	units
Total Nitrogen:	1.5	0.82	%
Ammonia (NH ₄ -N):	180	100	mg/kg
Nitrate (NO ₃ -N):	470	260	mg/kg
Org. Nitrogen (Org.-N):	1.4	0.79	%
Phosphorus (as P ₂ O ₅):	1.9	1.0	%
Phosphorus (P):	8200	4600	mg/kg
Potassium (as K ₂ O):	0.72	0.41	%
Potassium (K):	6000	3400	mg/kg
Calcium (Ca):	5.8	3.2	%
Magnesium (Mg):	0.45	0.25	%
Sulfate (SO ₄ -S):	3100	1800	mg/kg
Boron (Total B):	29	16	mg/kg
Moisture:	0	43.7	%
Sodium (Na):	0.22	0.12	%
Chloride (Cl):	0.15	0.087	%
pH Value:	NA	7.02	unit
Bulk Density :	24	42	lb/cu ft
Carbonates (CaCO ₃):	100	59	lb/ton
Conductivity (EC5):	7.0	NA	mmhos/cm
Organic Matter:	42.4	23.8	%
Organic Carbon:	24.0	13.0	%
Ash:	57.6	32.4	%
C/N Ratio	16	16	ratio
AgIndex	> 10	> 10	ratio

Stability Indicator:	Respirometry	Biologically Available C
CO₂ Evolution		
mg CO ₂ -C/g OM/day	1.6	1.8
mg CO ₂ -C/g TS/day	0.67	0.75
Stability Rating	very stable	very stable

Maturity Indicator: Cucumber Bioassay		
Compost:Vermiculite(v:v)	1:1	1:3
Emergence (%)	100	100
Seedling Vigor (%)	100	100
Description of Plants	healthy	healthy

Pathogens	Results	Units	Rating
Fecal Coliform	> 1500	MPN/g	fail
Salmonella	< 3	MPN/4g	pass
Date Tested: 02 May. 12			

Inerts	% by weight
Plastic	< 0.5
Glass	< 0.5
Metal	< 0.5
Sharps	ND

Metals	Dry wt.	EPA Limit	units
Aluminum (Al)	30000	-	mg/kg
Arsenic (As):	9.2	41	mg/kg
Cadmium (Cd):	< 1.0	39	mg/kg
Chromium (Cr):	31	1200	mg/kg
Cobalt (Co)	4.7	-	mg/kg
Copper (Cu):	180	1500	mg/kg
Iron (Fe):	17000	-	mg/kg
Lead (Pb):	19	300	mg/kg
Manganese (Mn):	1500	-	mg/kg
Mercury (Hg):	< 1.0	17	mg/kg
Molybdenum (Mo):	4.6	75	mg/kg
Nickel (Ni):	13	420	mg/kg
Selenium (Se):	1.7	36	mg/kg
Zinc (Zn):	260	2800	mg/kg

Size & Volume Distribution			
MM	% by weight	% by volume	BD g/cc
> 50	0.0	0.0	0.00
25 to 50	0.0	0.0	0.00
16 to 25	0.0	0.0	0.00
9.5 to 16	0.0	0.0	0.00
6.3 to 9.5	2.1	2.9	0.36
4.0 to 6.3	7.8	11.1	0.35
2.0 to 4.0	19.8	25.5	0.39
< 2.0	70.3	60.5	0.58

Bulk Density Description: <.35 Light Materials,
>.35-.60 medium weight materials, >.60 Heavy Materials

Analyst: Assaf Sadeh



*Sample was received and handled in accordance with TMECC procedures.

MAY 2012



US COMPOSTING COUNCIL

Seal of Testing Assurance

McGill Environmental (New Hill)
Steve Cockman
634 Christian Chapel Church Road
New Hill
NC 27562 (919) 362-1161

Date Sampled/Received: 25 Jun. 12 / 29 Jun. 12

Product Identification Compost
Merry Oaks Soil Builder

COMPOST TECHNICAL DATA SHEET

LABORATORY: Soil Control Lab; 42 Hangar Way; Watsonville, CA 95076 tel: 831.724.5422 fax: 831.724.3188			
Compost Parameters	Reported as (units of measure)	Test Results	Test Results
Plant Nutrients:	%, weight basis	Not reported	Not reported
Moisture Content	%, wet weight basis	33.3	
Organic Matter Content	%, dry weight basis	47.9	
pH	units	7.71	
Soluble Salts <i>(electrical conductivity EC₅)</i>	dS/m (mmhos/cm)	10	
Particle Size or Sieve Size	maxium aggregate size, inches	0.64	
Stability Indicator (<i>respirometry</i>)		Stability Rating:	
CO ₂ Evolution	mg CO ₂ -C/g OM/day	2.4	Stable
	mg CO ₂ -C/g TS/day	1.1	
Maturity Indicator (bioassay)			
Percent Emergence	average % of control	100.0	
Relative Seedling Vigor	average % of control	91.7	
Select Pathogens	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.32(a)	Pass	<i>Fecal coliform</i>
		Pass	<i>Salmonella</i>
Trace Metals	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.13, Tables 1 and 3.	Pass	<i>As,Cd,Cr,Cu,Pb,Hg</i> <i>Mo,Ni,Se,Zn</i>

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Laboratory Group:	Jun12E	Laboratory Number:	2060856-1/1
Analyst: Assaf Sadeh		www.compostlab.com	

JUNE 2012



US COMPOSTING COUNCIL

Seal of Testing Assurance

McGill Environmental (New Hill)
Steve Cockman
634 Christian Chapel Church Road
New Hill
NC 27562 (919) 362-1161

Date Sampled/Received: 16 Jul. 12 / 18 Jul. 12

Product Identification Compost
Merry Oaks Soil Builder

COMPOST TECHNICAL DATA SHEET

LABORATORY: Soil Control Lab; 42 Hangar Way; Watsonville, CA 95076 tel: 831.724.5422 fax: 831.724.3188			
Compost Parameters	Reported as (units of measure)	Test Results	Test Results
Plant Nutrients:	% weight basis	Not reported	Not reported
Moisture Content	% wet weight basis	33.9	
Organic Matter Content	% dry weight basis	51.1	
pH	units	7.66	
Soluble Salts <i>(electrical conductivity EC₅)</i>	dS/m (mmhos/cm)	10	
Particle Size or Sieve Size	maximum aggregate size, inches	0.64	
Stability Indicator (<i>respirometry</i>)		Stability Rating:	
CO ₂ Evolution	mg CO ₂ -C/g OM/day	3.6	Stable
	mg CO ₂ -C/g TS/day	1.8	
Maturity Indicator (bioassay)			
Percent Emergence	average % of control	100.0	
Relative Seedling Vigor	average % of control	0.0	
Select Pathogens	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.32(a)	Pass	<i>Fecal coliform</i>
		Pass	<i>Salmonella</i>
Trace Metals	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.13, Tables 1 and 3.	Pass	<i>As,Cd,Cr,Cu,Pb,Hg</i>
			<i>Mo,Ni,Se,Zn</i>

Participants in the US Composting Council's Seal of Testing Assurance Program have shown the commitment to test their compost products on a prescribed basis and provide this data, along with compost end use instructions, as a means to better serve the needs of their compost customers.

Laboratory Group:	Jul.12 C	Laboratory Number:	2070484-1/1
Analyst: Assaf Sadeh		www.compostlab.com	

July 2012



US COMPOSTING COUNCIL

Seal of Testing Assurance

McGill Environmental (New Hill)

Steve Cockman

634 Christian Chapel Church Road

New Hill

NC 27562

0

Date Sampled/Received: 21 Aug. 12 / 24 Aug. 12

Product Identification Compost

Merry Oaks Soil Builder

COMPOST TECHNICAL DATA SHEET

LABORATORY: Soil Control Lab; 42 Hangar Way; Watsonville, CA 95076 tel: 831.724.5422 fax: 831.724.3188

Compost Parameters	Reported as (units of measure)	Test Results	Test Results
Plant Nutrients:	% weight basis	Not reported	Not reported
Moisture Content	% wet weight basis	29.9	
Organic Matter Content	% dry weight basis	46.6	
pH	units	7.28	
Soluble Salts (electrical conductivity EC ₅)	dS/m (mmhos/cm)	9.0	
Particle Size or Sieve Size	maximum aggregate size, inches	0.38	
Stability Indicator (respirometry)		Stability Rating:	
CO ₂ Evolution	mg CO ₂ -C/g OM/day	2.2	Stable
	mg CO ₂ -C/g TS/day	1.0	
Maturity Indicator (bioassay)			
Percent Emergence	average % of control	100.0	
Relative Seedling Vigor	average % of control	0.0	
Select Pathogens	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.32(a)	Pass	Fecal coliform
		Pass	Salmonella
Trace Metals	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.13, Tables 1 and 3.	Pass	As,Cd,Cr,Cu,Pb,Hg
			Mo,Ni,Se,Zn

Participants in the US Composting Council's Seal of Testing Assurance Program have shown the commitment to test their compost products on a prescribed basis and provide this data, along with compost end use instructions, as a means to better serve the needs of their compost customers.

Laboratory Group: Aug.12 D

Laboratory Number: 2080694-1/1

Analyst: Assaf Sadeh

www.compostlab.com

Aug 2012



US COMPOSTING COUNCIL

Seal of Testing Assurance

McGill Environmental (New Hill)
Steve Cockman
634 Christian Chapel Church Road
New Hill
NC 27562 (919) 362-1161

Date Sampled/Received: 18 Sep. 12 / 21 Sep. 12

Product Identification Compost
Merry Oaks Soil Builder

COMPOST TECHNICAL DATA SHEET

LABORATORY: Soil Control Lab; 42 Hangar Way; Watsonville, CA 95076 tel: 831.724.5422 fax: 831.724.3188			
<i>Compost Parameters</i>	<i>Reported as (units of measure)</i>	<i>Test Results</i>	<i>Test Results</i>
Plant Nutrients:	%, weight basis	Not reported	Not reported
Moisture Content	%, wet weight basis	34.8	
Organic Matter Content	%, dry weight basis	51.5	
pH	units	7.62	
Soluble Salts <i>(electrical conductivity EC₅)</i>	dS/m (mmhos/cm)	8.9	
Particle Size or Sieve Size	maxium aggregate size, inches	0.38	
Stability Indicator (<i>respirometry</i>)		Stability Rating:	
CO ₂ Evolution	mg CO ₂ -C/g OM/day	3.0	Stable
	mg CO ₂ -C/g TS/day	1.5	
Maturity Indicator (bioassay)			
Percent Emergence	average % of control	100.0	
Relative Seedling Vigor	average % of control	0.0	
Select Pathogens	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.32(a)	Pass	<i>Fecal coliform</i>
		Pass	<i>Salmonella</i>
Trace Metals	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.13, Tables 1 and 3.	Pass	<i>As,Cd,Cr,Cu,Pb,Hg</i>
			<i>Mo,Ni,Se,Zn</i>

Participants in the US Composting Council's Seal of Testing Assurance Program have shown the commitment to test their compost products on a prescribed basis and provide this data, along with compost end use instructions, as a means to better serve the needs of their compost customers.

Laboratory Group: Sep.12 C_1	Laboratory Number: 2090608-1/1
Analyst: Assaf Sadeh 	www.compostlab.com

SEPT 2012



US COMPOSTING COUNCIL

Seal of Testing Assurance

McGill Environmental (New Hill)

Steve Cockman

634 Christian Chapel Church Road

New Hill

NC 27562

0

Date Sampled/Received: 18 Oct. 12 / 22 Oct. 12

Product Identification Compost

Merry Oaks Soil Builder

COMPOST TECHNICAL DATA SHEET

LABORATORY: Soil Control Lab; 42 Hangar Way; Watsonville, CA 95076 tel: 831.724.5422 fax: 831.724.3188

<i>Compost Parameters</i>	<i>Reported as (units of measure)</i>	<i>Test Results</i>	<i>Test Results</i>
Plant Nutrients:	% weight basis	Not reported	Not reported
Moisture Content	% wet weight basis	37.5	
Organic Matter Content	% dry weight basis	54.1	
pH	units	7.41	
Soluble Salts <i>(electrical conductivity EC_s)</i>	dS/m (mmhos/cm)	11	
Particle Size or Sieve Size	maxium aggregate size, inches	0.64	
Stability Indicator (<i>respirometry</i>)		<i>Stability Rating:</i>	
CO ₂ Evolution	mg CO ₂ -C/g OM/day	3.2	Stable
	mg CO ₂ -C/g TS/day	1.7	
Maturity Indicator (bioassay)			
Percent Emergence	average % of control	100.0	
Relative Seedling Vigor	average % of control	0.0	
Select Pathogens	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.32(a)	Pass	<i>Salmonella</i>
Trace Metals	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.13, Tables 1 and 3.	Pass	<i>As,Cd,Cr,Cu,Pb,Hg</i> <i>Mo,Ni,Se,Zn</i>

Participants in the US Composting Council's Seal of Testing Assurance Program have shown the commitment to test their compost products on a prescribed basis and provide this data, along with compost end use instructions, as a means to better serve the needs of their compost customers.

Laboratory Group:

Oct.12 D

Laboratory Number: 2100617-1/1

Analyst: Assaf Sadeh

www.compostlab.com

Oct 2012

SOIL CONTROL LAB

42 HANGAR WAY
WATSONVILLE
CALIFORNIA
95076
USA

Account #: 2100617-1/1-6691
Group: Oct.12 D #1
Reporting Date: November 6, 2012

McGill Environmental (New Hill)
634 Christian Chapel Church Road
New Hill, NC 27562
Attn: Steve Cockman

Date Received: 22 Oct. 12
Sample Identification: Merry Oaks Soil Builder
Sample ID #: 2100617 - 1/1

Nutrients	Dry wt.	As Rcvd.	units	Stability Indicator:	Respirometry	Biologically Available C	
Total Nitrogen:	2.0	1.3	%	CO2 Evolution			
Ammonia (NH ₄ -N):	2900	1800	mg/kg	mg CO ₂ -C/g OM/day	3.2	4.0	
Nitrate (NO ₃ -N):	2.8	1.8	mg/kg	mg CO ₂ -C/g TS/day	1.7	2.1	
Org. Nitrogen (Org.-N):	1.7	1.1	%	Stability Rating	stable	stable	
Phosphorus (as P ₂ O ₅):	2.4	1.5	%				
Phosphorus (P):	11000	6700	mg/kg	Maturity Indicator: Cucumber Bioassay			
Potassium (as K ₂ O):	0.68	0.42	%	Compost:Vermiculite(v:v)	1:1	1:3	
Potassium (K):	5600	3500	mg/kg	Emergence (%)	100	100	
Calcium (Ca):	3.6	2.3	%	Seedling Vigor (%)	0	93	
Magnesium (Mg):	0.36	0.22	%	Description of Plants	stunted	healthy	
Sulfate (SO ₄ -S):	5000	3100	mg/kg	Pathogens	Results	Units	Rating
Boron (Total B):	24	15	mg/kg	Fecal Coliform	> 1300	MPN/g	fail
Moisture:	0	37.5	%	Salmonella	< 3	MPN/4g	pass
Sodium (Na):	0.30	0.19	%	Date Tested: 22 Oct. 12			
Chloride (Cl):	0.25	0.16	%	Inerts	% by weight		
pH Value:	NA	7.41	unit	Plastic	< 0.5		
Bulk Density :	24	38	lb/cu ft	Glass	< 0.5		
Carbonates (CaCO ₃):	29	18	lb/ton	Metal	< 0.5		
Conductivity (EC5):	11	NA	mmhos/cm	Sharps	ND		
Organic Matter:	54.1	33.8	%	Size & Volume Distribution			
Organic Carbon:	27.0	17.0	%	MM	% by weight	% by volume	BD g/cc
Ash:	45.9	28.7	%	> 50	0.0	0.0	0.00
C/N Ratio	13	13	ratio	25 to 50	0.0	0.0	0.00
AgIndex	9	9	ratio	16 to 25	0.0	0.0	0.00
				9.5 to 16	0.2	0.1	0.90
				6.3 to 9.5	2.0	2.0	0.51
				4.0 to 6.3	7.1	8.0	0.45
				2.0 to 4.0	18.6	25.0	0.38
				< 2.0	72.1	64.9	0.57
				Bulk Density Description: <.35 Light Materials, >.35-.60 medium weight materials, >.60 Heavy Materials			
				Analyst: Assaf Sadeh			

*Sample was received and handled in accordance with TMECC procedures.

Oct 2012



US COMPOSTING COUNCIL

Seal of Testing Assurance

McGill Environmental (New Hill)
 Steve Cockman
 634 Christian Chapel Church Road
 New Hill
 NC 27562 0

Date Sampled/Received: 04 Nov. 12 / 09 Nov. 12

Product Identification Compost
Merry Oaks Soil Builder

COMPOST TECHNICAL DATA SHEET

LABORATORY: Soil Control Lab; 42 Hangar Way; Watsonville, CA 95076 tel: 831.724.5422 fax: 831.724.3188			
Compost Parameters	Reported as (units of measure)	Test Results	Test Results
Plant Nutrients:	%, weight basis	Not reported	Not reported
Moisture Content	%, wet weight basis	27.3	
Organic Matter Content	%, dry weight basis	37.4	
pH	units	7.18	
Soluble Salts <i>(electrical conductivity EC₅)</i>	dS/m (mmhos/cm)	6.7	
Particle Size or Sieve Size	maxium aggregate size, inches	0.38	
Stability Indicator (<i>respirometry</i>)		Stability Rating:	
CO ₂ Evolution	mg CO ₂ -C/g OM/day	3.3	Stable
	mg CO ₂ -C/g TS/day	1.2	
Maturity Indicator (bioassay)			
Percent Emergence	average % of control	100.0	
Relative Seedling Vigor	average % of control	80.0	
Select Pathogens	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.32(a)	Pass	Salmonella
Trace Metals	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.13, Tables 1 and 3.	Pass	As, Cd, Cr, Cu, Pb, Hg Mo, Ni, Se, Zn

Participants in the US Composting Council's Seal of Testing Assurance Program have shown the commitment to test their compost products on a prescribed basis and provide this data, along with compost end use instructions, as a means to better serve the needs of their compost customers.

Laboratory Group:	Nov.12 B	Laboratory Number:	2110305-1/1
Analyst: Assaf Sadeh		www.compostlab.com	

NOV 2012

SOIL CONTROL LAB

42 HANGAR WAY
WATSONVILLE
CALIFORNIA
95076
USA

Account #: 2110305-1/1-6691
Group: Nov.12 B #29
Reporting Date: November 26, 2012

McGill Environmental (New Hill)
634 Christian Chapel Church Road
New Hill, NC 27562
Attn: Steve Cockman

Date Received: 09 Nov. 12
Sample Identification: Merry Oaks Soil Builder
Sample ID #: 2110305 - 1/1

Nutrients	Dry wt.	As Rcvd.	units
Total Nitrogen:	1.6	1.2	%
Ammonia (NH ₄ -N):	1600	1100	mg/kg
Nitrate (NO ₃ -N):	130	97	mg/kg
Org. Nitrogen (Org.-N):	1.4	1.0	%
Phosphorus (as P ₂ O ₅):	1.6	1.2	%
Phosphorus (P):	7200	5200	mg/kg
Potassium (as K ₂ O):	0.45	0.32	%
Potassium (K):	3700	2700	mg/kg
Calcium (Ca):	2.5	1.8	%
Magnesium (Mg):	0.25	0.18	%
Sulfate (SO ₄ -S):	3300	2400	mg/kg
Boron (Total B):	19	14	mg/kg
Moisture:	0	27.3	%
Sodium (Na):	0.19	0.14	%
Chloride (Cl):	0.15	0.11	%
pH Value:	NA	7.18	unit
Bulk Density :	34	47	lb/cu ft
Carbonates (CaCO ₃):	29	21	lb/ton
Conductivity (EC5):	6.7	NA	mmhos/cm
Organic Matter:	37.4	27.2	%
Organic Carbon:	21.0	15.0	%
Ash:	62.6	45.6	%
C/N Ratio	13	13	ratio
AgIndex	> 10	> 10	ratio

Stability Indicator:	Respirometry	Biologically Available C	
CO2 Evolution			
mg CO ₂ -C/g OM/day	3.3	3.5	
mg CO ₂ -C/g TS/day	1.2	1.3	
Stability Rating	stable	stable	
Maturity Indicator: Cucumber Bioassay			
Compost:Vermiculite(v:v)	1:1	1:3	
Emergence (%)	100	100	
Seedling Vigor (%)	80	87	
Description of Plants	healthy	healthy	
Pathogens	Results	Units	Rating
Fecal Coliform	> 1100	MPN/g	fail
Salmonella	< 3	MPN/4g	pass
Date Tested: 09 Nov. 12			
Inerts	% by weight		
Plastic	< 0.5		
Glass	< 0.5		
Metal	< 0.5		
Sharps	ND		

Metals	Dry wt.	EPA Limit	units
Aluminum (Al)	24000	-	mg/kg
Arsenic (As):	7.3	41	mg/kg
Cadmium (Cd):	< 1.0	39	mg/kg
Chromium (Cr):	43	1200	mg/kg
Cobalt (Co)	3.5	-	mg/kg
Copper (Cu):	95	1500	mg/kg
Iron (Fe):	16000	-	mg/kg
Lead (Pb):	11	300	mg/kg
Manganese (Mn):	1200	-	mg/kg
Mercury (Hg):	< 1.0	17	mg/kg
Molybdenum (Mo):	3.8	75	mg/kg
Nickel (Ni):	12	420	mg/kg
Selenium (Se):	1.7	36	mg/kg
Zinc (Zn):	220	2800	mg/kg

Size & Volume Distribution	MM	% by weight	% by volume	BD g/cc
> 50		0.0	0.0	0.00
25 to 50		0.0	0.0	0.00
16 to 25		0.0	0.0	0.00
9.5 to 16		0.0	0.0	0.00
6.3 to 9.5		1.5	1.3	0.72
4.0 to 6.3		5.9	9.3	0.41
2.0 to 4.0		13.5	22.7	0.38
< 2.0		79.1	66.7	0.76

Bulk Density Description: <.35 Light Materials,
.35-.60 medium weight materials, >.60 Heavy Materials

Analyst: Assaf Sadeh



*Sample was received and handled in accordance with TMECC procedures.

NOV 2012



US COMPOSTING COUNCIL

Seal of Testing Assurance

McGill Environmental (New Hill)

Steve Cockman

634 Christian Chapel Church Road

New Hill

NC 27562

0

Date Sampled/Received: 03 Dec. 12 / 06 Dec. 12

Product Identification Compost
Merry Oaks Soil Builder

COMPOST TECHNICAL DATA SHEET

LABORATORY: Soil Control Lab; 42 Hangar Way; Watsonville, CA 95076 tel: 831.724.5422 fax: 831.724.3188			
Compost Parameters	Reported as (units of measure)	Test Results	Test Results
Plant Nutrients:	% weight basis	Not reported	Not reported
Moisture Content	% wet weight basis	34.5	
Organic Matter Content	% dry weight basis	50.5	
pH	units	7.29	
Soluble Salts <i>(electrical conductivity EC₃)</i>	dS/m (mmhos/cm)	9.6	
Particle Size or Sieve Size	maxium aggregate size, inches	0.38	
Stability Indicator (<i>respirometry</i>)		Stability Rating:	
CO ₂ Evolution	mg CO ₂ -C/g OM/day	1.8	Very Stable
	mg CO ₂ -C/g TS/day	0.90	
Maturity Indicator (bioassay)			
Percent Emergence	average % of control	100.0	
Relative Seedling Vigor	average % of control	0.0	
Select Pathogens	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.32(a)	Pass	Fecal coliform
		Pass	Salmonella
Trace Metals	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.13, Tables 1 and 3.	Pass	As,Cd,Cr,Cu,Pb,Hg Mo,Ni,Se,Zn

Participants in the US Composting Council's Seal of Testing Assurance Program have shown the commitment to test their compost products on a prescribed basis and provide this data, along with compost end use instructions, as a means to better serve the needs of their compost customers.

Laboratory Group:	Dec.12 A	Laboratory Number:	2120173-1/1
Analyst: Assaf Sadeh		www.compostlab.com	

DEC 2012



US COMPOSTING COUNCIL

Seal of Testing Assurance

McGill Environmental (New Hill)

Steve Cockman

634 Christian Chapel Church Road

New Hill

NC 27562

0

Date Sampled/Received: 10 Jan. 13 / 17 Jan. 13

Product Identification Compost

Merry Oaks Soil Builder

COMPOST TECHNICAL DATA SHEET

LABORATORY: Soil Control Lab; 42 Hangar Way; Watsonville, CA 95076 tel: 831.724.5422 fax: 831.724.3188

Compost Parameters	Reported as (units of measure)	Test Results	Test Results
Plant Nutrients:	%, weight basis	Not reported	Not reported
Moisture Content	%, wet weight basis	35.0	
Organic Matter Content	%, dry weight basis	47.9	
pH	units	6.98	
Soluble Salts <i>(electrical conductivity EC₅)</i>	dS/m (mmhos/cm)	9.4	
Particle Size or Sieve Size	maxium aggregate size, inches	0.38	
Stability Indicator (<i>respirometry</i>)		Stability Rating:	
CO ₂ Evolution	mg CO ₂ -C/g OM/day	3.0	Stable
	mg CO ₂ -C/g TS/day	1.4	
Maturity Indicator (bioassay)			
Percent Emergence	average % of control	100.0	
Relative Seedling Vigor	average % of control	85.0	
Select Pathogens	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.32(a)	Pass	<i>Fecal coliform</i>
		Pass	<i>Salmonella</i>
Trace Metals	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.13, Tables 1 and 3.	Pass	<i>As,Cd,Cr,Cu,Pb,Hg</i> <i>Mo,Ni,Se,Zn</i>

Participants in the US Composting Council's Seal of Testing Assurance Program have shown the commitment to test their compost products on a prescribed basis and provide this data, along with compost end use instructions, as a means to better serve the needs of their compost customers.

Laboratory Group:

Jan.13 C

Laboratory Number: 3010438-1/1

Analyst: Assaf Sadeh

www.compostlab.com

JAN 2013



US COMPOSTING COUNCIL

Seal of Testing Assurance

McGill Environmental (New Hill)

Steve Cockman

634 Christian Chapel Church Road

New Hill

NC 27562

0

Date Sampled/Received: 10 Jan. 13 / 17 Jan. 13

Product Identification Compost

Merry Oaks Soil Builder

COMPOST TECHNICAL DATA SHEET

LABORATORY: Soil Control Lab; 42 Hangar Way; Watsonville, CA 95076 tel: 831.724.5422 fax: 831.724.3188

<i>Compost Parameters</i>	<i>Reported as (units of measure)</i>	<i>Test Results</i>	<i>Test Results</i>
Plant Nutrients:	%, weight basis	%, wet weight basis	%, dry weight basis
Nitrogen	Total N	1.3	2.0
Phosphorus	P ₂ O ₅	1.2	1.8
Potassium	K ₂ O	0.39	0.59
Calcium	Ca	2.0	3.1
Magnesium	Mg	0.20	0.31
Moisture Content	%, wet weight basis	35.0	
Organic Matter Content	%, dry weight basis	47.9	
pH	units	6.98	
Soluble Salts <i>(electrical conductivity EC₅)</i>	dS/m (mmhos/cm)	9.4	
Particle Size or Sieve Size	% under 9.5 mm, dw basis	100.0	
Stability Indicator (<i>respirometry</i>)		<i>Stability Rating:</i>	
CO ₂ Evolution	mg CO ₂ -C/g OM/day	3.0	Stable
	mg CO ₂ -C/g TS/day	1.4	
Maturity Indicator (bioassay)			
Percent Emergence	average % of control	100.0	
Relative Seedling Vigor	average % of control	85.0	
Select Pathogens	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.32(a)	Pass	<i>Fecal coliform</i>
		Pass	<i>Salmonella</i>
Trace Metals	PASS/FAIL: per US EPA Class A standard, 40 CFR § 503.13, Tables 1 and 3.	Pass	<i>As, Cd, Cr, Cu, Pb, Hg</i>
			<i>Mo, Ni, Se, Zn</i>

Participants in the US Composting Council's Seal of Testing Assurance Program have shown the commitment to test their compost products on a prescribed basis and provide this data, along with compost end use instructions, as a means to better serve the needs of their compost customers.

Laboratory Group:

Jan.13 C

Laboratory Number: 3010438-1/1

Analyst: Assaf Sadeh

www.compostlab.com



US COMPOSTING COUNCIL

Seal of Testing Assurance



McGill Environmental (New Hill)

Steve Cockman

634 Christian Chapel Church Road

New Hill

NC 27562

0

Date Sampled/Received: 10 Jan. 13 / 17 Jan. 13

Product Identification: Compost

Merry Oaks Soil Builder

COMPOST TECHNICAL DATA SHEET for NORTH CAROLINA DOT

LABORATORY: Soil Control Lab; 42 Hangar Way; Watsonville, CA 95076 tel: 831.724.5422 fax: 831.724.3188

Compost Parameters	Test Results	Reported as (units of measure)	Project Specification (Allowable Limit)
Organic Matter Content	47.9	%, dry weight basis	25 - 65
pH	6.98	Unitless	5.0 - 8.5
Moisture Content	35.0	%, wet weight basis	30 - 60
Soluble Salts (electrical conductivity)	9.4	dS/m (mmhos/cm)	5.0 dS/m, maximum
Particle Size	100.0	%, dry weight passing through 3 inch screen and	100%
	100.0	1 inch screen and	90% minimum
	100.0	3/4 inch screen and	65% minimum
	98.0	1/4 inch screen	50% maximum
Stability Indicator (respirometry) CO2 Evolution	3.0	mg CO ₂ -C/g OM/day	≤ 8
Maturity Indicator (bioassay) Percent Emergence	100.0	average % of control	80%, minimum
Relative Seedling Vigor	85.0	average % of control	80%, minimum
Select Pathogens (Fecal Coliform)	Pass	PASS/FAIL: Per US EPA Class A standard, 40 CFR 503.32(a)	Pass
Trace Metals	Pass	PASS/FAIL: Per US EPA Class A 40 CFR 503.13, tables 1 and 3.	Pass
Inert Contamination (man-made)	None Detected	%, dry weight	<1.0 %

Participants in the US Composting Council's Seal of Testing Assurance Program have shown the commitment to test their compost products on a prescribed basis and provide this data, along with compost end use instructions, as a means to better serve the needs of their compost customers.

For additional information pertaining to compost use, the specific compost parameters tested for within the Seal of Testing assurance Program, or the program in general, log on to the US Composting Council's TMECC web-site at <http://www.tmecc.org>.

This compost product has been sampled and tested as required by the Seal of Testing assurance Program on the United States Composting Council (USCC), using certain methods from the "Test Methods for the Examination of Compost and Composting" manual. Test results are available upon request by contacting the compost producer (address at top of page). The USCC makes no warranties regarding this product or its content, quality, or suitability for any particular use.

Laboratory Group: Jan.13 C

Laboratory Number: 3010438-1/1

Analyst: Assaf Sadeh

www.compostlab.com

SOIL CONTROL LAB

42 HANGAR WAY
WATSONVILLE
CALIFORNIA
95076
USA

Account #: 3010438-1/1-6691
Group: Jan.13 C #33
Reporting Date: January 25, 2013

McGill Environmental (New Hill)
634 Christian Chapel Church Road
New Hill, NC 27562
Attn: Steve Cockman

Date Received: 17 Jan. 13
Sample Identification: Merry Oaks Soil Builder
Sample ID #: 3010438 - 1/1

Nutrients	Dry wt.	As Rcvd.	units	Stability Indicator:	Respirometry	Biologically Available C	
Total Nitrogen:	2.0	1.3	%	CO2 Evolution			
Ammonia (NH ₄ -N):	1300	870	mg/kg	mg CO ₂ -C/g OM/day	3.0	3.4	
Nitrate (NO ₃ -N):	490	320	mg/kg	mg CO ₂ -C/g TS/day	1.4	1.6	
Org. Nitrogen (Org.-N):	1.8	1.2	%	Stability Rating	stable	stable	
Phosphorus (as P ₂ O ₅):	1.8	1.2	%				
Phosphorus (P):	8100	5300	mg/kg				
Potassium (as K ₂ O):	0.59	0.39	%	Maturity Indicator: Cucumber Bioassay			
Potassium (K):	4900	3200	mg/kg	Compost:Vermiculite(v:v)	1:1	1:3	
Calcium (Ca):	3.1	2.0	%	Emergence (%)	100	100	
Magnesium (Mg):	0.31	0.20	%	Seedling Vigor (%)	85	90	
Sulfate (SO ₄ -S):	4000	2600	mg/kg	Description of Plants	healthy	healthy	
Boron (Total B):	29	19	mg/kg				
Moisture:	0	35.0	%	Pathogens	Results	Units	Rating
Sodium (Na):	0.26	0.17	%	Fecal Coliform	< 2.0	MPN/g	pass
Chloride (Cl):	0.31	0.2	%	Salmonella	< 3	MPN/4g	pass
pH Value:	NA	6.98	unit	Date Tested: 17 Jan. 13			
Bulk Density :	24	36	lb/cu ft				
Carbonates (CaCO ₃):	29	19	lb/ton	Inerts	% by weight		
Conductivity (EC5):	9.4	NA	mmhos/cm	Plastic	< 0.5		
Organic Matter:	47.9	31.2	%	Glass	< 0.5		
Organic Carbon:	25.0	16.0	%	Metal	< 0.5		
Ash:	52.1	33.9	%	Sharps	ND		
C/N Ratio	12	12	ratio				
AgIndex	8	8	ratio	Size & Volume Distribution			
Metals	Dry wt.	EPA Limit	units	MM	% by weight	% by volume	BD g/cc
Aluminum (Al)	25000	-	mg/kg	> 50	0.0	0.0	0.00
Arsenic (As):	14	41	mg/kg	25 to 50	0.0	0.0	0.00
Cadmium (Cd):	< 1.0	39	mg/kg	16 to 25	0.0	0.0	0.00
Chromium (Cr):	37	1200	mg/kg	9.5 to 16	0.0	0.0	0.00
Cobalt (Co)	5.6	-	mg/kg	6.3 to 9.5	2.0	2.9	0.35
Copper (Cu):	140	1500	mg/kg	4.0 to 6.3	4.0	6.1	0.33
Iron (Fe):	18000	-	mg/kg	2.0 to 4.0	13.9	18.2	0.39
Lead (Pb):	11	300	mg/kg	< 2.0	80.2	72.8	0.56
Manganese (Mn):	1700	-	mg/kg	Bulk Density Description:<.35 Light Materials, .35-.60 medium weight materials, >.60 Heavy Materials			
Mercury (Hg):	< 1.0	17	mg/kg	Analyst: Assaf Sadeh			
Molybdenum (Mo):	5.1	75	mg/kg				
Nickel (Ni):	13	420	mg/kg				
Selenium (Se):	2.8	36	mg/kg				
Zinc (Zn):	270	2800	mg/kg				

*Sample was received and handled in accordance with TMECC procedures.

Account No.:
3010438 - 1/1 - 6691
Group: Jan.13 C No. 33

Date Received
Sample i.d.
Sample I.d. No.

17 Jan. 13
Merry Oaks Soil Builder
1/1 3010438

INTERPRETATION:

Is Your Compost Stable?

Respiration Rate	Biodegradation Rate of Your Pile
3.0 mg CO ₂ -C/ g OM/day	+++++++ < Stable > < Moderately Unstable> < Unstable > < High For Mulch
Biologically Available Carbon (BAC)	Optimum Degradation Rate
3.4 mg CO ₂ -C/ g OM/day	+++++++ < Stable > < Moderately Unstable> < Unstable > < High For Mulch

Is Your Compost Mature?

AmmoniaN/NitrateN ratio	+++++++
2.7 Ratio	VeryMature> < Mature > < Immature
Ammonia N ppm	+++++++
1300 mg/kg dry wt.	VeryMature> < Mature > < Immature
Nitrate N ppm	+++++++
490 mg/kg dry wt.	< Immature > < Mature
pH value	+++++++
6.98 units	< Immature > < Mature > < Immature
Cucumber Emergence	+++++++
100.0 percent	< Immature > < Mature

Is Your Compost Safe Regarding Health?

Fecal Coliform	+++++++
< 1000 MPN/g dry wt.	< Safe > < High Fecal Coliform
Salmonella	+++++++
Less than 3 /4g dry wt.	<Safe (none detected) > < High Salmonella Count(> 3 per 4 grams)
Metals US EPA 503	+++++++
Pass dry wt.	<All Metals Pass > < One or more Metals Fail

Does Your Compost Provide Nutrients or Organic Matter?

Nutrients (N+P ₂ O ₅ +K ₂ O)	+++++++
4.4 Percent dry wt.	<Low > < Average > < High Nutrient Content
AgIndex (Nutrients / Sodium and Chloride Salts)	((N+P ₂ O ₅ +K ₂ O) / (Na + Cl))
8 Ratio	Na & Cl > < Nutrient and Sodium and Chloride Provider > < Nutrient Provider
Plant Available Nitrogen (PAN)	Estimated release for first season
10 lbs/ton wet wt.	+++++++ Low Nitrogen Provider> < Average Nitrogen Provider > <High Nitrogen Provider
C/N Ratio	+++++++
12 Ratio	< Nitrogen Release > < N-Neutral > < N-Demand> < High Nitrogen Demand
Soluble Available Nutrients & Salts (EC ₅ w/w dw)	+++++++
9.4 mmhos/cm dry wt.	SloRelease> < Average Nutrient Release Rate > <High Available Nutrients
Lime Content (CaCO ₃)	+++++++
29 Lbs/ton dry wt.	< Low > < Average > < High Lime Content (as CaCO ₃)

What are the physical properties of your compost?

Percent Ash	+++++++
52.1 Percent dry wt.	< High Organic Matter > < Average > < High Ash Content
Sieve Size % > 6.3 MM (0.25")	+++++++
2.0 Percent dry wt.	All Uses > < Size May Restrict Uses for Potting mix and Golf Courses