

4009C 00086
C
**BOARD OF COUNTY COMMISSIONERS
DEPARTMENT OF PUBLIC WORKS**

WAC 39859

**3600 W. SOVEREIGN PATH
LECANTO, FLORIDA 34461**

ADMINISTRATION OFFICE
Suite 212
352-527-5477 Phone
352-527-5479 Fax

ENGINEERING DIVISION:
Suite 241
352-527-5446 Phone
352-527-5476 Fax

- Land Section
Suite 205
352-527-5447 Phone
352-527-5459 Fax
- Permits & Compliance Sec.
Suite 204
352-527-5448 Phone
352-527-5319 Fax
- Project Management Sec.
Suite 241
352-527-5449 Phone
352-527-5482 Fax
- Survey Section
Suite 241
352-527-5446 Phone
352-527-5482 Fax

**1300 S. LECANTO HIGHWAY
LECANTO, FLORIDA 34461**

MAINTENANCE OPERATIONS:

- Facilities Maint. Section
PO Box 143
Lecanto, FL 34460
352-527-0333 Phone
352-527-0654 Fax
- Fleet Management Section
PO Box 215
Lecanto, FL 34460
352-746-6888 Phone
352-746-5011 Fax

AQUATIC SERVICES
PO Box 440
Lecanto, FL 34460
352-746-1743 Phone
352-746-9189 Fax

ROAD MAINTENANCE
PO Box 167
Lecanto, FL 34460
352-746-4107 Phone
352-746-1203 Fax

UTILITIES DIVISION
PO Box 440
Lecanto, FL 34460
352-746-2694 Phone
352-746-1676 Fax

SOLID WASTE MANAGEMENT
230 W. Gulf to Lake Highway
PO Box 340
Lecanto, FL 34460
352-746-5000 Phone
352-527-1204 Fax

April 13, 1999

Mr. John Morris
Solid Waste Section
Dept. Of Environmental Protection
3804 Coconut Palm Drive
Tampa, FL 33619-8318

REPLY TO:
Solid Waste Management

**RE: SEMI-ANNUAL, QUARTERLY AND WEEKLY LEACHATE
MONITORING REPORT FOR CITRUS COUNTY CENTRAL LANDFILL 60 AND
80 ACRE SITES - PERMIT NO. S009-274381**

Dear Mr. Morris:

Enclosed please find the following leachate monitoring results for the Citrus County Central Landfill site, together with the Operator's monthly reports, covering the period 1-99 through 3-99:

- 1) Semi-annual influent analytical results for field, laboratory parameters, and Appendix I. (Arsenic, bromodichloromethane, sodium, chloride, total dissolved solids and iron exceed drinking water standards or guidance concentrations in the untreated leachate.)
- 2) Weekly effluent analytical results. There are no exceedences of permit limits during January, 1999. Plant processing was discontinued on 2/3/99 for the batch tank refurbishing project. Plant re-start processing discharge commenced on 3/3/99 through 3/20/99. Off-site disposal to County owned WWTP's commenced on 3/23/99 after receipt of two weeks of CBOD analytical results exceeding permit limits.
- 3) Quarterly effluent analytical results. There are no exceedences of permit limits during this period; only sodium, chloride, total dissolved solids and the total of trihalomethanes exceed drinking water maximum contamination levels.

Included with the January 6, 1999 report are the laboratory's (Harbor Branch Environmental Laboratories) annual submittal for FDOH Certifications Numbers and FDEP CompQAP Approval Number.

RECEIVED

APR 16 1999

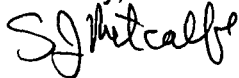
Solid Waste Section

**Citrus Springs / Dunnellon area
Toll Free # (352) 489-2120**

Mr. John Morris
Page Two - April 13, 1999
Leachate Monitoring Report

Should further information or clarification be necessary, please do not hesitate to contact me.

Sincerely,



Susan J. Metcalfe, P.G.
Director, Division of Solid Waste Management

SJM:CJW:cjw

CC: Chongman Lee, - Solid Waste - Tallahassee w/analysis
Kenneth Saunders, Director, Dept. Public Works w/xls.sheet
Kim Ford, P.E., Depart of Environmental Protection w/xls.sheet
Citrus County Utilities Division/Plant Operator w/xls.sheets

(swmFshared:swm_ltc:MorrisLea.doc)

JANUARY, FEBRUARY, MARCH 1999

[illegible]

Domestic Wastewater Treatment Plant Monthly Operating Report

(1) Month	MARCH	Year	99
(2) Plant's DEP Identification Number	4009C00086		
(3) Plant Name	Central Landfill Leachate Plant		
(4) Plant Address	SR 44 3 Miles East Lecanto		
(5) City	Lecanto		
(6) County	Citrus		
(7) Phone Number	(352) 746-5000		
(8) Permit Number	S-009-274381		
(9) Plant Type	1-C		
(10) Test Site Identification Number	N/A		
(11) Fecal Coliform Sample Method			
	X Membrane filter	Most Probable Number	
(12) Type Of Effluent Disposal or Reclaimed Water Use			
	N/A		
(13) Limited Wet Weather Discharge Activated			
	Yes	No	X Not Applicable
(14) Cumulative Days Wet Weather Discharge	N/A		
(15) Plant Staffing			
Day Shift Operator Class	C	Cert. No.	8197
Evening Shift Operator Clas		Cert. No.	N/A
Night Shift Operator Class		Cert. No.	N/A

[illegible]

Lead Operator James A. Brunswick

Signature: _____ Cert. No. _____

C8197

Month **MARCH** Year **99**

Lead Operator: This is to certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief this information is true, complete, and accurate.

4/12/99

(352) 746-5000

HARBOR BRANCH ENVIRONMENTAL LABORATORY

5600 US 1 North, Fort Pierce, FL 34946
561-465-2400, Ext. 285

FDEP QAP 870174



**ANALYTICAL REPORT FOR:
CITRUS COUNTY CENTRAL LANDFILL
LEACHATE SAMPLE
GMS # 4009C00086**

**PRESENTED TO:
CATHY WINTER**

**ANALYSIS BY:
HARBOR BRANCH ENVIRONMENTAL LABORATORY
CompQAP #870174G
HRS #E96080/96230
HBEL DELTONA: E83509**

**PROJECT MANAGER:
DON HASH**


APRIL 8, 1999

Southeast Florida
Fort Pierce, FL 34946
FDOH #96230 / E96080

Orlando Area
Deltona, FL 32725
FDOH #83486 / E83509

Jacksonville Area
Fernandina Beach, FL 32034
FDOH #82500 / E82417

Fort Myers Area
Lehigh Acres, FL 33936
FDOH #85512 / E85370

West Central Florida
Spring Hill, FL 34607
FDOH #84526 / E84418

HARBOR BRANCH ENVIRONMENTAL LABORATORY

5600 US 1 North, Fort Pierce, FL 34946
561-465-2400, Ext. 285

FDEP QAP 870174



April 12, 1999

Cathy Winter
Citrus County Central Landfill
Solid Waste Management
POB 340, 230 Gulf to Lake Hwy
Lecanto, FL 34460

Client : Citrus County Central Landfill
Project [Reference] : Citrus County Landfill [9400314]
Date Received : April 07, 1999

Analytical results presented in this report have been reviewed for compliance with the laboratory quality assurance plan and applicable quality control criteria. The quality control parameters evaluated have met all method and compliance criteria unless otherwise noted on a Quality Control Summary Page immediately following this cover sheet.

FDOH (HRS) Drinking Water Certification Number: 96230, 83486, 82500, 85512, 84526

FDOH (HRS) Environmental Certification Number: E96080, E83509, E82417, E85370, E84418

FDEP CompQAP Approval Number: 870174

NOTE: This report is not to be copied, except in full, without the express written consent of the Harbor Branch Environmental Laboratory.

If you have any questions regarding this report, or if we can be of further assistance, please feel free to call (561) 465-2400 ext. 285 and ask to speak with your project manager.

A handwritten signature in black ink, appearing to read "Don Hash".

Don Hash
Project Manager

Preliminary results

Southeast Florida
Fort Pierce, FL 34946
FDOH #96230 / E96080

Orlando Area
Deltona, FL 32725
FDOH #83486 / E83509

Jacksonville Area
Fernandina Beach, FL 32034
FDOH #82500 / E82417

Fort Myers Area
Lehigh Acres, FL 33936
FDOH #85512 / E85370

West Central Florida
Spring Hill, FL 34607
FDOH #84526 / E84418

CITRUS COUNTY CENTRAL LANDFILL**PARAMETER MONITORING REPORT**

Rule 62-522.900 (11)

GMS # 4009C00086

<CTRL-ALT-S>

Sample Date/Lab ID: 03/31/99 9100922001

Test Site #: _____

 Site Type: ☐ Background
☐ Site Boundary
☐ Intermediate
☐ Compliance
☒ Other: Leachate
Test Site Name: LeachateSample Method: Grab, where applicable

Storet Code	Parameter Monitored	Analysis Method	Analysis Date	Analysis Result	Units	Practical Quant. Level	Sample Filtered / Unfiltered	Preservative Added
004000	pH, Field	150.1	03/31/99	7.9	S.U.	0.20	--	--
900201	Total Suspended Solids <i>530</i>	160.2	04/05/99	5.0	mg/L	2.0	U	None
000620	Nitrate-Nitrogen	300.0	04/01/99	1.1	mg/L	0.060	U	None
000620	Nitrite-Nitrogen	300.0	04/01/99	0.096	mg/L	0.044	U	None
000610	Ammonia-Nitrogen	350.1	04/06/99	<0.050	mg/L	0.050	U	H ₂ SO ₄
000625	Total Kjeldahl Nitrogen	351.2	04/08/99	0.89	mg/L	0.20	U	H ₂ SO ₄
000600	Total Nitrogen	351.2	04/08/99	2.1	mg/L	0.20	U	H ₂ SO ₄
000665	Total Phosphorus	365.4	04/08/99	5.5	mg/L	0.50	U	H ₂ SO ₄
000340	COD	410.4	04/05/99	300	mg/L	5.0	U	H ₂ SO ₄
80082	CBOD ₅ ^J	SM5210 B	04/01/99	25	mg/L	2.0	U	None
031616	Fecal Coliform	SM9222 D	03/31/99	110	CFU/100mL	1.0	U	Na ₂ S ₂ O ₃

HARBOR BRANCH ENVIRONMENTAL LABORATORY

5600 US 1 North, Fort Pierce, FL 34946

561-465-2400, Ext. 285

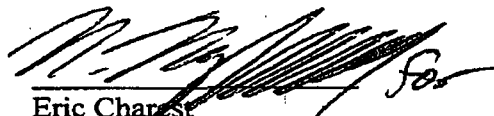
FDEP QAP 870174

**Quality Control Summary**

- **Laboratory Blank:** All analytes were below Reporting Detection Limits (RDL).
- **Laboratory Control Sample:** Recoveries for analytes were within laboratory accuracy limits.
- **Matrix Spike/Matrix Spike Duplicate:** Recoveries for analytes were within laboratory precision and accuracy limits.
- **Sample Duplicate:** Analysis data demonstrated acceptable reproducibility of laboratory processes.

Standard Methods 5210B, CBOD

The accompanying report contains results for the CBOD5 analysis of HBEL Sample 9100922001 that have been qualified with the FDEP 'J' qualifier code. The use of this code indicates that the result is estimated and may not be accurate. The dilutions that were run on this sample indicate that CBOD5 toxicity may have been experienced.



Eric Charney
Quality Assurance Manager

Southeast Florida
Fort Pierce, FL 34946
FDOH #96230 / E96080

Orlando Area
Deltona, FL 32726
FDOH #83486 / E83509

Jacksonville Area
Fernandina Beach, FL 32034
FDOH #82500 / E82417

Fort Myers Area
Lehigh Acres, FL 33936
FDOH #85512 / E85370

West Central Florida
Spring Hill, FL 34607
FDOH #84526 / E84418

 5600 U.S. 1 North
Fort Pierce, FL 34946

HARBOR BRANCH ENVIRONMENTAL LABORATORY

Phone: (561) 465-2400, Ext. 285 Fax: (561) 467-1584

Chain-of-Custody

USE BALL POINT PEN ONLY

FOOH # 82500/E82417

5390 First Coast Hwy., Suite 1
Fernandina Beach, FL 32034

Company: CCL

Method of Shipment:

☐ Standard Turn Around Time

Address:

Cooler #'s

☐ **Rush in Business Days**

FDOH # 83486/E83509

 255 Enterprise Road, Suite 1
Deltona, FL 32725

Phone: Fax:

Date _____ Time _____

For Lab Use Only

FOOH # 85512/E85370

 307 Coolidge Avenue
Lehigh Acres, FL 33936

Client Contact: _____

Temperature	Custody Seats	pH
Checked	Intact	Checked
Y N	Y N	() N

HPN # 7100922

FDOH # 84258/E84418

 2514 Osawaw Blvd.
Spring Hill, FL 34807

Project Name: Weekly Touch

Sampled By: St. Hill

Purchase Order #:

PRESERVATIVE

Preservation Key

H-Hydrochloric Acid	P-Phosphoric Acid
N-Nitric Acid	ST-Sodium Thiosulfate
S-Sulfuric Acid	U-Ungrouped
SH-Sodium Hydroxide	

ANALYSES REQUESTED

[illegible]

* Sample Type: G-Grab C-Composite O-Other

** Matrix: S-Solid SL-Sludge DW-Drinking Water GW-Ground Water SW-Surface Water WW-Wastewater

RELINQUISHED BY <i>[Signature]</i>	RELINQUISHED BY	RELINQUISHED BY
DATE/TIME <i>3/3/99 1305</i>	DATE/TIME	DATE/TIME
RECEIVED BY	RECEIVED BY	RECEIVED FOR HBEL CUSTODY BY <i>Michael P. [Signature]</i>
DATE/TIME	DATE/TIME	DATE/TIME <i>3/3/99 1305</i> <i>[Signature]</i>

Distribution: WHITE with REPORT; YELLOW for FILE; PINK to CLIENT; GOLD for RECEIVING; GREEN for SAMPLER

PAGE of

04/12/99 MON 14:21 FAX 1 561 467 1584

Н В Е Л

→→→ CITRUS COUNTY

004

Harbor Branch
Environmental LaboratoryForm 300
Revision 005
03/07/97

Field Data Sheet

Sampler(s) Pat Hilton Date 3/3/99 Sample Time 850 Field ID# _____
 Project Name Citrus County Landfill

Sample Type (circle one): WW SW GW DW ReagWtr. Sludge Sediment Soil Other
 Sample Site Identification leachate

Sampling Method: Grab Composite Monitoring Well: Baller Pump

Sampling Equipment: Bottles only

Site and Weather Conditions 73° Partly cloudy

Field Instrument Beginning Calibration

pH meter Yes No Buffer 4.0 _____ 7.0 6.9 10.0 9.7
 Conductivity meter Yes No Buffer 147 _____ 1414 1420 2900 _____
 Turbidity meter Yes No Buffer 0.5 _____ 5.0 _____ 20 _____
 DO meter Yes No Temp C° _____ Adjust _____ from _____

Field Filtered: Yes No

Duplicate: Yes No

Field Decontamination: Yes No

Parameter	Sample Containers	pH Check
Nutrient	Plastic - H ₂ SO ₄	<2
Metals	Plastic - HNO ₃	<2
Sulfide	Plastic - NaOH / Zn Acetate	>12
Cyanide	Plastic - NaOH / (NO Sulfide) / Ascorbic Acid	>12
Bacteriological	Glass - Thiosulfate (DW NO Chlorine Res.)	
Oil and Grease	Glass - HCl	<2
TRPH	Glass - HCl	<2
VOA	Glass - HCl	<2
SVOC	Glass - (DRW NO Chlorine Res.)	
Other Phenols	Glass - H ₃ PO ₄	<2
Other		

Well Diameter	Multiplier
1.5 inches	0.092
2.0 inches	0.163
4.0 inches	0.653
6.0 inches	1.469

Field Instrument Ending Calibration

pH meter Yes No Buffer 4.0 _____ 7.0 7.0 10.0 9.9
 Conductivity meter Yes No Buffer 147 _____ 1414 1410 2900 _____
 Turbidity meter Yes No Buffer 0.5 _____ 5.0 _____ 20 _____
 DO meter Yes No Temp C° _____ Adjust _____ from _____

General Site Information/Comments

Jim Brownwick on site while
samples collected He also collected a 913 sample

Analytical Field Data Sheet
030497

Project Name Citrus County (add fill)
Date 3/31/98

Page 02 of 2[illegible]

Client: Citrus County Central Landfill
Workorder ID Citrus County Landfill
Laboratory ID 9400314002
Sample ID Filtered cBOD sample

Sampled 04/07/99 09:00
Received 04/12/99 13:03
Reported 04/12/99 14:42

Page 2

Matrix Environmental Water

Wet Chemistry Analysis

Parameter	Method	Prep Date	Analyzed	Result	DL	Units
CBOD5	SM5210 B	N/A	04/07/99 16:00 MAB	<2.0	2.0	mg/L

Client: Citrus County Central Landfill
Workorder ID Citrus County Landfill
Laboratory ID 9400314002
Sample ID Filtered cBOD sample

Sampled 04/07/99 09:00
Received 04/12/99 13:03
Reported 04/12/99 14:42

Page 2

Matrix Environmental Water

Wet Chemistry Analysis

Parameter	Method	Prep Date	Analyzed	Result	DL	Units
CBOD5	SM5210 B	N/A	04/07/99 16:00 MAB	<2.0	2.0	mg/L

HARBOR BRANCH ENVIRONMENTAL LABORATORY

5600 US 1 North, Fort Pierce, FL 34946

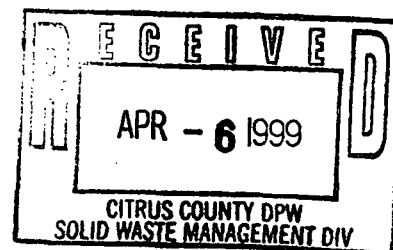
561-465-2400, Ext. 285

FDEP QAP 870174



**ANALYTICAL REPORT FOR:
CITRUS COUNTY CENTRAL LANDFILL
LEACHATE SAMPLE
GMS # 4009C00086**

**PRESENTED TO:
CATHY WINTER**



**ANALYSIS BY:
HARBOR BRANCH ENVIRONMENTAL LABORATORY
CompQAP #870174G
HRS #E96080/96230
HBEL SPRING HILL: E84418**

**PROJECT MANAGER:
DON HASH**

A handwritten signature of Don Hash, written in black ink over a horizontal line.

MARCH 31, 1999

HARBOR BRANCH ENVIRONMENTAL LABORATORY

5600 US 1 North, Fort Pierce, FL 34946

561-465-2400, Ext. 285

FDEP QAP 870174



Quality Control Summary

- **Laboratory Blank:** All analytes were below Reporting Detection Limits (RDL).
- **Laboratory Control Sample:** Recoveries for analytes were within laboratory accuracy limits.
- **Matrix Spike/Matrix Spike Duplicate:** Recoveries for analytes were within laboratory precision and accuracy limits.
- **Sample Duplicate:** Analysis data demonstrated acceptable reproducibility of laboratory processes.

HARBOR BRANCH ENVIRONMENTAL LABORATORY

5600 US 1 North, Fort Pierce, FL 34946

561-465-2400, Ext. 285

FDEP QAP 870174

**CITRUS COUNTY CENTRAL LANDFILL****PARAMETER MONITORING REPORT**

Rule 62-522.900 (11)

GMS # 4009C00086Sample Date/Lab ID: 03/24/99 9400277001

Test Site #: _____

Site Type: ☐ Background
☐ Site Boundary
☐ Intermediate
☐ Compliance
☒ Other: LeachateTest Site Name: LeachateSample Method: Grab, where applicable

Storet Code	Parameter Monitored	Analysis Method	Analysis Date	Analysis Result	Units	Practical Quant. Level	Sample Filtered /Unfiltered	Preservative Added
004000	pH, Field	150.1	03/24/99	7.2	S.U.	0.20	--	--
900201	Total Suspended Solids	SM2540 D	03/24/99	32	mg/L	1.0	U	None
000620	Nitrate-Nitrogen	300.0	03/25/99	7.0	mg/L	0.060	U	None
000620	Nitrite-Nitrogen	300.0	03/26/99	47	mg/L	0.044	U	None
000610	Ammonia-Nitrogen	350.1	03/25/99	21	mg/L	0.050	U	H ₂ SO ₄
000625	Total Kjeldahl Nitrogen	351.2	03/25/99	21	mg/L	0.20	U	H ₂ SO ₄
000600	Total Nitrogen	351.2	03/31/99	74	mg/L	0.20	U	H ₂ SO ₄
000665	Total Phosphorus	365.4	03/25/99	16	mg/L	0.50	U	H ₂ SO ₄
000340	COD	410.4	03/30/99	750	mg/L	5.0	U	H ₂ SO ₄
80082	CBOD5	SM5210 B	03/24/99	480	mg/L	2.0	U	None
031616	Fecal Coliform	SM9222 D	03/24/99	73	CFU/100mL	1.0	U	Na ₂ S ₂ O ₃

Field Data Sheet

Sampler(s) Pat Hilton Date 3/24/97 Sample Time 930 Field ID# _____
Project Name Citrus County Landfill

Sample Type (circle one): WW SW GW DW ReagWtr. Sludge Sediment Soil Other
Sample Site Identification leachate

Sampling Method: Grab Composite Monitoring Well: Bailer Pump
Sampling Equipment: Battler only
Site and Weather Conditions 74° sunny

Field Instrument Beginning Calibration

pH meter	<u>Yes</u>	No	Buffer	4.0	7.0	<u>6.9</u>	10.0	<u>9.8</u>
Conductivity meter	<u>Yes</u>	No	Buffer	147	1414	<u>1410</u>	12900	
Turbidity meter	Yes	No	Buffer	0.5	5.0		20	
DO meter	Yes	No	Temp C°		Adjust		from	

Field Filtered: Yes No Duplicate: Yes No Field Decontamination: Yes No

Parameter	Sample Containers	pH Check
Nutrient	Plastic - H ₂ SO ₄	<2
Metals	Plastic - HNO ₃	<2
Sulfide	Plastic - NaOH / Zn Acetate	>12
Cyanide	Plastic - NaOH / (NO Sulfide) / Ascorbic Acid	>12
Bacteriological	Glass - Thiosulfate (DW NO Chlorine Res.)	
Oil and Grease	Glass - HCl	<2
TRPH	Glass - HCl	<2
VOA	Glass - HCl	<2
SVOC	Glass - (DRW NO Chlorine Res.)	
Other Phenols	Glass - H ₂ PO ₄	<2
Other		

Well Diameter	Multiplier
1.5 inches	0.092
2.0 inches	0.163
4.0 inches	0.653
6.0 inches	1.469

Field Instrument Ending Calibration

pH meter	Yes	No	Buffer	4.0	7.0	<u>7.0</u>	10.0	<u>9.9</u>
Conductivity meter	Yes	No	Buffer	147	1414	<u>1410</u>	12900	
Turbidity meter	Yes	No	Buffer	0.5	5.0		20	
DO meter	Yes	No	Temp C°		Adjust		from	

General Site Information/Comments Jin Brunswick on site
while samples collected

Project Name e. l. r. s. county landfill
Date 3/24/99

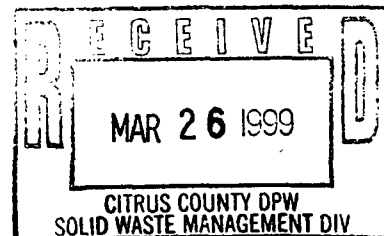
Page 2 of 2

[illegible]

HARBOR BRANCH ENVIRONMENTAL LABORATORY

5600 US 1 North, Fort Pierce, FL 34946
561-465-2400, Ext. 285

FDEP QAP 870174



**ANALYTICAL REPORT FOR:
CITRUS COUNTY CENTRAL LANDFILL
LEACHATE SAMPLE
GMS # 4009C00086**

**PRESENTED TO:
CATHY WINTER**

**ANALYSIS BY:
HARBOR BRANCH ENVIRONMENTAL LABORATORY
CompQAP #870174G
HRS #E96080/96230
HBEL DELTONA: E83509**

**PROJECT MANAGER:
DON HASH**

A handwritten signature of Don Hash, written in black ink, positioned above a horizontal line.

MARCH 24, 1999

HARBOR BRANCH ENVIRONMENTAL LABORATORY

5600 US 1 North, Fort Pierce, FL 34946
561-465-2400, Ext. 285

FDEP QAP 870174



Quality Control Summary

- **Laboratory Blank:** All analytes were below Reporting Detection Limits (RDL).
- **Laboratory Control Sample:** Recoveries for analytes were within laboratory accuracy limits.
- **Matrix Spike/Matrix Spike Duplicate:** Recoveries for analytes were within laboratory precision and accuracy limits.
- **Sample Duplicate:** Analysis data demonstrated acceptable reproducibility of laboratory processes.

CITRUS COUNTY CENTRAL LANDFILL**PARAMETER MONITORING REPORT**

Rule 62-522.900 (11)

GMS # 4009C00086Sample Date/Lab ID: 03/17/99 9100788001

Test Site #: _____

Test Site Name: Leachate

7479

Site Type: ☐ Background
☐ Site Boundary
☐ Intermediate
☐ Compliance
☒ Other: Leachate

Sample Method: Grab, where applicable

Storet Code	Parameter Monitored	Analysis Method	Analysis Date	Analysis Result	Units	Practical Quant. Level	Sample Filtered /Unfiltered	Preservative Added
004000	pH , Field	150.1	03/17/99	6.8	S.U.	0.20	--	--
900201	Total Suspended Solids	160.2	03/22/99	11	mg/L	2.0	U	None
000620	Nitrate-Nitrogen	300.0	03/18/99	<0.060	mg/L	0.060	U	None
000620	Nitrite-Nitrogen	300.0	03/18/99	<0.044	mg/L	0.044	U	None
000610	Ammonia-Nitrogen	350.1	03/19/99	10	mg/L	0.050	U	H ₂ SO ₄
000625	Total Kjeldahl Nitrogen	351.2	03/22/99	11	mg/L	0.20	U	H ₂ SO ₄
000600	Total Nitrogen	351.2	03/23/99	11	mg/L	0.20	U	H ₂ SO ₄
000665	Total Phosphorus	365.4	03/22/99	2.6	mg/L	0.50	U	H ₂ SO ₄
000340	COD	410.4	03/19/99	270	mg/L	5.0	U	H ₂ SO ₄
80082	CBOD5	SM5210 B	03/18/99	25	mg/L	2.0	U	None
031616	Fecal Coliform	SM9222 D	03/17/99	80	CFU/100mL	1.0	U	Na ₂ S ₂ O ₃

Field Data Sheet

Sampler(s) Pat H. Hay Date 3/17/99 Sample Time 850 Field ID#
Project Name C. + U.S. County landfill

Sample Type (circle one): WW SW GW DW ReagWtr. Sludge Sediment Soil Other
Sample Site Identification Leachate

Sampling Method: Grab Composite Monitoring Well: Bailer Pump
Sampling Equipment: Bottles only
Site and Weather Conditions 70° sunny

Field Instrument Beginning Calibration

pH meter	<u>Yes</u>	No	Buffer	4.0	7.0	<u>6.9</u>	10.0	<u>5.8</u>
Conductivity meter	<u>Yes</u>	No	Buffer	147	1414	<u>1400</u>	12900	
Turbidity meter	<u>Yes</u>	No	Buffer	0.5	5.0		20	
DO meter	<u>Yes</u>	No	Temp C°		Adjust		from	

Field Filtered: Yes No Duplicate: Yes No Field Decontamination: Yes No

Parameter	Sample Containers	pH Check
Nutrient	Plastic - H ₂ SO ₄	<2
Metals	Plastic - HNO ₃	<2
Sulfide	Plastic - NaOH / Zn Acetate	>12
Cyanide	Plastic - NaOH / (NO Sulfide) / Ascorbic Acid	>12
Bacteriological	Glass - Thiosulfate (DW NO Chlorine Res.)	
Oil and Grease	Glass - HCl	<2
TRPH	Glass - HCl	<2
VOA	Glass - HCl	<2
SVOC	Glass - (DRW NO Chlorine Res.)	
Other Phenols	Glass - H ₂ PO ₄	<2
Other		

Well Diameter	Multiplier
1.5 inches	0.092
2.0 inches	0.163
4.0 inches	0.653
6.0 inches	1.469

Field Instrument Ending Calibration

pH meter	Yes	No	Buffer	4.0	7.0	<u>7.0</u>	10.0	<u>9.9</u>
Conductivity meter	Yes	No	Buffer	147	1414	<u>1410</u>	12900	
Turbidity meter	Yes	No	Buffer	0.5	5.0		20	
DO meter	Yes	No	Temp C°		Adjust		from	

General Site Information/Comments Site - B-035116 on site while
sample collected. We also collected a pH sample

Project Name C-405 County Road Fill
Date 3/17/92

Page 2 of 2

[illegible]

Fort Pierce, FL 34946

HARBOR BRANCH ENVIRONMENTAL LABORATORY

Phone: (561) 465-2400, Ext. 285 Fax: (561) 467-1584

Chain-of-Custody

USE BALL POINT PEN ONLY

FDOH # 82500/E82417

5390 First Coast Hwy., Suite 1

Fernandina Beach, FL 32034

FDOH # 83486/E83509

255 Enterprise Road, Suite 1

Deltona, FL 32725

FDOH # 85512/E85370

307 Coolidge Avenue

Lehigh Acres, FL 33936

FDOH # 84256/E84418

2514 Osawaw Blvd.

Spring Hill, FL 34607

Company: Cc

Address:

Phone: _____ Fax: _____

Client Contact:

Project Name: Weekly, leachte

Sampled By: Rob 12.14.12

Purchase Order #:

Method of Shipment:

Cooler #'s

Date _____ Time _____

For Lab Use Only

Temperature

Checked

Y N

Custody Seals

Intact

Y

pH

Checked

Y N

HPN # 9100788

[illegible]

* Sample Type: G-Grab C-Composite O-Other

** Matrix: S-Solid SL-Sludge DW-Drinking Water GW-Ground Water SW-Surface Water WW-Wastewater

RELINQUISHED BY	RELINQUISHED BY	RELINQUISHED BY
DATE/TIME	DATE/TIME	DATE/TIME
RECEIVED BY	RECEIVED BY	RECEIVED FOR HBEL CUSTODY BY
DATE/TIME	DATE/TIME	DATE/TIME

· Distribution: WHITE with REPORT: YELLOW for FILE: PINK to CLIENT: GOLD for RECEIVING: GREEN for SAMPLER

PAGE of

HARBOR BRANCH ENVIRONMENTAL LABORATORY

5600 US 1 North, Fort Pierce, FL 34946

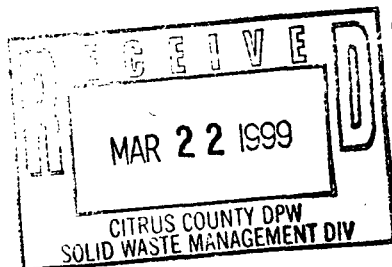
561-465-2400, Ext. 285

FDEP QAP 870174



**ANALYTICAL REPORT FOR:
CITRUS COUNTY CENTRAL LANDFILL
LEACHATE SAMPLE**

GMS # 4009C00086



**PRESENTED TO:
CATHY WINTER**

**ANALYSIS BY:
HARBOR BRANCH ENVIRONMENTAL LABORATORY**

CompQAP #870174G

HRS #E96080/96230

HBEL SPRING HILL: E84418

**PROJECT MANAGER:
DON HASH**

A handwritten signature of Don Hash, written in black ink, positioned above a horizontal line.

**LABORATORY DIRECTOR:
N. MYRON GUNSALUS, JR.**

A handwritten signature of N. Myron Gunsalus, Jr., written in black ink, positioned above a horizontal line.

MARCH 17, 1999

HARBOR BRANCH ENVIRONMENTAL LABORATORY

5600 US 1 North, Fort Pierce, FL 34946
561-465-2400, Ext. 285

FDEP QAP 870174



Quality Control Summary

- **Laboratory Blank:** All analytes were below Reporting Detection Limits (RDL).
- **Laboratory Control Sample:** Recoveries for analytes were within laboratory accuracy limits.
- **Matrix Spike/Matrix Spike Duplicate:** Recoveries for analytes were within laboratory precision and accuracy limits.
- **Sample Duplicate:** Analysis data demonstrated acceptable reproducibility of laboratory processes.

The attached report contains data that has been annotated with a "J" qualifier. This qualifier is used to indicate the method QC was not met during the analysis for cBOD and that the result reported is estimated.

HARBOR BRANCH ENVIRONMENTAL LABORATORY

5600 US 1 North, Fort Pierce, FL 34946

561-465-2400, Ext. 285

FDEP QAP 870174

**CITRUS COUNTY CENTRAL LANDFILL****PARAMETER MONITORING REPORT**

Rule 62-522.900 (11)

GMS # 4009C00086Sample Date/Lab ID: 03/10/99 9400234001

Test Site #: _____

Test Site Name: Leachate

Site Type: ☐ Background
☐ Site Boundary
☐ Intermediate
☐ Compliance
☒ Other: Leachate

Sample Method: Grab, where applicable

Storet Code	Parameter Monitored	Analysis Method	Analysis Date	Analysis Result	Units	Practical Quant. Level	Sample Filtered /Unfiltered	Preservative Added
004000	pH, Field	150.1	03/10/99	6.7	S.U.	0.20	--	--
900201	Total Suspended Solids	SM2540 D	03/10/99	1.5	mg/L	1.0	U	None
000620	Nitrate-Nitrogen	300.0	03/11/99	<0.060	mg/L	0.060	U	None
000620	Nitrite-Nitrogen	300.0	03/11/99	< 0.044	mg/L	0.044	U	None
000610	Ammonia-Nitrogen	350.1	03/15/99	4.2	mg/L	0.050	U	H ₂ SO ₄
000625	Total Kjeldahl Nitrogen	351.2	03/16/99	4.7	mg/L	0.20	U	H ₂ SO ₄
000600	Total Nitrogen	351.2	03/17/99	4.8	mg/L	0.20	U	H ₂ SO ₄
000665	Total Phosphorus	365.4	03/15/99	0.89	mg/L	0.50	U	H ₂ SO ₄
000340	COD	410.4	03/15/99	120	mg/L	5.0	U	H ₂ SO ₄
80082	CBOD ₅ ¹	SM5210 B	03/10/99	61 ¹	mg/L	2.0	U	None
031616	Fecal Coliform	SM9222 D	03/10/99	17	CFU/100mL	1.0	U	Na ₂ S ₂ O ₃

Field Data Sheet

Sampler(s) Pat H. H. Date 3/10/98 Sample Time 905 Field ID# _____
Project Name Citrus County Landfill

Sample Type (circle one): WW SW GW DW ReagWtr. Sludge Sediment Soil Other
Sample Site Identification Leachate

Sampling Method: Grab Composite Monitoring Well: Bailer Pump
Sampling Equipment: Bottles only
Site and Weather Conditions 73° sunny

Field Instrument Beginning Calibration

pH meter	<u>Yes</u>	No	Buffer	4.0	_____	7.0	<u>6.8</u>	10.0	<u>9.9</u>
Conductivity meter	<u>Yes</u>	No	Buffer	147	_____	1414	<u>1400</u>	12900	_____
Turbidity meter	Yes	No	Buffer	0.5	_____	5.0	_____	20	_____
DO meter	Yes	No	Temp C°	_____	_____	Adjust	_____	from	_____

Field Filtered: Yes No Duplicate: Yes No Field Decontamination: Yes No

Parameter	Sample Containers	pH Check
Nutrient	Plastic - H ₂ SO ₄	<2
Metals	Plastic - HNO ₃	<2
Sulfide	Plastic - NaOH / Zn Acetate	>12
Cyanide	Plastic - NaOH / (NO Sulfide) / Ascorbic Acid	>12
Bacteriological	Glass - Thiosulfate (DW NO Chlorine Res.)	
Oil and Grease	Glass - HCl	<2
TRPH	Glass - HCl	<2
VOA	Glass - HCl	<2
SVOC	Glass - (DRW NO Chlorine Res.)	
Other Phenols	Glass - H ₂ PO ₄	<2
Other		

Well Diameter	Multiplier
1.5 inches	0.092
2.0 inches	0.163
4.0 inches	0.653
6.0 inches	1.469

Field Instrument Ending Calibration

pH meter	<u>Yes</u>	No	Buffer	4.0	_____	7.0	<u>7.0</u>	10.0	<u>9.9</u>
Conductivity meter	<u>Yes</u>	No	Buffer	147	_____	1414	<u>1410</u>	12900	_____
Turbidity meter	Yes	No	Buffer	0.5	_____	5.0	_____	20	_____
DO meter	Yes	No	Temp C°	_____	_____	Adjust	_____	from	_____

General Site Information/Comments Jim Brunswick on site while
samples collected. He also collected a pH sample

Project Name Citrus County (and fill)
Date 3/18/55

Page 2 of 2

[illegible]

Month FEBRUARY Year 99

Lead Operator: This is to certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief this information is true, complete, and accurate.

$$2 \mid 5 \mid 99$$

(352) 746-5000

Fort Pierce, FL 34946

Phone: (561) 465-2400, Ext. 285 Fax: (561) 467-1584

Chain-of-Custody

USE BALL POINT PEN ONLY

Fernandina Beach, FL 32034

Company: CCI

Method of Shipment: *Fed Ex*

☐ **Standard Turn Around Time**

Deltona, FL 32725

Address:

Cooler #'s

☐ **Rush in Business Days**

Lehigh Acres, FL 33936

Phone: _____ Fax: _____

Date 3-10-99 Time

For Lab Use Only

Temperature

Custody Seals

pH

Checked

Intact

Checked

Y N

Y N

Y N

HPN # 9400234

Client Contact:

Project Name: Weekly Reports

Sampled By: _____

Spring Hill, FL 34607

Purchase Order #:

** Matrix: S-Solid SL-Sludge DW-Drinking Water GW-Ground Water SW-Surface Water WW-Wastewater

Distribution: WHITE with REPORT: YELLOW for FILE: PINK to CLIENT: GOLD for RECEIVING: GREEN for SAMPLER

PAGE of

Domestic Wastewater Treatment Plant Monthly Operating Report

(1) Month JANUARY Year 99

(2) Plant's DEP Identification Number 4009C00086

(3) Plant Name Central Landfill Leachate Plant

(4) Plant Address SR 44 3 Miles East Lecanto

(5) City Lecanto

(6) County Citrus

(7) Phone Number (352) 746-5000

(8) Permit Number S-009-274381

(9) Plant Type 1-C

(10) Test Site Identification Number N/A

(11) Fecal Coliform Sample Method
X Membrane filter Most Probable Number

(12) Type Of Effluent Disposal or Reclaimed Water Use
N/A

(13) Limited Wet Weather Discharge Activated
Yes No X Not Applicable

(14) Cumulative Days Wet Weather Discharge N/A

[illegible]

(15) Plant Staffing			
Day Shift Operator Class	C	Cert. No.	8197
Evening Shift Operator Class		Cert. No.	N/A
Night Shift Operator Class		Cert. No.	N/A

Lead Operator James A. Brunswick

Signature: [Signature] Cert. No. _____

C8197

Month JANUARY Year 99

Lead Operator: This is to certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief this information is true, complete, and accurate.

2/6/99

James Brunswick

(352) 746-5000

CITRUS COUNTY CENTRAL LANDFILL

	MCL		SAMPLE
NOTE: MCL OR GC* UG/L	FOR		DATE:
UNLESS MG/L INDICATED	REFERENCE		1/21/99
APPENDIX I:			
INORGANIC CONSTITUENTS:			
ANTIMONY	6	<	5.0
ARSENIC	50		63
BARIUM	2000		190
BERYLLIUM	4	<	1.0
CADMIUM	5	<	1.0
CHROMIUM	100		25
COBALT			9.8
COPPER	1000		26.00
LEAD	15		5.9
NICKEL	100		52
SELENIUM	50	<	5.0
SILVER	100	<	1.0
THALLIUM	2	<	2.0
VANADIUM	49*		18
ZINC	5000	<	100
APPENDIX I ORGANIC CONSTITUENTS			
ACETONE	700*	<	10
ACRYLONITRILE	8*	<	5.0
BENZENE	1		2.0
BROMOCHLOROMETHANE		<	1.0
BROMODICHLOROMETHANE	0.6*	<	1.0
BROMOFORM (TRIBROMOMETHANE)	4*	<	2.0
CARBON DISULFIDE	700*	<	1.0
CARBON TETRACHLORIDE	3	<	1.0
CHLOROBENZENE			1.6
CHLOROETHANE (ETHYL CHLORIDE)	140*	<	1.0
CHLOROFORM (TRICHLOROMETHANE)	6*	<	1.0
DIBROMOCHLOROMETHANE (CHLORODIBROMOMETHANE)	1*	<	1.0
1,2-DIBROMO-3-CHLOROPROPANE / DIBROMOCHLOROPROPANE/ DBCP	0.2	<	0.018
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) ; EDB	0.02	<	0.018
O-DICHLOROBENZENE (1,2-DICHLOROBENZENE)	600	<	2.0
P-DICHLOROBENZENE (1,4-DICHLOROBENZENE)	75		5.7
TRANS-1,4-DICHLORO-2-BUTENE		<	1.0
1,1-DICHLOROETHANE / ETHYLENE CHLORIDE	700*	<	1.0
1,2-DICHLOROETHANE / ETHYLENE DICHLORIDE	3	<	2.0
1,1-DICHLOROETHYLENE / 1,1-DICHLOROETHANE / VINYLIDENE CHLORIDE	7	<	2.0
CIS-1,2-DICHLOROETHYLENE (CIS-1, 2-DICHLOROETHENE)	70	<	2.0
TRANS-1,2-DICHLOROETHYLENE / TRANS-1,2-DICHLOROETHENE	100	<	1.0
1,2-DICHLOROPROPANE (PROPYLENE DICHLORIDE)	5	<	1.0
CIS-1, 3-DICHLOROPROPENE		<	1.0
TRANS-1,3-DICHLOROPROPENE		<	1.0
ETHYLBENZENE	700	<	7.0

CITRUS COUNTY CENTRAL LANDFILL

	MCL		SAMPLE
NOTE: MCL OR GC* UG/L UNLESS	FOR		DATE:
MCG/L INDICATED	REFERENCE		1/21/99
APPENDIX I			
ORGANIC CONSTITUENTS CONTINUED:			
2-HEXANONE (METHYL BUTYL KETONE)		<	1.0
METHYL BROMIDE / BROMOMETHANE	10*	<	1.0
METHYL CHLORIDE / CHLOROMETHANE	2.7*	<	1.0
METHYLENE BROMIDE / DIBROMOMETHANE		<	2.0
METHYLENE CHLORIDE / DICHLOROMETHANE	5	<	5.0
METHYL ETHYL KETONE / 2-BUTANONE / MEK	4200*	<	1.0
METHYL IODIDE / IODOMETHANE		<	2.0
4-METHYL-2-PENTANONE / METHYL ISOBUTYL KETONE	350*	<	1.0
STYRENE	100	<	1.0
1,1,1,2-TETRACHLOROETHANE	1*	<	1.0
1,1,2,2-TETRACHLOROETHANE	0.2*	<	2.0
TETRACHLOROETHYLENE /TETRACHLOROETHENE /PERCHLOROETHYLEN	3	<	1.0
TOLUENE	1000		11
1,1,1-TRICHLOROETHANE / METHYLCHLOROFORM	200	<	2.0
1,1,2-TRICHLOROETHANE	5	<	1.0
TRICHLOROETHYLENE / TRICHLOROETHENE TCE	3	<	1.0
TRICHLOROFLUOROMETHANE (CFC-11)	2100*	<	1.0
1,2,3-TRICHLOROPROPANE	42*	<	2.0
VINYL ACETATE	250*	<	2.0
VINYL CHLORIDE	1	<	1.0
XYLENES	10000		31
FIELD AND LABORATORY PARAMETERS:			
SPECIFIC CONDUCTIVITY umhos/cm			4.3
PH	6.5-8.5		8.8
DISSOLVED OXYGEN			4.1
COLORS, SHEENS (BY OBSERVATION) None noted			xxxxxx
TOTAL AMMONIA-N mg/l			280
BICARBONATE mg/l CaCO3			1900
CHLORIDES mg/l	250		670
IRON	300		40,000
MERCURY	2	<	0.50
NITRATE mg/l	10		0.75
SODIUM	160,000		600,000
TOTAL DISSOLVED SOLIDS mg/l	500		2200
cjw			

HARBOR BRANCH ENVIRONMENTAL LABORATORY

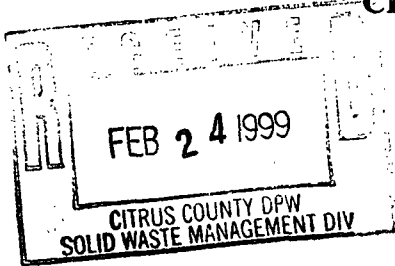
5600 US 1 North, Fort Pierce, FL 34946

561-465-2400, Ext. 285

FDEP QAP 870174



**ANALYTICAL REPORT FOR:
CITRUS COUNTY CENTRAL LANDFILL
SEMI ANNUAL LEACHATE
GMS # 4009C00086**



**PRESENTED TO:
CATHY WINTER**

**ANALYSIS BY:
HARBOR BRANCH ENVIRONMENTAL LABORATORY
CompQAP #870174G
HRS #E96080/96230**

**PROJECT MANAGER:
DON HASH**

A handwritten signature of Don Hash, the Project Manager, written in black ink.

**LABORATORY DIRECTOR:
N. MYRON GUNSALUS, JR.**

A handwritten signature of N. Myron Gunsalus, Jr., the Laboratory Director, written in black ink.

FEBRUARY 15, 1999

SUMMARY OF EXCEEDENCES

Referencing

Florida Ground Water Guidance Concentrations, June 1994

for

**Harbor Branch Environmental Laboratory
HPN #: 9000697**

1,1,2,2 – Tetrachloroethane RL, 2, is above the GCL of 0.2 ug/L.

Bromodichloromethane RL, 1, is above the GCL of 0.6 ug/L.

Leachate Influent: pH out of range, Total Dissolved Solids, Chloride, Iron and Benzene exceeds GCLs.

HARBOR BRANCH ENVIRONMENTAL LABORATORY

5600 US 1 North, Fort Pierce, FL 34946

561-465-2400, Ext. 285

FDEP QAP 870174



Quality Control Summary

- **Laboratory Blank:** All analytes were below Reporting Detection Limits (RDL).
- **Laboratory Control Sample:** Recoveries for analytes were within laboratory accuracy limits.
- **Matrix Spike/Matrix Spike Duplicate:** Recoveries for analytes were within laboratory precision and accuracy limits.
- **Sample Duplicate:** Analysis data demonstrated acceptable reproducibility of laboratory processes.

Specific Conductance, Dissolved Oxygen, and pH measurements were made in the field at the time of sampling.

SW-846 Method 6010:

Due to high analyte concentrations in the sample chosen to spike, the matrix spike and matrix spike duplicate samples produced accuracy results for Iron that did not meet established laboratory acceptance limits. Precision was acceptable between these samples for all analytes tested. Accuracy was established in the laboratory control sample for all analytes as well.

SW-846 Method 8011:

As a result of laboratory spiking errors, the recovery of 1,2-Dibromoethane was higher than established acceptance criteria in the quality control samples. Precision was acceptable, confirming a consistent spiking error. This analyte was not detected in any of the samples. All other quality control criteria were met.

A handwritten signature in black ink, appearing to read "Eric Charest".

Eric Charest

Quality Assurance Manager

HARBOR BRANCH ENVIRONMENTAL LABORATORY

5600 US 1 North, Fort Pierce, FL 34946

561-465-2400, Ext. 285

FDEP QAP 870174

**PART III ANALYTICAL RESULTS**

Facility GMS# : 4009C00086

Test Site ID# : N/A

HBEL Sample ID: 9000697001

Sampling Date/Time: 01/21/99 14:30

Report Period: Quarterly

Well Purged (Y/N) : -

Well Name: Leachate Influent

Classification of Ground Water: -

Ground Water Elevation (NGVD) :

or (MSL):

Well Type: ☒ Background☒ Intermediate☒ Compliance☒ Other

Storet Code	Parameter Monitored	Sampling Method	Field Filtered Y/N	Analysis Method	Analysis Date/Time	Analysis Result/Units	Detection Limits/Units
000081	Color & Sheens	G	N	-	01/21/99 14:30	None -	- -
000094	Specific Conductance	G	N	EPA 120.1	01/21/99 14:30	4.3 umhos/cm	2.0 umhos/cm
004000	pH	G	N	EPA 150.1	01/21/99 14:30	8.8 SU	0.20 SU
070304	Total Dissolved Solids	G	N	EPA 160.1	01/26/99 14:10	2200 mg/L	40 mg/L
000940	Chloride	G	N	EPA 300.0	01/25/99 22:54	670 mg/L	7.5 mg/L
000620	Nitrate as N	G	N	EPA 300.0	01/22/99 14:15	0.75 mg/L	0.060 mg/L
000610	Ammonia	G	N	EPA 350.1	01/24/99 11:44	280 mg/L	0.050 mg/L
000300	Dissolved Oxygen	G	N	EPA 360.1	01/21/99 14:30	4.1 mg/L	0.50 mg/L
000440	Alkalinity, Bicarbonate	G	N	SM2320 B	01/26/99 16:15	1900 mg/L CaCO3	2.0 mg/L CaCO3
001097	Antimony	G	N	SW-846 6010	02/03/99 22:19	<5.0 ug/L	5.0 ug/L
001002	Arsenic	G	N	SW-846 6010	02/03/99 22:19	63 ug/L	5.0 ug/L
001007	Barium	G	N	SW-846 6010	02/03/99 22:19	190 ug/L	10 ug/L
001012	Beryllium	G	N	SW-846 6010	02/03/99 22:19	<1.0 ug/L	1.0 ug/L
001027	Cadmium	G	N	SW-846 6010	02/03/99 22:19	<1.0 ug/L	1.0 ug/L
001034	Chromium	G	N	SW-846 6010	02/03/99 22:19	25 ug/L	2.0 ug/L
001037	Cobalt	G	N	SW-846 6010	02/03/99 22:19	9.8 ug/L	2.0 ug/L
001042	Copper	G	N	SW-846 6010	02/03/99 22:19	26 ug/L	2.0 ug/L
001045	Iron	G	N	SW-846 6010	02/03/99 22:19	40000 ug/L	40 ug/L
001051	Lead	G	N	SW-846 6010	02/03/99 22:19	5.9 ug/L	3.0 ug/L
001067	Nickel	G	N	SW-846 6010	02/03/99 22:19	52 ug/L	5.0 ug/L
001147	Selenium	G	N	SW-846 6010	02/03/99 22:19	<5.0 ug/L	5.0 ug/L
001077	Silver	G	N	SW-846 6010	02/03/99 22:19	<1.0 ug/L	1.0 ug/L
000929	Sodium	G	N	SW-846 6010	02/03/99 22:19	600000 ug/L	1000 ug/L
001087	Vanadium	G	N	SW-846 6010	02/03/99 22:19	18 ug/L	4.0 ug/L

HARBOR BRANCH ENVIRONMENTAL LABORATORY

5600 US 1 North, Fort Pierce, FL 34946

561-465-2400, Ext. 285

FDEP QAP 870174

**PART III ANALYTICAL RESULTS**

Facility GMS# : 4009C00086

Test Site ID# : N/A

HBEL Sample ID: 9000697001

Sampling Date/Time: 01/21/99 14:30

Report Period: Quarterly

Well Purged (Y/N) : _

Well Name: Leachate Influent

Classification of Ground Water: _

Ground Water Elevation (NGVD) : _

or (MSL): _

Well Type: ☒ Background☐ Intermediate☐ Compliance☐ Other

Storet Code	Parameter Monitored	Sampling Method	Field Filtered Y/N	Analysis Method	Analysis Date/Time	Analysis Result/Units	Detection Limits/Units
001092	Zinc	G	N	SW-846 6010	02/03/99 22:19	<100 ug/L	100 ug/L
007900	Mercury	G	N	SW-846 7470	02/08/99 15:58	<0.50 ug/L	0.50 ug/L
001059	Thallium	G	N	SW-846 7841	02/03/99 18:58	<2.0 ug/L	2.0 ug/L
038437	1,2-Dibromo-3-chloropropane	G	N	SW-846 8011	01/28/99 12:43	<0.018 ug/L	0.018 ug/L
077651	1,2-Dibromoethane	G	N	SW-846 8011	01/28/99 12:43	<0.018 ug/L	0.018 ug/L
077562	1,1,1,2-Tetrachloroethane	G	N	SW-846 8260	02/01/99 18:26	<1.0 ug/L	1.0 ug/L
034506	1,1,1-Trichloroethane	G	N	SW-846 8260	02/01/99 18:26	<2.0 ug/L	2.0 ug/L
034516	1,1,2,2-Tetrachloroethane	G	N	SW-846 8260	02/01/99 18:26	<2.0 ug/L	2.0 ug/L
034511	1,1,2-Trichloroethane	G	N	SW-846 8260	02/01/99 18:26	<1.0 ug/L	1.0 ug/L
034496	1,1-Dichloroethane	G	N	SW-846 8260	02/01/99 18:26	<2.0 ug/L	2.0 ug/L
034501	1,1-Dichloroethene	G	N	SW-846 8260	02/01/99 18:26	<1.0 ug/L	1.0 ug/L
077443	1,2,3-Trichloropropane	G	N	SW-846 8260	02/01/99 18:26	<2.0 ug/L	2.0 ug/L
034536	1,2-Dichlorobenzene	G	N	SW-846 8260	02/01/99 18:26	<2.0 ug/L	2.0 ug/L
034531	1,2-Dichloroethane	G	N	SW-846 8260	02/01/99 18:26	<2.0 ug/L	2.0 ug/L
034541	1,2-Dichloropropane	G	N	SW-846 8260	02/01/99 18:26	<1.0 ug/L	1.0 ug/L
034531	1,4 Dioxane	G	N	SW-846 8260	02/01/99 18:26	<100 ug/L	100 ug/L
034571	1,4-Dichlorobenzene	G	N	SW-846 8260	02/01/99 18:26	5.7 ug/L	2.0 ug/L
081595	2-Butanone	G	N	SW-846 8260	02/01/99 18:26	<1.0 ug/L	1.0 ug/L
077103	2-Hexanone	G	N	SW-846 8260	02/01/99 18:26	<1.0 ug/L	1.0 ug/L
081596	4-Methyl-2-pentanone	G	N	SW-846 8260	02/01/99 18:26	<1.0 ug/L	1.0 ug/L
081552	Acetone	G	N	SW-846 8260	02/01/99 18:26	<10 ug/L	10 ug/L
034215	Acrylonitrile	G	N	SW-846 8260	02/01/99 18:26	<5.0 ug/L	5.0 ug/L
034030	Benzene	G	N	SW-846 8260	02/01/99 18:26	2.0 ug/L	1.0 ug/L
077297	Bromochloromethane	G	N	SW-846 8260	02/01/99 18:26	<1.0 ug/L	1.0 ug/L

Southeast Florida
Fort Pierce, FL 34946
FDOH #96230 / E96080

Orlando Area
Deltona, FL 32725
FDOH #83486 / E83509

Jacksonville Area
Fernandina Beach, FL 32034
FDOH #82500 / E82417

Fort Myers Area
Lehigh Acres, FL 33936
FDOH #85512 / E85370

West Central Florida
Spring Hill, FL 34607
FDOH #84526 / E84418

HARBOR BRANCH ENVIRONMENTAL LABORATORY

5600 US 1 North, Fort Pierce, FL 34946

561-465-2400, Ext. 285

PART III ANALYTICAL RESULTS

FDEP QAP 870174



Facility GMS# : 4009C00086

Test Site ID# : N/A

HBEL Sample ID: 9000697001

Sampling Date/Time: 01/21/99 14:30

Report Period: Quarterly

Well Purged (Y/N) : --

Well Name: Leachate Influent

Classification of Ground Water: --

Ground Water Elevation (NGVD) :

or (MSL):

- Well Type:
- ☒ Background
 - ☒ Intermediate
 - ☒ Compliance
 - ☒ Other

Storet Code	Parameter Monitored	Sampling Method	Field Filtered Y/N	Analysis Method	Analysis Date/Time	Analysis Result/Units		Detection Limits/Units	
032101	Bromodichloromethane	G	N	SW-846 8260	02/01/99 18:26	<1.0	ug/L	1.0	ug/L
032104	Bromoform	G	N	SW-846 8260	02/01/99 18:26	<2.0	ug/L	2.0	ug/L
034413	Bromomethane	G	N	SW-846 8260	02/01/99 18:26	<1.0	ug/L	1.0	ug/L
077041	Carbon disulfide	G	N	SW-846 8260	02/01/99 18:26	<1.0	ug/L	1.0	ug/L
032102	Carbon tetrachloride	G	N	SW-846 8260	02/01/99 18:26	<1.0	ug/L	1.0	ug/L
034301	Chlorobenzene	G	N	SW-846 8260	02/01/99 18:26	1.6	ug/L	1.0	ug/L
034311	Chloroethane	G	N	SW-846 8260	02/01/99 18:26	<1.0	ug/L	1.0	ug/L
032106	Chloroform	G	N	SW-846 8260	02/01/99 18:26	<1.0	ug/L	1.0	ug/L
034418	Chloromethane	G	N	SW-846 8260	02/01/99 18:26	<1.0	ug/L	1.0	ug/L
077093	cis-1,2-Dichloroethene	G	N	SW-846 8260	02/01/99 18:26	<2.0	ug/L	2.0	ug/L
034704	cis-1,3-Dichloropropene	G	N	SW-846 8260	02/01/99 18:26	<1.0	ug/L	1.0	ug/L
081521	Dibromochloromethane	G	N	SW-846 8260	02/01/99 18:26	<1.0	ug/L	1.0	ug/L
081522	Dibromomethane	G	N	SW-846 8260	02/01/99 18:26	<2.0	ug/L	2.0	ug/L
034371	Ethylbenzene	G	N	SW-846 8260	02/01/99 18:26	7.0	ug/L	1.0	ug/L
077424	Methyl iodide	G	N	SW-846 8260	02/01/99 18:26	<2.0	ug/L	2.0	ug/L
034423	Methylene chloride	G	N	SW-846 8260	02/01/99 18:26	<5.0	ug/L	5.0	ug/L
077128	Styrene	G	N	SW-846 8260	02/01/99 18:26	<1.0	ug/L	1.0	ug/L
034475	Tetrachloroethene	G	N	SW-846 8260	02/01/99 18:26	<1.0	ug/L	1.0	ug/L
034010	Toluene	G	N	SW-846 8260	02/01/99 18:26	11	ug/L	1.0	ug/L
081551	Total Xylenes	G	N	SW-846 8260	02/01/99 18:26	31	ug/L	2.0	ug/L
034546	trans-1,2-Dichloroethene	G	N	SW-846 8260	02/01/99 18:26	<1.0	ug/L	1.0	ug/L
034699	trans-1,3-Dichloropropene	G	N	SW-846 8260	02/01/99 18:26	<1.0	ug/L	1.0	ug/L
073547	trans-1,4-Dichloro-2-butene	G	N	SW-846 8260	02/01/99 18:26	<1.0	ug/L	1.0	ug/L
039180	Trichloroethene	G	N	SW-846 8260	02/01/99 18:26	<1.0	ug/L	1.0	ug/L

Southeast Florida
Fort Pierce, FL 34946
FDOH #96230 / E96080

Orlando Area
Deltona, FL 32725
FDOH #83486 / E83509

Jacksonville Area
Fernandina Beach, FL 32034
FDOH #82500 / E82417

Fort Myers Area
Lehigh Acres, FL 33936
FDOH #85512 / E85370

West Central Florida
Spring Hill, FL 34607
FDOH #84526 / E84418

HARBOR BRANCH ENVIRONMENTAL LABORATORY

5600 US 1 North, Fort Pierce, FL 34946

561-465-2400, Ext. 285

FDEP QAP 870174



PART III ANALYTICAL RESULTS

Facility GMS# : 4009C00086

Test Site ID# : N/A

Well Name: Leachate Influent

Classification of Ground Water: --

Ground Water Elevation (NGVD) :

or (MSL):

HBEL Sample ID: 9000697001

Sampling Date/Time: 01/21/99 14:30

Report Period: Quarterly

Well Purged (Y/N) : --

Well Type: ☒ Background

☐ Intermediate

☐ Compliance

☐ Other

Storet Code	Parameter Monitored	Sampling Method	Field Filtered Y/N	Analysis Method	Analysis Date/Time	Analysis Result/Units	Detection Limits/Units
034488	Trichlorofluoromethane	G	N	SW-846 8260	02/01/99 18:26	<1.0 ug/L	1.0 ug/L
077057	Vinyl acetate	G	N	SW-846 8260	02/01/99 18:26	<2.0 ug/L	2.0 ug/L
039175	Vinyl chloride	G	N	SW-846 8260	02/01/99 18:26	<1.0 ug/L	1.0 ug/L

5600 U.S. 1 North
Fort Pierce, FL 34946

Phone: (561) 465-2400, Ext. 285 Fax: (561) 467-1584

USE BALL POINT PEN ONLY

**5390 First Coast Hwy., Suite 1
Fernandina Beach, FL 32034**

Company:

Address:

Method of Shipment:

Cooler #'s

Date 1/21/99 Time _____

255 Enterprise Road, Suite 1
Deltona, FL 32725

Phone:

Fax:

307 Coolidge Avenue
Lehigh Acres, FL 33936

Client Contact:

Project Name:

Sampled By:

2514 Osawaw Blvd.
Spring Hill, FL 34607

Purchase Order #:

For Lab Use Only

Temperature

Custody Seals

pH

Checked

Intact

Checked

Y N

Y N

Y N

HPN # 2000697

PRESERVATIVE

Preservation Key

H - Hydrochloric Acid

P - Phosphoric Acid

N - Nitric Acid

ST - Sodium Thiosulfate

S - Sulfuric Acid

U - Unreserved

SH - Sodium Hydroxide

COMMENTS

[illegible]

* Sample Type: G-Grab C-Composite O-Other

** Matrix: S-Solid SL-Sludge DW-Drinking Water GW-Ground Water SW-Surface Water WW-Wastewater

RELINQUISHED BY <i>D. Duenstberger</i>	RELINQUISHED BY	RELINQUISHED BY
DATE/TIME <i>1/21/99 16:00</i>	DATE/TIME	DATE/TIME
RECEIVED BY	RECEIVED BY	RECEIVED FOR HBEL CUSTODY BY <i>ABN/ndk</i>
DATE/TIME	DATE/TIME	DATE/TIME <i>1-22-99 1020</i>

Distribution: WHITE with REPORT; YELLOW for FILE; PINK to CLIENT; GOLD for RECEIVING; GREEN for SAMPLER

PAGE 1 of 1

CITRUS COUNTY CENTRAL LANDFILL

	MCL	BY	SAMPLE	
NOTE: MCL OR GC* UG/L UNLESS	FL GW GC	PERMIT	DATE:	
MG/L INDICATED	DOC 1994	SO09-		
	FOR INFO	274381	<	1/20/99
QUARTERLY PARAMETERS:				
CHLORIDE MG/L	250	ZOD		950
SODIUM	160,000	ZOD		530,000
TOTAL DISSOLVED SOLIDS MG/L	500	ZOD		1,900
ARSENIC	50	N/A		15
BARIUM	2,000	N/A		10
CADMIUM	5	N/A	<	1.0
CHROMIUM	100	N/A	<	2.0
IRON	300	N/A		81
MERCURY	2	N/A	<	0.5
LEAD	15	N/A	<	3.0
SELENIUM	50	N/A	<	5.0
SILVER	100	N/A	<	1.0
TOTAL TRIHALOMETHANES	100	N/A		129.2
(BROMODICHLOROMETHANE)				
(DIBROMOCHLOROMETHANE)				
(TRIBROMOMETHANE-BROMOFORM)				
(TRICHLOROMETHANE-CHLOROFORM)				
BENZENE	1	N/A	<	1.0
TOLUENE	1,000	N/A	<	1.0
ETHYLBENZENE	700	N/A	<	1.0
TOTAL XYLENES	10,000	N/A		2.2
ETHYLENE DIBROMIDE (EDB)	0.02	N/A	<	0.018
(1,2-DIBROMOETHANE)				
cjw				

HARBOR BRANCH ENVIRONMENTAL LABORATORY

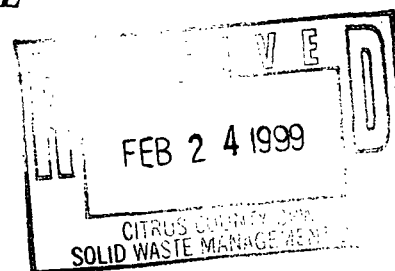
5600 US 1 North, Fort Pierce, FL 34946
561-465-2400, Ext. 285

FDEP QAP 870174



**ANALYTICAL REPORT FOR:
CITRUS COUNTY CENTRAL LANDFILL
LEACHATE SAMPLE
GMS # 4009C00086**

**PRESENTED TO:
CATHY WINTER**



**ANALYSIS BY:
HARBOR BRANCH ENVIRONMENTAL LABORATORY
CompQAP #870174G
HRS #E96080/96230**

**PROJECT MANAGER:
DON HASH**

A handwritten signature of Don Hash, written in black ink, positioned above a horizontal line.

**LABORATORY DIRECTOR:
N. MYRON GUNSALUS, JR.**

A handwritten signature of N. Myron Gunsalus, Jr., written in black ink, positioned above a horizontal line.

FEBRUARY 19, 1999

HARBOR BRANCH ENVIRONMENTAL LABORATORY

5600 US 1 North, Fort Pierce, FL 34946
561-465-2400, Ext. 285

FDEP QAP 870174

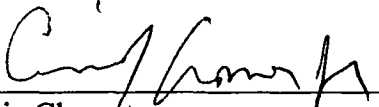


Quality Control Summary

- **Laboratory Blank:** All analytes were below Reporting Detection Limits (RDL).
- **Laboratory Control Sample:** Recoveries for analytes were within laboratory accuracy limits.
- **Matrix Spike/Matrix Spike Duplicate:** Recoveries for analytes were within laboratory precision and accuracy limits.
- **Sample Duplicate:** Analysis data demonstrated acceptable reproducibility of laboratory processes.

Water Temperature, Dissolved Oxygen, Turbidity, pH, and Specific Conductance measurements were made in the field at the time of sampling.

As a result of high levels of iron in the samples, the matrix spike and matrix spike duplicate analyses associated with these samples produced results for the EPA 6010 analysis that fell outside of established precision and accuracy limits. Accuracy was demonstrated with the analysis of the laboratory control sample. All other quality control criteria were met.


Eric Charest
Quality Assurance Manager

HARBOR BRANCH ENVIRONMENTAL LABORATORY

5600 US 1 North, Fort Pierce, FL 34946

561-465-2400, Ext. 285

PART III ANALYTICAL RESULTS

FDEP QAP 870174



Facility GMS#: 4009C00086

Test Site ID#: N/A

HBEL Sample ID: 9000663001

Sampling Date/Time: 01/20/99 8:53

Report Period: Qtrly Jan. - Mar. 99

Well Purged (Y/N): -

Well Name: Leachate Effluent

Classification of Ground Water: -

Ground Water Elevation (NGVD):

or (MSL):

Well Type: ☒ Background☐ Intermediate☐ Compliance☒ Other

Storet Code	Parameter Monitored	Sampling Method	Field Filtered Y/N	Analysis Method	Analysis Date/Time	Analysis Result/Units		Detection Limits/Units	
004000	pH	G	N	EPA 150.1	01/20/99 8:53	7.6	SU	0.20	SU
070304	Total Dissolved Solids	G	N	EPA 160.1	01/21/99 17:00	1900	mg/L	20	mg/L
900201	Total Suspended Solids	G	N	EPA 160.2	01/22/99 10:20	2.2	mg/L	1.0	mg/L
000940	Chloride	G	N	EPA 300.0	01/23/99 4:32	950	mg/L	7.5	mg/L
000620	Nitrate as N	G	N	EPA 300.0	01/22/99 6:02	0.38	mg/L	0.060	mg/L
000620	Nitrite as N	G	N	EPA 300.0	01/22/99 6:02	0.11	mg/L	0.044	mg/L
000610	Ammonia	G	N	EPA 350.1	01/22/99 10:30	0.16	mg/L	0.050	mg/L
000625	Total Kjeldahl Nitrogen	G	N	EPA 351.2	01/26/99 14:09	1.1	mg/L	0.20	mg/L
000600	Total Nitrogen	G	N	EPA 351.2	01/27/99 7:21	1.6	mg/L	0.20	mg/L
000665	Total Phosphorus as P	G	N	EPA 365.4	01/26/99 14:46	5.6	mg/L	0.50	mg/L
000340	COD	G	N	EPA 410.4	01/25/99 11:00	91	mg/L	5.0	mg/L
032101	Bromodichloromethane	G	N	EPA 601	01/28/99 20:26	3.2	ug/L	1.0	ug/L
032104	Bromoform	G	N	EPA 601	02/01/99 7:26	97	ug/L	5.0	ug/L
032106	Chloroform	G	N	EPA 601	01/28/99 20:26	<1.0	ug/L	1.0	ug/L
081521	Dibromochloromethane	G	N	EPA 601	01/28/99 20:26	28	ug/L	1.0	ug/L
034030	Benzene	G	N	EPA 602	01/28/99 20:26	<1.0	ug/L	1.0	ug/L
034371	Ethylbenzene	G	N	EPA 602	01/28/99 20:26	<1.0	ug/L	1.0	ug/L
034010	Toluene	G	N	EPA 602	01/28/99 20:26	<1.0	ug/L	1.0	ug/L
081551	Total Xylenes	G	N	EPA 602	01/28/99 20:26	2.2	ug/L	1.0	ug/L
82135	CBOD5	G	N	SM5210 B	01/22/99 8:00	2.4	mg/L	2.0	mg/L
031616	Fecal Coliform	G	N	SM9222D	01/20/99 13:25	<1.0	CFU/100mL	1.0	CFU/100mL
001002	Arsenic	G	N	SW-846 6010	01/26/99 12:34	15	ug/L	5.0	ug/L
001007	Barium	G	N	SW-846 6010	01/26/99 12:34	10	ug/L	10	ug/L
001027	Cadmium	G	N	SW-846 6010	01/26/99 12:34	<1.0	ug/L	1.0	ug/L

HARBOR BRANCH ENVIRONMENTAL LABORATORY

5600 US 1 North, Fort Pierce, FL 34946

561-465-2400, Ext. 285

PART III ANALYTICAL RESULTS

Facility GMS# : 4009C00086

Test Site ID# : N/A

Well Name: Leachate Effluent

Classification of Ground Water: --

Ground Water Elevation (NGVD) :

or (MSL):

FDEP QAP 870174



HBEL Sample ID: 9000663001

Sampling Date/Time: 01/20/99 8:53

Report Period: Qtrly Jan. - Mar. 99

Well Purged (Y/N) : --

Well Type: ☐ Background☐ Intermediate☐ Compliance☒ Other

Storet Code	Parameter Monitored	Sampling Method	Field Filtered Y/N	Analysis Method	Analysis Date/Time	Analysis Result/Units	Detection Limits/Units
001034	Chromium	G	N	SW-846 6010	01/26/99 12:34	<2.0 ug/L	2.0 ug/L
001045	Iron	G	N	SW-846 6010	01/26/99 12:34	81 ug/L	40 ug/L
001051	Lead	G	N	SW-846 6010	01/26/99 12:34	<3.0 ug/L	3.0 ug/L
001147	Selenium	G	N	SW-846 6010	01/26/99 12:34	<5.0 ug/L	5.0 ug/L
001077	Silver	G	N	SW-846 6010	01/26/99 12:34	<1.0 ug/L	1.0 ug/L
000929	Sodium	G	N	SW-846 6010	01/26/99 12:34	530000 ug/L	1000 ug/L
007900	Mercury	G	N	SW-846 7470	02/03/99 16:39	<0.50 ug/L	0.50 ug/L
077651	1,2-Dibromoethane	G	N	SW-846 8011	01/27/99 21:26	<0.018 ug/L	0.018 ug/L

Fort Pierce, FL 34946

Phone: (561) 465-2400, Ext. 285 Fax: (561) 467-1584

USE BALL POINT PEN ONLY

**5390 First Coast Hwy., Suite 1
Fernandina Beach, FL 32034**

**255 Enterprise Road, Suite 1
Deltona, FL 32725**

**307 Coolidge Avenue
Lehigh Acres, FL 33936**

2514 Osawaw Blvd.
Spring Hill, FL 34607

Company:

Address:

Phone:

Fax:

Client Contact:

Project Name:

Sampled By:

Purchase Order #:

Method of Shipment:

Cooler #'s

Date 1/20/99 Time _____

☒ Standard Turn Around Time

Rush in Business Days

For Lab Use Only

Temperature

Checked

Y N

Custody Seals

Intact

Y N

pH

Checked

Y N

HPN # 9100199

PRESERVATIVE

Preservation Key

H - Hydrochloric Acid

P - Phosphoric Acid

N-Nitric Acid

ST - Sodium Thiosulfate

S-Sulfuric Acid

U = Unpreserved

SH - Sodium Hydroxide

COMMENTS

Ph:	SC:	T:	DO:	Turb
7.6	19/ms	19°	5.86	3.06

[illegible]

** Matrix: S-Solid SL-Sludge DW-Drinking Water GW-Ground Water SW-Surface Water WW-Wastewater

RELINQUISHED BY <u>D. Dienstberger</u>	RELINQUISHED BY	RELINQUISHED BY
DATE/TIME <u>1/20/99 9:00</u>	DATE/TIME	DATE/TIME
RECEIVED BY <u>[Signature]</u>	RECEIVED BY	RECEIVED FOR HBEL CUSTODY BY <u>[Signature]</u>
DATE/TIME <u>1/20/99 9:00</u>	DATE/TIME	DATE/TIME <u>1/20/99 1235</u>

Distribution: WHITE with REPORT; YELLOW for FILE; PINK to CLIENT; GOLD for RECEIVING; GREEN for SAMPLER

PAGE 1 of 1

HARBOR BRANCH ENVIRONMENTAL LABORATORY

5600 US 1 North, Fort Pierce, FL 34946

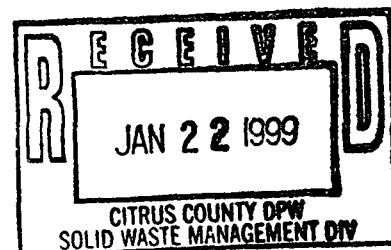
561-465-2400, Ext. 285

FDEP QAP 870174



**ANALYTICAL REPORT FOR:
CITRUS COUNTY CENTRAL LANDFILL
LEACHATE SAMPLE
GMS # 4009C00086**

**PRESENTED TO:
CATHY WINTER**



**ANALYSIS BY:
HARBOR BRANCH ENVIRONMENTAL LABORATORY
CompQAP #870174G
HRS #E96080/96230
HBEL SPRING HILL: E84418**

**PROJECT MANAGER:
DON HASH**

A handwritten signature in black ink, appearing to read "Don Hash", written over a horizontal line.

**LABORATORY DIRECTOR:
N. MYRON GUNSALUS, JR.**

A handwritten signature in black ink, appearing to read "N. Myron Gunsalus, Jr.", written over a horizontal line.

JANUARY 20, 1999

HARBOR BRANCH ENVIRONMENTAL LABORATORY

5600 US 1 North, Fort Pierce, FL 34946
561-465-2400, Ext. 285

FDEP QAP 870174



Quality Control Summary

- **Laboratory Blank:** All analytes were below Reporting Detection Limits (RDL).
- **Laboratory Control Sample:** Recoveries for analytes were within laboratory accuracy limits.
- **Matrix Spike/Matrix Spike Duplicate:** Recoveries for analytes were within laboratory precision and accuracy limits.
- **Sample Duplicate:** Analysis data demonstrated acceptable reproducibility of laboratory processes.

HARBOR BRANCH ENVIRONMENTAL LABORATORY

5600 US 1 North, Fort Pierce, FL 34946

561-465-2400, Ext. 285

FDEP QAP 870174

**CITRUS COUNTY CENTRAL LANDFILL****PARAMETER MONITORING REPORT**

Rule 62-522.900 (11)

GMS # 4009C00086Sample Date/Lab ID: 01/13/99 9400048001

Test Site #: _____

Site Type: ☐ Background
☐ Site Boundary
☐ Intermediate
☐ Compliance
☒ Other: LeachateTest Site Name: Leachate

7479

Sample Method: Grab, where applicable

Storet Code	Parameter Monitored	Analysis Method	Analysis Date	Analysis Result	Units	Practical Quant. Level	Sample Filtered /Unfiltered	Preservative Added
004000	pH, Field	150.1	01/13/99	7.4	S.U.	0.20	--	--
900201	Total Suspended Solids	SM2540 D	01/13/99	2.7	mg/L	1.0	U	None
000620	Nitrate-Nitrogen	300.0	01/14/99	0.36	mg/L	0.060	U	None
000620	Nitrite-Nitrogen	300.0	01/14/99	< 0.044	mg/L	0.044	U	None
000610	Ammonia-Nitrogen	350.1	01/15/99	0.060	mg/L	0.050	U	H ₂ SO ₄
000625	Total Kjeldahl Nitrogen	351.2	01/15/99	1.9	mg/L	0.20	U	H ₂ SO ₄
000600	Total Nitrogen	351.2	01/19/99	2.3	mg/L	0.20	U	H ₂ SO ₄
000665	Total Phosphorus	365.4	01/15/99	7.8	mg/L	0.50	U	H ₂ SO ₄
000340	COD	410.4	01/15/99	110	mg/L	5.0	U	H ₂ SO ₄
80082	CBOD ₅	SM5210 B	01/14/99	6.1	mg/L	2.0	U	None
031616	Fecal Coliform	SM9222 D	01/13/99	<1.0	CFU/100mL	1.0	U	Na ₂ S ₂ O ₃

Project Name Citrus county landfill
Date 1/13/99

[illegible]

Field Data Sheet

Sampler(s) Pat Hillon Date 1/13/99 Sample Time 845 Field ID# _____
Project Name Citrus county landfill

Sample Type (circle one): WW SW GW DW ReagWtr. Sludge Sediment Soil Other
Sample Site Identification Leachate

Sampling Method: Grab Composite Monitoring Well: Bailer Pump
Sampling Equipment: Bottles only
Site and Weather Conditions 71° Sunny

Field Instrument Beginning Calibration

pH meter	<u>Yes</u>	No	Buffer	4.0	_____	7.0	<u>6.9</u>	10.0	<u>9.8</u>
Conductivity meter	<u>Yes</u>	No	Buffer	147	_____	1414	<u>1420</u>	12900	_____
Turbidity meter	Yes	No	Buffer	0.5	_____	5.0	_____	20	_____
DO meter	Yes	No	Temp C°	_____	_____	Adjust	_____	from	_____

Field Filtered: Yes No

Duplicate: Yes No

Field Decontamination: Yes No

Parameter	Sample Containers	pH Check
Nutrient	Plastic - H ₂ SO ₄	<2 ✓
Metals	Plastic - HNO ₃	<2
Sulfide	Plastic - NaOH / Zn Acetate	>12
Cyanide	Plastic - NaOH / (NO Sulfide) / Ascorbic Acid	>12
Bacteriological	Glass - Thiosulfate (DW NO Chlorine Res.)	✓
Oil and Grease	Glass - HCl	<2
TRPH	Glass - HCl	<2
VOA	Glass - HCl	<2
SVOC	Glass - (DRW NO Chlorine Res.)	
Other Phenols	Glass - H ₃ PO ₄	<2
Other		

Well Diameter	Multiplier
1.5 inches	0.092
2.0 inches	0.163
4.0 inches	0.653
6.0 inches	1.469

Field Instrument Ending Calibration

pH meter	Yes	No	Buffer	4.0	_____	7.0	<u>7.0</u>	10.0	<u>9.9</u>
Conductivity meter	Yes	No	Buffer	147	_____	1414	<u>1416</u>	12900	_____
Turbidity meter	Yes	No	Buffer	0.5	_____	5.0	_____	20	_____
DO meter	Yes	No	Temp C°	_____	_____	Adjust	_____	from	_____

General Site Information/Comments Dave from landfill present white
samples collected He also collected a RL sample

HARBOR BRANCH ENVIRONMENTAL LABORATORY

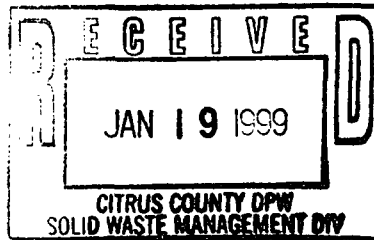
5600 US 1 North, Fort Pierce, FL 34946
561-465-2400, Ext. 285

FDEP QAP 870174



January 13, 1999

Cathy Winter
Citrus County Central Landfill
Solid Waste Management
POB 340, 230 Gulf to Lake Hwy
Lecanto, FL 34460



Client : Citrus County Central Landfill
Project [Reference] : Weekly Leachate [9100017]
Date Received : January 06, 1999

Analytical results presented in this report have been reviewed for compliance with the laboratory quality assurance plan and applicable quality control criteria. The quality control parameters evaluated have been summarized on the Quality Control Summary page immediately following this cover sheet. Applicable quality control standards have been met unless otherwise noted on the Quality Control Summary page:

FDOH (HRS) Drinking Water Certification Number: 96230, 83486, 82500, 85512, 84526

FDOH (HRS) Environmental Certification Number: E96080, E83509, E82417, E85370, E84418

FDEP CompQAP Approval Number: 870174

NOTE: This document and the Quality Control Summary page are included as part of the Analytical Report for the above referenced project and should be retained as a permanent record thereof.

If you have any questions regarding this report, or if we can be of further assistance, please feel free to call (561) 465-2400 ext. 285 and ask to speak with a project manager.

A handwritten signature in black ink, appearing to read "Don Hash".

Don Hash
Project Manager

A handwritten signature in black ink, appearing to read "N. Myron Gunsalus, Jr.".

N. Myron Gunsalus, Jr.
Laboratory Director

HARBOR BRANCH ENVIRONMENTAL LABORATORY

5600 US 1 North, Fort Pierce, FL 34946

561-465-2400, Ext. 285

FDEP QAP 870174



Quality Control Summary

- **Laboratory Blank:** All analytes were below Reporting Detection Limits (RDL).
- **Laboratory Control Sample:** Recoveries for analytes were within laboratory accuracy limits.
- **Matrix Spike/Matrix Spike Duplicate:** Recoveries for analytes were within laboratory precision and accuracy limits.
- **Sample Duplicate:** Analysis data demonstrated acceptable reproducibility of laboratory processes.

HARBOR BRANCH ENVIRONMENTAL LABORATORY

5600 US 1 North, Fort Pierce, FL 34946

561-465-2400, Ext. 285

FDEP QAP 870174

**CITRUS COUNTY CENTRAL LANDFILL****PARAMETER MONITORING REPORT**

Rule 62-522.900 (11)

GMS # 4009C00086Sample Date/Lab ID: 01/06/99 9100017001

Test Site #: _____

Site Type: ☐ Background
☐ Site Boundary
☐ Intermediate
☐ Compliance
☒ Other: LeachateTest Site Name: Leachate

7479

Sample Method: Grab, where applicable

Storet Code	Parameter Monitored	Analysis Method	Analysis Date	Analysis Result	Units	Practical Quant. Level	Sample Filtered /Unfiltered	Preservative Added
004000	pH, Field	150.1	01/06/99	7.6	S.U.	0.20	—	—
900201	Total Suspended Solids	160.2	01/08/99	4.4	mg/L	2.0	U	None
000620	Nitrate-Nitrogen	300.0	01/07/99	0.40	mg/L	0.060	U	None
000620	Nitrite-Nitrogen	300.0	01/07/99	<0.044	mg/L	0.044	U	None
000610	Ammonia-Nitrogen	350.1	01/11/99	0.062	mg/L	0.050	U	H ₂ SO ₄
000625	Total Kjeldahl Nitrogen	351.2	01/08/99	1.9	mg/L	0.20	U	H ₂ SO ₄
000600	Total Nitrogen	351.2	01/12/99	2.3	mg/L	0.20	U	H ₂ SO ₄
000665	Total Phosphorus	365.4	01/08/99	8.5	mg/L	0.50	U	H ₂ SO ₄
000340	COD	410.4	01/11/99	150	mg/L	5.0	U	H ₂ SO ₄
80082	CBOD ₅	SM5210 B	01/07/99	<2.0	mg/L	2.0	U	None
031616	Fecal Coliform	SM9222 D	01/06/99	<1.0	CFU/100mL	1.0	U	Na ₂ S ₂ O ₃

Project Name citrus county landfill
Date 1/6/99

Page 2 of 2[illegible]

Field Data Sheet

Sampler(s) Pat Hill Date 11/6/98 Sample Time 840 Field ID# _____
Project Name Citrus County Levee

Sample Type (circle one) WW SW GW DW ReagWtr. Sludge Sediment Soil Other
Sample Site Identification Levee

Sampling Method: Grab Composite Monitoring Well: Bailer Pump

Sampling Equipment: Bottles only

Site and Weather Conditions 30° clear and cold

Field Instrument Beginning Calibration

pH meter	<u>Yes</u>	No	Buffer	4.0	_____	7.0	<u>6.8</u>	10.0	<u>9.7</u>
Conductivity meter	<u>Yes</u>	No	Buffer	147	_____	1414	<u>1410</u>	12900	_____
Turbidity meter	<u>Yes</u>	No	Buffer	0.5	_____	5.0	_____	20	_____
DO meter	Yes	No	Temp C°	_____	_____	Adjust	_____	from	_____

Field Filtered: Yes No Duplicate: Yes No Field Decontamination: Yes No

Parameter	Sample Containers	pH Check
Nutrient	Plastic - H ₂ SO ₄	<2 ☒
Metals	Plastic - HNO ₃	<2 ☒
Sulfide	Plastic - NaOH / Zn Acetate	>12 ☐
Cyanide	Plastic - NaOH / (NO Sulfide) / Ascorbic Acid	>12 ☐
Bacteriological	Glass - Thiosulfate (DW NO Chlorine Res.)	☒
Oil and Grease	Glass - HCl	<2 ☐
TRPH	Glass - HCl	<2 ☐
VOA	Glass - HCl	<2 ☐
SVOC	Glass - (DRW NO Chlorine Res.)	☐
Other Phenols	Glass - H ₃ PO ₄	<2 ☐
Other		☐

Well Diameter	Multiplier
1.5 inches	0.092
2.0 inches	0.163
4.0 inches	0.653
6.0 inches	1.469

Field Instrument Ending Calibration

pH meter	Yes	No	Buffer	4.0	_____	7.0	<u>7.0</u>	10.0	<u>9.9</u>
Conductivity meter	Yes	No	Buffer	147	_____	1414	<u>1410</u>	12900	_____
Turbidity meter	Yes	No	Buffer	0.5	_____	5.0	_____	20	_____
DO meter	Yes	No	Temp C°	_____	_____	Adjust	_____	from	_____

General Site Information/Comments Jim Brunswick on site
while samples collected He also collected a PL
sample

5600 U.S. 1 North
Fort Pierce, FL 34946

Phone: (561) 465-2400, Ext. 285 Fax: (561) 467-1584

Chain-of-Custody

USE BALL POINT PEN ONLY

**5390 First Coast Hwy., Suite 1
Fernandina Beach, FL 32034**

Company: CCL

Method of Shipment:

☐ Standard Turn Around Time

Address:

Cooler #'s

☐ **Rush in Business Days**

255 Enterprise Road, Suite 1
Deltona, FL 32725

Phone: _____ Fax: _____

Date _____ Time _____

For Lab Use Only

Temperature	Custody Seals	pH
Checked	Intact	Checked
Y N	Y N	(Y) N

9100017
HPN # ~~910017~~

**307 Coolidge Avenue
Lehigh Acres, FL 33936**

Client Contact:

Project Name: Weekly leachats

Sampled By: Pat Milroy

Purchase Order #:

2514 Osawaw Blvd.
Spring Hill, FL 34607

* Sample Type: G-Grab C-Composite O-Other

** Matrix: S-Solid SL-Sludge DW-Drinking Water GW-Ground Water SW-Surface Water WW-Wastewater

RELINQUISHED BY 	RELINQUISHED BY	RELINQUISHED BY
DATE/TIME 1/6/99	DATE/TIME	DATE/TIME
RECEIVED BY	RECEIVED BY 	RECEIVED FOR HBEL CUSTODY BY 
DATE/TIME	DATE/TIME 1-7-99 1030	DATE/TIME 1/6/99 1335