

New York State Department of Environmental Conservation  
Division of Materials Management  
Albany, New York 12233-7253

2019  
REGISTERED OR PERMITTED FACILITY ANNUAL REPORT  
**COMPOSTING**  
(DO NOT USE THIS FORM FOR BIOSOLIDS COMPOSTING)  
6 NYCRR Part 361-3.2

This annual report is for the year of operation from January 01, 2019 to December 31, 2019

Annual Report Form Due: No Later than March 1, 2020

This form may be used for all composting facilities under section 361-3.2 of the Part 360 series except for biosolids composting. Biosolids composting requires the submission of a different annual report form. Forms for all solid waste management facilities can be found at <http://www.dec.ny.gov/chemical/52706.html>. If you have any questions on this form, please e-mail [organicrecycling@dec.ny.gov](mailto:organicrecycling@dec.ny.gov).

Failure to provide the required information requested is a violation of Environmental Conservation Law. Timely submission of a properly completed form to the Department's Regional Office that has jurisdiction over your facility and to the Department's Central Office is required to meet the Annual Report requirements of 6 NYCRR Part 360 series.

Attach additional sheets if space on the pages is insufficient or supplementary information is required or appropriate.

DSNY Fresh Kills Composting Facility - KE  
FACILITY NAME: STATEN ISLAND ORGANICS COMPOSTING FACILITY  
SW FACILITY ACTIVITY NUMBER(S): (Ex. 02P20099) 2-6499-00029 / 00097  
COUNTY WHERE FACILITY IS LOCATED: RICHMOND

DEC USE ONLY  
Region: 2 SWIMS: X  
MATRIX: X  
Date Reviewed:  
Reviewed By:  
Data Entered: 7/15/20 -KE

**COMPOST FACILITY ANNUAL REPORT  
SECTION 1 – FACILITY INFORMATION**

FACILITY INFORMATION			
FACILITY NAME: <b>STATEN ISLAND COMPOSTING FACILITY</b>			
FACILITY LOCATION ADDRESS: <b>450 WEST SERVICE ROAD</b>	FACILITY CITY: <b>STATEN ISLAND</b>	STATE: <b>NY</b>	ZIP CODE: <b>10314</b>
FACILITY TOWN: <b>STATEN ISLAND</b>	FACILITY COUNTY: <b>RICHMOND</b>	FACILITY PHONE NUMBER: <b>845-753-2242</b>	
NYSDEC REGION #: <b>2</b>			
FACILITY CONTACT: <b>BRIAN FLEURY</b>		CONTACT PHONE NUMBER: <b>845-753-2242</b>	
CONTACT EMAIL ADDRESS: <b>brian.fleury@denaliwater.com</b>			
OWNER INFORMATION			
OWNER NAME: <b>NYC DEPARTMENT OF SANITATION</b>	OWNER PHONE NUMBER: <b>212-437-4670</b>		
OWNER ADDRESS: <b>125 WORTH STREET - RM 726</b>	OWNER CITY: <b>NEW YORK</b>	STATE: <b>NY</b>	ZIP CODE: <b>10013</b>
OWNER CONTACT: <b>KIRK TOMLINSON</b>	OWNER CONTACT EMAIL ADDRESS: <b>KTOMLINSON@DSNY.NYC.GOV</b>		
OPERATOR INFORMATION			
OPERATOR NAME: <input type="checkbox"/> Same as owner <b>Denali Water Solutions</b>			
PREFERENCES			
Preferred address to receive correspondence: <input type="radio"/> Facility location address <input checked="" type="radio"/> Owner address			
<input checked="" type="radio"/> Other (provide): <b>125 WORTH STREET, RM 726 NY, NY 10013</b>			
Preferred email address: <input type="radio"/> Facility Contact <input checked="" type="radio"/> Owner Contact			
<input checked="" type="radio"/> Other (provide): <b>KTOMLINSON@DSNY.NYC.GOV</b>			
Preferred individual to receive correspondence: <input type="radio"/> Facility Contact <input type="radio"/> Owner <input checked="" type="radio"/> Owner Contact			
<input checked="" type="radio"/> Other (provide): <b>KIRK TOMLINSON</b>			
Did you operate in 2019? <input checked="" type="radio"/> Yes; Complete this form. <input type="radio"/> No; Complete and submit Sections 1, 12 and 13. If you no longer plan to operate and wish to relinquish your permit/registration associated with this solid waste management activity, please notify the regional office of your intent. See attachment for Regional Office addresses and contacts.			

## SECTION 2 – QUANTITY OF MATERIAL RECEIVED

Please report quantities received from January 01, 2019 to December 31, 2019

	Inputs	Quantity	Unit	Source(s)
<b>YARD WASTE</b>	Leaves only	<b>34,846</b>	Cubic Yards	
	Grass Clippings	<b>26,196</b>	Cubic Yards	
	Mixture of Grass and Leaves		Choose Units	
	Brush (Small branches and limbs, <4 inch diameter)	<b>30,962</b>	Cubic Yards	
<b>SSO</b>	Source Separated Organics (Food scraps, soiled paper products, etc.)	<b>1,041</b>	Cubic Yards	
	Food Processing Waste (brewery grains, grape pomace, etc.)		Choose Units	
<b>OTHER</b>	Crop Residues (Corn stalks, etc.)		Choose Units	
	Manure (including bedding)	<b>1,468</b>	Cubic Yards	
	Sawdust/Shavings		Choose Units	
	Animal Carcasses (road-kill, animal mortalities)		Choose Units	
	Paper Mill Residuals		Choose Units	
	Digestate		Choose Units	
	Other: <u>Christmas Trees</u>	<b>2,081</b>	Cubic Yards	
<b>BULKING AGENT</b>	Woodchips	<b>585</b>	Cubic Yards	
	Sawdust		Choose Units	
	Other: _____		Cubic Yards	

### SECTION 3 – COMPOST PRODUCTION

<b>WHAT IS THE PROCESS DETENTION TIME?</b> <i>Note: Total time material is processed, not including storage time</i>	<u>90-120 yardwaste</u> days
<b>COMPOST PRODUCED DURING THE YEAR:</b>	<u>32,856</u> cubic yards or _____ tons
<b>COMPOST DISTRIBUTED DURING THE YEAR:</b>	<u>30,916</u> cubic yards or _____ tons
<b>QUANTITY CURRENTLY STOCKPILED:</b> <i>Note: Finished product stockpiled</i>	<u>9440</u> cubic yards or _____ tons
<b>AGE OF OLDEST PRODUCT ON SITE:</b>	<u>3</u> months

### SECTION 4 – COMPOST DISTRIBUTION

Quantity Distributed (cubic yards)	Use of Compost (landscaping, agriculture, highway, onsite, bagged, etc.)
30,916	Finished compost produced at this facility
	was distributed to landscapers through sales
	and to NYC Agencies such as NYC Parks
	and to Non-Profit Agencies as free distribution
	for gardening, soil mitigation, habitat improvement,
	native plant establishment and to improve turf
	and other landscaping projects. A portion of
	the compost was bagged. Foodwaste compost was
	distributed for landscaping and soil manufacturing.

If **PERMITTED SSO** composting facility, continue to Section #5  
SSO – Source Separated Organics

**ALL OTHER COMPOSTING FACILITIES**, continue to Section #9

### SECTION 5 – PATHOGEN AND VECTOR ATTRACTION REDUCTION

For permitted SSO composting facilities only. Check one method for each:

#### Pathogen Reduction 361-3.7(a)

- Windrow Composting
- Aerated Static Pile Composting
- In-vessel Composting
- Other (specify): \_\_\_\_\_

#### Vector Attraction Reduction 361-3.7(b)

- 38 % Volatile Solids Reduction
- SOUR
- Aerobic Process 14 days,  $\geq 40C$ ,  $\geq 45 C$  avg.

**Attach operating and monitoring data to show compliance with methods chosen. Temperature data records should indicate when a pile was created, pile was moved, additional material was added and/or pile was turned.**

\*The food waste composting at this site in 2019 only accounted for about 1% of the total volume of incoming materials.

The food waste is composted in stand-alone windrow(s) and then screened once per year due to the screening frequency of this material at the site (May 2019). Once testing is received back (and we show compliance with metals and fecal), then the compost is distributed for use for topdressing, landscaping and soil manufacturing.

### SECTION 6 – FINISHED COMPOST ANALYSIS

For permitted SSOW composting facilities only. Please attach sampling analyses and laboratory reports as required under Part 360 or your permit. Copies of original laboratory results must be attached. All results, except pH and Total Solids, must be on a dry weight basis. See 361-3.9 Table 6 for pollutant limits and Table 5 for annual product testing frequency 361-3.9 Table 5.

**Summarize data in table below or attached document. Print additional pages as needed.**

Analysis Date =====>	Food Waste	Food Waste	Food Waste	Food Waste	Max. Conc. (mg/kg)
	6/5/2019	8/29/2019	12/18/2019	10/24/2019	
Arsenic (mg/kg)	<2.34	<2.31	<2.31	<2.10	41
Cadmium (mg/kg)	<2.34	<2.31	<2.31	<2.10	10
Chromium (mg/kg)	8.57	9.10	9.75	<9.66	1,000
Copper (mg/kg)	33.4	44.5	46.8	45.7	1,500
Lead (mg/kg)	26.8	31.8	33.9	28.6	300
Mercury (mg/kg)	< 0.234	<0.066	<0.077	<.058	10
Molybdenum (mg/kg)	< 2.34	<2.31	<2.31	<2.10	40
Nickel (mg/kg)	12.6	12.4	13.9	12.6	200
Selenium (mg/kg)	< 2.34	<2.31	<2.31	<2.10	100
Zinc (mg/kg)	63.8	72.6	85.9	70	2,500
TKN (mg/kg)	2410	12700			
Ammonia Nitrogen (mg/kg)	950	1770			
Nitrate (mg/kg)	9.6	3.9			
Total Phosphorus (mg/kg)	1620	2180			
Total Potassium (mg/kg)	4350	4870	3280	3220	
pH (s.u.)	8.47	8.57			
Total Solids( %)	42.8	43.2	43.3	47.7	
Total Volatile Solids (%)	40.9	46.5			
Fecal Coliform (MPN/g)	<4	<4	<4	<4	<1,000 MPN/g
Salmonella (MPN/4g)	N/A	N/A	N/A	N/A	<3MPN/4g
Other_____					

## SECTION 7 –SAMPLE MANAGEMENT PLAN

For permitted SSO composting facilities only. Describe the number, frequency and location of samples taken. Include a diagram showing all sampling locations.

DUE TO THE VERY SMALL AMOUNT OF FOOD WASTE RECEIVED AT THE FACILITY, ALL FOODWASTE IS COMPOSTED IN ONE OR TWO WINDROWS THROUGH OUT THE YEAR .. WE ONLY SCREENED PRODUCT ONCE DURING THE YEAR (May 2019) AND PRODUCED ~398 CYS OF FINISHED COMPOST.

\*\*\*\*SEE PROTOCOL BELOW IN SECTION 8\*\*\*\*

## SECTION 8 – ATTACHMENTS (IF REQUIRED)

Permitted SSO composting facilities, please attach:

- Temperature monitoring and detention time data.
- Sample analyses laboratory reports.
- Any additional reporting requirements.

Do you have a variance to the Part 360 permit requirements?  Yes  No

If yes, please describe:

- Each day material is removed from curing and screened, a minimum of three samples of compost throughout the daily screening period (i.e. beginning, middle and end of day) are obtained in a 5-gallon container.
- At the end of the day, the samples are completely mixed and a representative sample is stored in a bag or jar with the date and samplers initials. The sample is then stored in a refrigerator.
- At the end of the screening (if it takes more than 1 day), a composite sample is taken.
- A chain of custody is filled out and the sample is sent to the lab on ice.
- Additional grab samples were taken a various times during the year of the stockpiled compost in order to be in compliance with the number of samples needed annually.

## **SECTION 9 – UNAUTHORIZED WASTE**

Has unauthorized solid waste been received at the composting facility during the reporting period?

Yes  No

If yes, give information below for each incident (attach additional sheets if necessary):

## **SECTION 10 – PROBLEMS/COMPLAINTS**

Describe any operational problems or neighbor complaints arising from the composting operation and include any methods used to remedy the situations. This should include odor complaints, marketing difficulties, major equipment failure, etc.

NONE

## **SECTION 11 – QUESTIONS**

Please identify any questions or concerns that you would like the Department to answer or consider:

NONE AT THIS TIME



## SECTION 12 – FOOD DONATION & FOOD SCRAPS RECYCLING LAW

**If you are registered or permitted to compost food scraps please complete the following. For all other operations that are interested in processing food scraps, please contact your DEC regional office to determine what is required.**

In 2019, New York State passed the Food Donation & Food Scraps Recycling law. Effective January 1, 2022, large generators of food scraps (defined as generating an annual average of two tons per week or more) must donate excess food and recycle all remaining food scraps if they are within 25 miles of an organics recycler (composting facility, anaerobic digester, etc.). Examples of large generators include: large restaurants, grocery stores, hotels, colleges, etc. For more information visit: <https://www.dec.ny.gov/chemical/114499.html>

### Contact Information

Under this legislation, DEC is responsible for providing a list of organics recyclers (compost facilities, anaerobic digesters, etc.) to large generators so they can determine available food scraps recycling opportunities in their area.

You will be included in this listing if you hold a permit or registration for the composting of source separated organics or food scraps. This will educate both large generators and haulers of food scraps that you are an available composter in their area.

Please provide the following information to include in the listing.

Name of Business: \_\_\_\_\_

Business Phone Number: \_\_\_\_\_

Business Email: \_\_\_\_\_

Business Website: \_\_\_\_\_

I would like to opt out of DEC listing my facility as an available food scraps recycler for large generators as it relates to the Food Donation and Food Scraps Recycling law.

### Assessing Your Food Scraps Recycling Capacity

DEC is responsible for assessing available food scraps recycling capacity across New York State. Information from your operation will help us do this. Please complete the following section to calculate the amount of excess food scraps your operation will have the capability to process in **2022**. Please stay consistent with units (wet tons or cubic yards).

A. Amount of foods scraps projected to be processed in **2020**: \_\_\_\_\_ Choose Unit

B. Amount of foods scraps projected to be processed in **2022**: \_\_\_\_\_ Choose Unit

\* Note: You will not be required to process this quantity of material, these estimates will only be used to assist DEC in capacity planning across the state in preparation for the Food Donation and Food Scraps Recycling law effective January 1, 2022.

**Questions?**

DEC USE ONLY

Excess Capacity:

\_\_\_\_\_

## SECTION 13 - CERTIFICATION

The Owner or Operator must sign, date and submit one completed form with an original signature to the appropriate Regional Office (See attachment for Regional Office addresses and Contacts.)

The Owner or Operator must also submit one copy by email, fax or mail to:

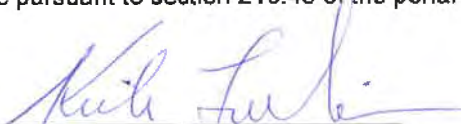
**NYS Department of Environmental Conservation  
Bureau of Waste Reduction and Recycling – Annual Report  
625 Broadway – 9<sup>th</sup> Floor  
Albany, New York 12233-7253**

**Phone: 518-402-8706**

**Fax 518-402-9024**

**Email address: [organicrecycling@dec.ny.gov](mailto:organicrecycling@dec.ny.gov)**

I certify, under penalty of law, that the information that will be used to determine compliance with the requirements in Subpart 361-3 of 6 NYCRR Part 361 has been prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that false statement made herein are punishable pursuant to section 210.45 of the penal law.

 _____ Signature	<u>2/28/2020</u> _____ Date
<b>KIRK TOMLINSON</b> _____ Name (Print)	DEPUTY DIRECTOR - COMPOSTING _____ Title (Print)
<b>KTOMLINSON@DSNY.NYC.GOV</b> _____ Email (Print)	
125 WORTH STREET - RM 726 _____ Address	<b>NEW YORK</b> _____ City
<b>NEW YORK 10013</b> _____ State and Zip	<u>212</u> <u>437</u> <u>4670</u> _____ Phone Number

ATTACHMENTS:  NO  YES (IF YES, LIST ATTACHMENTS)

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

New York State Department of Environmental Conservation  
Division of Materials Management  
Bureau of Waste Reduction and Recycling

## MATERIAL MANAGEMENT PROGRAM CONTACTS

### CENTRAL OFFICE

Bureau of Waste Reduction and Recycling  
625 Broadway  
Albany, NY 12233-7253  
Phone: (518) 402-8708

For Submission of Organics Recycling Annual Reports only:

Fax: (518) 402-9024

Email: [organicrecycling@dec.ny.gov](mailto:organicrecycling@dec.ny.gov)

### REGIONAL OFFICE ADDRESS & LEAD CONTACT PERSON

#### REGION 1 (Nassau, Suffolk)

Syed Rahman/David Gibb  
SUNY @ Stony Brook  
50 Circle Road  
Stony Brook, NY 11790  
Phone: (631) 444-0375  
SWMFannualreportR1@dec.ny.gov

#### REGION 2 (Bronx, Kings, New York, Queens, Richmond)

Joseph O'Connell  
47-40 21st Street  
Long Island City, NY 11101-5407  
Phone: (718) 482-4896  
SWMFannualreportR2@dec.ny.gov

#### REGION 3 (Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester)

James Lansing  
21 South Putt Corners Road  
New Paltz, NY 12561  
Phone: (845) 256-3123  
SWMFannualreportR3@dec.ny.gov

#### REGION 4 (Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady, Schoharie)

Victoria Schmitt  
1130 North Westcott Road  
Schenectady, NY 12306  
Phone: (518) 357-2243  
SWMFannualreportR4@dec.ny.gov

#### REGION 5 (Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren, Washington)

Jessie Sangster  
1115 State Route 86, PO Box 296  
Ray Brook, NY 12977  
Phone: (518) 897-1266  
SWMFannualreportR5@dec.ny.gov

#### REGION 6 (Herkimer, Jefferson, Lewis, Oneida, St. Lawrence)

Gary McCullough  
317 Washington Street  
Watertown, NY 13601  
Phone: (315) 785-2513  
SWMFannualreportR6@dec.ny.gov

#### REGION 7 (Broome, Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Tioga, Tompkins)

Thomas Annal  
615 Erie Boulevard West  
Syracuse, NY 13204  
Phone: (315) 426-7419  
SWMFannualreportR7@dec.ny.gov

#### REGION 8 (Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Yates)

Greg MacLean  
6274 East Avon-Lima Road  
Avon, NY 14414  
Phone: (585) 226-5411  
SWMFannualreportR8@dec.ny.gov

#### REGION 9 (Allegany, Cattaraugus, Chautauqua, Erie, Niagara, Wyoming)

Peter Grasso  
270 Michigan Avenue  
Buffalo, NY 14203  
Phone: (716) 851-7220  
SWMFannualreportR9@dec.ny.gov

December 2019



# FOOD WASTE WINDROW TEMPERATURE & TURNING CHART 2019



END



START

DATE	ROW 1	ROW 2	ROW 3	ROW TURNED
1/2/2019	140			
1/3/2019	141			1
1/4/2019	139			
1/5/2019	139			
1/7/2019	141			
1/8/2019	140			
1/9/2019	138			
1/10/2019	137			
1/11/2019	137	START		
1/12/2019	136	124		
1/14/2019	138	125		
1/15/2019	137	127		
1/16/2019	137	130		
1/17/2019	138	131		1,2
1/18/2019	135	132		
1/19/2019	137	131		
1/22/2019	136	133		
1/23/2019	138	134		1,2
1/24/2019	137	136		
1/25/2019	137	134		
1/26/2019	138	132		
1/28/2019	135	136		
1/29/2019	134	138		1,2
1/30/2019	131	137		
1/31/2019	130	136		
2/1/2019	132	137		
2/2/2019	131	134		
2/4/2019	129	133		
2/5/2019	130	135		
2/6/2019	131	134		
2/7/2019	130	134		1,2
2/8/2019	130	135		
2/9/2019	131	137		
2/11/2019	133	136		
2/12/2019	132	135		1,2
2/13/2019	131	136		
2/14/2019	130	136		
2/15/2019	130	136		
2/16/2019	129	135		
2/18/2019	130	138		
2/19/2019	130	139		
2/20/2019	127	133		1,2
2/21/2019	129	135		
2/22/2019	130	136		1,2
2/23/2019	128	138		
2/25/2019	127	131		
2/26/2019	125	125		
2/27/2019	126	129		

DATE	ROW 1	ROW 2	ROW 3	ROW TURNED
5/2/2019		136		
5/3/2019		136		
5/4/2019		137		
5/6/2019		138		
5/7/2019		138		
5/8/2019		138		
5/9/2019		140		
5/10/2019		140		
5/11/2019		140		
5/13/2019		140		
5/14/2019		140		
5/15/2019		139		
5/16/2019		139		
5/17/2019		139		
5/18/2019		139		
5/20/2019		139		
5/21/2019		139		
5/22/2019		146		
5/23/2019		143		2
5/24/2019		137		
5/25/2019		139		
5/27/2019		139		
5/28/2019		139		
5/29/2019		138		
5/30/2019		137		
5/31/2019		137		2
6/1/2019		138		
6/3/2019		138		
6/4/2019		140		
6/5/2019		140		2
6/6/2019		140		
6/7/2019		141		
6/8/2019		140		
6/10/2019		140		
6/11/2019		139		2
6/12/2019		140		
6/13/2019		140		
6/14/2019		140		
6/15/2019		140		
6/17/2019		140		
6/18/2019		137		2
6/19/2019		138		
6/20/2019		138		
6/21/2019		138		
6/22/2019		139		
6/24/2019		140		
6/25/2019		138		
6/26/2019		138		2

DATE	ROW 1	ROW 2	ROW 3	ROW TURNED
8/30/2019				
8/31/2019				
9/2/2019				
9/3/2019				
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9/5/2019				
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9/10/2019				
9/11/2019				
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10/21/2019				
10/22/2019				
10/23/2019				
10/24/2019				

2/28/2019	127	130		1,2
3/1/2019	128	131		1,2
3/2/2019	125	133		
3/4/2019	124	132		
3/5/2019	125	131		
3/6/2019	126	135		1,2
3/7/2019	124	133		
3/8/2019	125	132		1,2
3/9/2019	126	132		
3/11/2019	127	130		
3/12/2019	124	132		
3/13/2019	125	131		1,2
3/14/2019	124	130		
3/15/2019	124	130		
3/16/2019	123	131		
3/18/2019	124	132		
3/19/2019	126	131		
3/20/2019	124	131		
3/21/2019	123	130		1,2
3/22/2019	122	129		
3/23/2019	123	130		
3/25/2019	123	126		
3/26/2019	124	125		1,2
3/27/2019	121	126		1,2
3/28/2019	122	124		
3/29/2019	126	122		
3/30/2019	122	127		
4/1/2019	122	126		
4/2/2019	117	126		
4/3/2019	105	124		1,2
4/4/2019	108	128		1,2
4/5/2019	106	130		
4/6/2019	102	133		
4/8/2019	105	133		
4/9/2019	107	137		
4/10/2019	OFF	138		2
4/11/2019		136		
4/12/2019		136		
4/13/2019		136		
4/15/2019		137		
4/16/2019		136		
4/17/2019		136		2
4/18/2019		136		2
4/19/2019		136		
4/20/2019		137		
4/22/2019		137		
4/23/2019		137		2
4/24/2019		138		2
4/25/2019		137		
4/26/2019		136		
4/27/2019		136		
4/29/2019		137		
4/30/2019		136		2
5/1/2019		136		2

6/27/2019		140		
6/28/2019		139		
6/29/2019		139		
7/1/2019		140		
7/2/2019				
7/3/2019				
7/5/2019				
7/6/2019				
7/8/2019				
7/9/2019				
7/10/2019				
7/11/2019				
7/12/2019				
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12/31/2019				



Certified  
Environmental  
Services, Inc.

7280 Caswell Street  
North Syracuse, NY 13212  
Phone 315-478-2374  
Fax 315-478-2107

REPORT OF ANALYSES

We Care Denali, LLC  
250-B Lucius Gordon Dr.  
Suite 8  
W. Henrietta, NY 14586-  
Attn: Mr. Jason Fleury

PROJECT NAME: Staten Isl. Food Waste 6/2019  
DATE: 07/02/2019

SAMPLE NUMBER- 788620 SAMPLE ID- Staten Isl. Food Waste 6/2019 SAMPLE MATRIX- SO  
DATE SAMPLED- 06/04/19 TIME SAMPLED- 1400  
DATE RECEIVED- 06/05/19 SAMPLER- Miguel Nava RECEIVED BY- SB  
TIME RECEIVED- 0945 DELIVERED BY- UPS TYPE SAMPLE- Grab

Page 1 of 1

ANALYSIS	METHOD	SAMPLE PREP DATE	ANALYSIS BY	DATE	TIME	BY	RESULT	UNITS
Sample Receipt Temperature				06/05/19		SB	11.9	Degrees C
Sample Receipt Temperature				06/05/19		SB		Not Rec.On Ice
***Ammonia as N (SM -11)	4500NH3D/E			06/12/19		LA	950.	mg/Kg dry
Nitrate as N	EPA 9056			06/22/19		PAC	9.6	mg/Kg dry
Nitrite as N	EPA 9056			06/22/19		PAC	< 2.5	mg/Kg dry
pH in Water (At 21 Degrees C)	EPA 9045D			06/06/19	1414	LEW	H 8.47	std units
***Total Phosphorus as P	EPA 365.3			06/10/19		LA	1620.	mg/Kg dry
#Percent Solids-97,-11	SM 2540B			06/06/19		LEW	42.8	%
#Percent Vol Solids-97,-11	SM 2540B/E			06/07/19		LEW	R 40.9	%
***Total Kjeldahl N (SM -11)	4500NH3D/E			06/24/19		PAC	2410.	mg/Kg dry
Arsenic, Total (Prep 3050B)	EPA 6010C	06/06/19	MPB	06/10/19		MPB	< 2.34	mg/Kg dry
Cadmium, Total (Prep 3050B)	EPA 6010C	06/06/19	MPB	06/10/19		MPB	< 2.34	mg/Kg dry
Chromium, Total (Prep 3050B)	EPA 6010C	06/06/19	MPB	06/10/19		MPB	8.57	mg/Kg dry
Copper, Total (Prep 3050B)	EPA 6010C	06/06/19	MPB	06/10/19		MPB	33.4	mg/Kg dry
Lead, Total (Prep 3050B)	EPA 6010C	06/06/19	MPB	06/10/19		MPB	26.8	mg/Kg dry
Mercury, Total (Hg)	EPA 7471B			07/02/19		LSL	< 0.234	mg/Kg dry
Molybdenum, Total (Prep 3050B)	EPA 6010C	06/06/19	MPB	06/10/19		MPB	< 2.34	mg/Kg dry
Nickel, Total (Prep 3050B)	EPA 6010C	06/06/19	MPB	06/10/19		MPB	12.6	mg/Kg dry
Potassium, Total (Prep 3050B)	EPA 6010C	06/06/19	MPB	06/07/19		MPB	4350.	mg/Kg dry
Selenium, Total (Prep 3050B)	EPA 6010C	06/06/19	MPB	06/10/19		MPB	< 2.34	mg/Kg dry
Zinc, Total (Prep 3050B)	EPA 6010C	06/06/19	MPB	06/10/19		MPB	63.8	mg/Kg dry

Note: Mercury analysis performed by ELAP #10248. Nitrate and Nitrite analysis performed by ELAP #10478.

NYSDOH LAB ID NO. 11246

APPROVED BY:

(Terms and Conditions on Reverse Side)

The analytical results on this sample are representative of the sample received by the Laboratory.

Barbara L. DuChene  
Laboratory Manager

# Certified Environmental Services, Inc.

7280 Caswell Street, North Syracuse, NY 13212  
 Phone (315) 478-2374  
 Fax (315) 478-2107

# Chain of Custody Record

H 4454

<b>Client:</b> WeCare-Denali 250-B Lucius Gordon Drive, Suite 8 West Henrietta, NY 14586		<b>Project #/ Project Name:</b> Staten Island Food Waste 6/2019				Number of Containers	Bee Attached	1	2	3	4	5	6	7	8	9	10	Remarks
<b>Client Contact:</b> Jason Fleury	<b>Phone #:</b> 315-688-1937	<b>Location (city/state) Address:</b> 450 West Service Rd Staten Island, NY 10314																
<b>Sample ID</b>	<b>Date</b>	<b>Time</b>	<b>Matrix</b>	<b>GRAB OR COMP</b>	<b>CS Internal Use Only</b>													
Staten Island Food Waste 6/2019	6/4/2019	2:00 PM	Compost	G	788620	1	X											
<b>Parameter and Method</b>		<b>Sample bottle:</b>	<b>Type</b>	<b>Size</b>	<b>Preservative</b>	<b>Sampled by (Print)</b> <i>[Signature]</i> Company: WeCare Denali										<b>Name of Courier</b> UPS		
1						<b>Relinquished by (sign)</b> <i>[Signature]</i>										<b>Date</b>	<b>Time</b>	<b>Received by (sign)</b>
2						X										6/4/2019	5:00 PM	
3						<b>Relinquished by (sign)</b> <i>[Signature]</i> UPS										<b>Date</b>	<b>Time</b>	<b>Received by (sign)</b>
4																6/5/19	9:45	<i>[Signature]</i>
5						<b>Relinquished by (sign)</b>										<b>Date</b>	<b>Time</b>	<b>Rec'd for Lab by:</b>
6																		
7																		
8																		
9																		
10																		

11.9°c NO ICE



3308 Bernice Avenue  
Russellville, Arkansas 72802  
PO Box 3036  
Russellville, Arkansas 72811  
(479) 498-0500

RE: Fresh Kills Composting Facility

Compost Sample

Parameters

Units

- Total Solids	%
- Total Kjeldahl Nitrogen (TKN)	mg/kg dry weight basis
- Ammonia Nitrogen (NH <sub>4</sub> )	mg/kg dry weight basis
- Nitrate Nitrogen (NO <sub>3</sub> )	mg/kg dry weight basis
- Nitrite Nitrogen	mg/kg dry weight basis
- Total Phosphorus (P)	mg/kg dry weight basis
- Total Potassium (K)	mg/kg dry weight basis
- pH	Standard Units
- Arsenic	mg/kg dry weight basis
- Cadmium	mg/kg dry weight basis
- Chromium	mg/kg dry weight basis
- Copper	mg/kg dry weight basis
- Lead	mg/kg dry weight basis
- Molybdenum	mg/kg dry weight basis
- Nickel	mg/kg dry weight basis
- Selenium	mg/kg dry weight basis
- Zinc	mg/kg dry weight basis
- Mercury	mg/kg dry weight basis
- Total Volatile Solids	%
- Fecal Coliform	mpn/g

*\* Perform all the above \**





**Certified  
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7280 Caswell Street  
North Syracuse, NY 13212  
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Fax 315-478-2107

REPORT OF ANALYSES

We Care Denali, LLC  
250-B Lucius Gordon Dr.  
Suite 8  
W. Henrietta, NY 14586-  
Attn: Mr. Jason Fleury

PROJECT NAME: Staten Isl. Food Waste Fecal  
DATE: 06/07/2019

SAMPLE NUMBER- 788621    SAMPLE ID- Staten Island Food Waste Fecal    SAMPLE MATRIX- SO  
DATE SAMPLED- 06/04/19    TIME SAMPLED- 1400  
DATE RECEIVED- 06/05/19    SAMPLER- Miguel Nava    RECEIVED BY- SB  
TIME RECEIVED- 0945    DELIVERED BY- UPS    TYPE SAMPLE- Grab

Page 1 of 1

ANALYSIS	METHOD	ANALYSIS DATE	TIME	BY	RESULT UNITS
Sample Receipt Temperature		06/05/19		SB	11.9 Degrees C
#**Fecal Coliform, MPN (SM)	9221C,E-06	06/06/19	1200	DT	< 4 MPN/g dry

NYSDOH LAB ID NO. 11246

APPROVED BY:

(Terms and Conditions on Reverse Side)

Barbara L. DuChene  
Laboratory Manager

The analytical results on this sample are representative of the sample received by the Laboratory.

# Certified Environmental Services, Inc.

7280 Caswell Street, North Syracuse, NY 13212  
 Phone (315) 478-2374  
 Fax (315) 478-2107

# Chain of Custody Record

14455

<b>Client:</b> WeCare-Denali 250-B Lucius Gordon Drive, Suite B West Henrietta, NY 14586		<b>Project #/ Project Name:</b> Staten Island Food Waste 6/2019					Number of Containers	See Attached	1	2	3	4	5	6	7	8	9	10	Remarks
<b>Client Contact:</b> Jason Fleury	<b>Phone #:</b> 315-889-1937	<b>Location (city/state) Address:</b> 450 West Service Rd Staten Island, NY 10314																	
<b>Sample ID</b>	<b>Date</b>	<b>Time</b>	<b>Matrix</b>	<b>GRAB or COMP</b>	<b>255 (Staten Island)</b>														
Staten Island Food Waste 6/2019	6/4/2019	2:00 PM	Compost	G	78862	1	X												

1	Parameter and Method	Sample bottle:	Type	Size	Preservative	Sampled by (Print)	Company: WeCare Denali		Name of Courier UPS	
2										
3						Relinquished by (sign)	Date	Time	Received by (sign)	
4						X	6/4/2019	5:00 PM		
5						Relinquished by (sign)	Date	Time	Received by (sign)	
6							6/5/19	945	B. J. [Signature]	
7						Relinquished by (sign)	Date	Time	Received for Lab by	
8										
9										
10										

11.9°C NO ICE



3308 Bernice Avenue  
Russellville, Arkansas 72802  
PO Box 3036  
Russellville, Arkansas 72811  
(479) 498-0500

RE: Fresh Kills Composting Facility

Compost Sample

Parameters

Units

Total Solids	%
Total Kjeldahl Nitrogen (TKN)	mg/kg dry weight basis
Ammonia Nitrogen (NH <sub>4</sub> )	mg/kg dry weight basis
Nitrate Nitrogen (NO <sub>3</sub> )	mg/kg dry weight basis
Nitrite Nitrogen	mg/kg dry weight basis
Total Phosphorus (P)	mg/kg dry weight basis
Total Potassium (K)	mg/kg dry weight basis
pH	Standard Units
Arsenic	mg/kg dry weight basis
Cadmium	mg/kg dry weight basis
Chromium	mg/kg dry weight basis
Copper	mg/kg dry weight basis
Lead	mg/kg dry weight basis
Molybdenum	mg/kg dry weight basis
Nickel	mg/kg dry weight basis
Selenium	mg/kg dry weight basis
Zinc	mg/kg dry weight basis
Mercury	mg/kg dry weight basis
Total Volatile Solids	%
Fecal Coliform	mpn/g

*\* Perform all the above \**



Analysis Report For:				Copy To:		
Ryan Cerrato WeCare Organics 3308 Bernice Ave Russellville AR 72801						
LAB ID:	SAMPLE ID:	REPORT DATE:	SAMPLE TYPE:	FEEDSTOCKS	COMPOSTING METHOD	COUNTY
C11620	Staten Island Food Waste (Month: 6/2019)	06/13/2019	Finished Compost		Windrow	

## COMPOST ANALYSIS REPORT

*Compost Test 1C*

Analyte	Results (As is basis)	Results (Dry weight basis)
pH	8.3	—
Soluble Salts (1:5 w:w)	2.63 mmhos/cm	—
Solids	43.4 %	—
Moisture	56.6 %	—
Organic Matter	19.6 %	45.3 %
Total Nitrogen (N)	0.51 %	1.18 %
Organic Nitrogen <sup>1</sup>	0.50 %	1.15 %
Ammonium N (NH <sub>4</sub> -N)	158.3 mg/kg <i>or</i> 0.0158 %	365.0 mg/kg <i>or</i> 0.0365 %
Carbon (C)	10.6 %	24.5 %
Carbon:Nitrogen (C:N) Ratio	20.70	20.70
Phosphorus (as P <sub>2</sub> O <sub>5</sub> ) <sup>2</sup>	0.153 %	0.353 %
Potassium (as K <sub>2</sub> O) <sup>2</sup>	0.22 %	0.50 %
Calcium (Ca)	2.22 %	5.11 %
Magnesium (Mg)	1.02 %	2.36 %
Sulfur (S)	0.10 %	0.24 %
Sodium (Na)	524 mg/kg	1208 mg/kg
Aluminum (Al)	1984.79 mg/kg	4575.79 mg/kg
Iron (Fe)	4837.26 mg/kg	11151.98 mg/kg
Manganese (Mn)	79.60 mg/kg	183.51 mg/kg
Copper (Cu)	31.88 mg/kg	73.49 mg/kg
Zinc (Zn)	30.27 mg/kg	69.80 mg/kg

Sampled 6/4/2019 @ 1:00 PM. Shipped overnight and on ice. Ice melted. Arrived 6/5/2019 at 12:15 PM

See comments on back of report.

<sup>2</sup>To convert phosphorus as P<sub>2</sub>O<sub>5</sub> into elemental phosphorus (P), divide by 2.29. To convert potassium (as K<sub>2</sub>O) into elemental potassium (K), divide by 1.20.

## INTERPRETATION

<b>pH</b>	pH is a measure of active acidity in the feedstock or compost. The pH scale is 0 (acidic) to 14 (basic) with 7 being neutral. Most finished composts will have pH values in the range of 5.0 to 8.5. Ideal pH depends on compost use. A lower pH is preferred for certain ornamental plants while a neutral pH is suitable for most other applications. pH is not a measure of the total acidity or alkalinity and cannot be used to predict the effect of compost on soil pH.
<b>Soluble Salts</b>	Soluble salts are determined by measuring electrical conductivity (EC) in a 1:5 (compost:water, weight ratio) slurry. EC is related to the total soluble salts dissolved in the slurry and is measured in units of millimhos/cm (mmhos/cm). Compost soluble salt levels typically range from 1 to 10 mmhos/cm. High salinity may be toxic to plants. Ideal soluble salt levels will depend on the end use of the compost. Final compost blends with soil or container media/potting mixes should be tested for soluble salts.
<b>% Solids, % Moisture</b>	The ideal moisture content for composting will depend on the water holding capacity of the materials being composted. In general, high organic matter materials have a higher water holding capacity and a higher ideal moisture content. A typical starting compost mix will have an ideal % solids content of 35-55 % (65-45 % moisture). Finished compost should have a % solids content of 50-60 % (50-40 % moisture).
<b>% Organic Matter</b>	There is no ideal organic matter level for feedstocks or finished compost. Organic matter content will decrease during composting. The organic matter content (dry weight basis) of typical feedstocks and starting mixes will be greater than 60 % while that of finished compost will be in the range of 30-70 %. An organic matter content (dry weight basis) of 50-60 % is desirable for most compost uses.
<b>Nitrogen : Total, Organic, Ammonium, and Nitrate</b>	Total nitrogen (N) includes all forms of nitrogen: organic N, ammonium N ( $\text{NH}_4\text{-N}$ ), and nitrate N ( $\text{NO}_3\text{-N}$ ). Total N will normally range from less than 1 % to around 5 % (dry weight basis) in most feedstocks and from 0.5 to 2.5 % (dry weight basis) in finished composts. $\text{NO}_3\text{-N}$ (an optional test) is generally present in only low concentrations in immature composts, although it may increase as the compost matures. $\text{NH}_4\text{-N}$ levels may be high during initial stages of the composting process, but decrease as maturity increases. Organic N is determined by subtracting the inorganic N forms, $\text{NH}_4\text{-N}$ and $\text{NO}_3\text{-N}$ , from total N. However, because $\text{NO}_3\text{-N}$ levels are generally very low, total nitrogen minus $\text{NH}_4\text{-N}$ provides a good estimate of organic N in most composts and is the value shown on the front of this report. In stable, finished composts, most of the N should be in the organic form. While $\text{NH}_4\text{-N}$ and $\text{NO}_3\text{-N}$ are immediately available to plants, organic N is only slowly available, approximately 10 to 20 % per year. However, mineralization or break-down of organic N into available inorganic forms depends on the C:N ratio (see below) as well as factors such as soil moisture and temperature.
<b>Total Carbon</b>	Total carbon (C) is a direct measurement of all organic and inorganic carbon in the compost sample. Unless the sample has a high pH (> 8.3) or is known to contain carbonates, essentially all carbon will be in the organic form. Compost organic matter typically contains around 54 % organic carbon by weight. The carbon content of individual feedstocks may vary from this ratio.
<b>Carbon: Nitrogen Ratio</b>	This is the ratio of total carbon (C) to total nitrogen (N) in the compost sample provided. C:N ratio may be used as an indicator of compost stability and N availability. Compost C:N ratio typically decreases during composting if the starting C:N ratio is > 25, but may increase if the starting C:N ratio is low (< 15) and N is lost during the composting process. Composts with high C:N ratios (> 30) will likely immobilize or tie-up N if applied to soil, while those with low C:N ratios (< 20) will mineralize or break-down organic N to inorganic (plant-available) N.
<b>Phosphorus, Potassium</b>	Phosphorus (P) and potassium (K) are plant macronutrients. Values reported are for total amounts given in the oxide forms ( $\text{P}_2\text{O}_5$ and $\text{K}_2\text{O}$ ). These results provide an indication of the nutrient value of the compost sample. However, plant availability of total phosphorus and potassium in compost has not yet been established.
<b>Nitrogen, Phosphorus, Potassium Balance</b>	When compost is applied on the basis of nitrogen (N), most composts will have an excess of phosphorus (P) and potassium (K) relative to crop demand. These mineral elements and salts can accumulate to above optimum levels with repeated application. Growers using compost should regularly soil test to monitor P, K and salt accumulation and should consider using other nutrient sources or nitrogen fixing legumes in their crop rotation especially when P and K levels are above optimum.



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REPORT OF ANALYSES

We Care Denali, LLC  
250-B Lucius Gordon Dr.  
Suite 8  
W. Henrietta, NY 14586-  
Attn: Mr. Jason Fleury

PROJECT NAME: Staten Isl. Food Waste 8/2019  
DATE: 09/23/2019

SAMPLE NUMBER- 795170 SAMPLE ID- Staten Isl. Food Waste 8/2019 SAMPLE MATRIX- SO  
DATE SAMPLED- 08/28/19 TIME SAMPLED- 1400  
DATE RECEIVED- 08/29/19 SAMPLER- Miguel Nava RECEIVED BY- SB  
TIME RECEIVED- 1030 DELIVERED BY- UPS TYPE SAMPLE- Grab

Page 1 of 1

ANALYSIS	METHOD	SAMPLE DATE	PREP BY	ANALYSIS DATE	TIME	BY	RESULT	UNITS
Sample Receipt Temperature				08/29/19		SB	11.7	Degrees C
Sample Receipt Temperature				08/29/19		SB	Sample	Rec. On Ice
***Ammonia as N (SM -11)	4500NH3D/E			09/11/19		ME	1770.	mg/Kg dry
Nitrate as N	EPA 9056			09/10/19		PAC	3.9	mg/Kg dry
Nitrite as N	EPA 9056			09/10/19		PAC	< 2.1	mg/Kg dry
pH in Water (At 21 Degrees C)	EPA 9045D			08/30/19	0838	BLD	H 8.57	std units
***Total Phosphorus as P	EPA 365.3			09/06/19		ME	2180.	mg/Kg dry
#Percent Solids-97, -11	SM 2540B			08/29/19		LEW	43.2	%
#Percent Vol Solids-97, -11	SM 2540B/E			08/30/19		BLD	46.5	%
***Total Kjeldahl N (SM -11)	4500NH3D/E			09/11/19		JDC	12700.	mg/Kg dry
Arsenic, Total (Prep 3050B)	EPA 6010C	09/13/19	MPB	09/17/19		MPB	< 2.31	mg/Kg dry
Cadmium, Total (Prep 3050B)	EPA 6010C	09/13/19	MPB	09/17/19		MPB	< 2.31	mg/Kg dry
Chromium, Total (Prep 3050B)	EPA 6010C	09/13/19	MPB	09/17/19		MPB	9.10	mg/Kg dry
Copper, Total (Prep 3050B)	EPA 6010C	09/13/19	MPB	09/17/19		MPB	44.5	mg/Kg dry
Lead, Total (Prep 3050B)	EPA 6010C	09/13/19	MPB	09/17/19		MPB	31.8	mg/Kg dry
Mercury, Total (Hg)	EPA 7471B			09/06/19		PAC	< 0.066	mg/Kg dry
Molybdenum, Total (Prep 3050B)	EPA 6010C	09/13/19	MPB	09/17/19		MPB	< 2.31	mg/Kg dry
Nickel, Total (Prep 3050B)	EPA 6010C	09/13/19	MPB	09/17/19		MPB	12.4	mg/Kg dry
Potassium, Total (Prep 3050B)	EPA 6010C	09/13/19	MPB	09/19/19		MPB	4870.	mg/Kg dry
Selenium, Total (Prep 3050B)	EPA 6010C	09/13/19	MPB	09/17/19		MPB	< 2.31	mg/Kg dry
Zinc, Total (Prep 3050B)	EPA 6010C	09/13/19	MPB	09/17/19		MPB	72.6	mg/Kg dry

Note: Mercury, Nitrate, and Nitrite analysis performed by ELAP #10478.

NYSDOH LAB ID NO. 11246

APPROVED BY:

*Rachel R. Bonczyk*  
(Terms and Conditions on Reverse Side)

Rachel R. Bonczyk  
Technical Director

The analytical results on this sample are representative of the sample received by the Laboratory.

# Certified Environmental Services, Inc.

7280 Caswell Street, North Syracuse, NY 13212  
 Phone (315) 478-2374  
 Fax (315) 478-2107

# Chain of Custody Record

H 6516

<b>Client:</b> WeCare-Denali 250-B Lucius Gordon Drive, Suite 8 West Henrietta, NY 14586		<b>Project #/ Project Name:</b> Staten Island Food Waste 8/2019					Number of Copilines	See Attached	1	2	3	4	5	6	7	8	9	10	Remarks
<b>Client Contact:</b> Jason Fleury	<b>Phone #:</b> 315-889-1937	<b>Location (city/state) Address:</b> 450 West Service Rd Staten Island, NY 10314																	
<b>Sample ID</b>	<b>Date</b>	<b>Time</b>	<b>Matrix</b>	<b>GRAB</b> NO COMP	<b>GRAB</b> NO COMP														
Staten Island Food Waste 8/2019	8/28/2019	2:00 PM	Compost	G	795170	1	X												

Parameter and Method	Sample bottle:	Type	Size	Preservative	Sampled by (Print)	Company: WeCare Denali		Name of Courier		
1					<i>[Signature]</i>			UPS		
2								Date	Time	Received by (sign)
3								8/28/2019	5:00 PM	
4					X			Date	Time	Received by (sign)
5								8/29/19	1030	<i>[Signature]</i>
6								Date	Time	Rec'd for Lab by
7										
8										
9										
10										

11.7°C  
on ice



3308 Bernice Avenue  
Russellville, Arkansas 72802  
PO Box 3036  
Russellville, Arkansas 72811  
(479) 498-0500

RE: Fresh Kills Composting Facility

**Compost Sample**

Parameters

Units

· Total Solids	%
· Total Kjeldahl Nitrogen (TKN)	mg/kg dry weight basis
· Ammonia Nitrogen (NH <sub>4</sub> )	mg/kg dry weight basis
· Nitrate Nitrogen (NO <sub>3</sub> )	mg/kg dry weight basis
· Nitrite Nitrogen	mg/kg dry weight basis
· Total Phosphorus (P)	mg/kg dry weight basis
· Total Potassium (K)	mg/kg dry weight basis
· pH	Standard Units
· Arsenic	mg/kg dry weight basis
· Cadmium	mg/kg dry weight basis
· Chromium	mg/kg dry weight basis
· Copper	mg/kg dry weight basis
· Lead	mg/kg dry weight basis
· Molybdenum	mg/kg dry weight basis
· Nickel	mg/kg dry weight basis
· Selenium	mg/kg dry weight basis
· Zinc	mg/kg dry weight basis
· Mercury	mg/kg dry weight basis
· Total Volatile Solids	%
Fecal Coliform	mpn/g





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REPORT OF ANALYSES

We Care Denali, LLC  
 250-B Lucius Gordon Dr.  
 Suite 8  
 W. Henrietta, NY 14586-  
 Attn: Mr. Jason Fleury

PROJECT NAME: Staten Isl Food Waste 10/2019  
 DATE: 11/11/2019

SAMPLE NUMBER- 799340 SAMPLE ID- Staten Isl Food Waste 10/2019 SAMPLE MATRIX- SO  
 DATE SAMPLED- 10/23/19 TIME SAMPLED- 1400  
 DATE RECEIVED- 10/24/19 SAMPLER- Miguel Nava RECEIVED BY- SB  
 TIME RECEIVED- 0955 DELIVERED BY- UPS TYPE SAMPLE- Grab

Page 1 of 1

ANALYSIS	METHOD	SAMPLE PREP		ANALYSIS		TIME BY	RESULT UNITS
		DATE	BY	DATE			
Sample Receipt Temperature				10/24/19		SB	4.5 Degrees C
#Percent Solids-97,-11	SM 2540B			10/24/19		LEW	47.7 %
Arsenic, Total (Prep 3050B)	EPA 6010C	11/04/19	MPB	11/06/19		MPB	< 2.10 mg/Kg dry
Cadmium, Total (Prep 3050B)	EPA 6010C	11/04/19	MPB	11/06/19		MPB	< 2.10 mg/Kg dry
Chromium, Total (Prep 3050B)	EPA 6010C	11/04/19	MPB	11/06/19		MPB	9.66 mg/Kg dry
Copper, Total (Prep 3050B)	EPA 6010C	11/04/19	MPB	11/06/19		MPB	45.7 mg/Kg dry
Lead, Total (Prep 3050B)	EPA 6010C	11/04/19	MPB	11/06/19		MPB	28.6 mg/Kg dry
Mercury, Total (Hg)	EPA 7471B			11/04/19		PAC	< 0.058 mg/Kg dry
Molybdenum, Total (Prep 3050B)	EPA 6010C	11/04/19	MPB	11/06/19		MPB	< 2.10 mg/Kg dry
Nickel, Total (Prep 3050B)	EPA 6010C	11/04/19	MPB	11/06/19		MPB	12.6 mg/Kg dry
Potassium, Total (Prep 3050B)	EPA 6010C	11/04/19	MPB	11/07/19		MPB	3220 mg/Kg dry
Selenium, Total (Prep 3050B)	EPA 6010C	11/04/19	MPB	11/06/19		MPB	< 2.10 mg/Kg dry
Zinc, Total (Prep 3050B)	EPA 6010C	11/04/19	MPB	11/06/19		MPB	70.0 mg/Kg dry

Note: Mercury analysis performed by ELAP #10478.

NYSDOH LAB ID NO. 11246

APPROVED BY:

*Rachel R. Bonczuk*  
 (Terms and Conditions on Reverse Side)

Rachel R. Bonczuk  
 Technical Director

The analytical results on this sample are representative of the sample received by the Laboratory.

# Certified Environmental Services, Inc.

7280 Caswell Street, North Syracuse, NY 13212  
 Phone (315) 478-2374  
 Fax (315) 478-2107

# Chain of Custody Record

H7773/H7774

Client:		Project # Project Name					Number of Containers	Bee Attached	1	2	3	4	5	6	7	8	9	10	Remarks
WeCare-Denali 250-B Lucius Gordon Drive, Suite 8 West Henrietta, NY 14586		Staten Island Food Waste 10/2019																	
Client Contact:	Phone #:	Location (city/state) Address:			GRAB OR COMP	CSL Internal Use Only													
Jason Fleury	315-689-1937	450 West Service Rd Staten Island, NY 10314			G		1	X											
Sample ID	Date	Time	Matrix	GRAB OR COMP	CSL Internal Use Only														
Staten Island Food Waste 10/2019	10/23/2019	2:00 PM	Compost	G	799339 799340														

Parameter and Method	Sample bottle:	Type	Size	Preservative	Sampled by (Print)	Temperature	Name of Courier
1					<i>[Signature]</i>	4.6°C	UPS
2							
3							
4							
5							
6					X		
7					<i>[Signature]</i>		
8							
9							
10							

Company: WeCare Denali

UPS

Relinquished by: (sign)	Date	Time	Received by: (sign)
X	10/23/2019	5:00 PM	
Relinquished by: (sign)	Date	Time	Received by: (sign)
	10/24/19	9:55	<i>[Signature]</i>
Relinquished by: (sign)	Date	Time	Rec'd for Lab by



3308 Bernice Avenue  
Russellville, Arkansas 72802  
PO Box 3036  
Russellville, Arkansas 72811  
(479) 498-0500

RE: Fresh Kills Composting Facility

**Compost Sample**

Parameters

Units

Total Solids	%
Arsenic	mg/kg dry weight basis
Cadmium	mg/kg dry weight basis
Chromium	mg/kg dry weight basis
Copper	mg/kg dry weight basis
Lead	mg/kg dry weight basis
Molybdenum	mg/kg dry weight basis
Nickel	mg/kg dry weight basis
Potassium	mg/kg dry weight basis
Selenium	mg/kg dry weight basis
Zinc	mg/kg dry weight basis
Mercury	mg/kg dry weight basis
Fecal Coliform	mpn/g



Central  
Environmental  
Services, Inc.

7280 Caswell Street  
North Syracuse, NY 13212  
Phone 315-478-2374  
Fax 315-478-2107

REPORT OF ANALYSES

We Care Denali, LLC  
250-B Lucius Gordon Dr.  
Suite 8  
W. Henrietta, NY 14586-  
Attn: Mr. Jason Fleury

PROJECT NAME: Staten Isl Food Waste 10/2019  
DATE: 10/28/2019

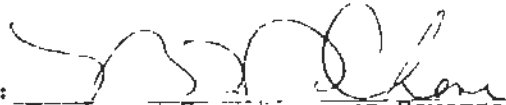
SAMPLE NUMBER- 799339    SAMPLE ID- Staten Isl Food Waste 10/2019    SAMPLE MATRIX- SO  
DATE SAMPLED- 10/23/19    TIME SAMPLED- 1400  
DATE RECEIVED- 10/24/19    SAMPLER- Miguel Nava    RECEIVED BY- SB  
TIME RECEIVED- 0955    DELIVERED BY- UPS    TYPE SAMPLE- Grab

Page 1 of 1

ANALYSIS	METHOD	ANALYSIS DATE	TIME	BY	RESULT	UNITS
Sample Receipt Temperature		10/24/19		SB	4.6	Degrees C
***Fecal Coliform, MPN (SM)	9221C,E-06	10/24/19	1135	DT	< 4	MPN/g dry

NYSDOH LAB ID NO. 11246

APPROVED BY:

  
(Terms and Conditions on Reverse Side)

Barbara L. DuChene  
Laboratory Manager

The analytical results on this sample are representative of the sample received by the Laboratory.

# Certified Environmental Services, Inc.

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 Phone (315) 478-2374  
 Fax (315) 478-2107

# Chain of Custody Record

H7773/H7774

Client:		Project #/ Project Name:				Number of Containers	See Attached	1	2	3	4	5	6	7	8	9	10	Remarks																																																																																							
WeCare-Denali 250-B Lucius Gordon Drive, Suite B West Henrietta, NY 14586		Staten Island Food Waste 10/2019																																																																																																							
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Jason Fleury		315-669-1837	450 West Service Rd Staten Island, NY 10314																																																																																																						
Sample ID	Date	Time	Matrix	GRAB OR COMP	OR PREPARE USE ONLY																																																																																																				
Staten Island Food Waste 10/2019	10/23/2019	2:00 PM	Compost	G	799339 799340	1	X																																																																																																		
<table border="1"> <thead> <tr> <th>Parameter and Method</th> <th>Sample bottle:</th> <th>Type</th> <th>Size</th> <th>Preservative</th> <th>Sampled by (Print)</th> <th>Temperature</th> <th>Name of Courier</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td><i>[Signature]</i></td> <td>4.6°C</td> <td>UPS</td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td>Relinquished by:(sign)</td> <td>Date</td> <td>Time</td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>10/23/2019</td> <td>5:00 PM</td> </tr> <tr> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td>Relinquished by:(sign)</td> <td>Date</td> <td>Time</td> </tr> <tr> <td>6</td> <td></td> <td></td> <td></td> <td></td> <td><i>[Signature]</i></td> <td>10/24/19</td> <td>9:55</td> </tr> <tr> <td>7</td> <td></td> <td></td> <td></td> <td></td> <td>UPS</td> <td></td> <td></td> </tr> <tr> <td>8</td> <td></td> <td></td> <td></td> <td></td> <td>Relinquished by:(sign)</td> <td>Date</td> <td>Time</td> </tr> <tr> <td>9</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>10</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>																		Parameter and Method	Sample bottle:	Type	Size	Preservative	Sampled by (Print)	Temperature	Name of Courier	1					<i>[Signature]</i>	4.6°C	UPS	2								3					Relinquished by:(sign)	Date	Time	4					X	10/23/2019	5:00 PM	5					Relinquished by:(sign)	Date	Time	6					<i>[Signature]</i>	10/24/19	9:55	7					UPS			8					Relinquished by:(sign)	Date	Time	9								10							
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3308 Bernice Avenue  
Russellville, Arkansas 72802  
PO Box 3036  
Russellville, Arkansas 72811  
(479) 498-0500

RE: Fresh Kills Composting Facility

**Compost Sample**

<u>Parameters</u>	<u>Units</u>
Total Solids	%
Arsenic	mg/kg dry weight basis
Cadmium	mg/kg dry weight basis
Chromium	mg/kg dry weight basis
Copper	mg/kg dry weight basis
Lead	mg/kg dry weight basis
Molybdenum	mg/kg dry weight basis
Nickel	mg/kg dry weight basis
Potassium	mg/kg dry weight basis
Selenium	mg/kg dry weight basis
Zinc	mg/kg dry weight basis
Mercury	mg/kg dry weight basis
Fecal Coliform	mpn/g



Account No. : 2055

**Compost (TMECC) Analysis Report**

**RYAN, CERRATO  
DENALI WATER SOLUTIONS  
3308 BERNICE AVE  
RUSSELLVILLE AR 72802**

Invoice No. : 1115675  
Date Received : 10/23/2019  
Date Analyzed: 10/24/2019

Lab No. : 10115

Results For : DENALI WATER SOLUTIONS  
Sample ID : STATEN ISLAND FOOD WASTE  
10/19

	Analysis Dry Basis	Analysis As Is Basis	Lbs / Ton		Available First Year
			Dry Basis	As Is Basis	
Organic N, % N	0.76	0.36	15.2	7.3	1.8
Ammonium, % N	0.035	0.0170	0.7	0.3	0.3
Nitrate, % N	0.003	0.0010	0.1	0.0	0.0
Total N, % N	0.80	0.38	16.0	7.7	2.2
Phosphorus, % P <sub>2</sub> O <sub>5</sub>	0.44	0.21	8.9	4.2	3.0
Potassium, % K <sub>2</sub> O	0.35	0.17	6.9	3.3	3.0
Sulfur, % S	0.23	0.11	4.6	2.2	0.9
Calcium, % Ca	4.82	2.31	96.4	46.2	32.4
Magnesium, % Mg	2.23	1.07	44.5	21.4	15.0
Sodium, % Na	0.09	0.04	1.8	0.9	0.9
Sodium Adsorption Ratio (SAR)	0.84				
Zinc, ppm Zn	73.8	35.4	0.1	0.1	0.0
Iron, ppm Fe	6715.5	3222.1	13.4	6.4	4.5
Manganese, ppm Mn	171.7	82.4	0.3	0.2	0.1
Copper, ppm Cu	52.7	25.3	0.1	0.0	0.1
Aluminum, ppm Al	1104.0	529.7	2.2	1.1	0.7
Boron, ppm B	23.3	11.2	0.0	0.0	0.0
Soluble Salts, (EC 1:5) dS/m		0.78			
pH		8.3			
Moisture, %	52.02				
Dry Matter (TS), %	47.98				
Ash, %	67.07	32.18			
Organic Matter LOI 550C, %	32.93	15.80			
Organic Carbon, %	19.10	9.16			
Organic C:N Ratio	23.9				
Bulk Density, lbs / cubic foot		32			

W.R. Rohrer - AgroLab Inc.

11/14/2019

Copy : 1

Page 1 of 2

Bus: 302/566-6094  
Email: admin@agrolab.us

web site  
www.agrolab.us

101 Clukey Dr.  
Harrington, DE 19952



Account No. : 2055

**Compost (TMECC) Analysis Report**

**RYAN, CERRATO  
DENALI WATER SOLUTIONS  
3308 BERNICE AVE  
RUSSELLVILLE AR 72802**

Invoice No. : 1115675  
Date Received : 10/23/2019  
Date Analyzed: 10/24/2019

Lab No. : 10115

Results For : DENALI WATER SOLUTIONS  
Sample ID : STATEN ISLAND FOOD WASTE  
10/19

	Analysis Dry Basis	Analysis As Is Basis	Lbs / Ton		Available First Year
			Dry Basis	As Is Basis	
Human Inerts & Plastic Film, %		< 0.1			
Respiration mg CO <sub>2</sub> -C/g OM/day	0.6				
Compost Respiration Stability Index		Very Stable			
Respiration mg CO <sub>2</sub> -C/g TS/day	0.4				
Compost Respiration Stability Index		Very Stable			
Maturity Indicator by Germination					
Emergence %		80			
Maturity		Mature			
Seedling Vigor %		54			
Maturity		Immature			

"<" - Not Detected / Below Detection Limit

**Note:** The available first year Ammonium-N is calculated based on maximum availability, or incorporation within 24 hours. Advise a nutrient consultant for adjustments beyond 24 hr incorporation.





Certified  
Environmental  
Services, Inc.

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North Syracuse, NY 13212  
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Fax 315-478-2107

REPORT OF ANALYSES

We Care Denali, LLC  
250-B Lucius Gordon Dr.  
Suite 8  
W. Henrietta, NY 14586-  
Attn: Mr. Jason Fleury

PROJECT NAME: Staten Isl Food Waste 12/2019  
DATE: 01/13/2020

SAMPLE NUMBER- 803058 SAMPLE ID- Staten Isl Food Waste 12/2019 SAMPLE MATRIX- SO  
DATE SAMPLED- 12/17/19 TIME SAMPLED- 1500  
DATE RECEIVED- 12/18/19 SAMPLER- Miguel Nava RECEIVED BY- SB  
TIME RECEIVED- 1300 DELIVERED BY- UPS TYPE SAMPLE- Grab

Page 1 of 1

ANALYSIS	METHOD	SAMPLE PREP DATE	ANALYSIS BY DATE	TIME	BY	RESULT	UNITS
Sample Receipt Temperature			12/18/19		SB	2.4	Degrees C
#Percent Solids-97, -11	SM 2540B		12/19/19		BLD	43.3	%
Arsenic, Total (Prep 3050B)	EPA 6010C	12/23/19	MPB 12/26/19		MPB	< 2.31	mg/Kg dry
Cadmium, Total (Prep 3050B)	EPA 6010C	12/23/19	MPB 12/26/19		MPB	< 2.31	mg/Kg dry
Chromium, Total (Prep 3050B)	EPA 6010C	12/23/19	MPB 12/26/19		MPB	9.75	mg/Kg dry
Copper, Total (Prep 3050B)	EPA 6010C	12/23/19	MPB 12/26/19		MPB	46.8	mg/Kg dry
Lead, Total (Prep 3050B)	EPA 6010C	12/23/19	MPB 12/26/19		MPB	33.9	mg/Kg dry
Mercury, Total (Hg)	EPA 7471B		01/07/20		PAC	< 0.077	mg/Kg dry
Molybdenum, Total (Prep 3050B)	EPA 6010C	12/23/19	MPB 12/26/19		MPB	< 2.31	mg/Kg dry
Nickel, Total (Prep 3050B)	EPA 6010C	12/23/19	MPB 12/26/19		MPB	13.9	mg/Kg dry
Potassium, Total (Prep 3050B)	EPA 6010C	12/23/19	MPB 01/02/20		MPB	3280	mg/Kg dry
Selenium, Total (Prep 3050B)	EPA 6010C	12/23/19	MPB 12/26/19		MPB	< 2.31	mg/Kg dry
Zinc, Total (Prep 3050B)	EPA 6010C	12/23/19	MPB 12/26/19		MPB	85.9	mg/Kg dry

Note: Mercury analysis performed by ELAP #10478

NYSDOH LAB ID NO. 11246

APPROVED BY:

(Terms and Conditions on Reverse Side)

Barbara L. DuChene  
Laboratory Manager

The analytical results on this sample are representative of the sample received by the Laboratory.





3308 Bernice Avenue  
Russellville, Arkansas 72802  
PO Box 3036  
Russellville, Arkansas 72811  
(479) 498-0500

RE: Fresh Kills Composting Facility

Compost Sample

<u>Parameters</u>	<u>Units</u>
. Total Solids	%
. Arsenic	mg/kg dry weight basis
. Cadmium	mg/kg dry weight basis
. Chromium	mg/kg dry weight basis
. Copper	mg/kg dry weight basis
. Lead	mg/kg dry weight basis
. Molybdenum	mg/kg dry weight basis
. Nickel	mg/kg dry weight basis
. Potassium	mg/kg dry weight basis
. Selenium	mg/kg dry weight basis
. Zinc	mg/kg dry weight basis
. Mercury	mg/kg dry weight basis
. Fecal Coliform	mpn/g



Certified  
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Services, Inc.

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Phone 315-478-2374  
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REPORT OF ANALYSES

We Care Denali, LLC  
250-B Lucius Gordon Dr.  
Suite 8  
W. Henrietta, NY 14586-  
Attn: Mr. Jason Fleury

PROJECT NAME: Staten Isl Food Waste 12/2019  
DATE: 12/23/2019

SAMPLE NUMBER- 803059    SAMPLE ID- Staten Isl Food Waste 12/2019    SAMPLE MATRIX- SO  
DATE SAMPLED- 12/17/19    TIME SAMPLED- 1500  
DATE RECEIVED- 12/18/19    SAMPLER- Miguel Nava    RECEIVED BY- SB  
TIME RECEIVED- 1300    DELIVERED BY- UPS    TYPE SAMPLE- Grab

Page 1 of 1

ANALYSIS	METHOD	ANALYSIS		BY	RESULT	UNITS
		DATE	TIME			
Sample Receipt Temperature		12/18/19		SB	2.4	Degrees C
***Fecal Coliform, MPN (SM)	9221C, B-06	12/18/19	1515	DT	< 4	MPN/g dry

NYSDOH LAB ID NO. 11246

APPROVED BY:

*Rachel O'Brien*  
(Terms and Conditions on Reverse Side)

The analytical results on this sample are representative of the sample received by the Laboratory.





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RE: Fresh Kills Composting Facility

**Compost Sample**

<u>Parameters</u>	<u>Units</u>
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· Lead	mg/kg dry weight basis
· Molybdenum	mg/kg dry weight basis
· Nickel	mg/kg dry weight basis
· Potassium	mg/kg dry weight basis
· Selenium	mg/kg dry weight basis
· Zinc	mg/kg dry weight basis
· Mercury	mg/kg dry weight basis
Fecal Coliform	mpn/g



Analysis Report For:				Copy To:		
Ryan Cerrato WeCare Organics 3308 Bernice Ave Russellville AR 72801						
LAB ID:	SAMPLE ID:	REPORT DATE:	SAMPLE TYPE:	FEEDSTOCKS	COMPOSTING METHOD	COUNTY
C11620	Staten Island Food Waste (Month: 6/2019)	06/13/2019	Finished Compost		Windrow	

## COMPOST ANALYSIS REPORT

### Compost Test 1C

Analyte	Results (As is basis)	Results (Dry weight basis)
pH	8.3	—
Soluble Salts (1:5 w:w)	2.63 mmhos/cm	—
Solids	43.4 %	—
Moisture	56.6 %	—
Organic Matter	19.6 %	45.3 %
Total Nitrogen (N)	0.51 %	1.18 %
Organic Nitrogen <sup>1</sup>	0.50 %	1.15 %
Ammonium N (NH <sub>4</sub> -N)	158.3 mg/kg or 0.0158 %	365.0 mg/kg or 0.0365 %
Carbon (C)	10.6 %	24.5 %
Carbon:Nitrogen (C:N) Ratio	20.70	20.70
Phosphorus (as P <sub>2</sub> O <sub>5</sub> ) <sup>2</sup>	0.153 %	0.353 %
Potassium (as K <sub>2</sub> O) <sup>2</sup>	0.22 %	0.50 %
Calcium (Ca)	2.22 %	5.11 %
Magnesium (Mg)	1.02 %	2.36 %
Sulfur (S)	0.10 %	0.24 %
Sodium (Na)	524 mg/kg	1208 mg/kg
Aluminum (Al)	1984.79 mg/kg	4575.79 mg/kg
Iron (Fe)	4837.26 mg/kg	11151.98 mg/kg
Manganese (Mn)	79.60 mg/kg	183.51 mg/kg
Copper (Cu)	31.88 mg/kg	73.49 mg/kg
Zinc (Zn)	30.27 mg/kg	69.80 mg/kg

Sampled 6/4/2019 @ 1:00 PM. Shipped overnight and on ice. Ice melted. Arrived 6/5/2019 at 12:15 PM

<sup>1</sup>See comments on back of report.

<sup>2</sup>To convert phosphorus as P<sub>2</sub>O<sub>5</sub> into elemental phosphorus (P), divide by 2.29. To convert potassium (as K<sub>2</sub>O) into elemental potassium (K), divide by 1.20.



Account No. : 2055

**Compost (TMECC) Analysis Report**

**RYAN, CERRATO  
DENALI WATER SOLUTIONS  
3308 BERNICE AVE  
RUSSELLVILLE AR 72802**

Invoice No. : 1115675  
Date Received : 10/23/2019  
Date Analyzed: 10/24/2019

Lab No. : 10114

Results For : DENALI WATER SOLUTIONS  
Sample ID : STATEN ISLAND YARD WASTE  
10/19

	Analysis Dry Basis	Analysis As Is Basis	Lbs / Ton		Available First Year
			Dry Basis	As Is Basis	
Organic N, % N	1.03	0.50	20.5	10.0	2.5
Ammonium, % N	0.042	0.0210	0.8	0.4	0.4
Nitrate, % N	0.002	0.0010	0.0	0.0	0.0
Total N, % N	1.07	0.52	21.4	10.5	2.9
Phosphorus, % P <sub>2</sub> O <sub>5</sub>	0.58	0.28	11.6	5.7	4.0
Potassium, % K <sub>2</sub> O	0.74	0.36	14.8	7.2	6.5
Sulfur, % S	0.21	0.10	4.2	2.1	0.8
Calcium, % Ca	2.86	1.40	57.2	28.0	19.6
Magnesium, % Mg	1.06	0.52	21.2	10.4	7.3
Sodium, % Na	0.10	0.05	2.0	1.0	1.0
Zinc, ppm Zn	150.9	73.8	0.3	0.1	0.1
Iron, ppm Fe	6673.4	3264.0	13.3	6.5	4.6
Manganese, ppm Mn	268.0	131.1	0.5	0.3	0.2
Copper, ppm Cu	74.9	36.6	0.1	0.1	0.1
Aluminum, ppm Al	1317.0	644.1	2.6	1.3	0.9
Boron, ppm B	42.5	20.8	0.1	0.0	0.0
Soluble Salts, (EC 1:5) dS/m		1.18			
pH		8.3			
Moisture, %	51.09				
Dry Matter (TS), %	48.91				
Ash, %	60.93	29.80			
Organic Matter LOI 550C, %	39.07	19.11			
Organic Carbon, %	22.66	11.08			
Organic C:N Ratio	21.2				
Bulk Density, lbs / cubic foot		34			
Human Inerts & Plastic Film, %		< 0.1			

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Account No. : 2055

Compost (TMECC) Analysis Report

**RYAN, CERRATO**  
**DENALI WATER SOLUTIONS**  
**3308 BERNICE AVE**  
**RUSSELLVILLE AR 72802**

**Invoice No. : 1115675**  
**Date Received : 10/23/2019**  
**Date Analyzed: 10/24/2019**  
**Lab No. : 10114**

**Results For : DENALI WATER SOLUTIONS**  
**Sample ID : STATEN ISLAND YARD WASTE**  
**10/19**

	Analysis Dry Basis	Analysis As Is Basis	Lbs / Ton		Available First Year
			Dry Basis	As Is Basis	
STA 503 H.Metal Screen	Pass				
STA Pathogen Screen		Pass			
Respiration mg CO <sub>2</sub> -C/g OM/day	0.6				
Compost Respiration Stability Index		Very Stable			
Respiration mg CO <sub>2</sub> -C/g TS/day	0.5				
Compost Respiration Stability Index		Very Stable			
<b>Maturity Indicator by Germination</b>					
Emergence %		100			
Maturity		Very Mature			
Seedling Vigor %		97			
Maturity		Very Mature			

"<" - Not Detected / Below Detection Limit

Particle Size Distribution	Sieve Size	Fraction Retained (%)	Total Passing (%)
	25 mm	0.0	100.0
	No.10 (2 mm)	38.9	60.1
	No.18 (1 mm)	25.2	34.9
	No.35 (500 µm)	21.8	13.1
	No.60 (250 µm)	9.3	3.8
	No.140 (106 µm)	2.7	1.1
	No.270 (53 µm)	0.6	0.5
	Pan	0.5	0.0

**Note:** The available first year Ammonium-N is calculated based on maximum availability, or incorporation within 24 hours. Advise a nutrient consultant for adjustments beyond 24 hr incorporation.

Reviewed By : W.R. Rohrer - AgroLab Inc.

11/14/2019

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Account No. : 2055

**JSCC-STA Compost (TMECC) Analysis Report**

**RYAN, CERRATO**  
**DENALI WATER SOLUTIONS**  
**3308 BERNICE AVE**  
**RUSSELLVILLE AR 72802**

Invoice No. : 1116590  
 Date Received : 12/18/2019  
 Date Analyzed : 12/19/2019

Lab No. : 10336

Results For : DENALI WATER SOLUTIONS  
 Sample ID : STATEN ISLAND YARD WASTE

	Analysis Dry Basis	Analysis As Is Basis	Lbs / Ton		Available First Year
			Dry Basis	As Is Basis	
Organic N, % N	1.34	0.54	26.9	10.8	2.7
Ammonium, % N	0.027	0.0110	0.5	0.2	0.2
Nitrate, % N	< 0.001	0.0000	0.0	0.0	0.0
Total N, % N	1.37	0.55	27.4	11.1	2.9
Phosphorus, % P <sub>2</sub> O <sub>5</sub>	0.56	0.23	11.3	4.6	3.2
Potassium, % K <sub>2</sub> O	1.09	0.44	21.8	8.8	7.9
Sulfur, % S	0.22	0.09	4.4	1.8	0.7
Calcium, % Ca	2.85	1.15	57.0	23.0	16.1
Magnesium, % Mg	0.92	0.37	18.4	7.4	5.2
Sodium, % Na	0.05	0.02	1.1	0.4	0.4
Zinc, ppm Zn	145.3	58.7	0.3	0.1	0.1
Iron, ppm Fe	7571.2	3058.0	15.1	6.1	4.3
Manganese, ppm Mn	245.8	99.3	0.5	0.2	0.1
Copper, ppm Cu	62.2	25.1	0.1	0.0	0.1
Aluminum, ppm Al	1267.0	511.7	2.5	1.0	0.7
Boron, ppm B	22.8	9.2	0.0	0.0	0.0
Soluble Salts, (EC 1:5) dS/m		2.19			
pH		8.4			
Moisture, %	59.61				
Dry Matter (TS), %	40.39				
Ash, %	53.61	21.65			
Organic Matter LOI 550C, %	46.39	18.74			
Organic Carbon, %	26.91	10.87			
Organic C:N Ratio	19.6				
Bulk Density, lbs / cubic foot		48			
Human Inerts & Plastic Film, %		< 0.1			

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Account No. : 2055

**JSCC-STA Compost (TMECC) Analysis Report**

**RYAN, CERRATO**  
**DENALI WATER SOLUTIONS**  
**3308 BERNICE AVE**  
**RUSSELLVILLE AR 72802**

Invoice No. : 1116590  
 Date Received : 12/18/2019  
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Results For : DENALI WATER SOLUTIONS  
 Sample ID : STATEN ISLAND YARD WASTE

	Analysis Dry Basis	Analysis As Is Basis	Lbs / Ton		Available First Year
			Dry Basis	As Is Basis	
STA 503 H.Metal Screen	Pass				
STA Pathogen Screen		Pass			
Respiration mg CO <sub>2</sub> -C/g OM/day	0.7				
Compost Respiration Stability Index		Very Stable			
Respiration mg CO <sub>2</sub> -C/g TS/day	0.8				
Compost Respiration Stability Index		Very Stable			
Maturity Indicator by Germination					
Emergence %		100			
Maturity		Very Mature			
Seedling Vigor %		95			
Maturity		Very Mature			

"<" - Not Detected / Below Detection Limit

Particle Size Distribution	Sieve Size	Fraction Retained (%)	Total Passing (%)
	25 mm	0.0	100.0
	No.10 (2 mm)	60.3	39.7
	No.18 (1 mm)	18.8	20.9
	No.35 (500 µm)	12.9	8.0
	No.60 (250 µm)	6.0	2.0
	No.140 (108 µm)	1.9	0.1
	No.270 (53 µm)	0.1	0.0
	Pan	0.0	0.0

**Note:** The available first year Ammonium-N is calculated based on maximum availability, or incorporation within 24 hours. Advise a nutrient consultant for adjustments beyond 24 hr incorporation.

