

DEPARTMENT OF ENVIRONMENTAL PROTECTION

REQUEST FOR ADDITIONAL INFORMATION

SUMTER COUNTY LANDFILL, LONG TERM CARE PERMIT RENEWAL  
PENDING PERMIT NOS:  
22926-002-SF, SUMTER COUNTY

PREPARED FOR



SUMTER COUNTY  
BOARD OF COUNTY COMMISSIONERS  
209 NORTH FLORIDA STREET  
BUSHNELL, FLORIDA 33513

October 1, 1997

921100.003

**Springstead Engineering, inc.**

Consulting Engineers - Architects - Planners - Surveyors

727 South 14th Street

Leesburg, Florida 34748

Lake (352) 787-1414

Sumter (352) 793-3639

Fax (352) 787-7221

FILE



**Springstead  
Engineering, inc.**

Consulting Engineers – Architects – Planners – Surveyors

EB - 0001723

AA - 0002820

LB - 0001723

727 South 14th Street  
Leesburg, Florida 34748

Lake (352) 787-1414

Sumter (352) 793-3639

Fax (352) 787-7221

October 2, 1997

Ms. Allison Amram, P.G.  
Southwest District - Solid Waste  
Florida Department of Environmental Protection  
3804 Coconut Palm Drive  
Tampa, Florida 33619

RECEIVED  
OCT 03 1997  
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E  
P

**RE: Sumter County Landfill, Long-term Care Permit Renewal  
Pending Permit No. 22926-002-SF, Sumter County  
SEI File No. 921100.000**

Dear Ms. Amram:

We are in receipt of your Request for Additional Information dated September 2, 1997 regarding the above referenced project; please find the following responses:

1. Solid Waste Management Facility Permit application: Please complete the following sections (and provide the required supporting data/reports) as they pertain to the closed landfill: B3, B8, B21, N3d, N3e, O4, O6, and Q. Section B contains general information concerning the closed landfill; Section N requires an engineering evaluation of the existing closed landfill systems (gas and water quality monitoring, cover conditions, stormwater control, etc.); Section O concerns the current use of the landfill areas (vacant land and recyclable storage only?) as well as documentation in the property deed that a landfill is present (see attached rule language from 17-701.074(4), dated December 10, 1985); and Section Q requires information about the financial responsibility accounts.
1. See the following responses:
  - B3) Disposal area 110 acres; used 60 acres, available 50 acres.
  - B8) The types of waste received include:
    1. Residential
    2. Commercial
    3. Yard Trash
    4. Domestic Sludge for current composting process
  - B21) The closed landfill unit has a natural soil bottom.
  - N3d) Gas migration survey reports have been performed each year and submitted to FDEP. A copy of the report for 1996 is presented in Appendix A. These reports have indicated that landfill gasses are not present in the closed portion of the landfill.

- N3e) The report addressing the effectiveness of the landfill design is presented in Appendix B.
  - O4) A declaration is being prepared by the County Attorney for submission to DEP.
  - O6) The closed landfill areas are not in use at this time with exception of Phase III which is used for recyclables storage. The cover over Phase III consists of asphaltic concrete.
  - Q1) Long term care costs for a third party to perform the work are attached.
  - Q2) Annual cost adjustments will be made by using the Department's cost increase percentage or a percentage of 2% per year whichever is lower.
  - Q3) Sumter County established an escrow account for the facility on September 29, 1992.
2. Based on the text provided, the FDEP understands that the applicant wishes to continue with the annual gas surveys. This is acceptable to FDEP.
  2. The results of the past two (2) years of methane gas migration reports indicate that the amount of gas measured at the facility is below the detection limits in all areas except the tipping floor of the MRF building. Based on the measurements and the fact that the landfill is approximately ten (10) years old at this time, we request that the requirement for annual gas monitoring be deleted.
  3. The ground water parameters missing from the last quarterly sampling event (listed in your August 20, 1997 letter to Ms. Danielle Nichols) are included in the EPA 601 parameter list. These parameters are part of the required sampling parameters and must be included in future sampling events. For your reference, the EPA 601 and 602 parameters as listed in 40 CFR, Part 136, Appendix A are attached to this letter.
  3. The groundwater parameters will be included on future sampling events.

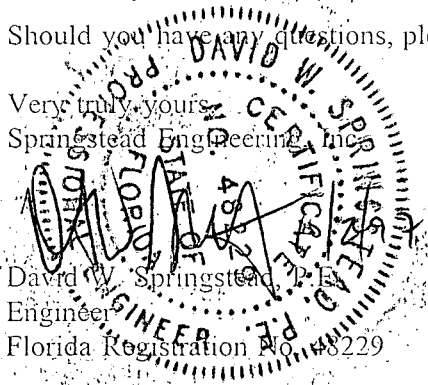
GROUNDWATER MONITORING PLAN EVALUATION

4. Appendix A, Groundwater Elevation Contours Maps. Please provide the groundwater elevation at each measurement point, and include the outline of the closed landfill and other pertinent structures in this area.
4. The revised maps are presented in Appendix C.
5. The evaluation included data from the past year only. The evaluation should include sampling events that occurred after those included in the May 1994 ground water evaluation.
5. The data for the last three (3) years is presented in Appendix "D".
6. A request to decrease sampling frequency must be supported by site-specific ground water flow velocity calculations. Please submit this data with supporting calculations. Well testing should be conducted on a representative number of wells.

6. **At this time, we do not request a decrease in the frequency of the groundwater monitoring testing.**
7. The evaluation stated that turbidity is a problem during some sampling events. Wells that are purged with bailers often exhibit higher turbidity than wells purged with pumps. If the wells are purged with bailers, the applicant may want to instruct the samplers to gently lower the bailers in and out of the wells. If problems persist, the applicant may wish to have the wells redeveloped, or institute another method for purging the wells.
7. **Response is noted.**
8. If the applicant would like to reduce the parameter list, a proposed list must be submitted along with rationale for the proposed changes.
8. **We request that the Volatile Organic Compounds and Pesticides and PCB's portion of the primary drinking water standards be deleted from the monitoring well testing requirements. Throughout the past five (5) years of testing, a minimum number of hits have been detected of these compounds and only on very few occurrences have compounds having levels above MCL been detected. In these instances the level was BDL or below MCL on the next sampling. Based on the age of the landfill it is our opinion that it is unlikely that these compounds will be detected in the future.**

Should you have any questions, please contact our office.

Very truly yours,  
Springstead Engineering, Inc.

  
David W. Springstead, P.E.  
Engineer  
Florida Registration No. 8229

DWS/jal

cc: Garry Breeden - Sumter County  
Terry Hurst - Sumter County  
TIA Solid Waste Management  
Denise Reynolds - Sumter County

(October 2 - a:amram.rai)

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

FINANCIAL ASSURANCE COST ESTIMATES

Date: 10/1/97

Date of FDEP Approval: \_\_\_\_\_

**I. GENERAL INFORMATION:**

Facility Name: Sumter County Recycling, Processing and Composting Facility GMS No.: 4060C00092

Permit No.: 22926-002-SF Expiration Date: Pending

Address (facility): 835 CR 529 Sumterville, Florida 33585

Address (mailing): 319 East Anderson Avenue, Bushnell, Florida 33513

Permittee (operating authority): Sumter County Public Works

Facility Lat. 28-44-30 Long. 82-05-20 or UTM's \_\_\_\_\_

Description of the Solid Waste Disposal Units included: 3 Class I soil bottom landfill units with impervious cover, methane vents and monitoring wells.

Landfill Acreage included in this Estimate: 14.5

Type of Landfill: X Class I        Class III

       Exempt; Type of Exemption: \_\_\_\_\_

Closure Plan Approved: Yes / XX

**II. TYPE OF FINANCIAL DOCUMENT SUBMITTED TO ENSURE FINANCIAL ASSURANCE:**

       Trust Fund Agreement        Performance Bond (only for landfills with an approved closure plan)

       Letter of Credit        Standby Trust Fund Agreement

       Insurance Certificate XX Escrow Account

       Financial Guarantee Bond        Other (Explain) \_\_\_\_\_

**IV. ANNUAL COST FOR LONG-TERM CARE**

( for 20 or 30 yrs. ,see 17-701.600(1)a.1. )

(circle one)

**\*\*Third Party Estimate/Quote must be provided for each item**

**\*\*Costs must be for a third party providing material and labor.**

All items must be addressed. Attach a detailed explanation for all items marked not applicable (N/A).

DESCRIPTION	UNIT (A)	QUANTITY (B)	UNIT COST (C)	ANNUAL COST** (D)=(A)x(B)x(C)
1. Groundwater Monitoring 17-701.510(6), (8)(a)	sampling frequency events/yr	# of wells	\$/well/event	\$/yr
Monthly	_____	_____	\$652	\$18,256
Quarterly	_____	_____	_____	_____
Semi-Annual	_____	_____	_____	_____
Annual	_____	_____	_____	_____
Subtotal Groundwater Monitoring				\$18,256
2. Gas Monitoring 17-701.400(10)	sampling frequency events/yr	# of locations	\$/location/event	\$/yr
Monthly	_____	_____	_____	_____
Quarterly	_____	_____	_____	_____
Semi-Annual	_____	_____	_____	_____
Annual	1	29	\$27.50	\$800
Subtotal Gas Migration Monitoring				\$800
3. Leachate Monitoring 17-701.510(5), (6)(b), 17-701.510(8)(c)	sampling frequency events/yr	# of locations	\$/location/event	\$/yr
Monthly	_____	_____	_____	_____
Quarterly	_____	_____	_____	_____
Semi-Annual	2	1	\$1055	\$2110
Annual	_____	_____	_____	_____
Subtotal Leachate Monitoring				\$2110.00

DESCRIPTION	UNIT (A)	QUANTITY (B)	UNIT COST (C)	ANNUAL COST** (D)=(A)x(B)x(C)
-------------	-------------	-----------------	------------------	----------------------------------

4. Surface Water Monitoring 17-701.510(4), (8)(b)	sampling frequency events/yr	# of locations	\$/location/event	\$/yr
Monthly	_____	_____	_____	_____
Quarterly	_____	_____	_____	_____
Semi-Annual	_____	_____	_____	_____
Annual	_____	_____	_____	_____

Subtotal Surface Water Monitoring           \$0          

5. Maintenance of Leachate Collection/Treatment Systems

Collection Pipes	LF	_____	_____	_____
Sumps, Traps	EA	_____	_____	_____
Lift Stations	EA	_____	_____	_____
Impoundments- Liner Repair	SF	_____	_____	_____
Sludge Removal	^CY	_____	_____	_____
Aeration Systems- Floating Aerators	EA	_____	_____	_____
Spray Aerators	EA	_____	_____	_____
Off-Site Disposal	1000gal	_____	_____	_____
On-Site Pretreatment System Maintenance-(Describe)		_____	_____	_____
		_____	_____	_____
Other (Describe)-		_____	_____	_____
		_____	_____	_____

Subtotal Leachate Collection/Treatment System Maintenance           \$2000

DESCRIPTION	UNIT (A)	QUANTITY (B)	UNIT COST (C)	ANNUAL COST** (D)=(A)x(B)x(C)
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6. Maintenance of Groundwater  
Monitoring Wells LF

\_\_\_\_\_

Subtotal Groundwater Monitoring Well Maintenance \$0

7. Maintenance of Gas Migration System

Piping, Vents LF

\_\_\_\_\_

Blowers EA

\_\_\_\_\_

Flaring Units EA

\_\_\_\_\_

Meters, Valves EA

\_\_\_\_\_

Subtotal Gas Migration System Maintenance \$200

8. Landscape Maintenance

Mowing AC

\_\_\_\_\_

Fertilizer AC

\_\_\_\_\_

Irrigation AC

\_\_\_\_\_

Subtotal Landscape Maintenance \$1305

9. Benchmark Maintenance EA

\_\_\_\_\_

Subtotal Benchmark Maintenance \$260

10. Administrative/Overhead-

P.E. Supervisor HR

\_\_\_\_\_

On-Site Engineer HR

\_\_\_\_\_

Office Engineer HR

\_\_\_\_\_

On-Site Technician HR

\_\_\_\_\_

Other (explain):

\_\_\_\_\_

Electricity-include: LS  
Leachate Pumps,  
Blowers, Lighting, etc.

\_\_\_\_\_

Subtotal Administrative \$0



DESCRIPTION	UNIT (A)	QUANTITY (B)	UNIT COST (C)	ANNUAL COST** (D)=(A)x(B)x(C)
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11. Maintenance of Cover

Sodding, Soil	AC	_____	_____	_____
Regrading	AC	_____	_____	_____
Liner Repair- Synthetic	SY	_____	_____	_____
Clay	CY	_____	_____	_____

Subtotal Cover Integrity Maintenance \$1050

12. Surface Water Drainage Maintenance

Ditch Cleaning	LF	_____	_____	_____
Stormwater Conveyance Maint.	EA	_____	_____	_____

Subtotal Drainage Maintenance \$0

13. Security System Maintenance

Fences	LF	_____	_____	_____
Gate(s)	EA	_____	_____	_____
Sign(s)	EA	_____	_____	_____

Subtotal Security System Maintenance \$0

14. Remedial Actions

LS	_____	_____	_____
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Subtotal Remedial Actions \$0

15. Site Specific Costs (explain):

_____	_____	_____	_____
_____	_____	_____	_____

Subtotal Site Specific Costs \$0

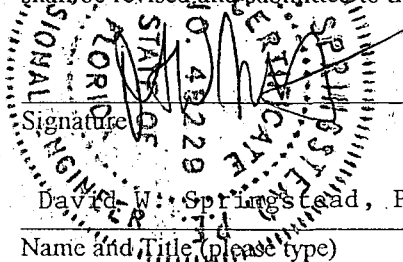
LONG-TERM CARE COSTS (\$/yr) \$25,981

TOTAL LONG-TERM CARE COSTS (\$)

\$25,981

CERTIFICATION BY ENGINEER

This is to certify that the Financial Assurance Cost Estimates pertaining to the engineering features of this solid waste management facility have been examined by me and found to conform to engineering principals applicable to such facilities. In my professional judgement, the Cost Estimates are a true, correct and complete representation of the financial liabilities for closing and long-term care of the facility, and comply with the requirements of Florida Administrative Code (FAC), Rule 17-701.630 and all other Department of Environmental Protection rules and statutes of the State of Florida. It is understood that the Financial Assurance Cost Estimates shall be revised and submitted to the Department annually as required by FAC 17-701.630(4).



Signature

727 S. 14th Street

Mailing Address

David W. Springsstead, P.E., Engineer Leesburg, Florida 34748

Name and Title (please type)

City, State, Zip Code

48229

Florida Registration Number (please affix seal)

(352) 787-1414

Telephone Number

Date: 10/1/97

APPENDIX A

# Central Testing Laboratory

Engineering and Materials Testing

Reply to:

December 31, 1996

Leesburg

Mr. Garry Breeden, Director of Public Works  
Sumter County Public Works Department  
222 East McCollum Avenue  
Bushnell, FL 33513

RE: Gas Migration Study Report  
Gas Monitoring In and Around Buildings  
Sumter County Solid Waste Management Facility  
9684452.300

Dear Mr. Breeden:

As is required by specific condition of the permit, Central Testing Laboratory (CTL) performed a gas migration study at the above referenced facility on December 6, 1996. Permanent monitoring assemblies were installed, October 5, 1994, at various locations at the facility. The locations are shown on the aerial photograph presented in Appendix A. A diagram showing the typical construction of the monitoring assembly is presented in Appendix B. The purpose of this study is to determine if generation and possible migration of combustible gases occur at the closed Class I Landfill.

The monitoring assemblies were placed at sampling locations chosen to detect methane gas migrating off areas of the subject site to areas of concern which include the structures. The sampling locations were analyzed by inserting a probe of a Foxboro Organic Vapor Analyzer (OVA), Model 128, (Serial Number A41775) through a rubber stopper then inserting the rubber stopper into the top of the monitoring assembly. The meter on the OVA was visually monitored, allowing the meter to stabilize. The OVA was calibrated using air and 100 ppm methane (CH<sub>4</sub>) in air. The results of the OVA analysis are tabulated in the table entitled Gas Migration Survey - December 6, 1996, presented below.

Florida Department of Environmental Protection (FDEP) has requested that the OVA test results be converted to percentage of Lower Explosive Limit (LEL) for methane. The LEL for methane reported in various publications is 5.0 percent. This value was used to make the conversion from percent methane to percent LEL of methane. To simplify, divide the ppm methane by 50,000 to obtain percent LEL of methane.

Gas Migration Study Report  
Gas Monitoring In and Around Buildings  
Sumter County Solid Waste Management Facility  
9684452.300

December 31, 1996

GAS MIGRATION SURVEY DECEMBER 6, 1996		
MONITORING POINT N°	ppm CH <sub>4</sub>	%LEL CH <sub>4</sub>
M-1	0	0
M-2	0	0
M-3	0	0
M-4	0	0
M-5	0	0
M-6	360	7.2 <sup>-3</sup>
M-7	0	0
M-8	0	0
M-9	0	0
M-10	0	0
M-11	0	0
M-12	0	0
M-13	0	0
M-14	0	0

Gas Migration Study Report  
Gas Monitoring In and Around Buildings  
Sumter County Solid Waste Management Facility  
9684452.300

December 31, 1996

GAS MIGRATION SURVEY DECEMBER 6, 1996		
MONITORING POINT N°	ppm CH <sub>4</sub>	%LEL CH <sub>4</sub>
M-15	0	0
M-16	0	0
M-17	0	0
M-18	0	0
M-19	0	0
M-20	0	0
M-21	0	0
M-22	0	0
M-23	0	0
M-24	0	0
M-25	0	0
M-26	0	0
M-27	0	0
M-28	0	0
M-29	0	0

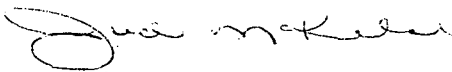
Gas Migration Study Report  
Gas Monitoring In and Around Buildings  
Sumter County Solid Waste Management Facility  
9684452.300

December 31, 1996


Based upon the results of the tests conducted as part of this gas migration survey, it is CTL's opinion that the existing gas venting system is functioning satisfactorily and that no recommendations for additional measures or corrective actions are required at this time.

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

Very Truly Yours,  
Central Testing Laboratory



Judi M. Kelch  
Environmental Technician



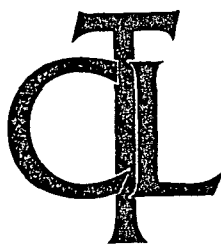
12/31/96  
David W. Springstead, P.E.  
Engineer  
Florida Reg. No. 48229

**GAS MIGRATION SURVEY**

**AT**

**THE SUMTER COUNTY  
SOLID WASTE MANAGEMENT FACILITY  
SUMTER COUNTY, FLORIDA**

**APPENDIX A  
AERIAL PHOTOGRAPH SHOWING LOCATION  
OF GAS MONITORING POINTS**



**CENTRAL TESTING LABORATORY  
LEESBURG, FLORIDA**

**DECEMBER 1996  
9684452.300**



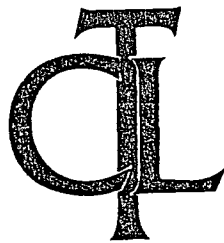
**GAS MIGRATION SURVEY**

**AT**

**THE SUMTER COUNTY  
SOLID WASTE MANAGEMENT FACILITY  
SUMTER COUNTY, FLORIDA**

**APPENDIX B**

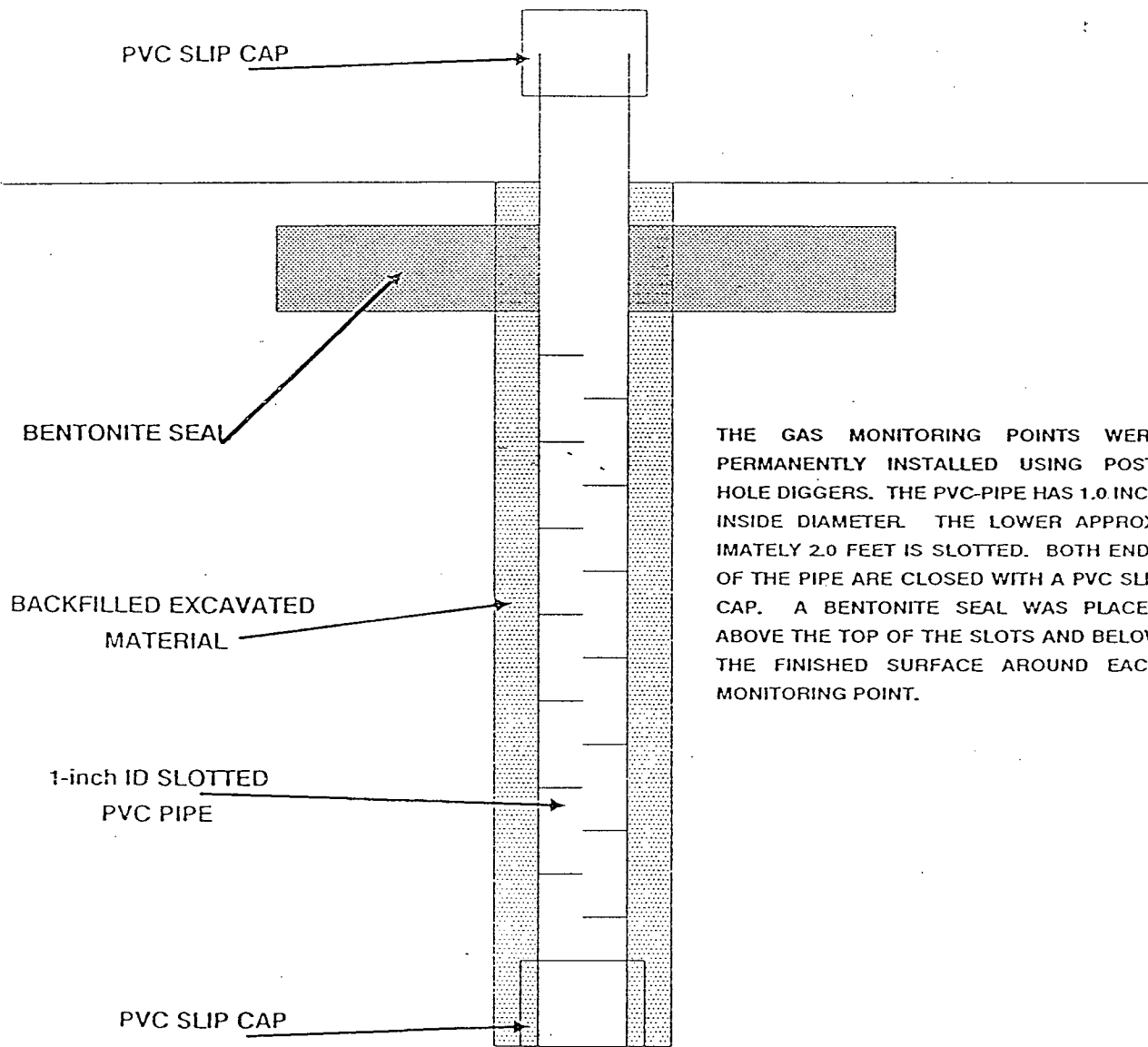
**DIAGRAM OF GAS MONITORING POINT CONSTRUCTION**



**CENTRAL TESTING LABORATORY  
LEESBURG, FLORIDA**

**DECEMBER 1996  
9684452.300**

TYPICAL GAS MONITORING POINT CONSTRUCTION



THE GAS MONITORING POINTS WERE PERMANENTLY INSTALLED USING POST-HOLE DIGGERS. THE PVC-PIPE HAS 1.0 INCH INSIDE DIAMETER. THE LOWER APPROXIMATELY 2.0 FEET IS SLOTTED. BOTH ENDS OF THE PIPE ARE CLOSED WITH A PVC SLIP CAP. A BENTONITE SEAL WAS PLACED ABOVE THE TOP OF THE SLOTS AND BELOW THE FINISHED SURFACE AROUND EACH MONITORING POINT.

APPENDIX B

## Report of Effectiveness of Landfill Design

This report addresses the requirements of FAC 62-701.600(4)(e) for the closed landfill at the Sumter County Recycling, Processing and Composting Facility in Sumterville, Florida. The purpose of the report is to describe the effects of the landfill on adjacent ground and surface waters and the landfill area.

The results of the geotechnical testing on the landfill site and adjacent parcels not indicate any detrimental effects on the site or adjacent sites due to the landfill operation at the subject site. No settling or sloughing has occurred due to foundation support. Settlement has occurred on the top of the landfill due to degradation of the organic materials in the landfilled materials.

The drainage design of the landfill has been effective and has operated as designed. It is Springstead Engineering, Inc.'s opinion that the stormwater and drainage system will continue to operate properly in the future.

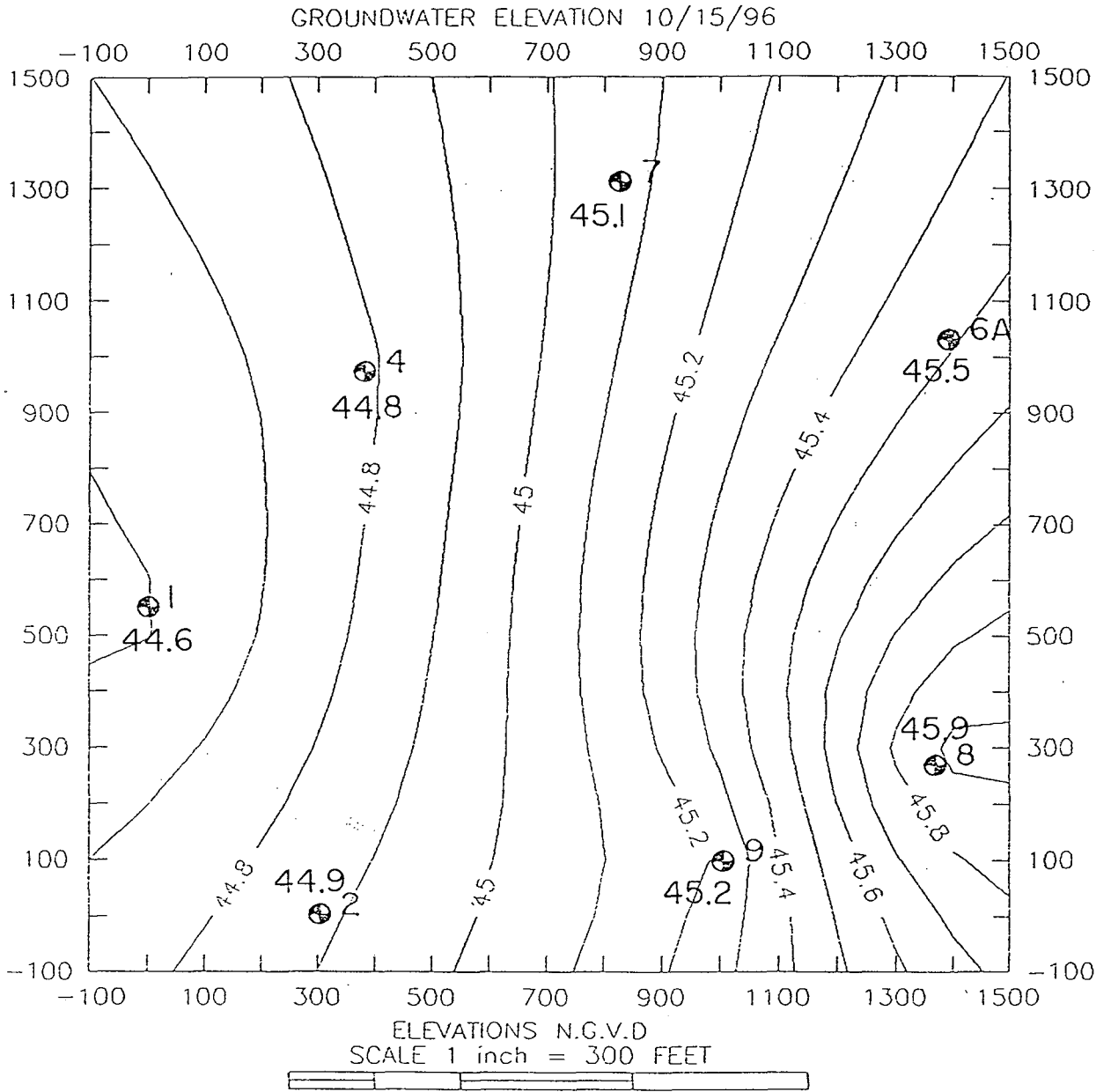
Based on the results of the gas migration studies performed for the site, the gas vents are in proper working condition and the landfill is exhibiting very low to no methane gas generation over the landfill cover.

The existing cover for the closed landfill consists of 1 foot of sand over an impervious membrane for the majority of the site and an asphaltic concrete section cover over the remainder of the site. The sand/membrane cover is in very good condition, having a good stand of native grasses growing in the sand. This cover is effective for preventing the flow of water into the closed landfill system. The asphalt cover is in good condition. Several areas are unlevel due to settlement of materials which were landfilled. The asphalt covers are currently being releveled and repaved to prevent any ponding on the asphalt, and to reseal the cover. The asphalt cover is also effective for preventing the flow of water into the closed landfill system.

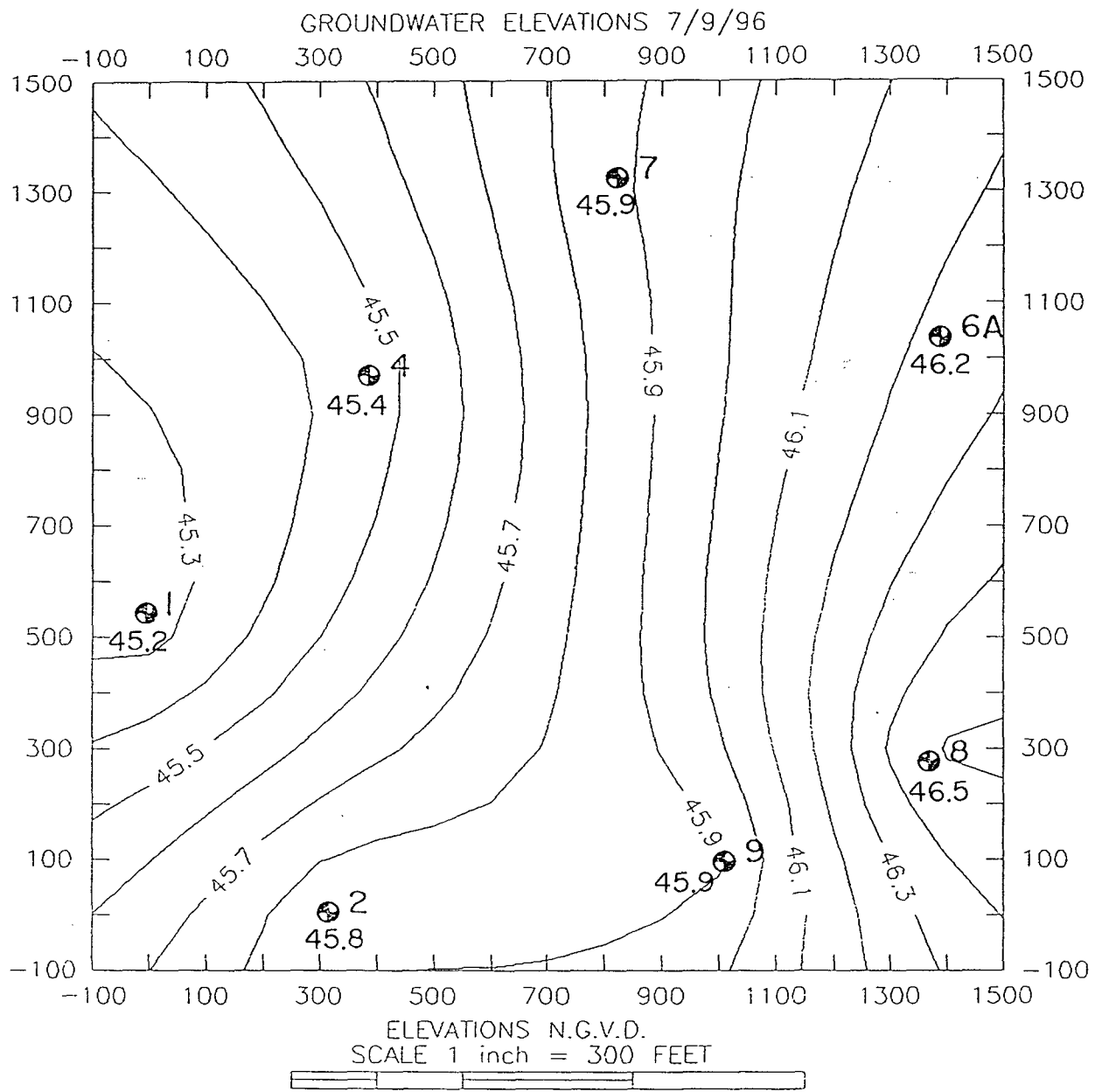
The waste disposed in the closed landfill consisted primarily of household waste with mixed with tree limbs and construction debris.

APPENDIX C

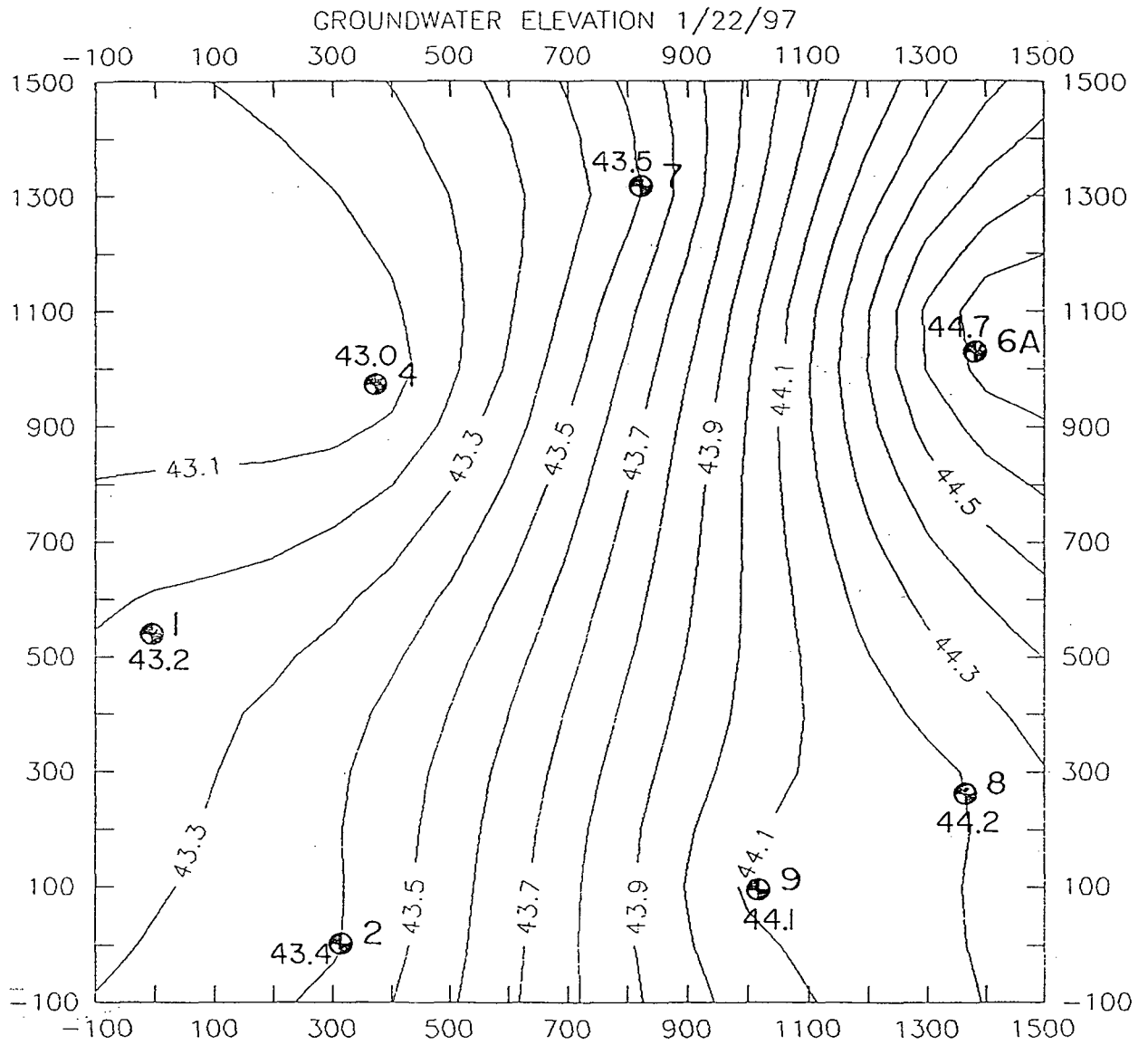
# SUMTER COUNTY SOLID WASTE MANAGEMENT FACILITY



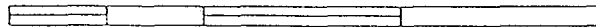
# SUMTER COUNTY SOLID WASTE MANAGEMENT FACILITY



# SUMTER COUNTY SOLID WASTE MANAGEMENT FACILITY

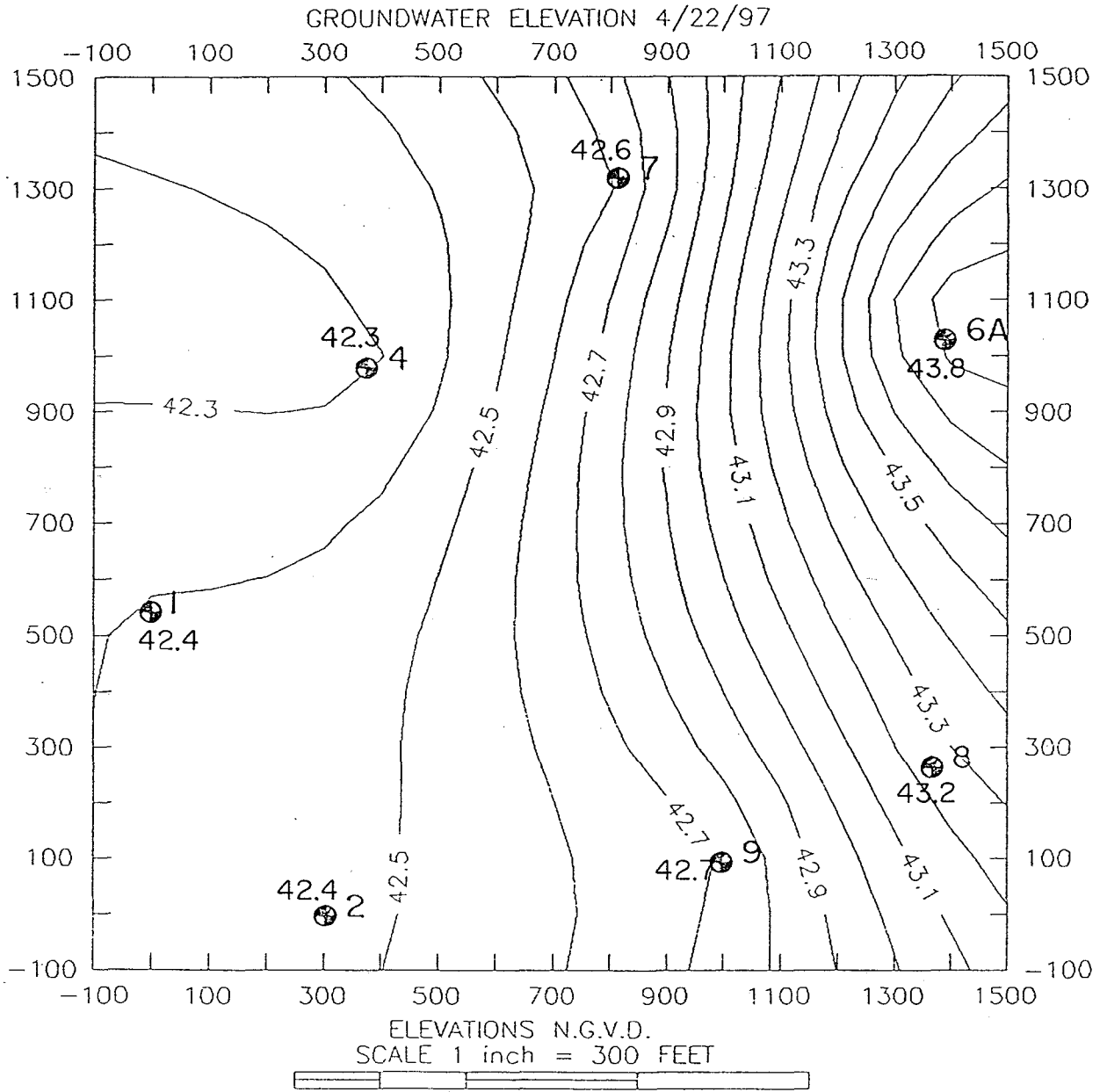


ELEVATIONS N.G.V.D.  
SCALE 1 inch = 300 FEET





# SUMTER COUNTY SOLID WASTE MANAGEMENT FACILITY



APPENDIX D

SUMTER COUNTY SOLID WASTE MANAGEMENT FACILITY  
ANALYTICAL TEST RESULTS

ALUMINUM mg/L MCL = 0.2 mg/L

DATE	MW1	MW2	MW4	MW6A	MW7	MW8	MW9
07-01-94	0.213	<0.002	0.259	0.46	<0.002	0.0506	0.205
10-01-94	0.386	0.279	0.331	1.36	0.105	2.59	0.575
01-01-95	0.512	0.065	0.652	1.01	0.448	0.109	0.246
04-01-95	0.3	0.052	0.172	0.225	0.185	0.0275	0.0855
07-01-95	0.476	0.227	2.83	0.71	0.767	0.263	0.41
10-01-95	0.614	0.379	0.648	1.18	0.122	0.265	0.362
01-01-96	0.53	0.399	0.429	0.924	0.492	0.232	0.368
04-01-96	1.42	0.764	5.7	4.71	1.38	0.429	0.559
08-01-96	1.5	0.839	2.81	11.9	28.5	3.75	1.59
10-30-96	2.17	0.179	1.41	0.367	0.11	0.592	0.162
02-11-97	0.29	0.189	1.02	0.337	0.303	0.401	0.194
05-19-97	0.243	0.023	0.073	0.117	0.192	0.022	0.024

SUMTER COUNTY SOLID WASTE MANAGEMENT FACILITY  
ANALYTICAL TEST RESULTS

AMMONIUM mg/L

DATE	MW1	MW2	MW4	MW6A	MW7	MW8	MW9
07-01-94	<0.01	<0.01	0.348	<0.01	<0.01	0.916	<0.01
10-01-94	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
01-01-95	<0.01	0.0126	<0.01	<0.01	<0.01	<0.01	<0.01
04-01-95	<0.01	<0.01	<0.01	<0.01	<0.01	0.145	<0.01
07-01-95	<0.01	<0.01	0.136	0.0134	0.0301	0.136	<0.01
10-01-95	0.279	<0.01	<0.01	0.175	<0.01	0.252	<0.01
01-01-96	<0.01	<0.01	<0.01	<0.01	<0.01	0.575	<0.01
04-01-96	<0.01	<0.01	<0.01	<0.01	<0.01	0.09	<0.01
08-01-96	<0.01	<0.01	0.0348	<0.01	<0.01	0.0841	<0.01
10-30-96	<0.01	<0.01	<0.01	<0.01	<0.01	0.0321	<0.01
02-11-96	<0.01	0.202	<0.01	<0.01	<0.01	0.231	0.0289
05-19-97	0.0267	0.0209	<0.01	<0.01	<0.01	<0.01	0.0919



SUMTER COUNTY SOLID WASTE MANAGEMENT FACILITY  
ANALYTICAL TEST RESULTS

CHLORIDE mg/L MCL = 250 mg/L

DATE	MW1	MW2	MW4	MW6A	MW7	MW8	MW9
07-01-94	8.99	42.3	36	18.8	28.5	36.8	33.6
10-01-94	3.41	24.1	19	6.74	9.34	13	11.7
01-01-95	4.82	24.8	38.9	9.39	11.1	14.8	14.3
04-01-95	3.99	44.4	53.3	9.22	9.29	14	14.8
07-01-95	6.69	38.6	62.5	10.4	10.3	13.7	17.1
10-01-95	2.07	11	65.6	6.59	6.21	8.51	14.9
01-01-96	2.89	25.9	64.2	7.85	7.74	8.45	11.4
04-01-96	2.44	48.1	79.8	9.63	10.2	11.5	22
08-01-96	3.04	71.8	70.4	8.47	8.23	8.64	15.8
10-30-96	4.8	50.8	68.4	9.17	8.46	8.18	13.6
02-11-97	4.04	50.8	66.1	11.3	11.2	10.6	17.5
05-19-97	18.7	3.72	35.1	62	8.01	8.6	7.54

SUMTER COUNTY SOLID WASTE MANAGEMENT FACILITY  
ANALYTICAL TEST RESULTS

CHROMIUM mg/L MCL = 0.1 mg/L

DATE	MW1	MW2	MW4	MW6A	MW7	MW8	MW9
07-01-94	0.6	0.8	1.5	8.7	2	1.4	1.3
10-01-94	0.552	1.56	1.2	5.48	0.00184	1.79	2
01-01-95	0.0006	0.0016	0.0018	0.005	0.0061	0.0065	0.001
04-01-95	0.0048	0.0022	0.0025	0.0057	0.0084	0.0028	0.0016
07-01-95	0.0016	0.0017	0.0102	0.0061	0.0081	0.0022	0.0022
10-01-95	0.002	0.0075	0.0066	0.0175	0.006	0.0028	0.0013
01-01-96	0.002	0.002	0.0024	0.049	0.0034	0.0283	0.002
04-01-96	0.002	0.002	0.0045	0.012	0.0049	0.0025	0.002
08-01-96	<0.002	<0.002	0.00672	0.0244	0.0492	0.0141	0.0355
10-30-96	0.0085	0.002	0.0084	0.0045	0.0026	0.0027	0.0012
02-11-97	0.00467	0.00698	0.0149	0.00894	0.0135	0.00939	0.0128
05-19-97	0.00894	0.00911	0.00792	0.0108	0.0117	0.00917	0.00751

SUMTER COUNTY SOLID WASTE MANAGEMENT FACILITY  
ANALYTICAL TEST RESULTS

COLOR PTU MCL = 15 PTU

DATE	MW1	MW2	MW4	MW6A	MW7	MW8	MW9
07-01-94	10	<5	20	120	<5	10	20
10-01-94	10	20	20	180	<5	10	<5
01-01-95	20	<5	40	160	120	240	10
04-01-95	20	10	50	25	55	20	20
07-01-95	20	15	170	150	50	10	20
10-01-95	20	100	120	350	20	10	<5
01-01-96	<5	<5	<5	300	30	140	30
04-01-96	<5	40	70	200	40	20	<5
08-01-96	20	40	200	300	200	200	20
10-30-96	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
02-11-97	<5.0	<5.0	20	<5.0	<5.0	<5.0	<5.0
05-19-97	20	<5.0	<5.0	<5.0	10	<5.0	<5.0



SUMTER COUNTY SOLID WASTE MANAGEMENT FACILITY  
ANALYTICAL TEST RESULTS

SPECIFIC CONDUCTANCE umhos

DATE	MW1	MW2	MW4	MW6A	MW7	MW8	MW9
07-01-94	42	260	398	168	214	348	467
10-01-94	37	204	308	90	165	366	444
01-01-95	83	425	556	193	234	501	675
04-01-95	71	578	519	173	241	602	629
07-01-95	61	413	454	216	216	488	607
10-01-95	480	297	417	142	151	362	459
01-01-96	875	648	851	298	322	676	902
04-01-96	67	443	68	221	244	529	748
08-01-96	83	394	647	151	183	333	652
10-30-96	79	486	651	230	401	234	706
02-11-97	88	419	530	182	219	318	670
07-19-97	145	447	799	274	334	447	866

SUMTER COUNTY SOLID WASTE MANAGEMENT FACILITY  
ANALYTICAL TEST RESULTS

IRON mg/L MCL = 0.3 mg/L

DATE	MW1	MW2	MW4	MW6A	MW7	MW8	MW9
07-01-94	0.0976	0.0073	0.391	0.178	0.001	0.934	0.366
10-01-94	0.0439	0.0453	0.235	0.117	0.00539	5.66	0.388
01-01-95	0.0943	0.042	0.201	0.0791	0.146	6.96	0.227
04-01-95	0.056	0.0392	0.0935	0.0811	0.329	0.518	0.276
07-01-95	0.0815	0.0716	1.52	0.105	0.173	0.258	0.556
10-01-95	0.104	0.238	0.38	0.503	0.167	0.56	0.171
01-01-96	0.00661	0.105	0.158	0.246	0.119	20.3	0.434
04-01-96	0.0585	0.082	0.273	0.448	0.156	0.695	0.27
08-01-96	0.115	0.248	0.656	1.3	2.07	0.684	9.1
10-30-96	0.309	0.0821	0.264	0.052	0.0383	0.223	0.339
02-11-97	0.0336	0.326	0.261	0.406	0.105	0.112	0.381
05-19-97	0.071	0.0602	0.0457	0.0719	0.141	0.0944	0.464

SUMTER COUNTY SOLID WASTE MANAGEMENT FACILITY  
ANALYTICAL TEST RESULTS

NITRATE mg/L MCL = 10 mg/L

DATE	MW1	MW2	MW4	MW6A	MW7	MW8	MW9
07-01-94	3.7	6.52	4.06	4.35	4.72	<.01	<.01
10-01-94	3.64	6.92	3.65	4.03	4.36	0.365	<.01
01-01-95	4.27	6.77	2.96	3.57	4.58	1.16	1.12
04-01-95	3.35	9.72	4.05	3.64	3.76	1.03	0.0361
07-01-95	66.2	99.7	62	55.3	81.6	14.3	0.0855
10-01-95	1.78	2.86	5.03	5.8	4.49	0.154	<.01
01-01-96	2.35	0.642	8.72	5.7	4.22	1.3	0.589
04-01-96	2.53	1.78	8.27	7.34	4.67	2.34	0.131
08-01-96	3.85	2.01	8.86	6	4.66	2.53	0.058
10-30-96	2.51	3.47	3.68	4.97	3.12	1.33	0.0708
02-11-97	3.6	7.63	7.45	5.82	5.12	4.84	0.359
05-19-97	0.156	0.541	0.797	0.526	0.431	1.7	<0.01

SUMTER COUNTY SOLID WASTE MANAGEMENT FACILITY  
ANALYTICAL TEST RESULTS

pH pH UNITS Min pH 6.5, Max pH 8.5 @ collection point

DATE	MW1	MW2	MW4	MW6A	MW7	MW8	MW9
07-01-94	6.28	6.49	6.94	7.62	7.44	6.72	6.56
10-01-94	5.85	6.62	6.95	7.72	7.49	6.72	6.65
01-01-95	6.29	6.62	6.96	7.85	7.63	6.9	6.83
04-01-95	7.55	6.58	7.02	7.79	7.14	6.84	6.86
07-01-95	6.99	6.51	6.68	7.24	7.02	6.86	6.65
10-01-95	7.48	6.95	7	6.82	6.65	6.71	6.84
01-01-96	7.69	6.94	6.64	8.03	7.64	6.92	6.74
04-01-96	6.97	6.65	6.55	7.45	7.43	7.01	6.84
08-01-96	7.84	7	6.85	7.74	7.55	7.05	6.83
10-30-96	7.25	6.71	6.95	7.35	6.55	6.73	6.62
02-11-97	7.48	6.92	6.5	6.5	7.41	7.16	6.82
05-19-97	7.29	6.78	6.32	7.25	6.94	7.15	6.79

SUMTER COUNTY SOLID WASTE MANAGEMENT FACILITY  
ANALYTICAL TEST RESULTS

SULFATE mg/L MCL = 250 mg/L

DATE	MW1	MW2	MW4	MW6A	MW7	MW8	MW9
07-01-94	1.93	9.31	2.66	2.79	2.13	3.82	14.8
10-01-94	5.22	7.8	<1.00	1.43	<1.00	5.35	14
01-01-95	<1.00	4.6	3.72	2.65	1.94	<1.00	4.78
04-01-95	1.81	3.95	4.26	5.65	1.81	2.11	4.57
07-01-95	1.39	13.5	3.29	1.39	2.01	4.35	7.01
10-01-95	9.82	12.7	3.71	7.55	1.96	5.09	<1.00
01-01-96	5.79	25.6	3.48	6.06	2.19	5.37	3.15
04-01-96	3.84	15.8	3.92	5.39	1.81	3.16	1.49
08-01-96	2.62	32.3	3.47	3.11	<1.00	<1.00	<1.00
10-30-96	<1.00	34.3	2.02	<1.00	2.99	<1.00	<1.00
02-11-97	2.35	19.6	5	5.62	<1.00	<1.00	<1.00
05-19-97	2.62	16	6.45	6.04	2.32	4	3.58

SUMTER COUNTY SOLID WASTE MANAGEMENT FACILITY  
ANALYTICAL TEST RESULTS

TEMPERATURE DEGREES CENTIGRADE

DATE	MW1	MW2	MW4	MW6A	MW7	MW8	MW9
07-01-94	25.1	27.1	26.6	24.2	23.8	24.2	27.1
10-01-94	26.6	24.8	27.3	23.9	23.8	24.3	26.2
01-01-95	23	24.1	24.1	21.3	21.3	23.6	25
04-01-95	25.7	25.3	25.9	22.1	22.7	24.2	27.7
07-01-95	25.8	25.9	27	26	24.5	24.5	27.6
10-01-95	25.7	25.3	26.5	23.1	22.9	23.9	25
01-01-96	24.2	23.3	23	18	16.2	19	24.3
04-01-96	20.8	22.5	23.2	21.8	22.2	21.9	24.5
08-01-96	24.6	23.7	27	24	24.2	23.6	25
10-30-96	28	24.3	27.4	25	23.1	22.4	23.5
02-11-97	20.4	22.4	20.5	19.2	22.1	22.5	23.8
05-19-97	25	25.1	26.6	26.3	23.4	24.9	25.8

SUMTER COUNTY SOLID WASTE MANAGEMENT FACILITY  
ANALYTICAL TEST RESULTS

TURBIDITY NTU MCL = 1 NTU

DATE	MW1	MW2	MW4	MW6A	MW7	MW8	MW9
07-01-94	8.6	2.5	17	208	0.6	4.9	15
10-01-94	13	25	6.9	204	3.6	12	2
01-01-95	90	99	44	87	30	2.2	6
04-01-95	19	1.9	34	76	170	3.05	16.5
07-01-95	<.05	2.7	225	115	41	2.25	11
10-01-95	3.2	5.4	30.1	140	17	16	3.4
01-01-96	16	1.4	22.5	335	62	38.3	22
04-01-96	17	8.9	81	290	65	5.5	15
08-01-96	8.4	16	64	340	62	8.9	12
10-30-96	90	12	200	32	6.5	1.4	2.8
02-11-97	3.8	1.1	34	9.2	17	3.1	3.1
05-19-97	12	2.4	3.1	4.3	58	1.3	2.9

SUMTER COUNTY SOLID WASTE MANAGEMENT FACILITY  
ANALYTICAL TEST RESULTS

SODIUM mg/L MCL = 150 mg/L

DATE	MW1	MW2	MW4	MW6A	MW7	MW8	MW9
07-01-94	2.5	21.4	9.25	3.22	4.7	10.2	31.4
10-01-94	3.77	20.6	11.4	3.47	6.49	12.7	31.3
01-01-95	4.49	19.2	17.4	4.16	5.47	11.1	30.2
04-01-95	7.26	33.4	25.7	5.65	8.19	13.2	31.8
07-01-95	5.71	31.7	24	4.97	5.97	10.2	31.8
10-01-95	4.28	18.8	23.5	5.44	6.15	12.2	11.9
01-01-96	4.76	51.4	40.8	6.15	7.99	12.9	21.2
04-01-96	2.83	33.9	30.9	4.22	4.85	9.04	8.99
08-01-96	5.47	63.8	79.4	37	7.53	7.1	10.38
10-30-96	2.96	66.7	33.8	3.85	4.56	7.74	10.2
02-11-97	4	57.3	35	4.97	5.58	8.61	11.2
05-19-97	3.82	44.7	34.8	4.44	5.23	5.73	11.6



SUMTER COUNTY SOLID WASTE MANAGEMENT FACILITY  
ANALYTICAL TEST RESULTS

TOTAL DISSOLVED SOLIDS mg/L MCL = 500 mg/L

DATE	MW1	MW2	MW4	MW6A	MW7	MW8	MW9
07-01-94	74	250	332	196	220	372	560
10-01-94	78	302	320	224	206	344	446
01-01-95	88	288	364	192	256	380	472
04-01-95	85	324	452	214	216	360	478
07-01-95	100	254	384	176	224	320	500
10-01-95	42	328	426	234	180	350	446
01-01-96	34	302	434	205	174	364	462
04-01-96	36	270	420	198	156	326	442
08-01-96	44	358	460	212	194	310	458
10-30-96	98	386	436	140	190	328	464
02-11-97	100	346	502	196	232	226	446
05-19-97	68	194	422	150	174	214	416