

Handwritten:
Hards
Wauchula
Biosolids
File

Handwritten:
VSM
2/9/11



**chastain
skillman**

incorporated Environmental Protection

FEB 08 2011

Southwest District

2010 ANNUAL DOMESTIC SLUDGE MANAGEMENT REPORT

City of Wauchula
Wauchula Wastewater Treatment Plant

Facility Permit Number: FLA119890



Prepared by

Chastain-Skillman, Inc.

Engineering Business No. EB262
4705 Old Highway 37 (33813)
P.O. Box 5710
Lakeland, Florida 33807-5710
(863) 646-1402

Prepared for

City of Wauchula

126 South 7th Avenue
Wauchula, Florida 33873

Table of Contents

FEB 08 2011

Page No.
Southwest District

Section No.		Page No.
CERTIFICATIONS.....		1
1.0 INTRODUCTION		3
2.0 POLLUTANT CONCENTRATIONS AND LOADING RATES		5
2.1 Regulatory Requirements		5
2.2 Actual Concentrations		5
3.0 MANAGEMENT PRACTICES.....		7
3.1 Regulatory Requirements		7
3.2 Description of the Wauchula WWTP Management Practices.....		9
4.0 OPERATIONAL STANDARDS		10
4.1 Pathogen Requirements		10
1. Class B - Alternative 1		10
2. Class B - Alternative 2		10
3. Class B - Alternative 3		10
4.2 Pathogen Compliance Status		11
4.3 Vector Attraction Reduction.....		11
4.4 Vector Attraction Reduction Compliance Status		12
4.5 Site Restrictions		12
5.0 FREQUENCY OF MONITORING		14
6.0 RECORD-KEEPING		15
7.0 REPORTING		15
8.0 CONCLUSION		15

List of Exhibits

<i>Exhibit No.</i>		<i>Page No.</i>
Exhibit 1	Bulk Sewage Sludge Pollutant Limits	5
Exhibit 2	Actual Pollutant Concentrations	5
Exhibit 3	Bulk Sewage Sludge Loading Rate for 2010	6
Exhibit 4	Bulk Sewage Sludge Cumulative Loading Rate	6
Exhibit 5	Nitrogen Loading	9
Exhibit 6	Fecal Coliform Density in Sludge Samples	11

Appendices

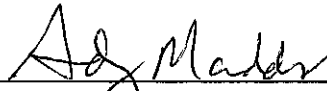
Residuals Annual Summary	A
Analytical Testing Results	B

CERTIFICATIONS**A. Preparer Of Sewage Sludge**

I certify, under penalty of law, that the Class B pathogen requirements in §503.32(b)(2) and the vector attraction reduction requirement in §503.33(b)(1) or (4) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

Date: _____

2/7/11



Andy Maddox, WWTP Supervisor
City of Wauchula
155 Griffin Road
Wauchula, Florida 33873

B. Applier Of Sewage Sludge

I certify, under penalty of law, that the requirements to obtain information in §503.12(e)(2) have been met for each site on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the requirements to obtain information have been met. I am aware that there are significant penalties for false certification including fine and imprisonment.

I certify, under penalty of law that the management practices in §503.14 have been met for each site, except as noted in this report, on which bulk sewage sludge is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices have been met. I am aware that there are significant penalties for false certification including fine and imprisonment.

I certify, under penalty of law, that the site restrictions in §503.32(b)(5) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the site restrictions have been met.

I am aware that there are significant penalties for false certification including fine and imprisonment.

Date: 2/7/11



Andy Maddox, WWTP Supervisor
City of Wauchula
155 Griffin Road
Wauchula, Florida 33873

1.0 INTRODUCTION

The U.S. Environmental Protection Agency (EPA) has promulgated Title 40 CFR Part 503 (Part 503), which establishes rules for managing domestic sewage sludge. The rule, designed to protect human health and environmental quality, went into effect on February 19, 1993 and was amended on February 25, 1994 and October 25, 1995. This Annual Domestic Sewage Sludge Management Report has been prepared to meet the intent of Part 503, to comply with the record-keeping and reporting requirements of the rule. This report discusses the City of Wauchula Wastewater Treatment Plant (Wauchula WWTP) in terms of compliance with the requirements of Part 503 for pollutant concentrations and loading rates, sludge management practices, operational standards, monitoring, record-keeping, and reporting.

This report also complies with Florida Department of Environmental Protection (FDEP) residuals management regulations under Chapter 62-640, F.A.C. The FDEP has adopted and incorporated into Chapter 62-640, F.A.C. many of the rules contained within 40 CFR Part 503. For purposes of this report, the City of Wauchula's compliance with the residuals management regulations is provided with reference to 40 CFR Part 503. Where 40 CFR Part 503 and Chapter 62-640, F.A.C. rules differ, separate sections are provided. Both agencies will receive the same submittal.

For convenience, the following Facility information is listed below:

Facility name, address, and telephone number:

City of Wauchula Wastewater Treatment Plant
155 Griffin Road
Wauchula, Florida 33873
(863) 773-6686

Facility Permit Number: FLA119890

Name, address, and telephone number of the responsible official:

Andy Maddox, WWTP Supervisor
City of Wauchula
155 Griffin Road
Wauchula, Florida 33873
(863) 773-6686

Name, address, and telephone number of the Facility operator:

Andy Maddox, WWTP Supervisor
City of Wauchula
155 Griffin Road
Wauchula, Florida 33873
(863) 773-6686

Dry metric tons of sludge generated and land applied: 37.7 (37,700 dry kg/yr).

Permitted land application sites:

Wauchula Old Airport Site: 32.2 dry metric tons
Hart-Albriton Site: 5.5 dry metric tons

DEP Form 62.640.210(2)(b):

Residuals Annual Summary is attached as **Appendix A**

2.0 POLLUTANT CONCENTRATIONS AND LOADING RATES

2.1 Regulatory Requirements

According to 40 CFR Part 503, bulk sewage sludge applied to agricultural land, forests, or reclamation sites cannot exceed the ceiling concentrations shown for each pollutant in **Exhibit 1**. Also, the cumulative pollutant loading limits shown in **Exhibit 1** cannot be exceeded, thereby governing the life of the disposal site.

Exhibit 1 Bulk Sewage Sludge Pollutant Limits

Pollutant	Pollutant Ceiling Concentrations (mg/kg, dry wt.)	Cumulative Pollutant Loading Rate (kg/hectare)	Average Pollutant Concentrations (mg/kg, dry wt.)
Arsenic	75	41	41
Cadmium	85	39	39
Copper	4,300	1,500	1,500
Lead	840	300	300
Mercury	57	17	17
Molybdenum	75	no limit	no limit
Nickel	420	420	420
Selenium	100	100	100
Zinc	7,500	2,800	2,800

2.2 Actual Concentrations

In 2010, all residuals generated by the Wauchula WWTP were applied at either the Wauchula Old Airport site or the Hart-Albriton site. The actual sludge pollutant concentrations for final sludge from the plant are shown in **Exhibit 2**. Copies of the analytical testing results are included in **Appendix B**.

Exhibit 2 Actual Pollutant Concentrations

Pollutant	01/6/2010 (mg/kg)
Arsenic	1.27
Cadmium	3.88
Copper	766
Lead	150
Mercury	0.91
Molybdenum	5.91
Nickel	19.6
Selenium	4.82
Zinc	1134

Based on the amount of sludge generated by the plant, the City is required to monitor the regulated pollutants once per year. During 2010, the City met this requirement and analyzed the sludge once. As shown in **Exhibit 2**, sludge pollutant concentrations did not exceed the average pollutant concentrations in **Exhibit 1**. **Exhibit 3** shows the bulk loading rate for each application zone of the Wauchula disposal site for 2010. **Exhibit 4** shows the cumulative loading rate for each section. Based on the current average annual loading rate, the useful life of the site is approximately 113 years and is controlled by the application of lead. Therefore, based on the test data available, the Wauchula WWTP met the EPA and FDEP requirements for cumulative loading rate for disposal of sludge.

Exhibit 3 Bulk Sewage Sludge Loading Rate for 2010

Pollutant	Loading Rate (kg/hectare) Application Site and Zone					
	Wauchula Old Airport Site					Hart-Albriton Site
	A	B	C	D	E	7
Arsenic	0.01	0	0	0	0.01	0
Cadmium	0.02	0.01	0.01	0	0.02	0
Copper	3.27	2.41	2.43	0	4.03	0.05
Lead	0.64	0.47	0.48	0	0.79	0.01
Mercury	0	0	0	0	0	0
Nickel	0.08	0.06	0.06	0	0.10	0
Selenium	0.02	0.02	0.02	0	0.03	0
Zinc	4.84	3.57	3.59	0	5.97	0.08

Exhibit 4 Bulk Sewage Sludge Cumulative Loading Rate

Pollutant	Loading Rate (kg/hectare) Application Site and Zone					
	Wauchula Old Airport Site					Hart-Albriton Site
	A	B	C	D	E	7
Arsenic	0.48	0.46	0.54	0.51	0.56	0.17
Cadmium	0.37	0.36	0.44	0.38	0.42	0.06
Copper	74.86	70.55	84.06	76.47	84.72	8.89
Lead	28.88	27.95	31.95	30.03	31.11	0.38
Mercury	0.15	0.13	0.18	0.17	0.20	0.02
Nickel	2.50	2.34	2.68	2.57	2.76	0.48
Selenium	0.58	0.50	0.58	0.56	0.63	0.13
Zinc	133.13	126.30	148.86	136.82	149.52	18.40

3.0. MANAGEMENT PRACTICES

3.1 Regulatory Requirements

Title 40 CFR Part 503, in Paragraph §503.14, requires that certain management practices be followed in order to protect wildlife, surface water and ground-water quality, and public health. Chapter 62-640, F.A.C. also requires that certain management practices be implemented for the protection of the environment and public health. The management practices required by both agencies for the application of bulk sewage residuals are outlined below.

EPA Title 40 CFR Part 503 Requirements

Title 40 CFR Part 503 provides the following requirements for land application of Class B residuals:

- a) Bulk sewage sludge shall not be applied to the land if it is likely to adversely affect a threatened or endangered species listed under Section 4 of the Endangered Species Act or its designated critical habitat;
- b) Bulk sewage sludge shall not be applied to agricultural land, forests, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge enters a wetland or other waters of the United States, as defined in Title 40 CFR 122.2, except as provided in a permit issued pursuant to Section 402 or 404 of the Clean Water Act;
- c) Bulk sewage sludge shall not be applied to agricultural land, forests, a public contact site, or a reclamation site that is 10 meters (approximately 33 feet) or less from waters of the United States, as defined in Title 40 CFR 122.2, unless otherwise specified by the permitting authority;
- d) Bulk sewage sludge shall be applied to agricultural land, forests, a public contact site, or a reclamation site at a whole sludge application rate that is equal to or less than the agronomic rate for the bulk sewage sludge, unless, in the case of a reclamation site, otherwise specified by the permitting authority.

FDEP Chapter 62-640, F.A.C. Requirements

In March of 1998, the FDEP promulgated new rules under Chapter 62-640, F.A.C. that included modifications to sludge management practices. According to Chapter 62-640, F.A.C., these modified management practices apply only to new and expanded land application sites that submitted a complete wastewater permit application after December 1, 1997. The City of

Wauchula submitted an application in 1999 to substantially modify its FDEP operating permit. Therefore, the plant must comply with the new rules which provide the following requirements for land application of Class B domestic wastewater residuals:

- a) Applied no closer than 1,000 feet from any Class I water body, Outstanding Florida Water, or Outstanding National Resource Water;
- b) Applied with a 200 foot setback from any other surface water. An exception is made for canals or bodies of water used for irrigation that are completely within the site boundaries and will not discharge from the site at any time;
- c) No application within 300 feet of a building occupied by the general public. This distance may be reduced to 100 feet if the residuals are injected into the soil;
- d) Applied no closer than 300 feet from any shallow private water supply well;
- e) Applied no closer than 500 feet from any shallow public water supply well;
- f) If applied in accordance with an Agricultural Use Plan (AUP), the application rate must not exceed the agronomic rate delineated in the AUP.
- g) No root crops, fruits, or vegetables which touch the soils and which are to be consumed raw shall be grown for 18 months following the last residuals application;
- h) Fruits or vegetables which do not touch the soil and which are to be consumed raw shall not be harvested for 60 days following the last residuals application. Orchard tree crops which do not come in contact with the domestic wastewater residuals, due to the application method, are exempted. This exemption does not apply to tree crops which have fallen to the ground before harvesting;
- i) Pasture vegetation shall not be cut or used for grazing by livestock for 30 days following the last residuals application;
- j) The public shall be restricted for 12 months following the last residuals application.

3.2 Description of the Wauchula WWTP Management Practices

The City transports the sludge to a land application site approved in the facility's AUP. In 2010, all sludge from the Wauchula WWTP was applied at either the Wauchula Old Airport site or the Hart-Albriton site.

Both land application sites have a vegetative cover of Bahia grass. Based on the current AUP, the agronomic rate for the sites is 400 pounds of nitrogen per acre per year (448 kg/ha/yr).

Exhibit 5 summarizes the nitrogen loading at the Wauchula Old Airport Site. In 2009, Section E received the highest nitrogen loading at 238 lbs N/acre/yr (267 kg N/ha/yr). This level of application is within the limits established by EPA and FDEP.

Exhibit 5 Nitrogen Loading

Nitrogen Loading Rate Application Site and Zone						Hart- Albriton Site
	Wauchula Old Airport Site					
	A	B	C	D	E	7
Sludge Applied (lbs./acre)	3,808	2,808	2,829	0	4,703	69
Average Nitrogen Conc. (%)	3.18	3.18	3.18	3.18	3.18	3.18
Nitrogen Loading (lbs/acre/yr)	121	89	90	0	150	3
Nitrogen Loading (kg/ha/hr)	136	100	101	0	168	3

FEB 08 2011

Southwest District

4.0 OPERATIONAL STANDARDS

Parts 503.30 through 503.33 require that certain performance standards be met for both pathogens and vector attraction reduction and gives several alternatives by which compliance with each of these can be demonstrated. FDEP Chapter 62-640 has adopted Parts 503.30 through 503.33 with the exception of site restrictions in section 503.32(b)(5), the septage requirements in Section 503.32(c), and the vector attraction reduction requirements in Section 503.33(b)(11) and Section 503.33(b)(12).

4.1 Pathogen Requirements

All sludge applied to land must meet Class A or Class B pathogen requirements. Sludge sold or given away in bags or other containers must meet Class A pathogen requirements. The City of Wauchula does not currently intend to sell its sludge or give it away in bags or other containers. Instead, the City applies the sludge from the WWTP in bulk form to agricultural lands permitted under their AUP. All sludge generated by the facility in 2010 was applied at either the Wauchula Old Airport site or the Hart-Albriton site. Therefore, the City need only demonstrate that it meets Class B pathogen requirements. The following are the alternatives by which Class B requirements can be achieved.

1. Class B - Alternative 1

- a) Seven samples of sewage sludge shall be collected at the time the sewage sludge is used or disposed.
- b) The geometric mean of the density of fecal coliform in the samples collected shall be less than either 2,000,000 Most Probable Number (MPN) per gram of total solids (dry weight basis), or 2,000,000 Colony Forming Units (CFU) per gram of total solids (dry weight basis).

2. Class B - Alternative 2

- a) Sewage sludge that is used or disposed shall be treated in one of the Processes to Significantly Reduce Pathogens (PSRP).

3. Class B - Alternative 3

- a) Sewage sludge that is used or disposed shall be treated in a process that is equivalent to a PSRP, as determined by the permitting authority.

4.2 Pathogen Compliance Status

Compliance with pathogen reduction criteria was demonstrated by Alternative 1. Seven samples of sludge were collected during 2010 and assayed for fecal coliforms (**Exhibit 6**). The geometric mean for the seven samples was determined by averaging the $\log_{10}$ values of the coliform density and taking the antilog of that value. The geometric mean of the samples was determined to be 98,401 MPN per gram of dry solids (mpn/gm). Therefore, the sludge from the Wauchula WWTP meets the pathogen reduction criteria of less than 2,000,000 mpn/gm.

Exhibit 6 Fecal Coliform Density in Sludge Samples

Sample Number	Fecal Coliform Density (mpn/gm dry wt)	Log ₁₀ of Fecal Coliform Density
1	174,603	5.24
2	163,043	5.21
3	39,326	4.59
4	42,105	4.62
5	161,290	5.21
6	159,574	5.20
7	73,684	4.87
Average log₁₀		4.99
Geometric Mean	98,401	

4.3 Vector Attraction Reduction

There are ten alternatives given in Title 40 CFR Part 503 by which vector attraction reduction requirements can be met. Only the alternatives applicable to the City are listed below.

- The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38%.
- When the 38% volatile solids reduction requirement cannot be met for aerobically digested sewage sludge, vector attraction reduction can be demonstrated by re-digesting a portion of the digested sewage sludge having two percent or less solids. If, after a 30-day, bench-scale, aerobic re-digestion at 20°C (68°F), the volatile solids in the once-digested sewage sludge is reduced by less than 15% after the second digestion, vector attraction reduction is achieved.
- The Specific Oxygen Uptake Rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20° C (68° F).

- d) Sludge shall be injected below the surface of the land such that no significant amount of the sewage sludge shall be present on the land surface within one hour after the sewage sludge is injected.
- e) Sewage sludge applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.

4.4 Vector Attraction Reduction Compliance Status

Compliance for the sludge at the Wauchula WWTP is demonstrated by the Volatile Solids Reduction method.

The following equation is used to calculate the volatile solids reduction across the digester:

$$\text{WAS VSS Fraction} = \text{VSS/TSS} = 6,288 \text{ mg/L} / 7,954 \text{ mg/L} = 0.791$$

$$\text{Digester VSS Fraction} = \text{VSS/TSS} = 11,208 \text{ mg/L} / 16,342 \text{ mg/L} = 0.686$$

$$\text{VR} = (\text{IVF} - \text{DVS}) / (\text{IVF} - (\text{IVF} \times \text{DVS})) \times 100$$

$$= (0.791 - 0.686) / (0.791 - (0.791 \times 0.686)) \times 100 = 42\%$$

Where, VR = Volatile reduction

The volatile solids reduction across the digester exceeded 38%; therefore, the Wauchula WWTP meets the vector attraction reduction criteria.

4.5 Site Restrictions

If Class B pathogen requirements are met, the site restrictions listed in this section apply. The EPA and FDEP site restriction requirements differ slightly. The EPA site restrictions for Class B residuals listed below apply under §503.32(b)(5):

- a) Food crops with harvested parts that touch the sewage sludge/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of sewage sludge.
- b) Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of sewage sludge when the sewage sludge remains on the land surface for four months or longer prior to incorporation into the soil.

- c) Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of sewage sludge when the sewage sludge remains on the land surface for less than four months prior to incorporation into the soil.
- d) Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of sewage sludge.
- e) Animals shall not be allowed to graze on the land for 30 days after application of sewage sludge.
- f) Turf grown on land where sewage sludge is applied shall not be harvested for one year after application of the sewage sludge when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the permitting authority.
- g) Public access to land with a high potential for public exposure shall be restricted for one year after application of sewage sludge.
- h) Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge.

The FDEP site restrictions for Class B residuals are provided as follows. Class B residuals shall not be used on unrestricted public access areas such as playgrounds, parks, golf courses, lawns, and hospital grounds. Use of Class B residuals is limited to restricted public access areas such as agricultural sites, forests, and roadway shoulders and medians. The public shall be restricted from the application zone for 12 months after the last application of residuals. The following restrictions also apply to the use of Class B residuals:

- a) Plant nursery use of Class B residuals is limited to plants which will not be sold to the public for 12 months after the last application of residuals.
- b) Use of Class B residuals on roadway shoulders and medians is limited to restricted public access roads.
- c) Food crops with harvested parts that touch the residuals/soil mixture and are totally above the land surface shall not be harvested for 14 months after the last application of Class B residuals.
- d) Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of Class B residuals when the residuals remain on the land surface for four months or longer before incorporation into the soil.
- e) Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of Class B residuals when the residuals remain on the land surface for less than four months before incorporation into the soil.

- f) Food crops, feed crops, and fiber crops shall not be harvested for 30 days following the last application of Class B residuals.
- g) Animals shall not be grazed on the land for 30 days after application of Class B residuals.
- h) Sod which will be distributed or sold to the public or used on unrestricted public access areas shall not be harvested for 12 months after the last application of Class B residuals.

5.0 FREQUENCY OF MONITORING

For domestic bulk sewage sludge, the pollutants listed in **Exhibit 1** must be monitored.

Additionally, monitoring must be conducted to assure compliance with the pathogen density requirements and vector attraction reduction requirements previously discussed. The frequency of monitoring is dependent upon the sludge production of the facility on a dry metric tons per year basis. Facilities which produce less than 290 dry metric tons of sludge per year are required to monitor on a yearly basis; facilities which produce greater than 290 but less than 1,500 dry metric tons per year are required to monitor once every quarter; facilities which produce more than 1,500 but less than 15,000 dry metric tons per year are required to monitor once per 60 days; and facilities which produce greater than 15,000 dry metric tons of sludge per year are required to monitor monthly.

In 2010, the Wauchula WWTP generated approximately 37.7 dry metric tons of sludge.

Therefore, the City is required to monitor for all Part 503 parameters once per year. In addition, the current FDEP operating permit requires annual monitoring of Chapter 62-640.650(1)(b) parameters.

6.0 RECORD-KEEPING

In addition to retaining the previously-developed information for five years, Title 40 CFR Part 503 also requires that the preparer of sewage sludge sign the certification at the beginning of this report and retain it for a period of five years. The methods in which the City meets pathogen and vector attraction reduction requirements are met are required to be retained for five years.

7.0 REPORTING

The information developed in the previous sections must be reported by February 19 of each year. Chapter 62-640.650, F.A.C. requires that analytical results from each sampling event be submitted with the report for the month in which the sampling event occurs.

FDEP Form 62-640.210(2)(b) shall also be submitted to the appropriate District Office of the FDEP by February 19 of each year.

8.0 CONCLUSION

The following summarizes the sludge management practices for the 2010 calendar year:

- Cumulative pollutant loading rates were within the limits established by Title 40 CFR Part 503 and the facility's FDEP operating permit.
- The estimated remaining life span of the Wauchula Old Airport site is 113 years based on the current application rate of lead.
- The sludge complies with the pathogen requirements of less than 2,000,000 MPN per gram of total solids.
- The WWTP meets the minimum volatile solids reduction of 38% across the digester.
- The nitrogen application rate is within the agronomic capacity of the vegetation at the disposal site.



**CITY OF WAUCHULA
2010 Annual Domestic Sludge Management Report**

Analytical Testing Results

APPENDIX



CITY OF WAUCHULA
2010 Annual Domestic Sludge Management Report

Residuals Annual Summary

APPENDIX A



Florida Department of Environmental Protection

Twin Towers Office Bldg, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400

USM
2/9/11

Residuals Annual Summary

Part I - Facility Information

FACILITY NAME: City of Wauchula Wastewater

FACILITY ID:

FLA119890

Treatment Plant

MAILING ADDRESS: 155 Griffin Road

MONITORING PERIOD -- From: JAN 1,

2010

To: DEC 31,

2010

Wauchula, Florida 33873

Total Quantity of Residuals Applied During Reporting Period: 41.5 dry tons

Total Number of Residuals Land Application Sites Used During Reporting Period: 2 (Parts II and III should address all residuals land application sites used)

Update of Residuals Characteristics (arithmetic average of all samples taken pursuant to Rule 62-640.650(1), F.A.C., during the reporting period):

Parameter	Units*	Celling Limits for Class A and B	Concentration	Parameter (continued)	Units*	Celling Limits for Class A and B	Concentration
Total Nitrogen	%	N/A	3.18	Copper	mg/kg	4300	766
Total Phosphorus	%	N/A	3.26	Lead	mg/kg	840	150
Total Potassium	%	N/A	0.31	Mercury	mg/kg	57	0.91
Total Solids	%	N/A	1.7	Molybdenum	mg/kg	75	5.91
pH	std. units	N/A	6.8	Nickel	mg/kg	420	19.6
Arsenic	mg/kg	75	1.27	Selenium	mg/kg	100	4.82
Cadmium	mg/kg	85	3.88	Zinc	mg/kg	7500	1134

*All units are in a dry weight basis except for total solids and pH. All sampling and analysis shall be conducted pursuant to Title 40 Code of Federal Regulations, Section 503.8, and the POTW Sludge Sampling and Analysis Guidance Document.

N/A = not applicable

Pathogen Reduction Class (Rule 62-640.600(1), F.A.C.):

☐ A

☒ B

EPA Vector Attraction Reduction Option (Rule 62-640.600(2), F.A.C.):

☒ 1

☐ 2

☐ 3

☒ 4

☐ 5

☐ 6

☐ 7

☐ 8

☐ 9

☐ 10

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein; and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT (Type or Print)	TELEPHONE NO.
Andy Maddox, Supervisor WWTP, City of Wauchula	(863) 773-6686
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	DATE (YY/MM/DD)
<i>Andy Maddox</i>	11/2/17

Part II. Total Application of Residuals or Septage, Nutrients, and Trace Elements for Application Zones Used Only By This Facility (attach a separate sheet for "other solids," if applicable):

Site Name (as identified in Agricultural Use Plan): Wauchula Old Airport Site

Site Address (as shown in Agricultural Use Plan): State Road 636 East, Wauchula, Florida 33873

Application Zone ID(s)	Crop(s)	Dry Tons Applied per Acre	Basis	N	P	K	As	Cd	Cu	Pb	Hg	Ni	Se	Zn
A	Bahia Grass	1.90	annual	121	124	12	0.00	0.01	2.92	0.57	0.00	0.07	0.02	4.32
			cumulative				0.46	0.35	73.43	28.51	0.15	2.46	0.57	130.8
B	Bahia Grass	1.40	annual	89	92	9	0.00	0.01	2.15	0.42	0.00	0.06	0.01	3.18
			cumulative				0.45	0.35	69.37	27.63	0.13	2.32	0.48	124.5
C	Bahia Grass	1.41	annual	90	92	9	0	0.01	2.17	0.42	0.00	0.06	0.01	3.21
			cumulative				0.52	0.43	82.18	31.51	0.16	2.64	0.55	145.9
D	Bahia Grass	0	annual	0	0	0	0	0	0	0	0	0	0	0
			cumulative				0.49	0.37	75.28	29.71	0.17	2.54	0.56	135.0
E	Bahia Grass	2.35	annual	150	153	15	0.01	0.02	3.60	0.71	0.00	0.09	0.02	5.33
			cumulative				0.53	0.42	84.71	31.45	0.20	2.78	0.61	149.2
			annual											
			cumulative											
			annual											
			cumulative											

(Enter all nutrient and trace element quantities in lbs/acre.)

Part II. Total Application of Residuals or Septage, Nutrients, and Trace Elements for Application Zones Used only By This Facility (attach a separate sheet "other solids," if applicable):

Facility Name: WAUCHULA WWTP CITY OF

Site Name	Application Zone ID(s)	Crop(s)	Dry Tons Applied per Acre	Basis	Max N allowed*	N	P	K	As	Cd	Cu	Pb	Hg	Ni	Se	Zn
Hart-Albriton	Zone 7	Bahia	0.0345	annual	400	3.04	1.92	0.26	0.00	0.00	0.05	0.01	0.00	0.00	0.00	0.08
				cumulative	N/A	N/A	424.02	60.09	0.17	0.06	8.89	0.38	0.02	0.48	0.13	16.40

(Enter all nutrient and trace element quantities in lbs/acre)

* Based on two (2) growing seasons per year

Part III. Total Application of Residuals or Septage, Nutrients, and Trace Elements for Application Zones Used By Multiple Facilities (attach a separate sheet "other solids," if applicable):

Site Name: Hart-Albritton

Application Zone ID(s)	Crop(s)	Facility	Dry Tons Applied per Acre	Max N allowed*	N	P	K	As	Cd	Cu	Pb	Hg	Ni	Se	Zn
Zone 7	Bahia	WAUCHULA WWTP CITY OF	0.0345	400	3.04	1.9238	0.2620	0.0001	0.0003	0.0542	0.0072	0.0001	0.0014	0.0001	0.0779
Zone 7	Bahia	FL0023949 Sun'n Lake of Sebring Improvement Dist. 4 WWTP	0.0026	400	0.43	0.0933	0.0423	0.0001	0.0000	0.0028	0.0001	0.0000	0.0001	0.0002	0.0026
Zone 7	Bahia	FL010288 CITY OF BARTOW MAIN WWTF	0.3504	400	12.58	14.6054	1.8277	0.0001	0.0011	0.2123	0.0214	0.0016	0.0063	0.0038	0.3144
Zone 7	Bahia	FLA012976 SEBRING CITY OF, WWTF	0.6070	400	110.23	21.2446	6.7983	0.0001	0.0008	0.3035	0.0170	0.0097	0.0115	0.0146	0.9032
Zone 7	Bahia	FLA014311 SUNN LAKE OF SEBRING UNIT 23 WWTP	0.0873	400	19.03	3.9988	0.9255	0.0002	0.0002	0.0763	0.0008	0.0002	0.0015	0.0035	0.0754
Annual Total		FLA014389	1.08	400	145.31	41.87	9.85	0.01	0.00	0.65	0.05	0.00	0.02	0.02	1537
Cumulative Total			165.921	N/A	N/A	N/A	N/A	0.17	0.06	8.89	0.38	0.02	0.48	0.13	1840

(Enter all nutrient and trace element quantities in lbs/acre)

* Based on two (2) growing seasons per year

Part IV. Hauling Records Summary For Calendar Year Not Applicable **(For Residuals Management Facilities Only)**

[illegible]



**CITY OF WAUCHULA
2010 Annual Domestic Sludge Management Report**

Analytical Testing Results

APPENDIX B

2010

City of Wauchula
Residuals Applied per Section

Section A: 65000 gallons

Section B: 60000 gallons

Section C: 240000 gallons

Section D: 0 gallons

Section E: 135000 gallons

Total Gallons: 500000

Facility ID No. FLA119890

[illegible]

TOTAL SUSPENDED SOLIDS
LABORATORY DATA LOG

Sample Type <u>MLSS</u> / <u>WAS</u> / <u>Digester</u>	Date Performed <u>1-5-10</u>
Sample Date <u>1-5-10</u> / <u>1-5-10</u> / <u>1-5-10</u>	Operator <u>BC</u>
Sample Time <u>1258</u> / <u>1258</u> / <u>0802</u>	Flow - mgd _____
STANDARD METHODS SM2540 D SM2540 E	

Sample Location	MLSS#1	MLSS#2	WAS	Digester		
Crucible No.	1	2	3	4		
Sample ml	100	100	50	50		
Dried Weight	.7880	.7497	.8150	1.2505		
Initial Weight	.4162	.4193	.4173	.4334		
Net Weight	.3718	.3304	.3977	.8171		
TSS PPM	3718	3304	7954	16342		
% Removal		3511				

Dried Weight	.7880	.7497	.8150	1.2505		
Ignited Weight	.4942	.4881	.5006	.6901		
Net Weight	.2938	.2616	.3144	.5604		
VSS PPM	2938	2616	6288	11208		

SRT		2777	4pms			
VSS %						
FM						

1.) Volatile Fraction = $\frac{VSS}{TSS}$

(was) (Digester)

$\frac{.6288}{.7954} = .79$ $\frac{.11208}{16342} = .69$

2.) % Volatile Reduction =

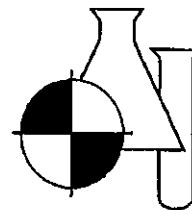
% = $\frac{WAS \% Vol - Digested Sludge \% Vol}{WAS - (WAS \times DS)} \times 100$

$\frac{.79 - .69}{.79 - (.79 \times .69)} \times 100 =$ $\frac{.10}{.2449} \times 100 = 41\%$

Corrected
SEE ATTACHED NOTE

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification # E84167

ANALYTICAL TEST REPORT

THESE RESULTS MEET NELAC STANDARDS

Submission Number : 10010197

Mid Florida Water Lab
8 Oakwood Rd.
Winter Haven, FL 33880

Project Name : CITY OF WAUCHULA
Date Received : 01/06/2010
Time Received : 1500

Submission Number 10010197

Sample Number: 001
Sample Date: 01/06/2010
Sample Time: 0922

Sample Description: Digestor Sludge
Sample Method: Grab

Parameter	Result	Units	Method Detection Limit	Procedure	Analysis Date	Time	Analyst
TOTAL KJELDAHL NITROGEN	3.00	% DRY WT	0.001	351.2	01/12/2010		RK
TOTAL NITROGEN	3.18	% DRY WT	0.001	353+351	01/12/2010		AG/RK
NITRATE+NITRITE AS N	0.188	% DRY WT	0.0002	353.2	01/11/2010		AG
TOTAL PHOSPHORUS AS P	3.26	% DRY WT	0.0002	365.3	01/13/2010		CB
ARSENIC	1.27 U	MG/KG	1.27	6010	01/13/2010		JG
CADMIUM	3.88	MG/KG	0.154	6010	01/13/2010		JG
CHROMIUM	25.8	MG/KG	0.197	6010	01/13/2010		JG
COPPER	766	MG/KG	0.500	6010	01/13/2010		JG
LEAD	150	MG/KG	0.666	6010	01/13/2010		JG
MOLYBDENUM	5.91	MG/KG	0.533	6010	01/13/2010		JG
NICKEL	19.6	MG/KG	0.243	6010	01/13/2010		JG
POTASSIUM	0.311	% DRY WT	0.0004	6010	01/13/2010		JG
SELENIUM	4.82 I	MG/KG	1.27	6010	01/13/2010		JG
ZINC	1134	MG/KG	0.338	6010	01/13/2010		JG
MERCURY	0.905	MG/KG	0.15	7471	01/07/2010	14:20	TDT/JSM
TOTAL FIXED SOLIDS	35.5	% DRY WT	0.1	SM2540G	01/11/2010	10:00	KD
TOTAL SOLIDS	1.70	% DRY WT	0.1	SM2540G	01/07/2010	15:58	KD
TOTAL VOLATILE SOLIDS	64.5	% DRY WT	0.1	SM2540G	01/11/2010	10:00	KD
PH	6.80 Q	UNITS		SM4500H+B	01/06/2010	16:35	JW

All values reported on a dry weight basis

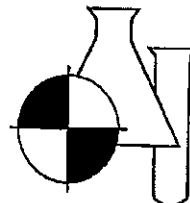
10010197

PAGE 1 OF 3

Corrected
SEE ATTACHED NOTE

BENCHMARK

EnviroAnalytical Inc.



NELAC Certification # E84167

R. Koutselas

01/21/2010

Dale D. Dixon / Laboratory Director
Radica Koutselas / QC Officer

Date

NOTES: Changed project name

DATA QUALIFIERS THAT MAY APPLY:

J = Reported value is between the laboratory MDL and the PQL.

Q = Sample held beyond the accepted holding time.

U = Analyte not detected at the value indicated

J2 = Est. value. No control criteria exists for this component

J2 = Per client request, analysis conducted without method blank

1. (PQL = 4x MDL)

2. SOUR calculations are based on total solids

For questions and comments regarding these results, please contact Bettina Beilfuss at (941) 723-9986

Results relate only to the samples.

All values reported on a dry weight basis

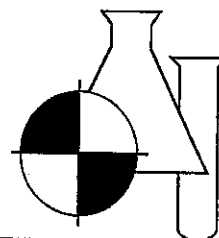
10010197

PAGE 2 OF 3

BENCHMARK

EnviroAnalytical, Inc.

NELAC CERTIFICATION #E84167



ANALYTICAL TEST REPORT

THESE RESULTS MEET NELAC STANDARDS

Submission Number 10010197

Mid Florida Water Lab
8 Oakwood Rd.
Winter Haven, FL 33880

Project Name: SLUDGE ANALYSIS
Date Received: 01/06/2010
Time Received: 1500

Submission Number 10010197

Sample Number: 001
Sample Date: 01/06/2010
Sample Time: 0922
Sample Description: Digester Sludge
Sample Method: Grab

Parameter	Result	Units	Detection Limit	Procedure	Analysis Date	Analysis Time	Analyst
TOTAL KJELDAHL NITROGEN	3.00	% DRY WT	0.001	351.2	01/12/2010		RK
TOTAL NITROGEN	3.18	% DRY WT	0.001	353+351	01/12/2010		AG/RK
NITRATE+NITRITE AS N	0.188	% DRY WT	0.0002	353.2	01/11/2010		AG
TOTAL PHOSPHORUS AS P	3.26	% DRY WT	0.0002	365.3	01/13/2010		CB
ARSENIC	1.27 U	MG/KG	1.27	6010	01/13/2010		JG
CADMIUM	3.88	MG/KG	0.154	6010	01/13/2010		JG
CHROMIUM	25.8	MG/KG	0.197	6010	01/13/2010		JG
COPPER	766	MG/KG	0.500	6010	01/13/2010		JG
LEAD	150	MG/KG	0.666	6010	01/13/2010		JG
MOLYBDENUM	5.91	MG/KG	0.533	6010	01/13/2010		JG
NICKEL	19.6	MG/KG	0.243	6010	01/13/2010		JG
POTASSIUM	0.311	% DRY WT	0.0004	6010	01/13/2010		JG
SELENIUM	4.82 I	MG/KG	1.27	6010	01/13/2010		JG
ZINC	1134	MG/KG	0.338	6010	01/13/2010		JG
MERCURY	0.905	MG/KG	0.15	7471	01/07/2010	14:20	TDT/JSM
TOTAL FIXED SOLIDS	35.5	% DRY WT	0.1	SM2540G	01/11/2010	10:00	KD
TOTAL SOLIDS	1.70	% DRY WT	0.1	SM2540G	01/07/2010	15:58	KD
TOTAL VOLATILE SOLIDS	64.5	% DRY WT	0.1	SM2540G	01/11/2010	10:00	KD
PH	6.80 Q	UNITS		SM4500H+B	01/06/2010	16:35	JW

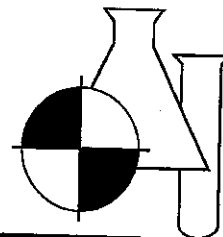
All solid values are reported on a dry weight basis

10010197 PAGE 1 OF 3

1711 12th Street East * Palmetto, FL 34221 * Phone (941) 723-9986 * Fax (941) 723-6061

BENCHMARK

EnviroAnalytical, Inc.



NELAC CERTIFICATION #E84167

D. Koutselas

01/19/2010

Dale D. Dixon / Laboratory Director

Date

Radica Koutselas / QC Officer

Jennifer Jordan / QC Officer

DATA QUALIFIERS THAT MAY APPLY:

I = Reported value is between the laboratory MDL and the PQL.

J2 = Est. value. No control criteria exists for this component

Q = Sample held beyond the accepted holding time.

U = Analyte not detected at the value indicated

V = Analyte detected in sample and method blank.

Z = Too many colonies were present (TNTC). The numeric value represents the filtration volume.

NOTES: 1. (PQL = 4x MDL)

2. SOUR calculations are based on total solids

J2 = Per client request, analysis conducted without method blank

J4 = Est. value. Sample matrix interference suspected.

X = Value exceed MCL.

For questions and comments regarding these results, please contact Bettina Beifuss at (941) 723-9986

Results relate only to the samples.

All solid values are reported on a dry weight basis

10010197

PAGE 2 OF 3

1711 12th Street East * Palmetto, FL 34221 * Phone (941) 723-9986 * Fax (941) 723-6061

CF - IN OF CUSTODY

Nº 40442

PAGE ____ OF ____



MID FLORIDA WATER LAB

Margaret Rajpaul, Director
8 Oakwood Rd.
Winter Haven, FL 33880

Phone (863) 965-2540
Fax (863) 967-8601
Toll Free 888-244-5657

DHRS PERMIT #E84567

HRS - QA# 9710NC - 181

FOR LAB. ONLY

RECEIVED

2010 JAN - 6 PM 10:32

10010197

Client Name <u>City of Wauchula</u>				State <u>FL</u> ZIP: <u>33873</u>			
Address <u>155 Griffin Road</u>							
City: <u>Wauchula</u>							
Phone # <u>863 773-6686</u>							
FAX # <u>863 773-6682</u>							
Collected by: <u>S. Chestnut</u>				State Collected From: <u>FL</u>			
Sample ID	Date	Time	Comp/Grab	Sample Location	Analysis	TESTS REQUIRED	Remarks
1	11/10/09	0922	grab	Digester - Sludge			
2							
3							
4							
5							
6							
8							
9							
10							
11							
12							
13							
14							

CUSTODY TRANSFERS		Date	11/10/2010	Time	9:40am
Relinquished by	<u>S. Chestnut</u>	Date	11/10/10	Time	9:40am
Received by	<u>W. Green</u>	Date	11/10/10	Time	11:35
Laboratory Remarks <u>Received - Konec & Kelly 11/6/10</u>					
<u>Relinquished - Konec & Kelly 11/6/10</u>					

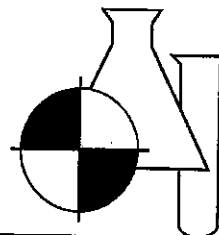
Delivered Directly to Lab	☒	Shipped	☐
Method of Shipment	<u>On ice</u>		
Containers Received	<u>4</u>		

MATRIX CODES
GW - GROUND WATER
SW - SURFACE WATER
SO - SOIL
SL - SLUDGE
WW - WASTE WATER

30f3

BENCHMARK

EnviroAnalytical, Inc.



NELAC CERTIFICATION #E84167

ANALYTICAL TEST REPORT

THESE RESULTS MEET NELAC STANDARDS

Submission Number 10010458

Mid Florida Water Lab
8 Oakwood Rd.
Winter Haven, FL 33880

Project Name: CITY OF WAUCHULA SLUDGE ANALYSIS
Date Received: 01/13/2010
Time Received: 1444

Submission Number 10010458

Sample Number: 001

Sample Date: 01/13/2010

Sample Time: 0810

Sample Description: Digester - 101140

Sample Method: Grab

Parameter	Result	Units	Detection Limit	Procedure	Analysis Date	Analysis Time	Analyst
TOTAL SOLIDS	1.89	% DRY WT	0.1	SM2540G	01/18/2010	09:30	KD
FECAL COLIFORM BY MPN	174603	#/GRAM	10582	SM9221E	01/14/2010	10:10	BH

R. Koutselas

01/27/2010

Dale D. Dixon / Laboratory Director

Date

Radica Koutselas / QC Officer

Jennifer Jordan / QC Officer

DATA QUALIFIERS THAT MAY APPLY:

I = Reported value is between the laboratory MDL and the PQL.

J2 = Est. value. No control criteria exists for this component

Q = Sample held beyond the accepted holding time.

U = Analyte not detected at the value indicated

V = Analyte detected in sample and method blank.

Z = Too many colonies were present (TNTC). The numeric value represents the filtration volume.

NOTES:

1. (PQL = 4x MDL)

2. SOUR calculations are based on total solids

J2 = Per client request, analysis conducted without method blank

J4 = Est. value. Sample matrix interference suspected.

X = Value exceed MCL.

For questions and comments regarding these results, please contact Bettina Beilfuss at (941) 723-9986

Results relate only to the samples.

All solid values are reported on a dry weight basis

10010458

PAGE 1 OF 2

1711 12th Street East * Palmetto, FL 34221 * Phone (941) 723-9986 * Fax (941) 723-6061

No 40797

PAGE _____ OF _____



MID FLORIDA WATER LAB

Margaret Rajpaul, Director
8 Oakwood Rd.
Winter Haven, FL 33880

Winter Haven, FL 33880

DHS PERMIT #E84567

HRS - QA# 9710NC - 181

Phone (863) 965-2540

Fax (863) 967-8601

Toll Free 888-244-5657

FOR LAB USE ONLY.

RECEIVED

2010 JAN 13 A 10:37

Client Name							Address							City							State							ZIP																																																							
Sample ID							Matrix							Date							Time							Comp/Grab							Sample Location																																																
1														11/10/08							10:08							grab							Diggester - Sludge																																																
2																																																																																			
3																																																																																			
4																																																																																			
5																																																																																			
6																																																																																			
7																																																																																			
8																																																																																			
9																																																																																			
10																																																																																			
11																																																																																			
12																																																																																			
13																																																																																			
14																																																																																			

Collected by: S. Chestnut

State Collected From: FL

Matrix Codes

GW — GROUND WATER

SW — SURFACE WATER

SO — SOIL

SL — SLUDGE

WW — WASTE WATER

CUSTOMER TRANSFER

Relinquished by: [Signature]

Received by: [Signature]

Laboratory Remarks: _____

Date: 11/13/10 Time: 9:45am

Date: 9/13/10 Time: 9:45am

Delivered Directly to Lab ☒

Shipped ☐

Method of Shipment: On ice

Containers Received: _____

CHAIN OF CUSTODY

No 40797

PAGE ____ OF ____



DHRS PERMIT #E84567

HRS - QA# 9710NC - 181

MID FLORIDA WATER LAB

Margaret Rajpaul, Director

8 Oakwood Rd.

Winter Haven, FL 33880

Phone (863) 965-2540

Fax (863) 967-8601

Toll Free 888-244-5657

FOR LAB USE ONLY

RECEIVED

2010 JAN 13 A 10:37

10010458

Client Name City of Wauchula
 Address 155 Griffin Road
 City Wauchula State FL ZIP 33873
 Phone # 863 773-6686
 FAX # 863 773-6682
 Collected by: S. Chestnut State Collected From: FL

Sample ID	Matrix	Date	Time	Comp/Grab	Sample Location	TESTS REQUIRED					Remarks
						Analysis	C.B.O.D.	TSS	NITRATE	TS (Total Solids)	
1		11/13/10	0810	grab	Digester - Sludge	Preservative on ice				X 101	TS 1
2											Temp 8
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											

* Margert called @ 9:00 to add Fecal (MPN) to this sample. 11/14/10

CUSTODY TRANSFER
 Relinquished by S. Chestnut Date 11/13/10 Time 9:45am
 Received by W. Rivera Date 11/13/10 Time 9:45am
 Laboratory Remarks Relinquished - Kona Reddy - 11/13/10 11:43
Relinquished - Kona Reddy - 11/13/10 1444

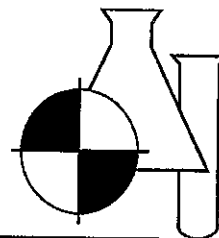
☒ Delivered Directly to Lab ☐ Shipped
 Method of Shipment On ice
 Containers Received 1

MATRIX CODES
 GW — GROUND WATER
 SW — SURFACE WATER
 SO — SOIL
 SL — SLUDGE
 WW — WASTE WATER

30 of 3
20 of 2

BENCHMARK

EnviroAnalytical, Inc.



NELAC CERTIFICATION #E84167

ANALYTICAL TEST REPORT

THESE RESULTS MEET NELAC STANDARDS

Submission Number 10010657

Mid Florida Water Lab
8 Oakwood Rd.
Winter Haven, FL 33880

Project Name: SLUDGE - CITY OF WACHULA
Date Received: 01/20/2010
Time Received: 1425

Submission Number 10010657

Sample Number: 001

Sample Date: 01/15/2010

Sample Time: 0821

Sample Description: Digester - 109181

Sample Method: Grab

Parameter	Result	Units	Detection Limit	Procedure	Analysis Date	Analysis Time	Analyst
TOTAL SOLIDS	1.84	% DRY WT	0.1	SM2540G	01/22/2010	13:10	KD
FECAL COLIFORM BY MPN	163043	#/GRAM	10870	SM9221E	01/20/2010	16:00	BH

R. Koutselas

01/29/2010

Dale D. Dixon / Laboratory Director

Date

Radica Koutselas / QC Officer

Jennifer Jordan / QC Officer

DATA QUALIFIERS THAT MAY APPLY:

I = Reported value is between the laboratory MDL and the PQL.

J2 = Est. value. No control criteria exists for this component

Q = Sample held beyond the accepted holding time.

U = Analyte not detected at the value indicated

V = Analyte detected in sample and method blank.

Z = Too many colonies were present (TNTC). The numeric value represents the filtration volume.

NOTES:

1. (PQL = 4x MDL)

2. SOUR calculations are based on total solids

J2 = Per client request, analysis conducted without method blank

J4 = Est. value. Sample matrix interference suspected.

X = Value exceed MCL.

For questions and comments regarding these results, please contact Bettina Beilfuss at (941) 723-9986

Results relate only to the samples.

All solid values are reported on a dry weight basis

10010657

PAGE 1 OF 2

1711 12th Street East * Palmetto, FL 34221 * Phone (941) 723-9986 * Fax (941) 723-6061

CHAIN JF CUSTODY

Nº 40800

PAGE ____ OF ____



MID FLORIDA WATER LAB

Margaret Rajpaul, Director
8 Oakwood Rd.
Winter Haven, FL 33880

DHRS PERMIT #E84567

HRS - QA# 9710NC - 181

Phone (863) 965-2540
Fax (863) 967-8601
Toll Free 888-244-5657

FOR LAB USE ONLY

RECEIVED

2010 JAN 15 A 9:47

Client Name				City of Vero Beach				State: FL ZIP: 33873				Penetration				TESTS REQUIRED			
Address				155 Griffin Road															
City:				Vero Beach															
Phone #				863-773-6686															
FAX #				863-773-6682															
Collected by:				S. Chestnut				State Collected From:				FL							
Sample ID	Matrix	Date	Time	Comp/Grab	Sample Location														
1		11/15/08	21	grab	Digester - Sludge														
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
CUSTODY TRANSFERS														Delivered Directly to Lab ☒ Shipped ☐					
Relinquished by: <i>S. Chestnut</i>														Date: 11/15/10 Time: 9:47					
Received by: <i>M. Rajpaul</i>														Date: 1/15/10 Time: 9:47					
Laboratory Remarks																			

MATRIX CODES
GW — GROUND WATER
SW — SURFACE WATER
SO — SOIL
SL — SLUDGE
WW — WASTE WATER

Method of Shipment: *On Ice*
Containers Received: _____

0804
Z-61

PAGE ____ OF ____



MID FLORIDA WATER LAB

Margaret Rajpaul, Director
8 Oakwood Rd.

Winter Haven, FL 33880

U-HRS PERMIT #E04567

HRS - OA# 9710NC - 181

Phone (863) 965-2540

Fax (863) 967-8601

Toll Free 888-244-5657

FOR LAB ONLY

RECEIVED

2010 JAN 15 A 9:47Z

10010657

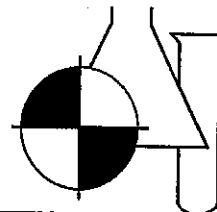
Client Name	City of Waukegan		
Address	155 Griffin Road		
City:	Waukegan	State:	IL
Phone #	863-773-6686		
FAX #	863-773-6682		
Collected by:	S. Chestnut	State Collected From:	IL

Sample ID	Matrix	Date	Time	Comp/Grab	Sample Location
1		11/5/08	0824	grab	Digester - Sludge
2					
3					ph - 6.40
4					Temp - 14.4
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

CUSTODY TRANSFERS		Date	Time
Relinquished by	<i>[Signature]</i>	11/5/10	9:47
Received by	<i>[Signature]</i>	11/5/10	9:47
Laboratory Remarks	F. Johnson - Karen P. Lillieby 1/20/10 11470		
	K. Lillieby - Karen P. Lillieby 1/20/10 14925		

[illegible]

☐ Delivered Directly to Lab / <u>12</u> ☐ Shipped	
Method of Shipment	<u>On Ice</u>
Containers Received	<u>2</u>



ANALYTICAL TEST REPORT

THESE RESULTS MEET NELAC STANDARDS

Submission Number 10010658

Mid Florida Water Lab
8 Oakwood Rd.
Winter Haven, FL 33880

Project Name: SLUDGE - CITY OF WACHULA
Date Received: 01/20/2010
Time Received: 1425

Submission Number 10010658

Sample Number: 001

Sample Description: Digester - 101203

Sample Date: 01/18/2010

Sample Method: Grab

Sample Time: 0722

Parameter	Result	Units	Detection Limit	Procedure	Analysis Date	Analysis Time	Analyst
TOTAL SOLIDS	1.78	% DRY WT	0.1	SM2540G	01/22/2010	13:10	KD
FECAL COLIFORM BY MPN	39326	#/GRAM	11236	SM9221E	01/20/2010	16:00	BH

R. Koutselas

01/29/2010

Dale D. Dixon / Laboratory Director

Date

Radica Koutselas / QC Officer

Jennifer Jordan / QC Officer

DATA QUALIFIERS THAT MAY APPLY:

I = Reported value is between the laboratory MDL and the PQL.

J2 = Est. value. No control criteria exists for this component

Q = Sample held beyond the accepted holding time.

U = Analyte not detected at the value indicated

V = Analyte detected in sample and method blank.

Z = Too many colonies were present (TNTC). The numeric value represents the filtration volume.

NOTES:

1. (PQL = 4x MDL)

2. SOUR calculations are based on total solids

J2 = Per client request, analysis conducted without method blank

J4 = Est. value. Sample matrix interference suspected.

X = Value exceed MCL.

For questions and comments regarding these results, please contact Bettina Beilfuss at (941) 723-9986

Results relate only to the samples.

All solid values are reported on a dry weight basis

10010658

PAGE 1 OF 2

1711 12th Street East * Palmetto, FL 34221 * Phone (941) 723-9986 * Fax (941) 723-6061

CHAIN OF CUSTODY

No 40801

AGE ____ OF ____



IRS PERMIT #E84567

HRS - QA# 9710NC - 181

MID FLORIDA WATER LAB

Margaret Rajpaul, Director
8 Oakwood Rd.
Winter Haven, FL 33880

Phone (863) 965-2540
Fax (863) 967-8601
Toll Free 888-244-5657

FOR LAB USE ONLY

RECEIVED

WR

2010 JAN 18 A 8:16

10010658

Client Name City of Wauchula
Address 155 Griffin Road
City Wauchula State FL ZIP 33873
Phone # 863-773-6686
FAX # 863-773-6682
Collected by: J. [Signature] State Collected From: FL

Sample ID	Matrix	Date	Time	Comp/Grab	Sample Location	TESTS REQUIRED					Remarks
						C.B.O.D.	TSS	NITRATE	FECAI-SLUDGE	TS	
1		1/18/10	0722	grab	Digester-Sludge				X	X	1
2									203	203	
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											

ph=6.08
Temp=18.5

CUSTOMER TRANSFER
Relinquished by: [Signature] Date 1/18/10 Time 6:16am
Received by: [Signature] Date 1/18/10 Time 6:16am
Laboratory Remarks: Received - 10010658
Relinquished - 10010658 1/20/10 11:40
Relinquished - 10010658 1/20/10 1425

☒ Delivered Directly to Lab ☐ Shipped

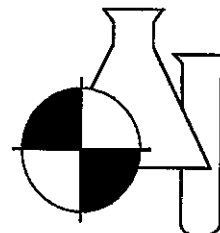
Method of Shipment on ice

Containers Received [Signature]

MATRIX CODES
GW — GROUND WATER
SW — SURFACE WATER
SO — SOIL
SL — SLUDGE
WW — WASTE WATER

BENCHMARK

EnviroAnalytical, Inc.



NELAC CERTIFICATION #E84167

ANALYTICAL TEST REPORT

THESE RESULTS MEET NELAC STANDARDS

Submission Number 10010659

Mid Florida Water Lab
8 Oakwood Rd.
Winter Haven, FL 33880

Project Name: SLUDGE - CITY OF WACHULA
Date Received: 01/20/2010
Time Received: 1425

Submission Number 10010659

Sample Number: 001 Sample Description: Digester - 101244
Sample Date: 01/20/2010 Sample Method: Grab
Sample Time: 0726

Parameter	Result	Units	Detection Limit	Procedure	Analysis Date	Analysis Time	Analyst
TOTAL SOLIDS	1.90	% DRY WT	0.1	SM2540G	01/22/2010	13:10	KD
FECAL COLIFORM BY MPN	42105	#/GRAM	10526	SM9221E	01/20/2010	16:00	BH

R. Koutselas

01/29/2010

Dale D. Dixon / Laboratory Director

Date

Radica Koutselas / QC Officer

Jennifer Jordan / QC Officer

DATA QUALIFIERS THAT MAY APPLY:

I = Reported value is between the laboratory MDL and the PQL.

J2 = Est. value. No control criteria exists for this component

Q = Sample held beyond the accepted holding time.

U = Analyte not detected at the value indicated

V = Analyte detected in sample and method blank.

Z = Too many colonies were present (TNTC). The numeric value represents the filtration volume.

NOTES: 1. (PQL = 4x MDL)

2. SOUR calculations are based on total solids

J2 = Per client request, analysis conducted without method blank

J4 = Est. value. Sample matrix interference suspected.

X = Value exceed MCL.

For questions and comments regarding these results, please contact Bettina Beilfuss at (941) 723-9986

Results relate only to the samples.

All solid values are reported on a dry weight basis

10010659 PAGE 1 OF 2

1711 12th Street East * Palmetto, FL 34221 * Phone (941) 723-9986 * Fax (941) 723-6061

CHAIN OF CUSTODY

№ 40805

PAGE ____ OF ____



DHRS PERMIT #E84567
HRS - QA# 9710NC - 181

MID FLORIDA WATER LAB

Margaret Rajpaul, Director
8 Oakwood Rd.
Winter Haven, FL 33880

Phone (863) 965-2540
Fax (863) 967-8601
Toll Free 888-244-5657

FOR LAB USE ONLY

RECEIVED

2010 JAN 20 A 10:23

10010659

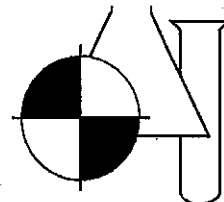
MR

Client Name					City of Wauchula							
Address					155 Griffin Road							
City:					Wauchula							
Phone #					863 773-6686							
FAX #					863 773-6682							
Collected by:					S. Chestnut							
State Collected From:					FL							
Sample ID	Matrix	Date	Time	Comp/Grab	Sample Location	Analysis				TESTS REQUIRED	Remarks	
1		1/20/10	07:46	grab	Digester Sludge	C.B.O.D.	TSS	NITRATE	FECAL-SLUDGE	T.S.		
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												

CUSTODY TRANSFERS			
Relinquished by:	<i>S. Chestnut</i>	Date:	1/20/10
Received by:	<i>Maria Rivero</i>	Date:	1/20/10
Laboratory Remarks:	<i>Remains - Kew Valley 1/20/10 11:48</i>		
Relinquished by:	<i>Karen Ballaney</i>	Date:	1/20/10
Received by:	<i>Karen Ballaney</i>	Date:	1/20/10

Delivered Directly to Lab ☒ Shipped ☐
Method of Shipment *ON CO*
Containers Received *1*

MATRIX CODES
GW — GROUND WATER
SW — SURFACE WATER
SO — SOIL
SL — SLUDGE
WW — WASTE WATER



ANALYTICAL TEST REPORT

THESE RESULTS MEET NELAC STANDARDS

Submission Number 10010715

Mid Florida Water Lab
8 Oakwood Rd.
Winter Haven, FL 33880

Project Name: SLUDGE - CITY OF WACHULA
Date Received: 01/22/2010
Time Received: 1352

Submission Number 10010715

Sample Number: 001

Sample Description: Digester Sludge - 101296

Sample Date: 01/22/2010

Sample Method: Grab

Sample Time: 0724

Parameter	Result	Units	Detection Limit	Procedure	Analysis Date	Analysis Time	Analyst
TOTAL SOLIDS	1.86	% DRY WT	0.1	SM2540G	01/26/2010	16:30	KD
FECAL COLIFORM BY MPN	161290	#/GRAM	10753	SM9221E	01/22/2010	17:00	BH

R. Koutselas

02/02/2010

Dale D. Dixon / Laboratory Director

Date

Radica Koutselas / QC Officer

Jennifer Jordan / QC Officer

DATA QUALIFIERS THAT MAY APPLY:

I = Reported value is between the laboratory MDL and the PQL.

J2 = Est. value. No control criteria exists for this component

Q = Sample held beyond the accepted holding time.

U = Analyte not detected at the value indicated

V = Analyte detected in sample and method blank.

Z = Too many colonies were present (TNTC). The numeric value represents the filtration volume.

NOTES: 1. (PQL = 4x MDL)

2. SOUR calculations are based on total solids

J2 = Per client request, analysis conducted without method blank

J4 = Est. value. Sample matrix interference suspected.

X = Value exceed MCL.

For questions and comments regarding these results, please contact Bettina Beilfuss at (941) 723-9986

Results relate only to the samples.

All solid values are reported on a dry weight basis

10010715

PAGE 1 OF 2

1711 12th Street East * Palmetto, FL 34221 * Phone (941) 723-9986 * Fax (941) 723-6061

CHAIN OF CUSTODY

No 40811

PAGE ____ OF ____



DHRS PERMIT #E84567

HRS - QA# 9710NC - 181

MID FLORIDA WATER LAB

Margaret Rajpaul, Director
8 Oakwood Rd.
Winter Haven, FL 33880

Phone (863) 965-2540
Fax (863) 967-8601
Toll Free 888-244-5657

FOR LAB USE ONL

RECEIVED

2010 JAN 22 1 A 8:55

MR

Client Name				Address				City				State				ZIP				Phone #				FAX #				Collected by				State Collected From											
Sample ID				Matrix				Date				Time				Comp/Grab				Sample Location				Analysis				TESTS REQUIRED				Remarks											
1				155 Griffin Road				Wauchula				FL				33873				863 773-6686				S. Chestnut				FL				NITRATE				ok				ok			
2				155 Griffin Road				Wauchula				FL				33873				863 773-6686				S. Chestnut				FL				TSS				ok				ok			
3				155 Griffin Road				Wauchula				FL				33873				863 773-6686				S. Chestnut				FL				C.B.O.D.				ok				ok			
4				155 Griffin Road				Wauchula				FL				33873				863 773-6686				S. Chestnut				FL				FECAL-SLUDGE				ok				ok			
5				155 Griffin Road				Wauchula				FL				33873				863 773-6686				S. Chestnut				FL				FECAL-SLUDGE				ok				ok			
6				155 Griffin Road				Wauchula				FL				33873				863 773-6686				S. Chestnut				FL				FECAL-SLUDGE				ok				ok			
7				155 Griffin Road				Wauchula				FL				33873				863 773-6686				S. Chestnut				FL				FECAL-SLUDGE				ok				ok			
8				155 Griffin Road				Wauchula				FL				33873				863 773-6686				S. Chestnut				FL				FECAL-SLUDGE				ok				ok			
9				155 Griffin Road				Wauchula				FL				33873				863 773-6686				S. Chestnut				FL				FECAL-SLUDGE				ok				ok			
10				155 Griffin Road				Wauchula				FL				33873				863 773-6686				S. Chestnut				FL				FECAL-SLUDGE				ok				ok			
11				155 Griffin Road				Wauchula				FL				33873				863 773-6686				S. Chestnut				FL				FECAL-SLUDGE				ok				ok			
12				155 Griffin Road				Wauchula				FL				33873				863 773-6686				S. Chestnut				FL				FECAL-SLUDGE				ok				ok			
13				155 Griffin Road				Wauchula				FL				33873				863 773-6686				S. Chestnut				FL				FECAL-SLUDGE				ok				ok			
14				155 Griffin Road				Wauchula				FL				33873				863 773-6686				S. Chestnut				FL				FECAL-SLUDGE				ok				ok			

MATRIX CODES
GW — GROUND WATER
SW — SURFACE WATER
SO — SOIL
SL — SLUDGE
WW — WASTE WATER

☒ Delivered Directly to Lab ☐ Shipped

Method of Shipment On ice

Containers Received _____

CUSTODY TRANSFER
Relinquished by S. Chestnut Date 1/22/10 Time 8:55am
Received by Priscilla Rivero Date 1/22/10 Time 8:55am
Laboratory Remarks _____

CUSTODY

No 40811

PAGE ____ OF ____



DHRS PERMIT #E84567

HRS - QA# 9710NC - 181

MID FLORIDA WATER LAB

Margaret Rajpaul, Director
8 Oakwood Rd.

Winter Haven, FL 33880

Phone (863) 965-2540
Fax (863) 967-8601
Toll Free 888-244-5657

FOR USE ONLY

RECEIVED

2010 JAN 22 1A 8:55

105107LS

MR

Client Name City of Wauchula
Address 155 Griffin Road
City Wauchula State FL ZIP 33873
Phone # 863 773-6686
FAX # 863 773-6682
Collected by: S. Chestnut State Collected From: FL

Sample ID	Matrix	Date	Time	Comp/Grab	Sample Location	Analysis	TESTS REQUIRED	Ref
1		1/22/10	8:55am	grab	Digester - Sludge	101/FECA - Sludge	101/FECA - Sludge	1
2						296 290	296 290	
3					ph - 6.35			
4					Temp - 21.3	ok to run out of hole		
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								

CUSTODY TRANSFER

Relinquished by: S. Chestnut Date: 1/22/10 Time: 8:55am

Received by: Phyllis Kiviro Date: 01/22/10 Time: 8:55am

Lab: Remnant - Kiviro Date: 1/22/10 Time: 11:23

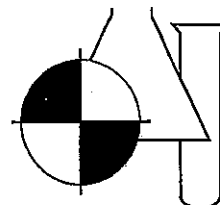
Signature: [Signature] Date: 1/22/10 Time: 11:23

Delivered Directly to Lab ☒ Shipped ☐

Method of Shipment: On ice

Containers Received: Open Mtk 1220

MATRIX C
CW - GROUT
SW - SURFACE
SO - SOIL
SL - SLUDGE
WW - WASTE



ANALYTICAL TEST REPORT
THESE RESULTS MEET NELAC STANDARDS

Submission Number 10010745

Mid Florida Water Lab
8 Oakwood Rd.
Winter Haven, FL 33880

Project Name: SLUDGE - CITY OF WACHULA
Date Received: 01/25/2010
Time Received: 0843

Submission Number 10010745

Sample Number: 001 Sample Description: Digester Sludge
Sample Date: 01/24/2010 Sample Method: Grab
Sample Time: 1215

Parameter	Result	Units	Detection Limit	Procedure	Analysis Date	Time	Analyst
TOTAL SOLIDS	1.88	% DRY WT	0.1	SM2540G	01/26/2010	16:30	KD
FECAL COLIFORM BY MPN	159574	#/GRAM	10638	SM9221E	01/25/2010	11:30	BH

Submission Number 10010745

Sample Number: 002 Sample Description: Digester Sludge
Sample Date: 01/25/2010 Sample Method: Grab
Sample Time: 0706

Parameter	Result	Units	Detection Limit	Procedure	Analysis Date	Time	Analyst
TOTAL SOLIDS	1.90	% DRY WT	0.1	SM2540G	01/28/2010	10:00	KD
FECAL COLIFORM BY MPN	73684	#/GRAM	10526	SM9221E	01/25/2010	11:30	BH

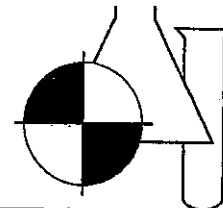
All solid values are reported on a dry weight basis

10010745 PAGE 1 OF 3

1711 12th Street East * Palmetto, FL 34221 * Phone (941) 723-9986 * Fax (941) 723-6061

BENCHMARK

EnviroAnalytical, Inc.



NELAC CERTIFICATION #E84167

R. Koutselas

02/02/2010

Dale D. Dixon / Laboratory Director

Date

Radica Koutselas / QC Officer

Jennifer Jordan / QC Officer

DATA QUALIFIERS THAT MAY APPLY:

I = Reported value is between the laboratory MDL and the PQL.

J2 = Est. value. No control criteria exists for this component

Q = Sample held beyond the accepted holding time.

U = Analyte not detected at the value indicated

V = Analyte detected in sample and method blank.

Z = Too many colonies were present (TNTC). The numeric value represents the filtration volume.

NOTES: 1. (PQL = 4x MDL)

2. SOUR calculations are based on total solids

J2 = Per client request, analysis conducted without method blank

J4 = Est. value. Sample matrix interference suspected.

X = Value exceed MCL.

For questions and comments regarding these results, please contact Bettina Beilfuss at (941) 723-9986

Results relate only to the samples.

All solid values are reported on a dry weight basis

10010745

PAGE 2 OF 3

1711 12th Street East * Palmetto, FL 34221 * Phone (941) 723-9986 * Fax (941) 723-6061

CHAIN OF CUSTODY

No 40812

PAGE ____ OF ____



DHRS PERMIT #E84567

HRS - QA# 9710NC - 181

MID FLORIDA WATER LAB

Margaret Rajpaul, Director
8 Oakwood Rd.
Winter Haven, FL 33880

Phone (863) 965-2540
Fax (863) 967-8601
Toll Free 888-244-5657

FOR LAB USE ONLY

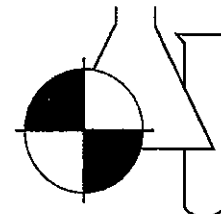
1/26/10

at 9:00am

10010745

Client Name <u>City of Wauchoula</u> Address <u>155 Griffin Road</u> City <u>Wauchoula</u> State <u>FL</u> ZIP <u>33873</u> Phone # <u>863-773-6686</u> FAX # <u>863-773-6682</u> Collected by: <u>S. Chestnut</u> State Collected From: <u>FL</u>				Sample ID 1 2 3 4 5 6 7 8 9 10 11 12 13 14				Date 1/25/10 1/25/10 1/25/10 1/25/10 1/25/10 1/25/10 1/25/10 1/25/10 1/25/10 1/25/10 1/25/10 1/25/10 1/25/10 1/25/10				Time 12:15 12:15 12:15 12:15 12:15 12:15 12:15 12:15 12:15 12:15 12:15 12:15 12:15 12:15 12:15				Sample Location Diester - Sludge Diester - Sludge Diester - Sludge Diester - Sludge Diester - Sludge Diester - Sludge Diester - Sludge Diester - Sludge Diester - Sludge Diester - Sludge Diester - Sludge Diester - Sludge Diester - Sludge Diester - Sludge				Analysis C.B.O.D. TSS NITRATE FECAL - Sludge TS				Remarks ph-6.51 Ten ph-6.28 Ten			
CUSTODY TRANSFER Relinquished by <u>[Signature]</u> Date <u>1/25/10</u> Time <u>0843</u> Received by <u>[Signature]</u> Date <u>1/25/10</u> Time <u>0843</u> Laboratory Remarks <u>Open flow 1/25/10</u>												Delivered Directly to Lab ☒ Shipped ☐ Method of Shipment <u>Open flow 1/25/10</u> Containers Received <u>Open flow 1/25/10</u>				MATRIX CODES GW — GROUND WATER SW — SURFACE WATER SO — SOIL SL — SLUDGE WW — WASTE WATER											

3 of 3



ANALYTICAL TEST REPORT

THESE RESULTS MEET NELAC STANDARDS

Submission Number 10010845

Mid Florida Water Lab
8 Oakwood Rd.
Winter Haven, FL 33880

Project Name: CITY OF WACHULA
Date Received: 01/27/2010
Time Received: 1543

Submission Number 10010845

Sample Number: 001 Sample Description: Digerstor-Sludge
Sample Date: 01/26/2010 Sample Method: Grab
Sample Time: 1444

Parameter	Result	Units	Detection Limit	Procedure	Analysis Date	Time	Analyst
TOTAL SOLIDS	2.08	% DRY WT	0.1	SM2540G	01/28/2010	10:00	KD
FECAL COLIFORM BY MPN	9615 C	#/GRAM	9615	SM9221E	01/27/2010	17:15	BH

Submission Number 10010845

Sample Number: 002 Sample Description: Digerstor-Sludge
Sample Date: 01/27/2010 Sample Method: Grab
Sample Time: 0725

Parameter	Result	Units	Detection Limit	Procedure	Analysis Date	Time	Analyst
TOTAL SOLIDS	2.11	% DRY WT	0.1	SM2540G	01/28/2010	10:00	KD
FECAL COLIFORM BY MPN	18957 C	#/GRAM	9479	SM9221E	01/27/2010	17:15	BH

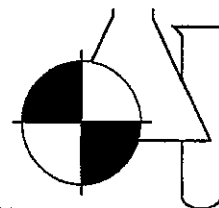
All solid values are reported on a dry weight basis

10010845 PAGE 1 OF 3

1711 12th Street East * Palmetto, FL 34221 * Phone (941) 723-9986 * Fax (941) 723-6061

BENCHMARK

EnviroAnalytical, Inc.



NELAC CERTIFICATION #E84167

D. Koutselos

02/02/2010

Dale D. Dixon / Laboratory Director

Date

Radica Koutselas / QC Officer

Jennifer Jordan / QC Officer

DATA QUALIFIERS THAT MAY APPLY:

I = Reported value is between the laboratory MDL and the PQL.

J2 = Est. value. No control criteria exists for this component

Q = Sample held beyond the accepted holding time.

U = Analyte not detected at the value indicated

V = Analyte detected in sample and method blank.

Z = Too many colonies were present (TNTC). The numeric value represents the filtration volume.

NOTES: 1. (PQL = 4x MDL)

2. SOUR calculations are based on total solids

J2 = Per client request, analysis conducted without method blank

J4 = Est. value. Sample matrix interference suspected.

X = Value exceed MCL.

C = Sample received out of hold time.

For questions and comments regarding these results, please contact Bettina Beilfuss at (941) 723-9986

Results relate only to the samples.

All solid values are reported on a dry weight basis

10010845

PAGE 2 OF 3

1711 12th Street East * Palmetto, FL 34221 * Phone (941) 723-9986 * Fax (941) 723-6061

DHRS PERMIT #E84567

№ 40813



PAGE _____ OF _____

MID FLORIDA WATER LAB

Margaret Rajpaul, Director
8 Oakwood Rd.
Winter Haven, FL 33880

DHRS PERMIT #E84567

HRS - QA# 9710NC - 181

Phone (863) 965-2540
Fax (863) 967-8601
Toll Free 888-244-5657

FOR LAB USE ONLY.

RECEIVED

2010 JAN 27: A 10:42

Client Name					City of Waukegan					
Address					155 Griffin Road					
City:					Waukegan State: IL ZIP: 33873					
Phone #					863 773-6680					
FAX #					863 773-6682					
Collected by:					S. Chestnut State Collected From: FI					
Sample ID	Matrix	Date	Time	Comp/Grab	Sample Location					
1		11/27/10	1444	grab	Digester-Sludge					
2		11/27/10	1755	grab	Digester-Sludge					
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

CUSTODY TRANSFER

Relinquished by: [Signature] Date: 11/27/10 Time: 9:40am

Received by: [Signature] Date: 01/27/10 Time: 9:40am

Laboratory Remarks: _____

Analysis

Analysis	TESTS REQUIRED
C.B.O.D.	
TSS	
NITRATE	
FECAI-SLUDGE	
101 101	
366 366	ph-6.68 Temp-20.6
101 101	ph-6.42 Temp-20.6
367 367	

Remarks

☒ Delivered Directly to Lab ☐ Shipped

Method of Shipment: On ice

Containers Received: _____

MATRIX CODES

GW — GROUND WATER

SW — SURFACE WATER

SO — SOIL

SL — SLUDGE

WW — WASTE WATER

CHAIN OF CUSTODY

NO 40813

PAGE ___ OF ___



DHRS PERMIT #E84567

HRS - QA# 9710NC - 181

MID FLORIDA WATER LAB

Margaret Rajpaul, Director

8 Oakwood Rd.

Winter Haven, FL 33880

Phone (863) 965-2540

Fax (863) 967-8601

Toll Free 888-244-5657

FOR LAB USE ONLY

RECEIVED

2010 JAN 27 A 10:42
10010845

Client Name						City of Wauchula	
Address						155 Griffin Road	
City:						Wauchula	
State:						FL	
Phone #						863 773-6680	
FAX #						863 773-6682	
Collected by:						S. Chestnut	
State Collected From:						FL	
Sample ID	Matrix	Date	Time	Comp/Grab	Sample Location		
1		1/26/10	1444	grab	Digester-Sludge		
2		1/27/10	0725	grab	Digester-Sludge		
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							

Analysis		TESTS REQUIRED	
C.B.O.D.		NITRATE	
TSS		FECAL-SLUDGE	
ph	6.68	Temp	6.42
Temp	6.42		

1 bottle each Sample

CUSTODY TRANSFER	
Relinquished by	S. Chestnut
Received by	1/27/10 9:40am
Laboratory Remarks	1/27/10 9:40am
	1/27/10 1:54pm

MATRIX C	
GW	GROUND
SW	SURFACE
SO	SOIL
SL	SLUDGE
WW	WASTE

Delivered Directly to Lab ☒ Shipped ☐

Method of Shipment On ice

Containers Received 1