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Central Testing Laboratory

Engineering and Materials Testing



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JUL 15 2004

Solid Waste Section

**SUMTER COUNTY PUBLIC WORKS
LANDFILL
SECOND QUARTER 2004
COMPOST
Conducted for
Mr. TOMMY HURST
July 13, 2004**



**CENTRAL TESTING LABORATORY
LEESBURG, FLORIDA**

Central Testing Laboratory

EB 0002407

Engineering and Materials Testing

Reply to:

Leesburg

July 13, 2004

Sumter County Solid Waste Facility
P.O. Box 1066
Bushnell, FL 33513

Attn: Mr. Tommy Hurst

Re: Second Quarter 2004 Compost Testing Results
Sumter County Solid Waste Facility

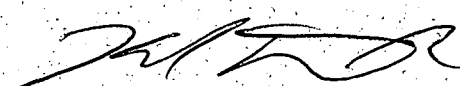
Dear Mr. Hurst

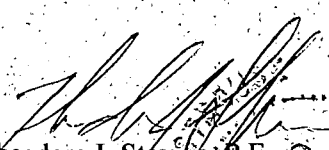
Central Testing Laboratory (CTL) has received the results of the Second quarter classification testing for the compost produced at the above referenced facility. A composite compost sample was collected for the purpose of analysis and classification on June 28, 2004 at the facility. The samples were analyzed and classified in accordance with the Florida Administrative Code (FAC) Chapter 62-709, Criteria for the Production and Use of Compost Made from Solid Waste.

Based on the attached results, currently the compost is classified as **Type A**. 62-709.600, Criteria for the Use of Compost, states compost classified as Type A has unrestricted use by commercial, agricultural, institutional or governmental operations.

We hope that the provided information meets your needs at the present time. Should you have any questions or require additional information, please contact our office.

Sincerely,
CENTRAL TESTING LABORATORY


Karl Retherford Jr.
Environmental Technician


Theodore J. Strouse, P.E.
President
Florida Registration No. 48220

cc: Ms. Susan Pelz, P.E.
Mr. Lonnie Cash
Mr. Tommy Hurst

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JUL 15 2004

Solid Waste Section

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Inverness, FL 34450
(352) 726-6447

723 S. 14th Street
Leesburg, FL 34748
(352) 787-1268

Sumter County
(352) 793-3639

1725 SW 17th Street
Ocala, FL 34474
(352) 622-1186



Central Testing Laboratory Report of Results

Reduction of Organic Matter per 62-709.530(h)

$$\%ROM = [1 - (OMK(100 - OM) / OM(100 - OMK))]100$$

where %ROM = Reduction of Organic Matter

OM = organic matter content of dry matter before decomposition

OMK = organic matter content of dry matter after decomposition

OM = 84% (Volatile Solids from Raw sample per STL report)

OMK = 54% (Volatile Solids from Finished Compost sample per STL report)

$$[1 - (54(100 - 84) / 84(100 - 54))]100$$

$$1 - (864 / 3864) 100$$

$$(1 - 0.223602) 100$$

$$0.77640 \times 100 = 77.64$$

Reduction of Matter = 77.64%

Foreign Matter Content per 62-709.530(f)

Dry weight of Finished Compost sample = 395.65g

Weight of inorganic material held back by ¼ inch screen = 4.80g

Weight of glass = 4.80g 1.21% of total weight of sample

Foreign Matter Content = 1.21%



STL

STL Tampa

6712 Benjamin Road, Suite 100 - Tampa FL 33634 Telephone:(813) 885-7427 Fax:(813) 885-7049

Analytical Report

For: Mr. Karl Retherford Jr.
Central Testing Laboratories
723 South 14th Street
Leesburg, FL 34748

CC:

Order Number: B423206
SDG Number:
Client Project ID:
Project: SCPW Landfill/Quarterly
Report Date: 07/09/2004
Sampled By: Client
Sample Received Date: 06/28/2004
Requisition Number:
Purchase Order: 2254

Nancy Robertson, Project Manager
nrobertson@stl-inc.com

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Sample Summary

Order: B423206
Date Received: 06/28/2004

Client: Central Testing Laboratories
Project: SCPW Landfill/Quarterly

Client Sample ID	Lab Sample ID	Matrix	Date Sampled
SO-1 FINISHED COMPOST	B423206*1	Solid	06/28/2004 14:00
SO-2 RAW COMPOST	B423206*2	Solid	06/28/2004 13:55

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDC#
23206-1	SO-1 FINISHED COMPOST	Solid	06/28/04	06/28/04 14:00	
23206-2	SO-2 RAW COMPOST	Solid	06/28/04	06/28/04 13:55	

Parameter	Units	Lab Sample IDs	
		23206-1	23206-2
ICP Metals (6010)			
Arsenic	mg/kg dw	2.0	0.56U
Cadmium	mg/kg dw	0.84I	0.26U
Copper	mg/kg dw	180	4.4I
Lead	mg/kg dw	82	1.2I
Molybdenum	mg/kg dw	5.7	0.85I
Nickel	mg/kg dw	18	1.4I
Selenium	mg/kg dw	1.7I	1.8I
Zinc	mg/kg dw	360	41
Percent Solids		45	34
Dilution Factor		1	1
Prep Date		06/29/04	07/08/04
Analysis Date		07/03/04	07/09/04
Batch ID		40629A	40708A

Potassium (6010)			
Potassium	% dw	0.33	0.37
Percent Solids		45	34
Dilution Factor		1	1
Prep Date		06/29/04	07/08/04
Analysis Date		07/08/04	07/09/04
Batch ID		40629A	40708A

Mercury (7471)			
Mercury	mg/kg dw	0.24	0.026I
Percent Solids		45	34
Dilution Factor		1	1
Prep Date		07/07/04	07/07/04
Analysis Date		07/08/04	07/08/04
Batch ID		40707R	40707R

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
23206-1	SO-1 FINISHED COMPOST	Solid	06/28/04	06/28/04 14:00	
23206-2	SO-2 RAW COMPOST	Solid	06/28/04	06/28/04 13:55	

Parameter	Units	Lab Sample IDs	
		23206-1	23206-2

Moisture (% Loss on drying @ 105 C) (D2216)

Moisture (% Loss on drying @ 105 C)	%	50 %	69 %
Percent Solids		45	34
Dilution Factor		1	1
Analysis Date		07/08/04	07/08/04
Batch ID		0708KK	0708KK

Nitrate + Nitrite-N (353.2)

Nitrate + Nitrite-N	mg/kg dw	1.0U	3.3I
Percent Solids		45	34
Dilution Factor		1	1
Analysis Date		07/09/04	07/09/04
Batch ID		0709G	0709G

Total Kjeldahl Nitrogen-N (351.3)

Total Kjeldahl Nitrogen-N	mg/kg dw	15000	12000
Percent Solids		45	34
Dilution Factor		1	1
Analysis Date		07/07/04	07/07/04
Batch ID		0707GG	0707GG

Total Nitrogen (351.2+353.2)

Total Nitrogen	%	1.5 %	1.2 %
Percent Solids		45	34

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDC#
23206-1	SO-1 FINISHED COMPOST	Solid	06/28/04	06/28/04 14:00	
23206-2	SO-2 RAW COMPOST	Solid	06/28/04	06/28/04 13:55	

Lab Sample IDs

Parameter	Units	23206-1	23206-2
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Phosphorus, Total (365.2)

Phosphorus, Total	mg/kg dw	410	360
Percent Solids		45	34
Dilution Factor		10	10
Analysis Date		07/06/04	07/06/04
Batch ID		0706V	0706V

pH (9045)

pH	units	8.0	6.0
Percent Solids		45	34
Dilution Factor		1	1
Analysis Date		07/09/04	07/09/04
Batch ID		0709A	0709A

Fecal Coliform MPN (SM9221C)

Fecal Coliform MPN	MPN/g dw	670	4700L
Percent Solids		45	34
Dilution Factor		100	100
Analysis Date		06/29/04	06/29/04
Batch ID		0629CC	0629CC

Volatile Solids (EPA/CE-81-1(3-59))

Volatile Solids	%	54 %	84 %
Percent Solids		45	34
Dilution Factor		1	1
Analysis Date		07/08/04	07/08/04
Batch ID		0708N	0708N

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDC#
23206-3	Method Blank	Solid	06/28/04		
23206-4	Accuracy (%Rec)	Solid	06/28/04		
23206-5	LCS Accuracy Control Limit (NR)	Solid	06/28/04		
23206-6	Precision (%RPD)	Solid	06/28/04		
23206-7	LCS Precision Control Limit (Advisory) %RPD	Solid	06/28/04		

Parameter	Units	Lab Sample IDs				
		23206-3	23206-4	23206-5	23206-6	23206-7
ICP Metals (6010)						
Arsenic	mg/kg dw	0.190	102 %	75-125 %	2.2 %	<20 %
Cadmium	mg/kg dw	0.036U	98 %	75-125 %	0.01 %	<20 %
Copper	mg/kg dw	0.30U	109 %	75-125 %	1.0 %	<20 %
Lead	mg/kg dw	0.15U	91 %	75-125 %	5.3 %	<20 %
Molybdenum	mg/kg dw	0.16U	97 %	75-125 %	0.06 %	<20 %
Nickel	mg/kg dw	0.43U	96 %	75-125 %	3.8 %	<20 %
Selenium	mg/kg dw	0.37U	93 %	75-125 %	2.8 %	<20 %
Zinc	mg/kg dw	0.30U	96 %	75-125 %	1.4 %	<20 %
Dilution Factor		1				
Prep Date		06/29/04	06/29/04		06/29/04	
Analysis Date		07/08/04	07/08/04		07/08/04	
Batch ID		40629A	40629A		40629A	
Potassium (6010)						
Potassium	% dw	0.0016U	113 %	75-125 %	3.2 %	<20 %
Dilution Factor		1				
Prep Date		06/29/04	06/29/04		06/29/04	
Analysis Date		07/08/04	07/08/04		07/08/04	
Batch ID		40629A	40629A		40629A	

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SGC#
23206-3	Method Blank	Solid	06/28/04		
23206-4	Accuracy (%Rec)	Solid	06/28/04		
23206-5	LCS Accuracy Control Limit (%R)	Solid	06/28/04		
23206-6	Precision (%RPD)	Solid	06/28/04		
23206-7	LCS Precision Control Limit (Advisory) %RPD	Solid	06/28/04		

Parameter	Units	Lab Sample IDs				
		23206-3	23206-4	23206-5	23206-6	23206-7

Mercury (7471)

Mercury	mg/kg dw	0.0075U	98 %	80-120 %	5.0 %	<20 %
Dilution Factor		1				
Prep Date		07/07/04	07/07/04		07/07/04	
Analysis Date		07/08/04	07/08/04		07/08/04	
Batch ID		40707R	40707R		40707R	

Moisture (% Loss on drying @ 105 °C) (D2216)

Moisture (% Loss on drying @ 105 °C)	%	0.10U %	102 %	80-120 %	0.55 %	<25 %
Dilution Factor		1				
Analysis Date		07/08/04	07/08/04		07/08/04	
Batch ID		0708KK	0708KK		0708KK	

Nitrate + Nitrite-N (353.2)

Nitrate + Nitrite-N	mg/kg dw	1.0U	94 %	75-125 %	1.1 %	<30 %
Dilution Factor		1				
Analysis Date		07/09/04	07/09/04		07/09/04	
Batch ID		0709G	0709G		0709G	

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDC#
23206-3	Method Blank	Solid	06/28/04		
23206-4	Accuracy (XRec)	Solid	06/28/04		
23206-5	LCS Accuracy Control Limit (XR)	Solid	06/28/04		
23206-6	Precision (XRFD)	Solid	06/28/04		
23206-7	LCS Precision Control Limit (Advisory) (XRFD)	Solid	06/28/04		

Parameter	Units	Lab Sample IDs				
		23206-3	23206-4	23206-5	23206-6	23206-7

Total Kjeldahl Nitrogen-N (351.3)

Total Kjeldahl Nitrogen-N	mg/kg dw	17U	97 %	65-135 %	2.9 %	<50 %
Dilution Factor		1				
Analysis Date		07/07/04	07/07/04		07/07/07	
Batch ID		0707GG	0707GG		0707GG	

Phosphorus, Total (365.2)

Phosphorus, Total	mg/kg dw	6.8U	101 %	60-140 %	0 %	<40 %
Dilution Factor		1				
Analysis Date		07/06/04	07/06/04		07/06/04	
Batch ID		0706V	0706V		0706V	

pH (9045)

pH	units	6.9	110 %	63-158 %	0.33 %	<40 %
Dilution Factor		1				
Analysis Date		07/09/04	07/09/04		07/09/04	
Batch ID		0709A	0709A		0709A	

Fecal Coliform MPN (SMB221C)

Fecal Coliform MPN	MPN/100ml	2U	---		0 %	<200 %
Dilution Factor		1				
Analysis Date		06/29/04			06/29/04	
Batch ID		0629CC			0629CC	

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
23206-8	Practical Quantitation Limit (PQL)	Solid	06/28/04		
23206-9	Method Detection Limit (MDL)	Solid	06/28/04		

Parameter	Units	Lab Sample IDs	
		23206-8	23206-9
ICP Metals (6010)			
Arsenic	mg/kg dw	0.50	0.19
Cadmium	mg/kg dw	0.50	0.087
Copper	mg/kg dw	2.0	0.50
Lead	mg/kg dw	0.50	0.15
Molybdenum	mg/kg dw	1.0	0.16
Nickel	mg/kg dw	4.0	0.43
Selenium	mg/kg dw	1.0	0.37
Zinc	mg/kg dw	2.0	0.50
Potassium (6010)			
Potassium	% dw	0.010	0.0016
Mercury (7471)			
Mercury	mg/kg dw	0.020	0.0075
Moisture (% Loss on drying @ 105 C) (D2215)			
Moisture (% Loss on drying @ 105 C)	%	0.10	0.10
Nitrate + Nitrite-N (353.2)			
Nitrate + Nitrite-N	mg/kg dw	5.0	1.0

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
23206-8	Practical Quantitation Limit (PQL)	Solid	06/28/04		
23206-9	Method Detection Limit (MDL)	Solid	06/28/04		

Parameter	Units	Lab Sample IDs	
		23206-8	23206-9

Total Kjeldahl Nitrogen-N (351.3)			
Total Kjeldahl Nitrogen-N	mg/kg dw	50	17
Phosphorus, Total (365.2)			
Phosphorus, Total	mg/kg dw	25	6.8
Fecal Coliform MPN (SM9221C)			
Fecal Coliform MPN	MPN/100ml	2	2

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDC#
23206-10	Method Blank #2	Solid	06/28/04		
23206-11	Accuracy (XRec)	Solid	06/28/04		
23206-12	Precision (XRPD)	Solid	06/28/04		

Parameter	Units	Lab Sample IDs		
		23206-10	23206-11	23206-12

ICP Metals (6010)

Arsenic	mg/kg dw	0.19U	86 %	2.2 %
Cadmium	mg/kg dw	0.087U	98 %	0.10 %
Copper	mg/kg dw	0.50U	120 %	14 %
Lead	mg/kg dw	0.15U	103 %	2.1 %
Molybdenum	mg/kg dw	0.16U	99 %	0.99 %
Nickel	mg/kg dw	0.43U	103 %	0.14 %
Selenium	mg/kg dw	0.37U	95 %	1.6 %
Zinc	mg/kg dw	0.50U	106 %	13 %
Dilution Factor		1		
Prep Date		07/08/04	07/08/04	07/08/04
Analysis Date		07/09/04	07/09/04	07/09/04
Batch ID		40708A	40708A	40708A

Potassium (6010)

Potassium	% dw	0.0016U	89 %	1.3 %
Dilution Factor		1		
Prep Date		07/08/04	07/08/04	07/08/04
Analysis Date		07/09/04	07/09/04	07/09/04
Batch ID		40708A	40708K	40708A

Order Number: 8423206

Methods: EPA 600/4-79-020, EPA SW-846, EPA Standard Methods, FDEP
DOH Certification #E84282

U = Indicates that the compound was analyzed for but not detected.

I = The reported value is between the laboratory method detection
limit and the laboratory practical quantitation limit.

These test results meet all the requirements of NELAP. All questions
regarding this test report should be directed to the STL project
manager who signed this test report.

The estimated uncertainty associated with these reported results is
available upon request.

