4009C00086

BOARD OF COUNTY COMMISSIONERS
DEPARTMENT OF PUBLIC WORKS

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
352-746-2694 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

July 10, 1998

Mr. John Morris
Environmental Specialist III
Dept. Of Environmental Protection
3804 Coconut Palm Drive
Tampa, Fl 33619-8318

REPLY TO:
Solid Waste Management

RE: QUARTERLY 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 4-98 through 6-98:

1) Weekly effluent analytical results. There are no exceedences of permit limits during this period.

2) Quarterly effluent analytical results. There are no exceedences of permit limits during this period. The results for Total Trihalomethanes has increased significantly from previous sampling events. We have re-sampled for these parameters on 7/9/98 at 3 stages of processing in order to determine the source, and initiate corrective measures. A follow-up report will be forwarded within 30 days of sampling.

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

Sincerely,

Susan J. Metcalfe

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

RECEIVED
JUL 13 1998
Solid Waste Section

SJM:GJW: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)

CITRUS COUNTY CENTRAL LANDFILL
APRIL, MAY, JUNE, 1998

MCL		200 CUF/100ML		20	6.0 -					12				20		
		FECAL			8.5		AMMONIA					TOTAL	TOTAL			
DATE	<	COLIFORM	<	CBOD	PH	<	NITROGEN	<	COD	<	NITRATE-N	<	NITROGEN	<	PHOSPHOROUS	<	TSS	<	TKN
4/1/98	<	1.0		2.5	7.6	<	0.05		30	<	0.89		2.1		6.8	<	2.0		1.2
4/8/98	<	1.0	<	2.0	7.4		0.26		74		0.051		2.2		6.0	<	1.0		1.7
4/15/98		1.0		2.8	7.6		0.06		82		0.7		2.5		1.4		2.4		1.8
4/22/98	<	1.0	<	2.0	7.4	<	0.05		96		5.30		7.7		11		4.6		2.4
4/29/98	<	1.0		2.5	7.3		0.053		73		0.60		2.2		10		1.2		1.6
5/6/98	<	1.0		3.1	7.2		0.057		130		0.41		2.2		14		1.3		1.8
5/13/98	<	1.0	<	2.0	6.8		0.088		100		2.30		4.2		5.4	<	2.0		1.9
5/20/98	<	1.0	<	2.0	7.1		0.070		120		0.58		2.4		8.1	<	2.1		1.8
5/27/98	<	1.0	<	2.0	7.5		0.080		72		0.29		1.9		7.9	<	2.0		1.6
6/3/98		1.0	<	2.0	7.6		0.040		58		0.31		1.7		9.4	<	1.0		1.4
6/10/98		10	<	2.0	7.6		0.140		74		0.32		1.9		7.4	<	2.0		1.6
6/17/98	<	1.0	<	2.0	7.4		0.65		57.00		0.20		1.3		7.7	<	1.0		1.08
6/24/98	<	1.0	<	2.0	7.4		0.654		57		0.20		1.3		7.7	<	1.0		1.08
	*	Analytical results reported in MG/L except for Fecal Coliform																	
/cjw																			

A MOR GEN

Domestic Wastewater Treatment Plant
Monthly Operating Report

Part II - General Information

(1) Month APRIL Year 98

(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

Lead Operator James A. Brunswick

Signature: ~~James~~ Cert. No. C8197

Parameter	Units	Storet Code	Value
(16) Monthly average daily flow	mgd	050053	0.013
(17) Permitted capacity	mgd	--	0.030
(18) Three month average daily flo	mgd	--	0.02
(19) Percent of permitted capacity	%	--	39%
(20) CBOD5 Effluent	mg/L	080082	2.7
(21) CBOD5 Effluent	lbs/day	--	N/A
(22) TSS Effluent	mg/L	900201	2.2
(23) TSS Effluent	lbs/day	--	N/A
(24) Minimum pH		--	7.3
(25) Maxium pH		--	8.3
(26) Total N	mg/L	000600	3.3
(27) TKN	mg/L	000625	1.7
(28) Ammonia (NH3 - N)	mg/L	000610	0.07
(29) Nitrate	mg/L	071850	1.5
(30) Total Phosphorus	mg/L	000665	7
(31) Minimum Chlorine Residual	mg/L	--	0.2
(32) Maximum Chlorine Residual	mg/L	--	0.8
(33) Other Effluent Parameters			
COD	mg/L		71.4

Domestic Wastewater Treatment Plant
Monthly Operating Report

Month APR Year 98

Day of the Month	Flow (mgd)	Chlorine Residual after Contact	Chlorine Residual after Dechlor.	CBOD5 Influent (mg/lL	TSS Influent (mg/L)	CBOD5 Effluent (mg/L)	TSS Effluent (mg/L)	pH Effluent	TKN Effluent mg/L)	NH3 - N Effluent (mg/L)	Nitrate Effluent (mg/L)	Total P Effluent (mgL)	Fecal Coliform (#/100ml)	COD	TOTAL N							
1	14584	0.6				2.6	<2.0	7.6	1.2	<0.0	0.89	6.8	<1.0	30	2.1							
2	25574	0.7						7.8														
3	17484	0.8						7.7														
4	4609	0.7						8.1														
5	NR																					
6	33360	0.8						7.9														
7	12916	0.6						7.3														
8	4745	0.8				<2.0	<1.0	7.4	1.7	0.26	0.05	6.0	<1.0	74	2.2							
9	13180	0.6						8.0														
10	24345	0.7						8.1														
11	17458	0.4						8.1														
12	NR																					
13	18569	0.6						8.0														
14	NR	0.5						7.3														
15	14863	0.4				2.8	2.4	7.6	1.8	0.06	0.7	1.4	1.0	82	2.5							
16	10243	0.4						8.3														
17	NR	0.4						7.9														
18	21039	0.4						8.0														
19	NR																					
20	10882	0.3						7.8														
21	9377	0.3						7.4														
22	3165	0.2				<2.0	4.6	7.8	2.4	<0.0	5.3	11	<1.0	96	7.7							
23	21233	0.3						8.1														
24	10586	0.4						7.7														
25	8589	0.4						7.9														
26	NR							8.0														
27	13956	0.5						7.3														
28	NR	0.7						7.8														
29	10440	0.5				2.5	1.2	7.3	1.6	0.05	0.6	10	<1.0	73	2.2							
30	19579	0.4						8.0														
31																						

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.

Signed: James A. Brunswick Date: 5/12/98

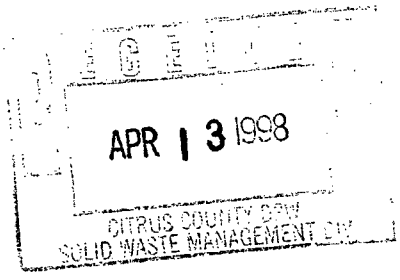
Name (Please Type) James Brunswick

Company Name Citrus County Utilities Division Telephone No. (Please Type) (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

LABORATORY DIRECTOR:
N. MYRON GUNSALUS, JR.

April 8, 1998

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.

Well Depth for MW-D measured 95.61' on April 1, 1998

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 # 4009C00086

Sample Date/Lab ID: 04/01/98 81007610001

Test Site #: -A

Site Type: [ ] Background
[ ] Site Boundary
[ ] Intermediate
[ ] Compliance
[X] Other: Leachate

Test 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	04/01/98	7.6	S.U.	0.20	--	--
900201	Total Suspended Solids	160.2	04/03/98	<2.0	mg/L	2.0	U	None
000620	Nitrate-Nitrogen	300.0	04/02/98	0.89	mg/L	0.060	U	None
000620	Nitrite-Nitrogen	300.0	04/02/98	<0.044	mg/L	0.044	U	None
000610	Ammonia-Nitrogen	350.1	04/07/98	<0.05	mg/L	0.050	U	H_2SO_4
000625	Total Kjeldahl Nitrogen	351.2	04/03/98	1.2	mg/L	0.20	U	H_2SO_4
000600	Total Nitrogen	351.2	04/07/98	2.1	mg/L	N/A	U	H_2SO_4
000665	Total Phosphorus	365.4	04/03/98	6.8	mg/L	0.050	U	H_2SO_4
000340	COD	410.4	04/03/98	30	mg/L	5.0	U	H_2SO_4
80082	CBOD5	SM5210 B	04/01/98	2.6	mg/L	2.0	U	None
031616	Fecal Coliform	SM9222 D	04/01/98	<1.0	CFU/100mL	1.0	U	$Na_2S_2O_3$

Harbor Branch
Environmental Laboratory

Form 300
Revision 005
03/07/97

Field Data Sheet

Sampler (s) Pat Hilton **Date** 4/1/98 **Sample Time** 920 **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 75 / partly cloudy, wind SW small

Field Instrument Beginning Calibration

pH meter	(Yes)	No	Buffer	4.0	_____	7.0	7.2	10.0	9.3
Conductivity meter	(Yes)	No	Buffer	147	_____	1414	1410	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	
X	Nutrient	Plastic - H_2SO_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_3PO_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	6.9	10.0	9.3
Conductivity meter	(Yes)	No	Buffer	147	_____	1414	1410	12900	_____
Turbidity meter	Yes	No	Buffer	0.5	_____	5.0	_____	20	_____
DO meter	Yes	No	Temp C°		_____	Adjust	_____	from	_____

General Site Information/Comments Jim on site while sampling
We collected PW sample at some time, checked
MW-D Depth at 95 Feet 6.1 inches 95.61'

Harbor Branch
Environmental Laboratory

Analytical Field Data Sheet
030497

ANALYTICAL FIELD DATA

Project Name Citrus County landFill
Date 4/1/98

LOCATION	Time	pH	Specific Conductivity	Temperature Water	D.O.	Turbidity	Residual Chlorine	Comments
Leachate	920	7.8	1210	23				

CHAIN OF CUSTODY RECORD

The ENVIRONMENTAL LABORATORY at Harbor Branch

5600 U. S. 1 North, Ft. Pierce, FL 34946 • (561) 465-2400, Ext. 285 • Fax (561) 467-1584

COMPANY: CCI
ADDRESS:
PHONE:
FAX:
CLIENT CONTACT:
PURCHASE ORDER #:

DATE NEEDED:
CLIENT PROJECT: Citrus County Landfill
PROJECT NAME / #: Weekly Leachate
HBOI W/O & HPN: 8100761

SPECIAL INSTRUCTIONS:
☐ RUSH in ___ BUSINESS DAYS
SAMPLE SAFETY INFORMATION **:
Are there any other known or suspected safety hazards associated with these samples other than those listed below?
Yes __ No __ If Yes, _____

SAMPLED BY: Pat Hilton
DATE: 4/1/98
TIME: 920
METHOD OF SHIPMENT:
COOLER NO.(s)

MATRIX KEY	PRESERVATION KEY
S = Solid	H = Hydrochloric Acid
SL = Sludge	N = Nitric Acid
DW = Drinking	S = Sulfuric Acid
GW = Ground	SH = Sodium Hydroxide
SW = Surface	P = Phosphoric Acid
WW = Waste	ST = Sodium Thiosulfate
	U = None / Unpreserved

G = Grab
C = Composite
O = Other

FIELD ID	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	MATRIX	#	PRESERVATIVE → / SAMPLE LOCATION ↓	Fecal Coli	PH, TSS	Cl2od	NO3/NH3	Cod, TP, Alk, TKN			COMMENTS
							5+	U	U	U	S			PH; COA; 7.5 12
001	4/1/98	920	G	WW	5	EFFLUENT	X	X	X	X	1			
							PH	PH	PH					

RELINQUISHED BY**:	DATE: 4/1/98	RECEIVED BY:	DATE:
	TIME: 145		TIME:
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE: 4/2/98
	TIME:		TIME: 1230
RELINQUISHED BY:	DATE:	RECEIVED FOR LAB BY:	DATE: 4/1/98
	TIME:	LAB NAME: Michael C Meyer	TIME: 1350

DISTRIBUTION: *WHITE - For HBOI; CANARY - With Report; PINK - To Courier; GOLDENROD - Client at Pick-up*

FORM 1936 - PRINTING BY HEARN

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 DELTONA: E83509

PROJECT MANAGER:
DON HASH

LABORATORY DIRECTOR:
N. MYRON GUNSALUS, JR.

April 22, 1998

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 # 4009C00086

Sample Date/Lab ID: 04/15/98 81009480001

Test Site #:_____

Site Type: [ ] Background
[ ] Site Boundary
[ ] Intermediate
[ ] Compliance
[X] Other: Leachate

Test Site Name: Leachate

747

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	04/15/98	7.6	S.U.	0.20	--	--
900201	Total Suspended Solids	160.2	04/17/98	2.4	mg/L	2.0	U	None
000620	Nitrate-Nitrogen	300.0	04/16/98	0.70	mg/L	0.060	U	None
000620	Nitrite-Nitrogen	300.0	04/16/98	<0.044	mg/L	0.044	U	None
000610	Ammonia-Nitrogen	350.1	04/20/98	0.06	mg/L	0.050	U	H_2SO_4
000625	Total Kjeldahl Nitrogen	351.2	04/21/98	1.8	mg/L	0.20	U	H_2SO_4
000600	Total Nitrogen	351.2	04/22/98	2.5	mg/L	N/A	U	H_2SO_4
000665	Total Phosphorus	365.4	04/21/98	1.4	mg/L	0.050	U	H_2SO_4
000340	COD	410.4	04/20/98	82	mg/L	5.0	U	H_2SO_4
80082	CBOD5	SM5210 B	04/16/98	2.8	mg/L	2.0	U	None
031616	Fecal Coliform	SM9222 D	04/15/98	1.0	CFU/100mL	1.0	U	$Na_2S_2O_3$

Harbor Branch
Environmental Laboratory

Form 300
Revision 005
03/07/97

Field Data Sheet

Sampler (s) Pat Hilton Date 4/15/98 Sample Time 900 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 Sunny 70° wind SW 5-9H

Field Instrument Beginning Calibration

pH meter	(Yes)	No	Buffer	4.0	_____	7.0	7.2	10.0	10.3
Conductivity meter	(Yes)	No	Buffer	147	_____	1414	1500	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_2SO_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_2PO_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	6.9	10.0	10.0
Conductivity meter	(Yes)	No	Buffer	147	_____	1414	1400	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 pulled.

Harbor Branch
Environmental Laboratory

Analytical Field Data Sheet
030497

ANALYTICAL FIELD DATA

Project Name citrus county landfill
Date 4/13/98

LOCATION	Time	pH	Specific Conductivity	Temperature	D.O.	Turbidity	Residual Chlorine	Comments
leachate	910	7.6	1520	21 C				

CHAIN OF CUSTODY RECORD

The ENVIRONMENTAL LABORATORY at Harbor Branch

5600 U. S. 1 North, Ft. Pierce, FL 34946 • (561) 465-2400, Ext. 285 • Fax (561) 467-1584

COMPANY: Citrus county

ADDRESS:

PHONE:

FAX:

CLIENT CONTACT:

PURCHASE ORDER #:

DATE NEEDED:

CLIENT PROJECT:

PROJECT NAME / #:

HBOI W/O & HPN: 8100948

SPECIAL INSTRUCTIONS:

☐ **RUSH in ___BUSINESS DAYS**

SAMPLE SAFETY INFORMATION **

Are there any other known or suspected safety hazards associated with these samples other than those listed below?

Yes __ No __ If Yes, _____

SAMPLED BY: Patricia

DATE: 4/15/98

TIME: 910

METHOD OF SHIPMENT:

COOLER NO.(s)

G = Grab
C = Composite
O = Other

MATRIX KEY	PRESERVATION KEY
S = Solid	H = Hydrochloric Acid
SL = Sludge	N = Nitric Acid
DW = Drinking	S = Sulfuric Acid
GW= Ground	SH = Sodium Hydroxide
SW = Surface	P = Phosphoric Acid
WW = Waste	ST = Sodium Thiosulfate
	U = None / Unpreserved

FIELD ID	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	MATRIX	#	PRESERVATIVE → / SAMPLE LOCATION ↓	Fecal col Fcc	pH (Grab)	NO3/NO2	Cd, TP (ortho), TKN, TN				COMMENTS
							ST	U	U	S				
001	4/15/98	910	G	WW	5	Effluent	X	X	X	X				pH 7.6 Co... 15
									RUN	RUN				

RELINQUISHED BY**:	DATE:	RECEIVED BY:	DATE:
	TIME:		TIME:
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
	TIME:		TIME:
RELINQUISHED BY:	DATE:	RECEIVED FOR LAB BY:	DATE: 4/15/98
	TIME:	LAB NAME: RVH	TIME: 1345

***DISTRIBUTION**: WHITE - For HBOI; CANARY - With Report; PINK - To Courier; GOLDENROD - Client at Pick-up*

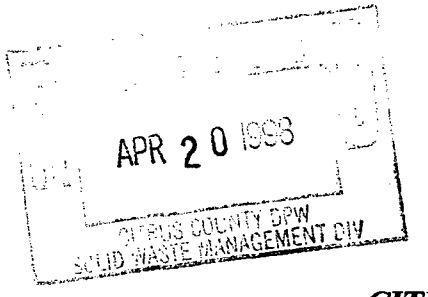
FORM 1936 - PRINTING BY HEARN

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

LABORATORY DIRECTOR:
N. MYRON GUNSALUS, JR.

April 15, 1998

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 # 4009C00086

Sample Date/Lab ID: 04/08/98 8400418001

Test Site #: _____

Site Type: [ ] Background
[ ] Site Boundary
[ ] Intermediate
[ ] Compliance
[X] Other: Leachate

Test Site Name: Leachate

747

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, Filed	150.1	04/08/98	7.4	S.U.	0.20	–	–
900201	Total Suspended Solids	SM2540 D	04/09/98	<1.0	mg/L	1.0	U	None
000620	Nitrate-Nitrogen	300.0	04/09/98	0.051	mg/L	0.060	U	None
000620	Nitrite-Nitrogen	300.0	04/09/98	<0.044	mg/L	0.044	U	None
000610	Ammonia-Nitrogen	350.1	04/09/98	0.26	mg/L	0.050	U	H_2SO_4
000625	Total Kjeldahl Nitrogen	351.2	04/14/98	1.7	mg/L	0.20	U	H_2SO_4
000600	Total Nitrogen	351.2	04/15/98	2.2	mg/L	N/A	U	H_2SO_4
000665	Total Phosphorus	365.4	04/14/98	6.0	mg/L	0.050	U	H_2SO_4
000340	COD	410.4	04/13/98	74	mg/L	5.0	U	H_2SO_4
80082	CBOD5	SM5210 B	04/08/98	<2.0	mg/L	2.0	U	None
031616	Fecal Coliform	SM9222 D	04/08/98	<1.0	CFU/100mL	1.0	U	$Na_2S_2O_3$

Harbor Branch
Environmental Laboratory

Form 300
Revision 005
03/07/97

Field Data Sheet

Sampler (s) Pat Hilton Date 4/8/98 Sample Time _____ 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 76° / Sunny

Field Instrument Beginning Calibration

pH meter	(Yes)	No	Buffer	4.0	_____	7.0	7.1	10.0	9.5
Conductivity meter	(Yes)	No	Buffer	147	_____	1414	1290	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_2SO_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_3PO_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	6.9	10.0	9.3
Conductivity meter	(Yes)	No	Buffer	147	_____	1414	1470	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 were taked.

Harbor Branch
Environmental Laboratory

Analytical Field Data Sheet
030497

ANALYTICAL FIELD DATA

Project Name
Date

LOCATION	Time	pH	Specific Conductivity	Temperature	D.O.	Turbidity	Residual Chlorine	Comments
Leachate	1015	7.4	1820	21°				

CHAIN OF CUSTODY RECORD

The ENVIRONMENTAL LABORATORY at Harbor Branch

5600 U. S. 1 North, Ft. Pierce, FL 34946 • (561) 465-2400, Ext. 285 • Fax (561) 467-1584

COMPANY: citrus county
ADDRESS:

PHONE:
FAX :
CLIENT CONTACT:
PURCHASE ORDER #:

DATE NEEDED:
CLIENT PROJECT: central land fill
PROJECT NAME / #: weekly leachate
HBOI W/O & HPN: 840 0418

SPECIAL INSTRUCTIONS:
☐ RUSH in ___BUSINESS DAYS
SAMPLE SAFETY INFORMATION **
Are there any other known or suspected safety hazards associated with these samples other than those listed below?
Yes __ No __ If Yes, _____

SAMPLED BY: Pat Hilton
DATE: 4/8/98
TIME: 1015
METHOD OF SHIPMENT:
COOLER NO.(s)

G = Grab
C = Composite
O = Other

MATRIX KEY	PRESERVATION KEY
S = Solid	H = Hydrochloric Acid
SL = Sludge	N = Nitric Acid
DW = Drinking	S = Sulfuric Acid
GW= Ground	SH = Sodium Hydroxide
SW = Surface	P = Phosphoric Acid
WW = Waste	ST = Sodium Thiosulfate
	U = None / Unpreserved

FIELD ID	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	MATRIX	#	PRESERVATIVE → / SAMPLE LOCATION ↓	Fecal col: FAR	PH, COND, TSS, NO3/NO2	COD, TP, NH3, TKN, TN					COMMENTS
							SH	U	S					PH cond
001	4/8/98	1015	G	WW	5	Effluent	X	X	X					7.4 1820
						1015								

RELINQUISHED BY**	DATE: 4/8/98	RECEIVED BY:	DATE: 4-8-98
	TIME: 1140	Maryann Bonomatti	TIME: 11:40
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
	TIME:		TIME:
RELINQUISHED BY:	DATE:	RECEIVED FOR LAB BY:	DATE:
	TIME:	LAB NAME:	TIME:

***DISTRIBUTION**: WHITE - For HBOI; CANARY - With Report; PINK - To Courier; GOLDENROD - Client at Pick-up*

FORM 1936 - PRINTING BY HEARN

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

LABORATORY DIRECTOR:
N. MYRON GUNSALUS, JR.

April 30, 1998

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 # 4009C00086

Sample Date/Lab ID: 04/22/98 8400468001

Test Site #:_____

Site Type: [ ] Background
[ ] Site Boundary
[ ] Intermediate
[ ] Compliance
[X] Other: Leachate

Test Site Name: 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, Filed	150.1	04/22/98	7.4	S.U.	0.20	--	--
900201	Total Suspended Solids	SM2540 D	04/23/98	4.6	mg/L	2.0	U	None
000620	Nitrate-Nitrogen	300.0	04/23/98	5.3	mg/L	0.060	U	None
000620	Nitrite-Nitrogen	300.0	04/23/98	<0.044	mg/L	0.044	U	None
000610	Ammonia-Nitrogen	350.1	04/27/98	<0.050	mg/L	0.050	U	H_2SO_4
000625	Total Kjeldahl Nitrogen	351.2	04/28/98	2.4	mg/L	0.20	U	H_2SO_4
000600	Total Nitrogen	351.2	04/28/98	7.7	mg/L	N/A	U	H_2SO_4
000665	Total Phosphorus	365.4	04/28/98	11	mg/L	0.050	U	H_2SO_4
000340	COD	410.4	04/27/98	96	mg/L	5.0	U	H_2SO_4
80082	CBOD5	SM5210 B	04/22/98	<2.0	mg/L	2.0	U	None
031616	Fecal Coliform	SM9222 D	04/22/98	<1.0	CFU/100mL	1.0	U	$Na_2S_2O_3$

Harbor Branch
Environmental Laboratory

Form 300
Revision 005
03/07/97

Field Data Sheet

Sampler (s) Pat Hicks Date 4/22/98 Sample Time _____ Field ID# _____
Project Name _____

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 Wind SW 10-15 mph

Field Instrument Beginning Calibration

pH meter	(Yes)	No	Buffer	4.0	_____	7.0	6.9	10.0	9.5
Conductivity meter	(Yes)	No	Buffer	147	_____	1414	1440	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_2SO_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_3PO_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	7.1	10.0	8.9
Conductivity meter	Yes	No	Buffer	147	_____	1414	1420	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 sample collected.

Harbor Branch
Environmental Laboratory

Analytical Field Data Sheet
030497

ANALYTICAL FIELD DATA

Project Name weekly leachate
Date 4/22/98

LOCATION	Time	pH	Specific Conductivity	Temperature	D.O.	Turbidity	Residual Chlorine	Comments
leachate	1012	7.4	1390	23				

CHAIN OF CUSTODY RECORD

The ENVIRONMENTAL LABORATORY at Harbor Branch

5600 U. S. 1 North, Ft. Pierce, FL 34946 • (561) 465-2400, Ext. 285 • Fax (561) 467-1584

COMPANY: Citrus county
ADDRESS:
PHONE:
FAX :
CLIENT CONTACT:
PURCHASE ORDER #:

DATE NEEDED:
CLIENT PROJECT: Control landFill
PROJECT NAME / #: Weekly leachate
HBOI W/O & HPN: 840 0468

SPECIAL INSTRUCTIONS:
☐ RUSH in ___ BUSINESS DAYS
SAMPLE SAFETY INFORMATION **:
Are there any other known or suspected safety hazards associated with these samples other than those listed below?
Yes __ No __ If Yes, _____

SAMPLED BY: Pat Hilton
DATE: 4/22/98
TIME:
METHOD OF SHIPMENT: Fed Ex
COOLER NO.(s) 202
802736882761

G = Grab
C = Composite
O = Other

MATRIX KEY	PRESERVATION KEY
S = Solid	H = Hydrochloric Acid
SL = Sludge	N = Nitric Acid
DW = Drinking	S = Sulfuric Acid
GW= Ground	SH = Sodium Hydroxide
SW = Surface	P = Phosphoric Acid
WW = Waste	ST = Sodium Thiosulfate
	U = None / Unpreserved

FIELD ID	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	MATRIX	#	PRESERVATIVE → / SAMPLE LOCATION ↓	Fecal Coli:For-	PH, CBod TSS	NO3/NO2	COD, TP, NH3 TKN, TN				COMMENTS
							5t	U	U	S				pH: cold
001	4/22/98	1012	G	WW	5	Effluent	X	X	X	X				7.41 13.3

RELINQUISHED BY**:	DATE: 4/22/98	RECEIVED BY: M Bononette	DATE: 4-22-98
	TIME: 1135		TIME: 11:35
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
	TIME:		TIME:
RELINQUISHED BY:	DATE:	RECEIVED FOR LAB BY:	DATE: 04 · 23 · 98
	TIME:	LAB NAME:	TIME: 09:30

DISTRIBUTION: *WHITE - For HBOI; CANARY - With Report; PINK - To Courier; GOLDENROD - Client at Pick-up*

FORM 1936 - PRINTING BY HEARN

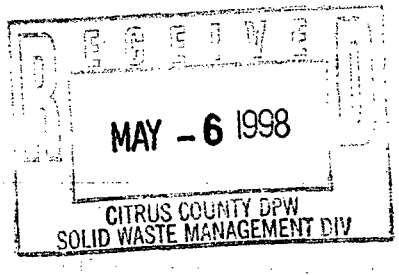
PAGE _____ OF _____

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

FDEP QAP 870174

HARBOR BRANCH OCEANOGRAPHIC INSTITUTION

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

LABORATORY DIRECTOR:
N. MYRON GUNSALUS, JR.

May 6, 1998

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 # 4009C00086

Sample Date/Lab ID: 04/29/98 81010560001

Test Site #:_____

Site Type: [ ] Background
[ ] Site Boundary
[ ] Intermediate
[ ] Compliance
[X] Other: Leachate

Test Site Name: Leachate

747

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	04/29/98	7.3	S.U.	0.20	--	--
900201	Total Suspended Solids	160.2	05/01/98	1.2	mg/L	1.0	U	None
000620	Nitrate-Nitrogen	300.0	04/30/98	0.60	mg/L	0.060	U	None
000620	Nitrite-Nitrogen	300.0	04/30/98	<0.044	mg/L	0.044	U	None
000610	Ammonia-Nitrogen	350.1	05/04/98	0.053	mg/L	0.050	U	H_2SO_4
000625	Total Kjeldahl Nitrogen	351.2	05/05/98	1.6	mg/L	0.20	U	H_2SO_4
000600	Total Nitrogen	351.2	05/05/98	2.2	mg/L	N/A	U	H_2SO_4
000665	Total Phosphorus	365.4	05/05/98	10	mg/L	0.050	U	H_2SO_4
000340	COD	410.4	05/04/98	73	mg/L	5.0	U	H_2SO_4
80082	CBOD5	SM5210 B	04/30/98	2.5	mg/L	2.0	U	None
031616	Fecal Coliform	SM9222 D	04/29/98	<1.0	CFU/100mL	1.0	U	$Na_2S_2O_3$

Harbor Branch
Environmental Laboratory

Form 300
Revision 005
03/07/97

Field Data Sheet

Sampler (s) Pat Hilton Date 4/29/98 Sample Time 920 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 76° sunny, wind 15 mph NNW

Field Instrument Beginning Calibration

pH meter	(Yes)	No	Buffer	4.0	_____	7.0	7.5	10.0	9.8
Conductivity meter	(Yes)	No	Buffer	147	_____	1414	1550	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_2SO_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_3PO_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	6.8	10.0	8.9
Conductivity meter	(Yes)	No	Buffer	147	_____	1414	1430	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 sampling. He collected a PH sample at the same time.

Harbor Branch
Environmental Laboratory

Analytical Field Data Sheet
030497

ANALYTICAL FIELD DATA

Project Name Citrus county landfill
Date 4/29/98

LOCATION	Time	pH	Specific Conductivity	Temperature	D.O.	Turbidity	Residual Chlorine	Comments
leachate	920	7.3	1290	23c				

CHAIN OF CUSTODY RECORD

The ENVIRONMENTAL LABORATORY at Harbor Branch

5600 U. S. 1 North, Ft. Pierce, FL 34946 • (561) 465-2400, Ext. 285 • Fax (561) 467-1584

COMPANY: Citrus County
ADDRESS:
PHONE:
FAX :
CLIENT CONTACT:
PURCHASE ORDER #:

DATE NEEDED:
CLIENT PROJECT: Central Landfill
PROJECT NAME / #: leachate weekly
HBOI W/O & HPN: 8101056

SPECIAL INSTRUCTIONS:
☐ RUSH in ___ BUSINESS DAYS
SAMPLE SAFETY INFORMATION **
Are there any other known or suspected safety hazards associated with these samples other than those listed below?
Yes __ No __ If Yes, _____

SAMPLED BY: Pat Hilton
DATE: 4/29/98
TIME: 920 AM
METHOD OF SHIPMENT:
COOLER NO.(s)

MATRIX KEY	PRESERVATION KEY
S = Solid	H = Hydrochloric Acid
SL = Sludge	N = Nitric Acid
DW = Drinking	S = Sulfuric Acid
GW= Ground	SH = Sodium Hydroxide
SW = Surface	P = Phosphoric Acid
WW = Waste	ST = Sodium Thiosulfate
G = Grab	U = None / Unpreserved
C = Composite	
O = Other	

FIELD ID	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	MATRIX	#	PRESERVATIVE → / SAMPLE LOCATION ↓	Fecal Coli. Fecal Strep.	pH - BOD TSS	COD, TP, NH3 TKN, TN	NO3/NO2				COMMENTS
							ST	U	S	H				pH cond. 7.3 1297
001	4/29	920	G	WW	5	EFFluent	X	X	X	X				
							P/PM	M/PM						

RELINQUISHED BY**:	DATE: 4/29/98	RECEIVED BY:	DATE: 4/29/98
	TIME: 1340		TIME: 1346
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
	TIME:		TIME:
RELINQUISHED BY:	DATE:	RECEIVED FOR LAB BY:	DATE:
	TIME:	LAB NAME:	TIME:

DISTRIBUTION: *WHITE - For HBOI; CANARY - With Report; PINK - To Courier; GOLDENROD - Client at Pick-up*

FORM 1936 - PRINTING BY HEARN

PAGE ____ OF ____

AMOR GEN

Domestic Wastewater Treatment Plant
Monthly Operating Report

Part II - General Information

(1) Month MAY Year 98

(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

Lead Operator James A. Brunswick

Signature: [signature] Cert. No. C8197

Parameter	Units	Storet Code	Value
(16) Monthly average daily flow	mgd	050053	0.011
(17) Permitted capacity	mgd	--	0.030
(18) Three month average daily flo	mgd	--	0.016
(19) Percent of permitted capacity	%	--	33%
(20) CBOD5 Effluent	mg/L	080082	2.2
(21) CBOD5 Effluent	lbs/day	--	N/A
(22) TSS Effluent	mg/L	900201	<1.8
(23) TSS Effluent	lbs/day	--	N/A
(24) Minimum pH		--	6.8
(25) Maxium pH		--	8.1
(26) Total N	mg/L	000600	2.7
(27) TKN	mg/L	000625	1.8
(28) Ammonia (NH3 - N)	mg/L	000610	0.07
(29) Nitrate	mg/L	071850	0.8
(30) Total Phosphorus	mg/L	000665	8.8
(31) Minimum Chlorine Residual	mg/L	--	0.2
(32) Maximum Chlorine Residual	mg/L	--	0.6
(33) Other Effluent Parameters			
COD	mg/L		105.5

Domestic Wastewater Treatment Plant
Monthly Operating Report

Month MAY Year 98

Day of the Month	Flow (mgd)	Chlorine Residual after Contact	Chlorine Residual after Dechlor.	CBOD5 Influent (mg/lL	TSS Influent (mg/L)	CBOD5 Effluent (mg/L)	TSS Effluent (mg/L)	pH Effluent	TKN Effluent mg/L)	NH3 - N Effluent (mg/L)	Nitrate Effluent (mg/L)	Total P Effluent (mgL)	Fecal Coliform (#/100ml)	COD	TOTAL N						
1	12293	0.3						7.8													
2	7914							8.0													
3	NR																				
4	15882	0.6						7.6													
5	NR	0.4						7.3													
6	11732	0.3				3.1	1.3	7.2	1.8	0.06	0.4	14	<1.0	130	2.2						
7	20846	0.4						8.0													
8	1936	0.2						8.1													
9	22261							7.9													
10	NR																				
11	20969	0.6						8.1													
12	8	0.5						6.9													
13	10171	0.4				<2.0	<2.0	6.8	1.9	0.08	2.3	5.4	<1.0	100	4.2						
14	19206	0.2						8.1													
15	15758	0.3						8													
16	6653							8.0													
17	NR																				
18	16481	0.3						7.4													
19	NR	0.4						7.1													
20	11945	0.3				<2.0	<2.1	7.1	1.8	0.07	0.6	8.1	<1.0	120	2.4						
21	21674	0.5						7.7													
22	5903	0.4						7.7													
23	19537							8.1													
24	NR																				
25	17166	0.4						8.1													
26	NR	0.4						7.5													
27	14226	0.4				<2.0	<2.0	7.1	1.6	0.08	0.3	7.9	<1.0	72	1.9						
28	13395	0.3						7.8													
29	1985	0.5						7.8													
30	4867							7.8													
31	NR																				

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.

Signed: James A. Brunswick Date: 6/10/98

Name (Please Type) James Brunswick

Company Name Citrus County Utilities Division Telephone No. (Please Type) (352) 746-5000

HARBOR BRANCH ENVIRONMENTAL LABORATORY
[illegible] Fort Pierce, FL 34946
561-465-2400, Ext. 285

FDEP QAP 870174

HARBOR BRANCH OCEANOGRAPHIC INSTITUTION

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

FILED
MAY 18 [illegible]

PRESENTED TO:
CATHY WINTER

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

PROJECT MANAGER:
DON HASH

LABORATORY DIRECTOR:
N. MYRON GUNSALUS, JR.

May 13, 1998

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
561-465-2400, Ext. 235

FDEP QAP 870174

CITRUS COUNTY CENTRAL LANDFILL

PARAMETER MONITORING REPORT
Rule 62-522.900 (11)

GMS # 4009C00086

Sample Date/Lab ID: 05/06/98 8400535001

Test Site #: _____

Site Type: [ ] Background
[ ] Site Boundary
[ ] Intermediate
[ ] Compliance
[X] Other: Leachate

Test Site Name: Leachate

1479

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, ~~Filed~~ field	150.1	05/06/98	7.2	S.U.	0.20	--	--
900201	Total Suspended Solids	SM2540 D	05/07/98	1.3	mg/L	1.0	U	None
000620	Nitrate-Nitrogen	300.0	05/08/98	0.41	mg/L	0.060	U	None
000620	Nitrite-Nitrogen	300.0	05/08/98	<0.044	mg/L	0.044	U	None
000610	Ammonia-Nitrogen	350.1	05/08/98	0.057	mg/L	0.050	U	H_2SO_4
000625	Total Kjeldahl Nitrogen	351.2	05/08/98	1.8	mg/L	0.20	U	H_2SO_4
000600	Total Nitrogen	351.2	05/12/98	2.2	mg/L	N/A	U	H_2SO_4
000665	Total Phosphorus	365.4	05/08/98	14	mg/L	0.050	U	H_2SO_4
000340	COD	410.4	05/11/98	130	mg/L	5.0	U	H_2SO_4
80082	CBOD5	SM5210 B	05/06/98	3.1	mg/L	2.0	U	None
031616	Fecal Coliform	SM9222 D	05/06/98	<1.0	CFU/100mL	1.0	U	$Na_2S_2O_3$

Field Data Sheet

Sampler (s) Pat Hilton Date 5-6-98 Sample Time _____ 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 79°

Field Instrument Beginning Calibration

pH meter	(Yes)	No	Buffer	4.0	_____	7.0	7.2	10.0	9.2
Conductivity meter	(Yes)	No	Buffer	147	_____	1414	1370	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_2SO_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_3PO_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	8.7
Conductivity meter	(Yes)	No	Buffer	147	_____	1414	1400	12900	_____
Turbidity meter	Yes	No	Buffer	0.5	_____	5.0	_____	20	_____
DO meter	Yes	No	Temp C°		_____	Adjust	_____	from	_____

General Site Information/Comments Jim Braddock on site while sample is taken.

Water Branch

Analytical Field Data Sheet
030-497

ANALYTICAL FIELD DATA

Project Name Citrus county landfill
Date 5-6-98

LOCATION	Time	pH	Specific Conductivity	Water Temperature	D.O.	Turbidity	Residual Chlorine	Comments
Leachate	1015	7.2	1090	23				

CHAIN OF CUSTODY RECORD

The ENVIRONMENTAL LABORATORY at Harbor Branch

5600 U. S. 1 North, Ft. Pierce, FL 34946 • (561) 465-2400, Ext. 285 • Fax (561) 467-1584

COMPANY: Citrus County
ADDRESS:

PHONE:
FAX :
CLIENT CONTACT:
PURCHASE ORDER #:

DATE NEEDED:
CLIENT PROJECT: Central landFill
PROJECT NAME / #: leachate weekly

HBOI W/O & HPN: 8400535

SPECIAL INSTRUCTIONS:
☐ RUSH in ___ BUSINESS DAYS
SAMPLE SAFETY INFORMATION **
Are there any other known or suspected safety hazards associated with these samples other than those listed below?
Yes __ No __ If Yes, _____

SAMPLED BY: Pat Hills
DATE: 5-6-98
TIME:
METHOD OF SHIPMENT: Fed Ex
COOLER NO.(s) 8-219
8027369 43837

MATRIX KEY	PRESERVATION KEY
S = Solid	H = Hydrochloric Acid
SL = Sludge	N = Nitric Acid
DW = Drinking	S = Sulfuric Acid
GW= Ground	SH = Sodium Hydroxide
SW = Surface	P = Phosphoric Acid
WW = Waste	ST = Sodium Thiosulfate
	U = None / Unpreserved

G = Grab
C = Composite
O = Other

FIELD ID	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE	MATRIX	#	PRESERVATIVE → / SAMPLE LOCATION ↓	Fecal coliform	CBOD TSS pH	NO3/NO2	COD TP, NH3 TKN TN				COMMENTS
							St	U	U	S				pH (Col)
001	5-6-98	1015	G	WW	5	Effluent	1	2	1	1				7.2

RELINQUISHED BY**:	DATE: 5/6/98	RECEIVED BY: M Bonometti	DATE: 5-6-98
	TIME: 1145		TIME: 11:45
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
	TIME:		TIME:
RELINQUISHED BY:	DATE:	RECEIVED FOR LAB BY:	DATE: 5-7-98
	TIME:	LAB NAME: B North	TIME: 1030

DISTRIBUTION: WHITE - For HBOI; CANARY - With Report; PINK - To Courier; GOLDENROD - Client at Pick-up

FORM 1936 - PRINTING BY HEARN

PAGE ____ OF

CITRUS COUNTY CENTRAL LANDFILL
LEACHATE MONITORING

	MCL	BY		SAMPLE	
NOTE: MCL OR GC* UG/L UNLESS	FL GW GC	PERMIT		DATE:	
MG/L INDICATED	DOC 1994	SO09-			
	FOR INFO	274381		5/13/98	
QUARTERLY PARAMETERS:					
CHLORIDE MG/L	250	ZOD		890	
SODIUM	160,000	ZOD		470,000	
TOTAL DISSOLVED SOLIDS MG/L	500	ZOD		1,600	
ARSENIC	50	N/A		17.0	
BARIUM	2,000	N/A		8.8	
CADMIUM	5	N/A	<	0.9	
CHROMIUM	100	N/A	<	2.5	
IRON	300	N/A	<	29	
MERCURY	2	N/A	<	ND	
LEAD	15	N/A	<	0.6	
SELENIUM	50	N/A	<	2.9	
SILVER	100	N/A	<	0.3	
TOTAL TRIHALOMETHANES	100	N/A		365	
(BROMODICHLOROMETHANE 43)					
(DIBROMOCHLOROMETHANE 120)					
(TRIBROMOMETHANE-BROMOFORM 190)					
(TRICHLOROMETHANE-CHLOROFORM 12)					
BENZENE	1	N/A	<	ND	
TOLUENE	1,000	N/A	<	1.7	
ETHYLBENZENE	700	N/A	<	1.8	
TOTAL XYLENES	10,000	N/A	<	9.9	
ETHYLENE DIBROMIDE (EDB)	0.02	N/A		ND	
(1,2-DIBROMOETHANE)					
cjw					

HARBOR BRANCH ENVIRONMENTAL LABORATORY
[illegible] Fort Pierce, FL 34946
561-465-2400, Ext. 285

FDEP QAP 870174

HARBOR BRANCH OCEANOGRAPHIC INSTITUTION

JUN 22 1998
STATE OF FLORIDA DEP
SOLID WASTE MANAGEMENT DIV

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

LABORATORY DIRECTOR:
N. MYRON GUNSALUS, JR.

JUNE 19, 1998

HARBOR BRANCH ENVIRONMENTAL LABORATORY
561-465-2400, Ext. 285

FDEP QAP

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.

pH measurements were taken in the field.

HARBOR BRANCH ENVIRONMENTAL LABORATORY
[illegible] FL 34946
561-465-2400, Ext. 265

FDEP QAP 870174

HARBOR BRANCH OCEANOGRAPHIC INSTITUTION

PART III ANALYTICAL RESULTS

HBEL Sample ID: 8101248001

Facility GMS# : 4009C00086

Sampling Date/Time: 05/13/98 9:10

Test Site ID# :

Report Period: Qtrly Jan. 98 - Mar. 98

Well Purged (Y/N) :

Well Name: Leachate

Well Type: ☐ Background ☐ Intermediate ☐ Compliance ☐ Other

Classification of Ground Water: 747

Ground Water Elevation (NGVD) :

or (MSL):

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	05/13/98 9:10	6.8	SU	0.20	SU
070304	Total Dissolved Solids	G	N	EPA 160.1	05/14/98 16:30	1600	mg/L	10	mg/L
900201	Total Suspended Solids	G	N	EPA 160.2	05/18/98 8:00	ND	mg/L	2.0	mg/L
000940	Chloride	G	N	EPA 300.0	06/14/98 18:00	890	mg/L	3.0	mg/L
000620	Nitrate	G	N	EPA 300.0	05/14/98 15:21	0.23	mg/L	0.060	mg/L
000620	Nitrite	G	N	EPA 300.0	05/14/98 15:21	ND	mg/L	0.044	mg/L
000610	Ammonia	G	N	EPA 350.1	05/18/98 12:55	0.088	mg/L	0.050	mg/L
000625	Total Kjeldahl Nitrogen	G	N	EPA 351.2	05/18/98 16:01	1.9	mg/L	0.20	mg/L
000600	Total Nitrogen	G	N	EPA 351.2	05/20/98 15:15	2.1	mg/L	0.20	mg/L
000665	Total Phosphorus	G	N	EPA 365.4	05/18/98 16:27	5.4	mg/L	0.25	mg/L
000340	COD	G	N	EPA 410.4	05/15/98 13:56	100	mg/L	5.0	mg/L
032101	Bromodichloromethane	G	N	EPA 601	05/20/98 13:55	43	ug/L	5.0	ug/L
032104	Bromoform	G	N	EPA 601	05/20/98 13:55	190	ug/L	5.0	ug/L
032106	Chloroform	G	N	EPA 601	05/20/98 13:55	12	ug/L	5.0	ug/L
081521	Dibromochloromethane	G	N	EPA 601	05/20/98 13:55	120	ug/L	5.0	ug/L
034030	Benzene	G	N	EPA 602	05/15/98 19:45	ND	ug/L	1.0	ug/L
034371	Ethylbenzene	G	N	EPA 602	05/15/98 19:45	1.8	ug/L	1.0	ug/L
034010	Toluene	G	N	EPA 602	05/15/98 19:45	1.7	ug/L	1.0	ug/L
081551	Total Xylenes	G	N	EPA 602	05/15/98 19:45	9.9	ug/L	1.0	ug/L
031616	Fecal Coliform	G	N	SM9222 D	05/13/98 14:35	ND	CFU/100mL	1.0	CFU/100mL
001002	Arsenic	G	N	SW-846 6010	06/02/98 23:24	17	ug/L	5.0	ug/L
001007	Barium	G	N	SW-846 6010	06/02/98 23:24	8.8	ug/L	10	ug/L
001027	Cadmium	G	N	SW-846 6010	06/02/98 23:24	0.92	ug/L	1.0	ug/L
001034	Chromium	G	N	SW-846 6010	06/02/98 23:24	2.5	ug/L	2.0	ug/L

HARBOR BRANCH ENVIRONMENTAL LABORATORY
[illegible] Fort Pierce, FL 34946
561-465-2400, Ext. 285

FDEP QAP 870174

HARBOR BRANCH OCEANOGRAPHIC INSTITUTION

PART III ANALYTICAL RESULTS

Facility GMS# : 4009C00086
Test Site ID# :

Well Name: Leachate
Classification of Ground Water:
Ground Water Elevation (NGVD) :
or (MSL):

HBEL Sample ID: 8101248001
Sampling Date/Time: 05/13/98 9:10
Report Period: Qtrly Jan. 98 - Mar. 98
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	
001045	Iron	G	N	SW-846 6010	06/02/98 23:24	29	ug/L	40	ug/L
001051	Lead	G	N	SW-846 6010	06/02/98 23:24	0.60	ug/L	3.0	ug/L
001147	Selenium	G	N	SW-846 6010	06/02/98 23:24	2.9	ug/L	5.0	ug/L
001077	Silver	G	N	SW-846 6010	06/02/98 23:24	0.30	ug/L	1.0	ug/L
000929	Sodium	G	N	SW-846 6010	06/02/98 23:24	470000	ug/L	1000	ug/L
007900	Mercury	G	N	SW-846 7470	05/18/98 8:47	ND	ug/L	500	ug/L
077651	1,2-Dibromoethane	G	N	SW-846 8011	05/20/98 15:00	ND	ug/L	18	ug/L

HARBOR BRANCH ENVIRONMENTAL LABORATORY
[illegible] Fort Pierce, FL 34946
561-465-2400, Ext. 285

FDEP QAP [illegible]

HARBOR BRANCH OCEANOGRAPHIC INSTITUTION

CITRUS COUNTY CENTRAL LANDFILL

PARAMETER MONITORING REPORT
Rule 62-522.900 (11)

GMS # 4009C00086

Sample Date/Lab ID: 05/13/98 81012480001

Test Site #:_____

Test Site Name: Leachate

Site Type:
[ ] Background
[ ] Site Boundary
[ ] Intermediate
[ ] Compliance
[X] Other: Leachate

D

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	05/13/98	6.8	S.U.	0.20	–	–
900201	Total Suspended Solids	160.2	05/18/98	<2.0	mg/L	2.0	U	None
000620	Nitrate-Nitrogen	300.0	05/14/98	2.3	mg/L	0.060	U	None
000620	Nitrite-Nitrogen	300.0	05/14/98	<0.044	mg/L	0.044	U	None
000610	Ammonia-Nitrogen	350.1	05/18/98	0.088	mg/L	0.050	U	H_2SO_4
000625	Total Kjeldahl Nitrogen	351.2	05/18/98	1.9	mg/L	0.20	U	H_2SO_4
000600	Total Nitrogen	351.2	05/20/98	4.2	mg/L	N/A	U	H_2SO_4
000665	Total Phosphorus	365.4	05/18/98	5.4	mg/L	0.050	U	H_2SO_4
000340	COD	410.4	05/15/98	100	mg/L	5.0	U	H_2SO_4
80082	CBOD5	SM5210 B	05/14/98	<2.0	mg/L	2.0	U	None
031616	Fecal Coliform	SM9222 D	05/13/98	<1.0	CFU/100mL	1.0	U	$Na_2S_2O_3$

Client Citrus County Central Landfill
Workorder Weekly / Quarterly Leachate

QC Batch WCGE 6752 (30977)
Original 8101248001
Matrix Environmental Water **Analysis Method** EPA 410.4

QC results affect the following production samples:

8101248001

QC results for Matrix Spike [65177] - Matrix Spike Duplicate [65178]

Parameter		Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analyzed	Instru ID
COD	MS	100	210	100	63.6-135.9			110mg/L	05/15/98	
	MSD		220	101		1	0-20	110mg/L	05/15/98	

HARBOR BRANCH ENVIRONMENTAL LABORATORY
FDEP QAP 870174
561-465-2400, Ext. 265

Client Citrus County Central Landfill
Workorder Weekly / Quarterly Leachate

QC Batch AUTO 4686 (30984)
Original 8101248001
Matrix Environmental Water **Analysis Method** EPA 350.1

QC results affect the following production samples:

8101248001

QC results for Matrix Spike [65185] - Matrix Spike Duplicate [65186]

Parameter		Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analyzed	Instru ID
Ammonia	MS	0.088	0.39	121	69-126			.25mg/L	05/18/98	TRAACS
	MSD		0.37	112		7.7	0-20	.25mg/L	05/18/98	TRAACS

HARBOR BRANCH ENVIRONMENTAL LABORATORY
[illegible] Fort Pierce, FL [illegible]
561-465-2400, Ext. 285

FDEP QAP 870174

Client	Citrus County Central Landfill
Workorder	Weekly / Quarterly Leachate
QC Batch	EXTR 2581 (31211)
Original	8101248001
Matrix	Environmental Water
Prep Date	05/20/98 14:33
Analysis Method	EDB's

QC results affect the following production samples:

8101248001

QC results for Matrix Spike [65685] - Matrix Spike Duplicate [65686]

Parameter		Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analyzed	Instru ID
1,2-Dibromoethane	MS	ND	0.055	61	60-140			.09ug/L	05/20/98	AUTOE_
	MSD		0.056	61		0	0-20	.09ug/L	05/20/98	AUTOE_
1,2-Dibromo-3-chloropropane	MS	ND	0.066	73	60-140			.09ug/L	05/20/98	AUTOE_
	MSD		0.073	80		9.2	0-20	.09ug/L	05/20/98	AUTOE_

Form 300
Revision 02.2
03/07/97

Field Data Sheet

Sampler (s) Pat L Heal Date 5/13/98 Sample Time _____ 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 Sunny 73° calm

Field Instrument Beginning Calibration

pH meter	(Yes)	No	Buffer	4.0	_____	7.0	7.0	10.0	9.0
Conductivity meter	(Yes)	No	Buffer	147	_____	1414	1380	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_2SO_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_3PO_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	7.1	10.0	9.3
Conductivity meter	(Yes)	No	Buffer	147	_____	1414	1400	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.

Harbor Branch
Environmental

Analytical Field Data Sheet

ANALYTICAL FIELD DATA

Project Name Citrus County landfill
Date 5/13/98

LOCATION	Time	pH	Specific Conductivity	Temperature	D.O.	Turbidity	Residual Chlorine	Comments
Trachate.	910	6.8	1270	24				

FDOH # 98230/E98080
5800 U.S. 1 North
Fort Pierce, FL 34946

FDOH # 82500/E82417
5390 First Coast Hwy., Suite 1
Fernandina Beach, FL 32034

FDOH # 83486/E83509
[X] 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

HARBOR BRANCH ENVIRONMENTAL LABORATORY

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

Chain-of-Custody

USE BALL POINT PEN ONLY

Company: CCI

Address:

Phone: Fax:

Client Contact:

Project Name: Weekly, Leachate, Quarterly,

Sampled By: P&T H.H.J

Purchase Order #:

Method of Shipment:

Cooler #'s

[ ] Standard Turn Around Time

[ ] Rush in _____ Business Day

Date _____ Time _____

For Lab Use Only

Temperature Checked Y N

Custody Seals Intact Y N

pH Checked Y N

HPN # 810

PRESERVATIVE

ANALYSES REQUESTED

Preservation Key

H - Hydrochloric Acid P - Phosphoric

N - Nitric Acid ST - Sodium

S - Sulfuric Acid Thiosulfate

SH - Sodium Hydroxide U - Unpreserved

Lab Use LAB ID	FIELD ID	COLLECTION DATE	COLLECTION TIME	Sample Type*	MATRIX**	# Containers	SAMPLE LOCATION	Fecal Coliform	Cl, NO2/NO3	COD, T Phos (NH3 TKN TP)	24 CBOD	Total TSS	As, Ba, Cd, Cr, Fe, Pb, Se, Ag, Hg	Soil EDS	Soil Fecal	COMMENTS
001		5/13	910	G	WW	12	Effluent	X	X	X	X	X	X	X	X	
								RL			RH	RL				6.8 1270

* 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 R. Matt	RECEIVED BY	RECEIVED FOR HBEL CUSTODY BY
DATE/TIME 5/13/98 1405	DATE/TIME	DATE/TIME

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

PAGE _____ of _____

HARBOR BRANCH ENVIRONMENTAL LABORATORY
[illegible] Fort Pierce, FL 34946
561-465-2400, Ext. 235

FDEP QAP 870174

HARBOR BRANCH OCEANOGRAPHIC INSTITUTION

JUN 3 1998

[illegible] SOLID WASTE MANAGEMENT

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

LABORATORY DIRECTOR:
N. MYRON GUNSALUS, JR.

May 27, 1998

HARBOR BRANCH ENVIRONMENTAL LABORATORY
[illegible] 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
[illegible] Fort Pierce, FL 34946
561-465-2400, Ext. 285

FDEP QAP 870174

HARBOR BRANCH OCEANOGRAPHIC INSTITUTION

CITRUS COUNTY CENTRAL LANDFILL

PARAMETER MONITORING REPORT

Rule 62-522.900 (11)

GMS # 4009C00086

Sample Date/Lab ID: 05/20/98 8400590001

Test Site #: _____

Site Type: [ ] Background
[ ] Site Boundary
[ ] Intermediate
[ ] Compliance
[X] Other: Leachate

Test Site Name: Leachate

1479

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, ~~Filed~~ field	150.1	05/20 /98	7.1	S.U.	0.20	--	--
900201	Total Suspended Solids	SM2540 D	05/21/98	<2.1	mg/L	2.1	U	None
000620	Nitrate-Nitrogen	300.0	05/21/98	0.58	mg/L	0.060	U	None
000620	Nitrite-Nitrogen	300.0	05/21/98	<0.044	mg/L	0.044	U	None
000610	Ammonia-Nitrogen	350.1	05/22/98	0.070	mg/L	0.050	U	H_2SO_4
000625	Total Kjeldahl Nitrogen	351.2	05/21/98	1.8	mg/L	0.20	U	H_2SO_4
000600	Total Nitrogen	351.2	05/22/98	2.4	mg/L	N/A	U	H_2SO_4
000665	Total Phosphorus	365.4	05/21/98	8.1	mg/L	0.050	U	H_2SO_4
000340	COD	410.4	05/22/98	120	mg/L	5.0	U	H_2SO_4
80082	CBOD5	SM5210 B	05/20/98	<2.0	mg/L	2.0	U	None
031616	Fecal Coliform	SM9222 D	05/20/98	<1.0	CFU/100mL	1.0	U	$Na_2S_2O_3$

FDOH # 98230/E96080
5600 U.S. 1 North
Fort Pierce, FL 34946

FDOH # 82500/E82417
5390 First Coast Hwy., Suite 1
Fernandina Beach, FL 32034

FDOH # 83488/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

HARBOR BRANCH ENVIRONMENTAL LABORATORY

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

Chain-of-Custod

USE BALL POINT PEN O

Company: citrus county landfill

Address:

Method of Shipment: FedEx

Cooler #'s

Date Time

☐ Standard Turn Around Time

☐ Rush in _____ Business Day

Phone: Fax:

Client Contact:

Project Name: weekly leachate

Sampled By: Pat Hilbert

Purchase Order #:

For Lab Use Only

Temperature Checked Y N

Custody Seals Intact Y N

pH Checked Y N

HPN # 8410

PRESERVATIVE

4t	U	S	N				

ANALYSES REQUESTED

Lab Use LAB ID	FIELD ID	COLLECTION DATE	COLLECTION TIME	Sample Type*	MATRIX**	# Containers	SAMPLE LOCATION	Fecal Coli	TSS, CBOD	COD, TP, NH3 TKN, TN	NO3+NO2					COMMENTS
001		5/20	1000	6	WW	5	EFFluent	1	2	1	1					pH 7.1

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

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

Preservation Key

H-Hydrochloric Acid P-Phosphoric Acid

N-Nitric Acid ST-Sodium Thiosulfate

S-Sulfuric Acid

SH-Sodium Hydroxide U-Unpreserved

RELINQUISHED BY Ron	RELINQUISHED BY	RELINQUISHED BY
DATE/TIME 5/20/98 1110	DATE/TIME	DATE/TIME
RECEIVED BY M Bennett	RECEIVED BY	RECEIVED FOR HBEL CUSTODY BY
DATE/TIME 5/20/98 11:10	DATE/TIME	DATE/TIME

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

HARBOR BRANCH ENVIRONMENTAL LABORATORY
5511 US 1 North, Fort Pierce, FL 34946
561-465-2400, Ext. 285

FDEP QAP #870174

HARBOR BRANCH OCEANOGRAPHIC INSTITUTION

JUN - 8 1998

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

LABORATORY DIRECTOR:
N. MYRON GUNSALUS, JR.

June 2, 1998

HARBOR BRANCH ENVIRONMENTAL LABORATORY
561-465-2400, Ext. 285

FDEP QAP 870174

HARBOR BRANCH OCEANOGRAPHIC INSTITUTION

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
[illegible] FL 34946
561-465-2400, Ext. 285

FDEP CAP 870174

HARBOR BRANCH OCEANOGRAPHIC INSTITUTION

CITRUS COUNTY CENTRAL LANDFILL

PARAMETER MONITORING REPORT
Rule 62-522.900 (11)

GMS # 4009C00086

Sample Date/Lab ID: 05/27/98 81013650001

Test Site #: _____

Site Type:
[ ] Background
[ ] Site Boundary
[ ] Intermediate
[ ] Compliance
[X] Other: Leachate

Test Site Name: Leachate

1479

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	05/27/98	7.5	S.U.	0.20	--	--
900201	Total Suspended Solids	160.2	05/29/98	<2.0	mg/L	2.0	U	None
000620	Nitrate-Nitrogen	300.0	05/27/98	0.29	mg/L	0.060	U	None
000620	Nitrite-Nitrogen	300.0	05/27/98	<0.044	mg/L	0.044	U	None
000610	Ammonia-Nitrogen	350.1	06/01/98	0.080	mg/L	0.050	U	H_2SO_4
000625	Total Kjeldahl Nitrogen	351.2	06/01/98	1.6	mg/L	1.0	U	H_2SO_4
000600	Total Nitrogen	351.2	06/01/98	1.9	mg/L	N/A	U	H_2SO_4
000665	Total Phosphorus	365.4	06/01/98	7.9	mg/L	0.50	U	H_2SO_4
000340	COD	410.4	05/29/98	72	mg/L	5.0	U	H_2SO_4
80082	CBOD5	SM5210 B	05/28/98	<2.0	mg/L	2.0	U	None
031616	Fecal Coliform	SM9222 D	05/27/98	<1.0	CFU/100mL	1.0	U	$Na_2S_2O_3$

HARBOR BRANCH ENVIRONMENTAL LABORATORY
[illegible]
561-465-2400, Ext. 265

FDEP QAP 870171

HARBOR BRANCH OCEANOGRAPHIC INSTITUTION

Client	Citrus County Central Landfill
Workorder	Weekly Leachate
QC Batch	IC 2047 (31482)
Original Matrix	Environmental Water
Analysis Method	EPA 300.0

QC results affect the following production samples:

8101365001

QC results for Method Blank [66338]

Run Instrument: Manual Entry Shimadzu

Parameter	Analyzed	Result	RDL	Units
Nitrite	05/27/98	ND	0.0022	mg/L
Nitrate	05/27/98	ND	0.0030	mg/L

HARBOR BRANCH ENVIRONMENTAL LABORATORY
[illegible] Fort Pierce FL 34946
561-465-2400, Ext. 285

FDEP QAP 870174

HARBOR BRANCH OCEANOGRAPHIC INSTITUTION

Client	Citrus County Central Landfill
Workorder	Weekly Leachate
QC Batch	AUTO 4729 (31594)
Original	
Matrix	Environmental Water
Prep Date	05/29/98 09:00
Analysis Method	EPA 351.2

QC results affect the following production samples:

8101365001

QC results for Method Blank [66558]

Run Instrument: TRAACS 2000 Autoanalyzer

Parameter	Analyzed	Result	RDL	Units
Total Kjeldahl Nitrogen	06/01/98	ND	0.048	mg/L
Total Phosphorus	06/01/98	ND	0.0094	mg/L

HARBOR BRANCH ENVIRONMENTAL LABORATORY
[illegible] FL [illegible]
561-465-2400, Ext. 285

FDEP QAP [illegible]

Client	Citrus County Central Landfill
Workorder	Weekly Leachate
QC Batch	WCGE 6851 (31612)
Original	
Matrix	Environmental Water

Analysis Method EPA 410.4

QC results affect the following production samples:

8101365001

QC results for Method Blank [66604]

Run Instrument:

Parameter	Analyzed	Result	RDL	Units
COD	05/29/98	ND	1.6	mg/L

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

FDEP [illegible]

Client	Citrus County Central Landfill
Workorder	Weekly Leachate
QC Batch	WCDE 1437 (31653)
Original Matrix	Environmental Water
Analysis Method	EPA 160.2

QC results affect the following production samples:

8101365001

QC results for Method Blank [66671]

Run Instrument:

Parameter	Analyzed	Result	RDL	Units
Total Suspended Solids	05/29/98	ND	1.0	mg/L

HARBOR BRANCH ENVIRONMENTAL LABORATORY
561-465-2400, Ext. 236

FDEP QAP 870174

Client	Citrus County Central Landfill
Workorder	Weekly Leachate
QC Batch	AUTO 4733 (31670)
Original Matrix	Environmental Water
Analysis Method	EPA 350.1

QC results affect the following production samples:

8101365001

QC results for Method Blank [66705]

Run Instrument: TRAACS 2000 Autoanalyzer

Parameter	Analyzed	Result	RDL	Units
Ammonia	06/01/98	ND	0.0090	mg/L

HARBOR BRANCH ENVIRONMENTAL LABORATORY
[illegible] Fort Pierce, FL 34946
561-465-2400, Ext. 285

FDEP QAP [illegible]

Client	Citrus County Central Landfill
Workorder	Weekly Leachate
QC Batch	WCDE 1440 (31716)
Original Matrix	Environmental Water
Analysis Method	SM5210 B

QC results affect the following production samples:

8101365001

QC results for Method Blank [66812]

Run Instrument:

Parameter	Analyzed	Result	RDL	Units
CBOD5	05/28/98	ND	2.0	mg/L

HARBOR BRANCH ENVIRONMENTAL LABORATORY
561-468-2400, Ext. 285

FDEP QAP 870174

Client	Citrus County Central Landfill
Workorder	Weekly Leachate
QC Batch	WCDE 1442 (31733)
Original Matrix	Environmental Water
Analysis Method	SM9222 D

QC results affect the following production samples:

8101365001

QC results for Method Blank [66848]

Run Instrument:

Parameter	Analyzed	Result	RDL	Units
Fecal Coliform	05/27/98	ND	1.0	CFU/100mL

End of Report

Field Data Sheet

Sampler (s) Pat Hilton Date 5/27 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 77° / cloudy

Field Instrument Beginning Calibration

pH meter	(Yes)	No	Buffer	4.0	_____	7.0	7.1	10.0	9.2
Conductivity meter	(Yes)	No	Buffer	147	_____	1414	1408	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_2SO_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_3PO_4	<2	
Other			

Well Diameter	Multiplie
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	6.9	10.0	8.9
Conductivity meter	(Yes)	No	Buffer	147	_____	1414	1460	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 sample collected.

Harbor Branch
Environmental Lab

ANALYTICAL FIELD DATA

Project Name citrus county landfill
Date 5/27/98

LOCATION	Time	pH	Specific Conductivity	Temperature	D.O.	Turbidity	Residual Chlorine	Comments
leachate	~850	7.5	1940	25°c				

HARBOR BRANCH ENVIRONMENTAL LABORATORY

Chain-of-Custody

☐ FDOH # 98230/E98080
5600 U.S. 1 North
Fort Pierce, FL 34946

☐ 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 # 84258/E84418
2514 Osawew Blvd.
Spring Hill, FL 34607

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

USE BALL POINT PEN ONLY

Company: citrus county landfill

Address:

Phone: Fax:

Client Contact:

Project Name: Weekly leachate

Sampled By: Pat Hilton

Purchase Order #:

Method of Shipment:

Cooler #'s

Date Time

☐ Standard Turn Around Time

☐ Rush in _____ Business Days

For Lab Use Only

Temperature Checked	Custody Seals Intact	pH Checked	HPN #
Y N	Y N	Y N	

PRESERVATIVE

ANALYSES REQUESTED

Preservation Key

H = Hydrochloric Acid P = Phosphoric Acid
N = Nitric Acid ST = Sodium
S = Sulfuric Acid Thiosulfate
SH = Sodium Hydroxide U = Unpreserved

Lab Use LAB ID	FIELD ID	COLLECTION DATE	COLLECTION TIME	Sample Type*	MATRIX**	# Containers	SAMPLE LOCATION	Fecal coliform								COMMENTS
001		5/27	550	G	WW	5	Effluent	1	1							

* 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 5/28/98 1300	DATE/TIME	DATE/TIME
RECEIVED BY	RECEIVED BY B Nath	RECEIVED FOR HBEL CUSTODY BY
DATE/TIME	DATE/TIME 5.27.98 1700	DATE/TIME

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

A MOR GEN

Domestic Wastewater Treatment Plant
Monthly Operating Report

Part II - General Information

(1) Month JUNE Year 98

(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

Lead Operator James A. Brunswick

Signature [signature] Cert. No. C8197

Parameter	Units	Storet Code	Value
(16) Monthly average daily flow	mgd	050053	0.008
(17) Permitted capacity	mgd	--	0.030
(18) Three month average daily flo	mgd	--	0.01
(19) Percent of permitted capacity	%	--	24%
(20) CBOD5 Effluent	mg/L	080082	<2.0
(21) CBOD5 Effluent	lbs/day	--	N/A
(22) TSS Effluent	mg/L	900201	<1.0
(23) TSS Effluent	lbs/day	--	N/A
(24) Minimum pH		--	6.7
(25) Maxium pH		--	8.3
(26) Total N	mg/L	000600	1.55
(27) TKN	mg/L	000625	1.29
(28) Ammonia (NH3 - N)	mg/L	000610	0.38
(29) Nitrate	mg/L	071850	0.25
(30) Total Phosphorus	mg/L	000665	8
(31) Minimum Chlorine Residual	mg/L	--	0.1
(32) Maximum Chlorine Residual	mg/L	--	0.6
(33) Other Effluent Parameters			
COD	mg/L		61.5

Domestic Wastewater Treatment Plant
Monthly Operating Report

Month June Year 98

Day of the Month	Flow (mgd)	Chlorine Residual after Contact	Chlorine Residual after Dechlor.	CBOD5 Influent (mg/lL	TSS Influent (mg/L)	CBOD5 Effluent (mg/L)	TSS Effluent (mg/L)	pH Effluent	TKN Effluent mg/L)	NH3 - N Effluent (mg/L)	Nitrate Effluent (mg/L)	Total P Effluent (mgL)	Fecal Coliform (#/100ml)	COD	TOTAL N							
1	18963	0.4						7.5														
2	NR	0.4						7.5														
3	9797	0.5				<2.0	<1.0	7.6	1.4	0.04	0.3	9.4	1.0	58	1.7							
4	12325	0.4						7.9														
5	NR	0.4						8.3														
6	20161	0.3						8.1														
7	NR																					
8	3026	0.3						7.5														
9	7186	0.2						7.5														
10	7076	0.5				<2.0	<2.0	7.6	1.6	0.14	0.32	7.40	10	74	1.9							
11	6283	0.6						8.2														
12	3433	0.3						8.2														
13	9247	0.3						8.2														
14	NR																					
15	14998	0.2						7.8														
16	NR	0.2						7.4														
17	5283	0.5				<2.0	<1.0	7.4	1.1	0.7	0.2	7.7	<1.0	57	1.3							
18	8183	0.5						6.9														
19	25																					
20	614																					
21	NR																					
22	NR	0.2						6.9														
23	NR	0.3						6.7														
24	3579	0.3				<2.0	<1.0	7.4	1.08	0.65	0.2	7.7	<1.0	57	1.3							
25	3748	0.4						8.0														
26	14904	0.3						8.0														
27	NR	0.4						7.8														
28	NR																					
29	13741	0.4						7.4														
30	NR	0.1						7.9														

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.

Signed: James Brunswick Date: 7/8/98

Name (Please Type) James Brunswick

Company Name Citrus County Utilities Division Telephone No. (Please Type) (352) 746-5000

HARBOR BRANCH ENVIRONMENTAL LABORATORY
Fort Pierce, FL 34946
561-465-2400, Ext. 285

FDEP QAP 870174

HARBOR BRANCH OCEANOGRAPHIC INSTITUTION

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

JUN 15 1998

PRESENTED TO:
CATHY WINTER

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

PROJECT MANAGER:
DON HASH

LABORATORY DIRECTOR:
N. MYRON GUNSALUS, JR.

June 10, 1998

HARBOR BRANCH ENVIRONMENTAL LABORATORY
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
561-465-2400, Ext. 265

FDEP QAP 870174

CITRUS COUNTY CENTRAL LANDFILL

PARAMETER MONITORING REPORT

Rule 62-522.900 (11)

GMS # 4009C00086

Sample Date/Lab ID: 06/03/98/8400623001

Test Site #: _____

Test Site Name: Leachate

Site Type:
- [ ] Background
- [ ] Site Boundary
- [ ] Intermediate
- [ ] Compliance
- [X] 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, Filed	150.1	06/03/98	7.6	S.U.	0.20	–	–
900201	Total Suspended Solids	SM2540 D	06/04/98	<1.0	mg/L	1.0	U	None
000620	Nitrate-Nitrogen	300.0	06/04/98	0.31	mg/L	0.060	U	None
000620	Nitrite-Nitrogen	300.0	06/04/98	<0.044	mg/L	0.044	U	None
000610	Ammonia-Nitrogen	350.1	06/04/98	0.040	mg/L	0.050	U	H_2SO_4
000625	Total Kjeldahl Nitrogen	351.2	06/08/98	1.4	mg/L	0.80	U	H_2SO_4
000600	Total Nitrogen	351.2	06/10/98	1.7	mg/L	N/A	U	H_2SO_4
000665	Total Phosphorus	365.4	06/08/98	9.4	mg/L	1.0	U	H_2SO_4
000340	COD	410.4	06/08/98	58	mg/L	5.0	U	H_2SO_4
80082	CBOD5	SM5210 B	06/03/98	<2.0	mg/L	2.0	U	None
031616	Fecal Coliform	SM9222 D	06/03/98	1.0	CFU/100mL	1.0	U	$Na_2S_2O_3$

Form 300
Revision 005
03/07/97

Field Data Sheet

Sampler (s) Pat Hilton Date 6/3/98 Sample Time 955 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 87° Sunny.

Field Instrument Beginning Calibration

pH meter	(Yes)	No	Buffer	4.0	_____	7.0	6.9	10.0	9.8
Conductivity meter	(Yes)	No	Buffer	147	_____	1414	1390	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_2SO_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_3PO_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	8.9
Conductivity meter	(Yes)	No	Buffer	147	_____	1414	1410	12900	_____
Turbidity meter	Yes	No	Buffer	0.5	_____	5.0	_____	20	_____
DO meter	Yes	No	Temp C°		_____	Adjust	_____	from	_____

General Site Information/Comments Jim Rowswick on site while samples collected

ANALYTICAL FIELD DATA

Project Name citrus county landfill
Date 6/3/98

Page 2 of 2

LOCATION	Time	pH	Specific Conductivity	Temperature	D.O.	Turbidity	Residual Chlorine	Comments
Leachate	955	7.55	1740	26				

HARBOR BRANCH ENVIRONMENTAL LABORATORY

Chain-of-Custody

[illegible] # 96230/E96080
[illegible] U.S. 1 North
[illegible] Pierce, FL 34946

[illegible] # 82500/E82417
[illegible] First Coast Hwy., Suite 1
[illegible]ndina Beach, FL 32034

[illegible] # 83486/E83509
[illegible] Enterprise Road, Suite 1
[illegible], FL 32725

[illegible] # 85512/E85370
[illegible] Coolidge Avenue
[illegible] Acres, FL 33936

[illegible] # 84256/E84418
[illegible] Osawaw Blvd.
[illegible] Hill, FL 34607

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

USE BALL POINT PEN ONLY

Company: Citrus County landfill

Address: _____

_____

Phone: _____ Fax: _____

Client Contact: _____

Project Name: weekly leachate

Sampled By: Pat Hilton

Purchase Order #: _____

Method of Shipment: _____

Cooler #'s _____

Date _____ 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 # 8400623

PRESERVATIVE								Preservation Key
St	U	U	S					H-Hydrochloric Acid P-Phosphoric Acid
ANALYSES REQUESTED								N-Nitric Acid ST-Sodium Thiosulfate
Fecal coliform	TSS, C30d	NO3/NO2	COD, T-NH3, TKN, TN					S-Sulfuric Acid U-Unpreserved
								SH-Sodium Hydroxide

Lab ID / FAB ID	FIELD ID	COLLECTION DATE	COLLECTION TIME	Sample Type*	MATRIX**	# Containers	SAMPLE LOCATION	Fecal coliform	TSS, C30d	NO3/NO2	COD, T-NH3, TKN, TN					COMMENTS
		6/3/98	955	G	WW		Effluent	X	X	X	X					pH - 7.55
																conductivity 1740

* 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	Rolt	RELINQUISHED BY		RELINQUISHED BY	
DATE/TIME	6-3-98 1115	DATE/TIME		DATE/TIME	
RECEIVED BY	M Boisvert	RECEIVED BY		RECEIVED FOR HBEL CUSTODY BY	L Nott
DATE/TIME	6-3-98 1115	DATE/TIME		DATE/TIME	6-3-98 1630

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 DELTONA: E83509

PROJECT MANAGER:
DON HASH

LABORATORY DIRECTOR:
N. MYRON GUNSALUS, JR.

June 17, 1998

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 # 4009C00086

Sample Date/Lab ID: 06/10/98 81014960001

Test Site #:_____

Test Site Name: Leachate

Site Type:
[ ] Background
[ ] Site Boundary
[ ] Intermediate
[ ] Compliance
[X] 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	06/10/98	7.6	S.U.	0.20	--	--
900201	Total Suspended Solids	160.2	06/12/98	<2.0	mg/L	2.0	U	None
000620	Nitrate-Nitrogen	300.0	06/11/98	0.32	mg/L	0.060	U	None
000620	Nitrite-Nitrogen	300.0	06/11/98	<0.044	mg/L	0.044	U	None
000610	Ammonia-Nitrogen	350.1	06/16/98	0.14	mg/L	0.050	U	H_2SO_4
000625	Total Kjeldahl Nitrogen	351.2	06/16/98	1.6	mg/L	1.0	U	H_2SO_4
000600	Total Nitrogen	351.2	06/17/98	1.9	mg/L	N/A	U	H_2SO_4
000665	Total Phosphorus	365.4	06/16/98	7.4	mg/L	0.25	U	H_2SO_4
000340	COD	410.4	06/11/98	74	mg/L	5.0	U	H_2SO_4
80082	CBOD5	SM5210 B	06/11/98	<2.0	mg/L	2.0	U	None
031616	Fecal Coliform	SM9222 D	06/10/98	10	CFU/100mL	1.0	U	$Na_2S_2O_3$

FDOH # 96230/E96080
5600 U.S. 1 North
Fort Pierce, FL 34946

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

HARBOR BRANCH ENVIRONMENTAL LABORATORY

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

Chain-of-Custody

USE BALL POINT PEN ONLY

Company: Citrus county landFill

Address:

Phone: Fax:

Client Contact:

Project Name: Weekly leachate

Sampled By: Pat Hilton

Purchase Order #:

Method of Shipment:

Cooler #'s

Date 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 # 8101496

PRESERVATIVE

ST	U	U	S					

ANALYSES REQUESTED

Lab Use LAB ID	FIELD ID	COLLECTION DATE	COLLECTION TIME	Sample Type*	MATRIX**	# Containers	SAMPLE LOCATION	Fecal	TSS cBOD	NO3/NO2	cod, TP NH3, TKN, TN					COMMENTS
001		6/10	910	G		5	EFFluent	X	X	X	X					pH - 7.6
																cosdot - 1730

Preservation Key

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

* 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 6/10/98 1415	DATE/TIME	DATE/TIME
RECEIVED BY	RECEIVED BY	RECEIVED FOR HBEL CUSTODY BY
DATE/TIME	DATE/TIME	DATE/TIME 6/10/98 1415

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

LABORATORY DIRECTOR:
N. MYRON GUNSALUS, JR.

June 24, 1998

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 # 4009C00086 Sample Date/Lab ID: 06/17/98 840067400

Test Site #:_____

Test Site Name: Leachate

Site Type: [ ] Background
[ ] Site Boundary
[ ] Intermediate
[ ] Compliance
[X] Other: Leachate

1479

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, Filed	150.1	06/17/98	7.4	S.U.	0.20	--	--
900201	Total Suspended Solids	SM2540 D	06/04/98	<1.0	mg/L	1.0	U	None
000620	Nitrate-Nitrogen	300.0	06/17/98	0.20	mg/L	0.060	U	None
000620	Nitrite-Nitrogen	300.0	06/18/98	<0.044	mg/L	0.044	U	None
000610	Ammonia-Nitrogen	350.1	06/22/98	0.654	mg/L	0.050	U	H_2SO_4
000625	Total Kjeldahl Nitrogen	351.2	06/23/98	1.08	mg/L	0.40	U	H_2SO_4
000600	Total Nitrogen	351.2	06/10/98	1.3	mg/L	N/A	U	H_2SO_4
000665	Total Phosphorus	365.4	06/22/98	7.7	mg/L	0.25	U	H_2SO_4
000340	COD	410.4	06/08/98	57	mg/L	5.0	U	H_2SO_4
80082	CBOD5	SM5210 B	06/17/98	<2.0	mg/L	2.0	U	None
031616	Fecal Coliform	SM9222 D	06/17/98	<1.0	CFU/100mL	1.0	U	$Na_2S_2O_3$

Harbor Branch
Environmental Laboratory

Page 1 of 2

Form 300
Revision 005
03/07/97

Field Data Sheet

Sampler (s) Pat Hilton Date 6-17 Sample Time 1055 Field ID# _____
Project Name citrus county landfill

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

Sampling Method: Grab Composite Monitoring Well: Bailer Pump
Sampling Equipment: Bailer only
Site and Weather Conditions 92° Partly cloudy

Field Instrument Beginning Calibration

pH meter	Yes	No	Buffer	4.0	_____	7.0	7.1	10.0	9.9
Conductivity meter	Yes	No	Buffer	147	_____	1414	1410	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_2SO_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_3PO_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	10.0
Conductivity meter	Yes	No	Buffer	147	_____	1414	1410	12900	_____
Turbidity meter	Yes	No	Buffer	0.5	_____	5.0	_____	20	_____
DO meter	Yes	No	Temp C°		_____	Adjust	_____	from	_____

General Site Information/Comments Jim Bardwick on site while sample collected

Harbor Branch
Environmental Laboratory

Analytical Field Data Sheet
030497

ANALYTICAL FIELD DATA

Project Name Citrus County Landfill
Date 6-17-98

Page 2 of 2

LOCATION	Time	pH	Specific Conductivity	Temperature	D.O.	Turbidity	Residual Chlorine	Comments
Leachate	1055	7.4	1580	28°				

FDOH # 96230/E96080
5608 U.S. 1 North
Fort Pierce, FL 34948

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 Osowaw Blvd.
Spring Hill, FL 34607

HARBOR BRANCH ENVIRONMENTAL LABORATORY

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

801 859 542 437

Chain-of-Custody

USE BALL POINT PEN ONLY

Company: Citrus county landfill

Address:

Phone: Fax:

Client Contact:

Project Name: Weekly leachate

Sampled By: Pat Hilton

Purchase Order #:

Method of Shipment: FedEx

Cooler #'s

Date 6-17 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 | HBN # 840 0674

PRESERVATIVE

ANALYSES REQUESTED

Preservation Key

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

Lab Use LAB ID	FIELD ID	COLLECTION DATE	COLLECTION TIME	Sample Type*	MATRIX**	# Containers	SAMPLE LOCATION	Fecal coliform	C30d, TSS	NO3/NO2	COD, TP, NH3, TKN, TN					COMMENTS
		6/17	1055	G	WW	5		X	X	X	X					pH 7.4 cond 1580

* 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 6-17-98 1200	DATE/TIME	DATE/TIME
RECEIVED BY M Bonsmith	RECEIVED BY	RECEIVED FOR HBEL CUSTODY BY L Nott
DATE/TIME 6-17-98 1200	DATE/TIME	DATE/TIME 6.18.98 0930

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

PAGE ____ of ____

07/07/98 TUE 08:28 FAX 1 561 467 1584 HBEL +++ CITRUS COUNTY 008

HARBOR BRANCH ENVIRONMENTAL LABORATORY
3600 US 1 North, Fort Pierce, FL 34946
561-465-2400, Ext. 285

FDEP QAP 870174

HARBOR BRANCH OCEANOGRAPHIC INSTITUTION

JUN 29 [illegible]

PUBLIC [illegible]
SOLID WASTE MANAGEMENT

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

LABORATORY DIRECTOR:
N. MYRON GUNSALUS, JR.

June 24, 1998

HARBOR BRANCH ENVIRONMENTAL LABORATORY
[illegible]
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
561-465-2400, Ext. 285

FDEP QAP 87071

CITRUS COUNTY CENTRAL LANDFILL

PARAMETER MONITORING REPORT

Rule 62-522.900 (11)

GMS # 4009C00086

Sample Date/Lab ID: 06/24/98 8400674001

Test Site #: _____

Test Site Name: Leachate

Site Type:
[ ] Background
[ ] Site Boundary
[ ] Intermediate
[ ] Compliance
[X] 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, Filed	150.1	06/17/98	7.4	S.U.	0.20	--	--
900201	Total Suspended Solids	SM2540 D	06/04/98	<1.0	mg/L	1.0	U	None
000620	Nitrate-Nitrogen	300.0	06/17/98	0.20	mg/L	0.060	U	None
000620	Nitrite-Nitrogen	300.0	06/18/98	<0.044	mg/L	0.044	U	None
000610	Ammonia-Nitrogen	350.1	06/22/98	0.654	mg/L	0.050	U	H_2SO_4
000625	Total Kjeldahl Nitrogen	351.2	06/23/98	1.08	mg/L	0.40	U	H_2SO_4
000600	Total Nitrogen	351.2	06/10/98	1.3	mg/L	N/A	U	H_2SO_4
000665	Total Phosphorus	365.4	06/22/98	7.7	mg/L	0.25	U	H_2SO_4
000340	COD	410.4	06/08/98	57	mg/L	5.0	U	H_2SO_4
80082	CBOD5	SM5210 B	06/17/98	<2.0	mg/L	2.0	U	None
031616	Fecal Coliform	SM9222 D	06/17/98	<1.0	CFU/100mL	1.0	U	$Na_2S_2O_3$

Revision 005
03/07/97

Field Data Sheet

Page 1 of 2

Sampler (s) Pat Hilton Date 6-17 Sample Time 1055 Field ID# _____
Project Name Citrus county land Fill

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

Sampling Method: Grab Composite Monitoring Well: Bailer Pump
Sampling Equipment: Bottles only
Site and Weather Conditions 92° Partly cloudy

Field Instrument Beginning Calibration

pH meter	Yes	No	Buffer	4.0	_____	7.0	7.1	10.0	9.9
Conductivity meter	Yes	No	Buffer	147	_____	1414	1410	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_2SO_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_3PO_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	10.0
Conductivity meter	Yes	No	Buffer	147	_____	1414	1410	12900	_____
Turbidity meter	Yes	No	Buffer	0.5	_____	5.0	_____	20	_____
DO meter	Yes	No	Temp C°		_____	Adjust	_____	from	_____

General Site Information/Comments Jim Broderick on site while sample collected

ANALYTICAL FIELD DATA

Project Name Citrus county landfill
Date 6-17-98

Page 2 of 2

LOCATION	Time	pH	Specific Conductivity	Temperature	D.O.	Turbidity	Residual Chlorine	Comments
leachate	1055	7.4	1580	28°				

FDOH # 96230/E96080
5600 U.S. 1 North
Fort Pierce, FL 34946

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

X FDOH # 84256/E84418
2514 Osawaw Blvd.
Spring Hill, FL 34607

HARBOR BRANCH ENVIRONMENTAL LABORATORY

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

Chain-of-Custo...

801 859 542 43 6

USE BALL POINT PEN ...

Company: Citrus county landfill

Address:

Phone: Fax:

Client Contact:

Project Name: weekly leachate

Sampled By: Pat Hilton

Purchase Order #:

Method of Shipment: FedEx

Cooler #'s

Date 6-17 Time

☐ Standard Turn Around Time

☐ Rush in ____ Business ...

For Lab Use Only

Temperature Checked Y N | Custody Seals Intact Y N | pH Checked Y N | HPN # 840 06 ...

Lab Use LAB ID	FIELD ID	COLLECTION DATE	COLLECTION TIME	Sample Type*	MATRIX**	# Containers	SAMPLE LOCATION	PRESERVATIVE	ANALYSES REQUESTED: Fecal coliform	cBOD, TSS	NO3/NO2	COD, TP, NH3, TKN, TN					COMMENTS
		6/17	1055	6	WW	5			X	X	X	X					pH 7.4 cool 15

Preservation Key: H - Hydrochloric Acid; P - Phosphat...; N - Nitric Acid; ST - Sodium Th...; S - Sulfuric Acid; U - Unpreserved; SH - Sodium Hydroxide

* 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 [signature]	RELINQUISHED BY	RELINQUISHED BY
DATE/TIME 6-17-98 1200	DATE/TIME	DATE/TIME
RECEIVED BY M Bonnett	RECEIVED BY	RECEIVED FOR HBEL CUSTODY BY [signature]
DATE/TIME 6-17-98 1200	DATE/TIME	DATE/TIME 6-18-98 0930

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

PAGE ____ of ____