SUMTER COUNTY
(CLOSED) LANDFILL
QUARTERLY GROUNDWATER
MONITORING REPORT
Quarter I (February) 2010

Prepared for:

SUMTER COUNTY
SOLID WASTE DEPARTMENT
SUMTER COUNTY, FLORIDA

Prepared by:

THE COLINAS GROUP, INC.
509 N. Virginia Avenue
Winter Park, Florida 32789

March 2010

THE COLINAS GROUP, INC.
HYDROGEOLOGISTS & ENGINEERS

March 5, 2010

Mr. John Morris, P.G.
Florida Department of Environmental Protection
13051 N. Telecom Parkway
Temple Terrace, Florida 33637

Subj: **Quarter I 2010 Groundwater Monitoring Report**
Sumter County Closed Class I Landfill
Sumter County, Florida
FDEP Permit No. 22926-003-SF

Dear Mr. Morris:

On behalf of Sumter County Board of County Commissioners, The Colinas Group, Inc. (TCG) herewith submits one (1) copy of the report prepared by TCG entitled:

Sumter County (Closed) Landfill Quarterly Groundwater Monitoring Report, Quarter I (February) 2010

The report was prepared and is submitted in satisfaction of part of the requirements of the Sumter County Closed Landfill Long-Term Care Permit. If you have any questions concerning the contents of the report please do not hesitate to contact me at your convenience.

Very truly yours,
THE COLINAS GROUP, INC.

Richard L. Potts, Jr., P.G.
Principal Consultant
Fl. Reg. No. 1113

cc: Ms. Miram Zimms (KCI)
Ms. Denise Warnock (Sumter County)
Mr. Jimmy Wise (Sumter County)

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SUMTER COUNTY (CLOSED) LANDFILL GROUNDWATER MONITORING REPORT, SUMTER COUNTY, FLORIDA Quarter I (February) 2010

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Sumter County (Closed) Landfill
Quarterly Groundwater Monitoring Report
Quarter I (February) 2010

INTRODUCTION

The Colinas Group, Inc. (TCG) has reviewed the groundwater monitoring well sampling and analytical results for the Quarter I 2010 sampling event at the Sumter County (Closed) Landfill near Lake Panasoffkee in Sumter County. The sampling event was completed in accordance with the quarterly water quality monitoring and reporting requirements of the closed landfill Long-Term Care Permit #22926-003-SF.

The Groundwater Monitoring Plan for the closed landfill was amended in 2004 to replace three (3) existing monitoring wells deemed unsuitably located with respect to closed solid waste disposal areas. Existing wells MW-1, MW-7 and MW-9 were replaced by installation of new wells MW-11, MW-10 and MW-9A, respectively. The existing wells continue to be used as water level measuring points (piezometers).

New monitoring wells MW-4A and MW-4B, installed as part of a Preliminary Contamination Assessment completed at the landfill in January 2006, were added by the Florida Department of Environmental Protection (FDEP) to the facility groundwater monitoring network in May 2006. Groundwater sample analytical results for these new wells are included in this report. The current array of groundwater monitoring wells and piezometers at the facility is shown on Figure 1.

In accordance with Specific Condition 16d of the facility Long-Term Care Permit, sampling and analytical chemical parameters for this sampling event included the normal list of quarterly monitoring parameters. The Long-Term Care Permit requires an expanded parameter list, to include 40 CFR Appendix II parameters, during Quarter IV of each year.

SAMPLING EVENT

The Quarter I 2010 sampling event at the Sumter County Landfill occurred on February 3 and 4, 2010. Sampling was performed by TCG personnel in accordance with the FDEP Standard Operating Procedures (SOP) for Field Activities. Water samples collected from the facility groundwater monitoring wells were tested for the required field parameters. Monitoring wells were purged and the groundwater discharge allowed to stabilize prior to sample collection. The results of field testing were recorded as part of the Field Reports (Attachment 3) and are listed in Table I. All samples were preserved and stored as required prior to shipment to the analytical laboratory.

Laboratory analytical services were provided by Environmental Conservation Laboratories, Inc. (ENCO) in accordance with the laboratory's NELAP and FDHRS Certification No. E83182. The original analytical reports prepared by ENCO in FDEP format are presented in Attachment 2 to this report.

Water table depth measurements in each facility groundwater monitoring well and piezometer were recorded on February 4, 2010. These measurements were used to develop the Groundwater Contour Map shown on Figure 1 (Attachment 1) for the uppermost receiving groundwater aquifer beneath the site. Depth to water table measurements and corresponding groundwater elevations are listed in Table II.

RESULTS

Field Tested Parameters

Results of field testing completed at groundwater monitoring wells for the February 2010 sampling event are summarized in Table I. Field tests were completed by TCG sampling personnel in strict accordance with the FDEP SOP requirements.

pH

The field testing results indicate pH of groundwater in the uppermost aquifer was within the FDEP secondary standard (6.5 - 8.5 pH units) at eight (8) of the nine (9) groundwater monitoring wells sampled. The nearly neutral to slightly basic pH values measured are consistent across the landfill property and appear normal considering the monitoring well screen intervals at and near the top of carbonate rocks and sediments.One well (**MW-4B**) produced water with a pH above the upper FDEP range at 9.13 pH units. This well has consistently produced pH values above 8.5 since sampling of the well began in Quarter II of 2006.

Fluid Temperature

Temperature of each water sample was measured in the field immediately following discharge into the flow cell used to accept flow from the purging pump. Temperature measurements of groundwater from the monitoring wells ranged from a low of 24.13 C at well **MW-8** to 26.57 C at **MW-4**.

Dissolved Oxygen

Dissolved oxygen (DO) exceeded the FDEP sampling guidance level of 20% saturation at five (5) of the nine (9) monitoring wells sampled, including the facility background monitoring well **MW-6A**. These wells consistently produce groundwater with elevated DO concentrations.

Specific Conductance
Specific conductance of groundwater samples collected during this sampling event are included in Table I. Specific conductance values varied through a relatively narrow range of 148 umhos/cm to 876 umhos/cm. Lowest specific conductance was measured at well **MW-4B**. Highest specific conductance was measured at detection well **MW-9A**.

Turbidity
The FDEP recommends attainment of turbidity values less than 10 to 20 NTUs in groundwater samples obtained from monitoring wells. As shown in Table I, groundwater samples collected at all wells had measured turbidity values less than 20 NTUs. Fluid turbidity exceeded 10 NTUs at four (4) wells.

Regulatory Exceedances

A summary of groundwater laboratory analytical results that were either equal to or exceeded the regulatory level for the particular parameter in the February 2010 sample set is presented in Table III. As shown, four (4) analytical parameters were reported for certain monitoring wells at concentrations that exceed applicable regulatory levels. Exceeded parameters were aluminum, iron, manganese and nitrate nitrogen.

Aluminum
Aluminum was detected at concentrations above the Florida Secondary Drinking Water Standards (FSDWS) MCL (200 ug/l) in samples from four (4) monitoring wells: **MW-4** (320 ug/l), **MW-4B** (366 ug/l), **MW-10** (351 ug/l) and **MW-11** (355 ug/l). Aluminum was detected by the laboratory at a concentration below the MCL at **MW-9A** (133 ug/l).

Iron
Dissolved iron was detected in two (2) monitoring wells at concentrations above the FSDWS MCL of 300 ug/l. Iron was reported at 303 ug/l at well **MW-9A** and 825 ug/l at **MW-10**. Iron was detected at concentrations less than 300 ug/l at three (3) other wells, and was below the laboratory method detection limit at the remaining monitoring wells.

Manganese
Manganese was reported above the FSDWS MCL of 50 ug/l in monitoring well **MW-9A** at 77.2 ug/l. Manganese was detected in five (5) other wells at concentrations below 50 ug/l.

Nitrate Nitrogen
Nitrate was reported slightly above the 10 mg/l FPDWS MCL at monitoring well **MW-4A** at 11 mg/l. Elevated nitrate levels less than the MCL are noted in the facility background monitoring well **MW-6A** at 6.8 mg/l and in most of the remaining monitoring wells.

No other exceedance of a parameter regulatory concentration level was reported in the laboratory analytical results for samples from groundwater monitoring wells at the Sumter County Closed Landfill.

Other Detected Parameters

Cadmium was detected in samples from two (2) monitoring wells (**MW-9A** and **MW-11**) at concentrations less than the FPDWS MCL. Cadmium was reported below the laboratory detection limit in remaining monitoring wells.

Chromium was detected at four (4) wells (**MW-4, -6A, -10** and **-11**), including the facility background well, at low concentrations below the MCL for this constituent.

Gross alpha radioactivity, including the sum of radium 226/228, approached the 15 pCi/l MCL in groundwater samples from well **MW-11**, reported at a range of 14.9 - 19.3 pCi/l. Gross alpha individually ranged from 11.7 - 15.1 pCi/l.

Mercury was detected at 0.489 ug/l in monitoring well **MW-9A** and at 0.032 ug/l in **MW-11**, well below the FPDWS MCL of 2 ug/l, and was less than the laboratory method detection limit in remaining wells.

Sodium and **chloride** concentrations reported for seven (7) of the nine (9) monitoring wells appear consistent between individual wells and typical for natural shallow groundwaters in Florida. Although significantly below respective regulatory MCLs, sodium/chloride concentrations at monitoring wells **MW-4** and **MW-4A** are somewhat elevated above concentrations measured in samples from other monitoring wells.

Thallium was reported at low concentrations in three (3) wells, **MW-4** (0.591 ug/l), **MW-4A** (0.735 ug/l) and **MW-9A** (0.573 ug/l). The FPDWS MCL for thallium is 2 ug/l.

SUMMARY

Chemical characteristics of groundwater monitored at the Sumter County Landfill are reported for the Quarter I 2010 sampling event. Exceedances of specific constituent regulatory levels and MCLs are reported at specific monitoring wells for **aluminum, iron, manganese** and **nitrate nitrogen**.

Elevated **dissolved oxygen (DO)** levels were measured in five of the nine groundwater monitoring wells, including the facility background monitoring well. Prior sampling data indicate that elevated DO levels occur frequently and in many of the same monitoring wells, suggesting that high DO in groundwater at these locations is likely a natural condition.

Aluminum was detected in samples from three wells (**MW-4B**, background well **MW-6A** and **MW-10**) at concentrations above the FSDWS MCL of 200 ug/l. Aluminum was also detected below the MCL in five other monitoring wells. The most likely source of aluminum measured in groundwater samples is natural deposits of aluminum-silicate clay minerals within and near the groundwater monitoring zone tapped by wells at the landfill.

Gross alpha radioactivity, including the sum of radium 226/228, approached, but did not exceed the 15 pCi/l MCL in groundwater samples from well **MW-11**, reported at a range of 14.9 - 19.3 pCi/l. Gross alpha individually is reported to range from 11.7 - 15.1 pCi/l in the groundwater sample.

Manganese was reported above the FSDWS MCL in the sample from **MW-9A**, one of the more recently-constructed monitoring wells. **Iron** was detected slightly above the FSDWS MCL in wells **MW-9A** and **MW-10**. Both of these elements occur naturally in sediments and carbonate rocks penetrated by the monitoring wells.

Nitrate nitrogen dissolved in groundwater was reported above the FPDWS MCL of 10 mg/l at well **MW-4A** (11 mg/l). As shown on the groundwater contour map for the February 2010 sampling event (Figure 1) well **MW-4A** was upgradient of well **MW-4** and the closed landfill waste disposal areas. Elevated concentrations of nitrate nitrogen were also reported at background well **MW-6A** and at all but one of the remaining monitoring wells, at levels considered well above naturally-occurring nitrate concentrations typically found in groundwaters in Florida.

* * * * *

TABLE I
FIELD PARAMETER RESULTS SUMMARY,
SUMTER COUNTY (CLOSED) LANDFILL
SUMTER COUNTY, FLORIDA
Quarter I (February) 2010

Sampling Point	Temp. (C)	Dissolved Oxygen (mg/l)	pH	Specific Conductance (umhos/cm)	Turbidity (NTU)
MW-2	26.22	**4.42**	6.81	264	0.62
MW-4	26.57	1.11	7.21	707	10.87
MW-4A	26.30	0.58	7.00	726	10.39
MW-4B	25.83	**5.05**	**9.13**	148	4.08
MW-6A	24.62	**6.68**	7.79	281	12.2
MW-8	24.13	**3.50**	7.19	434	3.50
MW-9A	25.20	0.54	6.55	876	8.51
MW-10	24.69	**1.98**	6.93	537	15.2
MW-11	26.02	1.27	6.65	594	10.96

Notes: **Bold** lettering indicates: Exceedance of FDEP 20% saturation dissolved oxygen limit
Exceedance of pH range (6.5 - 8.5)
Exceedance of FDEP-recommended turbidity (20 NTU)

TABLE II

QUARTER I 2010
SUMMARY OF GROUNDWATER LEVELS
SUMTER COUNTY (CLOSED) LANDFILL
SUMTER COUNTY, FLORIDA
(February 4, 2010)

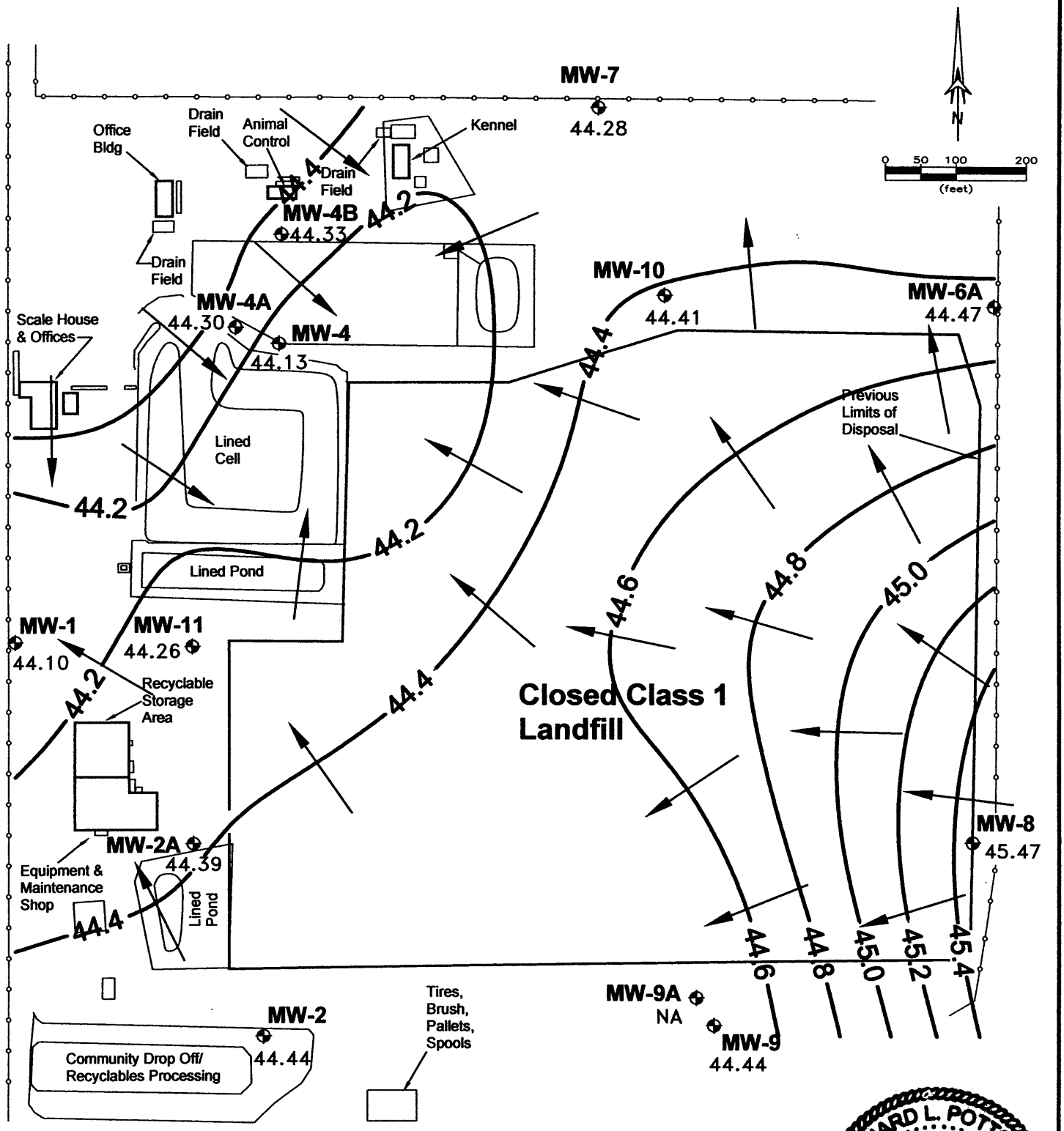
Well No.	Measuring Point Elevation (ft. +NGVD)	Depth to Water (ft. - MP)	Groundwater Elevation (ft. +NGVD)
MW-1	70.17	26.07	44.10
MW-2	69.13	24.69	44.44
MW-2A	72.11	27.72	44.39
MW-4	70.36	26.23	44.13
MW-4A	75.73	31.43	44.30
MW-4B	73.83	29.50	44.33
MW-6A	77.54	33.07	44.47
MW-7	73.14	28.86	44.28
MW-8	69.26	23.79	45.47
MW-9	71.95	27.51	44.44
MW-9A	74.26	30.85	43.41
MW-10	68.28	23.87	44.41
MW-11	70.21	25.95	44.26

Notes: 1. Measuring Point is top of PVC well casing.
2. Water levels recorded on February 4, 2010.

TABLE III
SUMMARY OF LABORATORY RESULTS
SUMTER COUNTY (CLOSED) LANDFILL, QUARTER I (FEBRUARY) 2010

Parameter	units	MW-2	MW-4	MW-4A	MW-4B	MW-6A	MW-8	MW-9A	MW-10	MW-11	MCL
Ammonia	mg/l	BDL	BDL	BDL	BDL	BDL	BDL	0.20	0.035	BDL	**2.8**
Aluminum	ug/l	BDL	**320**	BDL	**366**	BDL	BDL	133	**351**	**355**	**200**
Antimony	ug/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	**6**
Cadmium	ug/l	BDL	BDL	BDL	BDL	BDL	BDL	1.27	BDL	2.89	**5**
Chloride	mg/l	7.1	29	29	4.1	9.2	13	19	8.2	3.5	**250**
Chromium	ug/l	BDL	23.0	BDL	BDL	9.91	BDL	BDL	11.6	6.22	**100**
Fluoride	mg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	**4**
Gross Alpha	pCi/l	<1.4 ± 0.9	3.8 ± 0.8	1.6 ± 1.1	2.5 ± 1.1	<1.2 ± 0.9	<1.3 ± 1.0	6.3 ± 1.6	7.0 ± 1.2	13.4 ± 1.7	**15**
Iron	ug/l	BDL	171	BDL	BDL	BDL	68.7	**303**	**825**	83.1	**300**
Lead	ug/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	**15**
Manganese	ug/l	BDL	14.6	7.44	BDL	BDL	2.02	77.2	28.8	4.37	**50**
Mercury	ug/l	BDL	BDL	BDL	BDL	BDL	BDL	0.489	BDL	0.032	**2**
Nitrate, as N	mg/l	3.2	9.7	**11**	4.1	6.8	2.9	0.90	3.2	5.0	**10**
Radium 226	pCi/l	0.5 ± 0.2	1.0 ± 0.2	2.3 ± 0.2	0.7 ± 0.2	<0.2 ± 0.1	0.5 ± 0.2	2.2 ± 0.4	1.3 ± 0.3	3.7 ± 0.5	---
Radium 228	pCi/l	<0.7 ± 0.4	<0.8 ± 0.5	<0.8 ± 0.5	<0.7 ± 0.5	<0.7 ± 0.4	<0.8 ± 0.5	<0.9 ± 0.6	<0.8 ± 0.5	<0.8 ± 0.6	---
Silver	ug/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	**100**
Sodium	mg/l	4.53	50.4	27.3	11.0	3.16	7.24	19.2	7.28	10.6	**160**
TDS	mg/l	170	390	410	100	180	270	**540**	320	340	**500**
Thallium	ug/l	BDL	0.591	0.735	BDL	BDL	BDL	0.573	BDL	BDL	**2**

Notes: 1). BDL means below laboratory method detection limit 2). **Bold lettering** indicates result exceeds MCL/Guidance concentration



LEGEND

MW-2 — Monitor Well Location

44.44 — Groundwater Elevation (ft, NGVD, 2/4/10)

45.4 — Groundwater Contour (Potentiometric Surface, 2/4/10)

Estimated Groundwater Flow Direction (2/4/10)

RICHARD L. POTTS LICENSE NO. PG 1113 3/5/10 STATE OF FLORIDA PROFESSIONAL GEOLOGIST

The Colinas Group, Inc. 509 N. Virginia Avenue Winter Park, Florida 32789	PROJ. NO.: P-410 DATE: MARCH 2010 SCALE: 1" = 200'	GROUNDWATER CONTOUR MAP QUARTER I (February) 2010 SUMTER COUNTY LANDFILL	FIGURE 1

Facility Name: SUMTER COUNTY VOL. RED. & LANDFILL

PARAMETER MONITORING REPORT

Rule 62-701

WACS Report Type: SEMGW

Description: Semiannual Gw: 62-701.510(8)(A) (1 Pages)

WACS Facility ID #: 53008

WACS Testsite ID #: 4535

WACS Testsite Name: MW-2 WELL

Water Classification: G-II
(i.e.: LC - Leachate, G-II, SW-IIIF)

Sample Date/Time: 2/4/2010 2:35:00PM

Sampling Method: Submersible Pump

Permitted Well Type: DE - Detection

* Well Purged prior to Sample Collection? (Y/N): Y

STORET Code	Parameter Monitored	Field Filtered (Y/N)	NELAC Lab Certification # (DOHE)	Analysis Method	Analysis Date/Time	Analysis Result	Detection Limit	Units	Qual
001105	Aluminum	N	E83182	EPA 200.8	2/9/2010 12:38:00PM	68.0	68.0	ug/L	U
000610	Ammonia as N	N	E83182	EPA 350.1	2/8/2010 1:16:00PM	0.010	0.010	mg/L	U
001097	Antimony	N	E83182	EPA 200.8	2/9/2010 12:38:00PM	0.700	0.700	ug/L	U
001027	Cadmium	N	E83182	EPA 200.8	2/9/2010 12:38:00PM	1.10	1.10	ug/L	U
000940	Chloride	N	E83182	EPA 300.0	2/5/2010 2:01:00PM	7.1	0.24	mg/L	
001034	Chromium	N	E83182	EPA 200.8	2/9/2010 12:38:00PM	4.50	4.50	ug/L	U
000299	Dissolved Oxygen	N	E83182	Field	2/4/2010 2:35:00PM	4.42	0.00	mg/L	
000951	Fluoride	N	E83182	EPA 300.0	2/5/2010 2:01:00PM	0.03	0.03	mg/L	U
001045	Iron	N	E83182	EPA 200.8	2/9/2010 12:38:00PM	38.0	38.0	ug/L	U
001051	Lead	N	E83182	EPA 200.8	2/9/2010 12:38:00PM	1.20	1.20	ug/L	U
001055	Manganese	N	E83182	EPA 200.8	2/9/2010 12:38:00PM	2.00	2.00	ug/L	U
071900	Mercury	N	E83182	EPA 245.1	3/3/2010 7:11:00AM	0.024	0.024	ug/L	U
000620	Nitrate as N	N	E83182	EPA 300.0	2/5/2010 2:01:00PM	3.2	0.10	mg/L	
000400	pH	N	E83182	Field	2/4/2010 2:35:00PM	6.81		pH Units	
001077	Silver	N	E83182	EPA 200.8	2/9/2010 12:38:00PM	0.200	0.200	ug/L	U
000929	Sodium	N	E83182	EPA 200.8	2/9/2010 12:38:00PM	4.53	0.320	mg/L	
000094	Specific Conductance (EC)	N	E83182	Field	2/4/2010 2:35:00PM	264	0	umhos/cm	
000010	Temperature	N	E83182	Field	2/4/2010 2:35:00PM	26.22	0.00	Degrees C	
001059	Thallium	N	E83182	EPA 200.8	2/9/2010 12:38:00PM	0.260	0.260	ug/L	U
000515	Total Dissolved Solids	N	E83182	SM18 2540C	2/9/2010 12:35:00AM	170	10	mg/L	
082078	Turbidity	N	E83182	Field	2/4/2010 2:35:00PM	0.62	0.00	NTU	
082545	Water Elevation	N	E83182	Field	2/4/2010 2:35:00PM	44.31		Ft	

Total Parameters Monitored: 22

* Well purging is the process of pumping the well prior to sampling in order to obtain a representative ground water sample.

Form Produced by FDEP Validator software

Facility Name: SUMTER COUNTY VOL. RED. & LANDFILL

PARAMETER MONITORING REPORT

Rule 62-701

WACS Report Type: SEMGW

Description: Semiannual Gw: 62-701.510(8)(A) (1 Pages)

WACS Facility ID #: 53008

WACS Testsite ID #: 4537

WACS Testsite Name: MW-4 WELL

Water Classification: G-II
(i.e.: LC - Leachate, G-II, SW-IIIF)

Sample Date/Time: 2/4/2010 12:00:00PM

Sampling Method: Submersible Pump

Permitted Well Type: DE - Detection

* Well Purged prior to Sample Collection? (Y/N): Y

STORET Code	Parameter Monitored	Field Filtered (Y/N)	NELAC Lab Certification # (DOHE)	Analysis Method	Analysis Date/Time	Analysis Result	Detection Limit	Units	Qual
001105	Aluminum	N	E83182	EPA 200.8	2/9/2010 1:28:00PM	320	68.0	ug/L	
000610	Ammonia as N	N	E83182	EPA 350.1	2/8/2010 1:25:00PM	0.010	0.010	mg/L	U
001097	Antimony	N	E83182	EPA 200.8	2/9/2010 1:28:00PM	0.700	0.700	ug/L	U
001027	Cadmium	N	E83182	EPA 200.8	2/9/2010 1:28:00PM	1.10	1.10	ug/L	U
000940	Chloride	N	E83182	EPA 300.0	2/5/2010 2:18:00PM	29	0.24	mg/L	
001034	Chromium	N	E83182	EPA 200.8	2/9/2010 1:28:00PM	23.0	4.50	ug/L	
000299	Dissolved Oxygen	N	E83182	Field	2/4/2010 12:00:00PM	1.11	0.00	mg/L	
000951	Fluoride	N	E83182	EPA 300.0	2/5/2010 2:18:00PM	0.03	0.03	mg/L	U
001045	Iron	N	E83182	EPA 200.8	2/9/2010 1:28:00PM	171	38.0	ug/L	
001051	Lead	N	E83182	EPA 200.8	2/9/2010 1:28:00PM	1.20	1.20	ug/L	U
001055	Manganese	N	E83182	EPA 200.8	2/9/2010 1:28:00PM	14.6	2.00	ug/L	
071900	Mercury	N	E83182	EPA 245.1	3/3/2010 7:14:00AM	0.024	0.024	ug/L	U
000620	Nitrate as N	N	E83182	EPA 300.0	2/5/2010 2:18:00PM	9.7	0.10	mg/L	
000400	pH	N	E83182	Field	2/4/2010 12:00:00PM	7.21		pH Units	
001077	Silver	N	E83182	EPA 200.8	2/9/2010 1:28:00PM	0.200	0.200	ug/L	U
000929	Sodium	N	E83182	EPA 200.8	2/9/2010 1:28:00PM	50.4	0.320	mg/L	
000094	Specific Conductance (EC)	N	E83182	Field	2/4/2010 12:00:00PM	707	0	umhos/cm	
000010	Temperature	N	E83182	Field	2/4/2010 12:00:00PM	26.57	0.00	Degrees C	
001059	Thallium	N	E83182	EPA 200.8	2/9/2010 1:28:00PM	0.591	0.260	ug/L	I
000515	Total Dissolved Solids	N	E83182	SM18 2540C	2/9/2010 12:35:00AM	390	10	mg/L	
082078	Turbidity	N	E83182	Field	2/4/2010 12:00:00PM	10.87	0.00	NTU	
082545	Water Elevation	N	E83182	Field	2/4/2010 12:00:00PM	43.95		Ft	

Total Parameters Monitored: 22

* Well purging is the process of pumping the well prior to sampling in order to obtain a representative ground water sample.

Form Produced by FDEP Validator software

Facility Name: SUMTER COUNTY VOL. RED. & LANDFILL

PARAMETER MONITORING REPORT

Rule 62-701

WACS Report Type: SEMGW

Description: Semiannual Gw: 62-701.510(8)(A) (1 Pages)

WACS Facility ID #: 53008

WACS Testsite ID #: 21975

WACS Testsite Name: MW-4A

Water Classification: G-II
(i.e.: LC - Leachate, G-II, SW-IIIF)

Sample Date/Time: 2/4/2010 10:50:00AM

Sampling Method: Submersible Pump

Permitted Well Type: AS - Assessment

* Well Purged prior to Sample Collection? (Y/N): Y

STORET Code	Parameter Monitored	Field Filtered (Y/N)	NELAC Lab Certification # (DOHE)	Analysis Method	Analysis Date/Time	Analysis Result	Detection Limit	Units	Qual
001105	Aluminum	N	E83182	EPA 200.8	2/9/2010 2:31:00PM	68.0	68.0	ug/L	U
000610	Ammonia as N	N	E83182	EPA 350.1	2/8/2010 1:27:00PM	0.010	0.010	mg/L	U
001097	Antimony	N	E83182	EPA 200.8	2/9/2010 2:31:00PM	0.700	0.700	ug/L	U
001027	Cadmium	N	E83182	EPA 200.8	2/9/2010 2:31:00PM	1.10	1.10	ug/L	U
000940	Chloride	N	E83182	EPA 300.0	2/5/2010 3:26:00PM	29	0.24	mg/L	
001034	Chromium	N	E83182	EPA 200.8	2/9/2010 2:31:00PM	4.50	4.50	ug/L	U
000299	Dissolved Oxygen	N	E83182	Field	2/4/2010 10:50:00AM	0.58	0.00	mg/L	
000951	Fluoride	N	E83182	EPA 300.0	2/5/2010 3:26:00PM	0.03	0.03	mg/L	U
001045	Iron	N	E83182	EPA 200.8	2/9/2010 2:31:00PM	38.0	38.0	ug/L	U
001051	Lead	N	E83182	EPA 200.8	2/9/2010 2:31:00PM	1.20	1.20	ug/L	U
001055	Manganese	N	E83182	EPA 200.8	2/9/2010 2:31:00PM	7.44	2.00	ug/L	I
071900	Mercury	N	E83182	EPA 245.1	3/3/2010 7:27:00AM	0.024	0.024	ug/L	U
000620	Nitrate as N	N	E83182	EPA 300.0	2/5/2010 3:26:00PM	11	0.10	mg/L	
000400	pH	N	E83182	Field	2/4/2010 10:50:00AM	7.00		pH Units	
001077	Silver	N	E83182	EPA 200.8	2/9/2010 2:31:00PM	0.200	0.200	ug/L	U
000929	Sodium	N	E83182	EPA 200.8	2/9/2010 2:31:00PM	27.3	0.320	mg/L	
000094	Specific Conductance (EC)	N	E83182	Field	2/4/2010 10:50:00AM	726	0	umhos/cm	
000010	Temperature	N	E83182	Field	2/4/2010 10:50:00AM	26.30	0.00	Degrees C	
001059	Thallium	N	E83182	EPA 200.8	2/9/2010 2:31:00PM	0.735	0.260	ug/L	I
000515	Total Dissolved Solids	N	E83182	SM18 2540C	2/9/2010 12:35:00AM	410	10	mg/L	
082078	Turbidity	N	E83182	Field	2/4/2010 10:50:00AM	10.39	0.00	NTU	
082545	Water Elevation	N	E83182	Field	2/4/2010 10:50:00AM	44.26		Ft	

Total Parameters Monitored: 22

* Well purging is the process of pumping the well prior to sampling in order to obtain a representative ground water sample.

Form Produced by FDEP Validator software

Facility Name: SUMTER COUNTY VOL. RED. & LANDFILL

PARAMETER MONITORING REPORT

Rule 62-701

WACS Report Type: SEMGW

Description: Semiannual Gw: 62-701.510(8)(A) (1 Pages)

WACS Facility ID #: 53008

WACS Testsite ID #: 21976

WACS Testsite Name: MW-4B

Water Classification: G-II
(i.e.: LC - Leachate, G-II, SW-IIIF)

* Well Purged prior to Sample Collection? (Y/N): Y

Sample Date/Time: 2/4/2010 12:48:00PM

Sampling Method: Submersible Pump

Permitted Well Type: AS - Assessment

STORET Code	Parameter Monitored	Field Filtered (Y/N)	NELAC Lab Certification # (DOHE)	Analysis Method	Analysis Date/Time	Analysis Result	Detection Limit	Units	Qual
001105	Aluminum	N	E83182	EPA 200.8	2/9/2010 2:24:00PM	366	68.0	ug/L	
000610	Ammonia as N	N	E83182	EPA 350.1	2/8/2010 1:26:00PM	0.010	0.010	mg/L	U
001097	Antimony	N	E83182	EPA 200.8	2/9/2010 2:24:00PM	0.700	0.700	ug/L	U
001027	Cadmium	N	E83182	EPA 200.8	2/9/2010 2:24:00PM	1.10	1.10	ug/L	U
000940	Chloride	N	E83182	EPA 300.0	2/5/2010 2:35:00PM	4.1	0.24	mg/L	I
001034	Chromium	N	E83182	EPA 200.8	2/9/2010 2:24:00PM	4.50	4.50	ug/L	U
000299	Dissolved Oxygen	N	E83182	Field	2/4/2010 12:48:00PM	5.05	0.00	mg/L	
000951	Fluoride	N	E83182	EPA 300.0	2/5/2010 2:35:00PM	0.03	0.03	mg/L	U
001045	Iron	N	E83182	EPA 200.8	2/9/2010 2:24:00PM	38.0	38.0	ug/L	U
001051	Lead	N	E83182	EPA 200.8	2/9/2010 2:24:00PM	1.20	1.20	ug/L	U
001055	Manganese	N	E83182	EPA 200.8	2/9/2010 2:24:00PM	2.00	2.00	ug/L	U
071900	Mercury	N	E83182	EPA 245.1	3/3/2010 7:18:00AM	0.024	0.024	ug/L	U
000620	Nitrate as N	N	E83182	EPA 300.0	2/5/2010 2:35:00PM	4.1	0.10	mg/L	
000400	pH	N	E83182	Field	2/4/2010 12:48:00PM	9.13		pH Units	
001077	Silver	N	E83182	EPA 200.8	2/9/2010 2:24:00PM	0.200	0.200	ug/L	U
000929	Sodium	N	E83182	EPA 200.8	2/9/2010 2:24:00PM	11.0	0.320	mg/L	
000094	Specific Conductance (EC)	N	E83182	Field	2/4/2010 12:48:00PM	148	0	umhos/cm	
000010	Temperature	N	E83182	Field	2/4/2010 12:48:00PM	25.83	0.00	Degrees C	
001059	Thallium	N	E83182	EPA 200.8	2/9/2010 2:24:00PM	0.260	0.260	ug/L	U
000515	Total Dissolved Solids	N	E83182	SM18 2540C	2/9/2010 12:35:00AM	100	10	mg/L	
082078	Turbidity	N	E83182	Field	2/4/2010 12:48:00PM	4.08	0.00	NTU	
082545	Water Elevation	N	E83182	Field	2/4/2010 12:48:00PM	44.29		Ft	

Total Parameters Monitored: 22

* Well purging is the process of pumping the well prior to sampling in order to obtain a representative ground water sample.

Form Produced by FDEP Validator software

Facility Name: SUMTER COUNTY VOL. RED. & LANDFILL

PARAMETER MONITORING REPORT

Rule 62-701

WACS Report Type: SEMGW

Description: Semiannual Gw: 62-701.510(8)(A) (1 Pages)

WACS Facility ID #: 53008

WACS Testsite ID #: 4557

WACS Testsite Name: MW-6A WELL

Water Classification: G-II
(i.e.: LC - Leachate, G-II, SW-IIIF)

Sample Date/Time: 2/4/2010 4:15:00PM

Sampling Method: Submersible Pump

Permitted Well Type: BG - Background

* Well Purged prior to Sample Collection? (Y/N): Y

STORET Code	Parameter Monitored	Field Filtered (Y/N)	NELAC Lab Certification # (DOHE)	Analysis Method	Analysis Date/Time	Analysis Result	Detection Limit	Units	Qual
001105	Aluminum	N	E83182	EPA 200.8	2/9/2010 2:41:00PM	68.0	68.0	ug/L	U
000610	Ammonia as N	N	E83182	EPA 350.1	2/8/2010 1:29:00PM	0.010	0.010	mg/L	U
001097	Antimony	N	E83182	EPA 200.8	2/9/2010 2:41:00PM	0.700	0.700	ug/L	U
001027	Cadmium	N	E83182	EPA 200.8	2/9/2010 2:41:00PM	1.10	1.10	ug/L	U
000940	Chloride	N	E83182	EPA 300.0	2/5/2010 3:43:00PM	9.2	0.24	mg/L	
001034	Chromium	N	E83182	EPA 200.8	2/9/2010 2:41:00PM	9.91	4.50	ug/L	I
000299	Dissolved Oxygen	N	E83182	Field	2/4/2010 4:15:00PM	6.68	0.00	mg/L	
000951	Fluoride	N	E83182	EPA 300.0	2/5/2010 3:43:00PM	0.03	0.03	mg/L	U
001045	Iron	N	E83182	EPA 200.8	2/9/2010 2:41:00PM	55.5	38.0	ug/L	
001051	Lead	N	E83182	EPA 200.8	2/9/2010 2:41:00PM	1.20	1.20	ug/L	U
001055	Manganese	N	E83182	EPA 200.8	2/9/2010 2:41:00PM	2.40	2.00	ug/L	I
071900	Mercury	N	E83182	EPA 245.1	3/3/2010 7:30:00AM	0.024	0.024	ug/L	U
000620	Nitrate as N	N	E83182	EPA 300.0	2/5/2010 3:43:00PM	6.8	0.10	mg/L	
000400	pH	N	E83182	Field	2/4/2010 4:15:00PM	7.79		pH Units	
001077	Silver	N	E83182	EPA 200.8	2/9/2010 2:41:00PM	0.200	0.200	ug/L	U
000929	Sodium	N	E83182	EPA 200.8	2/9/2010 2:41:00PM	3.16	0.320	mg/L	
000094	Specific Conductance (EC)	N	E83182	Field	2/4/2010 4:15:00PM	281	0	umhos/cm	
000010	Temperature	N	E83182	Field	2/4/2010 4:15:00PM	24.62	0.00	Degrees C	
001059	Thallium	N	E83182	EPA 200.8	2/9/2010 2:41:00PM	0.260	0.260	ug/L	U
000515	Total Dissolved Solids	N	E83182	SM18 2540C	2/9/2010 12:35:00AM	180	10	mg/L	
082078	Turbidity	N	E83182	Field	2/4/2010 4:15:00PM	12.20	0.00	NTU	
082545	Water Elevation	N	E83182	Field	2/4/2010 4:15:00PM	44.40		Ft	

Total Parameters Monitored: 22

* Well purging is the process of pumping the well prior to sampling in order to obtain a representative ground water sample.

Form Produced by FDEP Validator software

Facility Name: SUMTER COUNTY VOL. RED. & LANDFILL

PARAMETER MONITORING REPORT

Rule 62-701

WACS Report Type: SEMGW

Description: Semiannual Gw: 62-701.510(8)(A) (1 Pages)

WACS Facility ID #: 53008

WACS Testsite ID #: 4592

WACS Testsite Name: MW-8 WELL

Water Classification: G-II
(i.e.: LC - Leachate, G-II, SW-IIIF)

* Well Purged prior to Sample Collection? (Y/N): Y

Sample Date/Time: 2/3/2010 2:50:00PM

Sampling Method: Submersible Pump

Permitted Well Type: DE - Detection

STORET Code	Parameter Monitored	Field Filtered (Y/N)	NELAC Lab Certification # (DOHE)	Analysis Method	Analysis Date/Time	Analysis Result	Detection Limit	Units	Qual
001105	Aluminum	N	E83182	EPA 200.8	2/9/2010 2:48:00PM	68.0	68.0	ug/L	U
000610	Ammonia as N	N	E83182	EPA 350.1	2/8/2010 1:30:00PM	0.010	0.010	mg/L	U
001097	Antimony	N	E83182	EPA 200.8	2/9/2010 2:48:00PM	0.700	0.700	ug/L	U
001027	Cadmium	N	E83182	EPA 200.8	2/9/2010 2:48:00PM	1.10	1.10	ug/L	U
000940	Chloride	N	E83182	EPA 300.0	2/5/2010 12:21:00PM	13	0.24	mg/L	
001034	Chromium	N	E83182	EPA 200.8	2/9/2010 2:48:00PM	4.50	4.50	ug/L	U
000299	Dissolved Oxygen	N	E83182	Field	2/3/2010 2:50:00PM	3.56	0.00	mg/L	
000951	Fluoride	N	E83182	EPA 300.0	2/5/2010 12:21:00PM	0.03	0.03	mg/L	U
001045	Iron	N	E83182	EPA 200.8	2/9/2010 2:48:00PM	68.7	38.0	ug/L	
001051	Lead	N	E83182	EPA 200.8	2/9/2010 2:48:00PM	1.20	1.20	ug/L	U
001055	Manganese	N	E83182	EPA 200.8	2/9/2010 2:48:00PM	2.02	2.00	ug/L	I
071900	Mercury	N	E83182	EPA 245.1	3/3/2010 7:33:00AM	0.024	0.024	ug/L	U
000620	Nitrate as N	N	E83182	EPA 300.0	2/5/2010 12:21:00PM	2.9	0.10	mg/L	
000400	pH	N	E83182	Field	2/3/2010 2:50:00PM	7.19		pH Units	
001077	Silver	N	E83182	EPA 200.8	2/9/2010 2:48:00PM	0.200	0.200	ug/L	U
000929	Sodium	N	E83182	EPA 200.8	2/9/2010 2:48:00PM	7.24	0.320	mg/L	
000094	Specific Conductance (EC)	N	E83182	Field	2/3/2010 2:50:00PM	434	0	umhos/cm	
000010	Temperature	N	E83182	Field	2/3/2010 2:50:00PM	24.13	0.00	Degrees C	
001059	Thallium	N	E83182	EPA 200.8	2/9/2010 2:48:00PM	0.260	0.260	ug/L	U
000515	Total Dissolved Solids	N	E83182	SM18 2540C	2/9/2010 12:35:00AM	270	10	mg/L	
082078	Turbidity	N	E83182	Field	2/3/2010 2:50:00PM	3.50	0.00	NTU	
082545	Water Elevation	N	E83182	Field	2/3/2010 2:50:00PM	45.41		Ft	

Total Parameters Monitored: 22

* Well purging is the process of pumping the well prior to sampling in order to obtain a representative ground water sample.

Form Produced by FDEP Validator software

Facility Name: SUMTER COUNTY VOL. RED. & LANDFILL

PARAMETER MONITORING REPORT

Rule 62-701

WACS Report Type: SEMGW

Description: Semiannual Gw: 62-701.510(8)(A) (1 Pages)

WACS Facility ID #: 53008

WACS Testsite ID #: 21211

WACS Testsite Name: WELL MW-9A

Water Classification: G-II
(i.e.: LC - Leachate, G-II, SW-IIIF)

Sample Date/Time: 2/3/2010 1:35:00PM

Sampling Method: Submersible Pump

Permitted Well Type: DE - Detection

* Well Purged prior to Sample Collection? (Y/N): Y

STORET Code	Parameter Monitored	Field Filtered (Y/N)	NELAC Lab Certification # (DOHE)	Analysis Method	Analysis Date/Time	Analysis Result	Detection Limit	Units	Qual
001105	Aluminum	N	E83182	EPA 200.8	2/9/2010 2:55:00PM	133	68.0	ug/L	
000610	Ammonia as N	N	E83182	EPA 350.1	2/8/2010 1:31:00PM	0.20	0.010	mg/L	
001097	Antimony	N	E83182	EPA 200.8	2/9/2010 2:55:00PM	0.700	0.700	ug/L	U
001027	Cadmium	N	E83182	EPA 200.8	2/9/2010 2:55:00PM	1.27	1.10	ug/L	I
000940	Chloride	N	E83182	EPA 300.0	2/5/2010 12:03:00PM	19	0.24	mg/L	
001034	Chromium	N	E83182	EPA 200.8	2/9/2010 2:55:00PM	4.50	4.50	ug/L	U
000299	Dissolved Oxygen	N	E83182	Field	2/3/2010 1:35:00PM	0.54	0.00	mg/L	
000951	Fluoride	N	E83182	EPA 300.0	2/5/2010 12:03:00PM	0.03	0.03	mg/L	U
001045	Iron	N	E83182	EPA 200.8	2/9/2010 2:55:00PM	303	38.0	ug/L	
001051	Lead	N	E83182	EPA 200.8	2/9/2010 2:55:00PM	1.20	1.20	ug/L	U
001055	Manganese	N	E83182	EPA 200.8	2/9/2010 2:55:00PM	77.2	2.00	ug/L	
071900	Mercury	N	E83182	EPA 245.1	3/3/2010 7:36:00AM	0.489	0.024	ug/L	
000620	Nitrate as N	N	E83182	EPA 300.0	2/5/2010 12:03:00PM	0.90	0.10	mg/L	I
000400	pH	N	E83182	Field	2/3/2010 1:35:00PM	6.55		pH Units	
001077	Silver	N	E83182	EPA 200.8	2/9/2010 2:55:00PM	0.200	0.200	ug/L	U
000929	Sodium	N	E83182	EPA 200.8	2/9/2010 2:55:00PM	19.2	0.320	mg/L	
000094	Specific Conductance (EC)	N	E83182	Field	2/3/2010 1:35:00PM	876	0	umhos/cm	
000010	Temperature	N	E83182	Field	2/3/2010 1:35:00PM	25.20	0.00	Degrees C	
001059	Thallium	N	E83182	EPA 200.8	2/9/2010 2:55:00PM	0.573	0.260	ug/L	I
000515	Total Dissolved Solids	N	E83182	SM18 2540C	2/9/2010 12:35:00AM	540	10	mg/L	
082078	Turbidity	N	E83182	Field	2/3/2010 1:35:00PM	8.51	0.00	NTU	
082545	Water Elevation	N	E83182	Field	2/3/2010 1:35:00PM	40.92		Ft	

Total Parameters Monitored: 22

* Well purging is the process of pumping the well prior to sampling in order to obtain a representative ground water sample.

Form Produced by FDEP Validator software

Facility Name: SUMTER COUNTY VOL. RED. & LANDFILL

PARAMETER MONITORING REPORT

Rule 62-701

WACS Report Type: SEMGW

Description: Semiannual Gw: 62-701.510(8)(A) (1 Pages)

WACS Facility ID #: 53008

WACS Testsite ID #: 21212

WACS Testsite Name: MW-10

Water Classification: G-II
(i.e.: LC - Leachate, G-II, SW-IIIF)

Sample Date/Time: 2/3/2010 4:22:00PM

Sampling Method: Submersible Pump

Permitted Well Type: DE - Detection

* Well Purged prior to Sample Collection? (Y/N): Y

STORET Code	Parameter Monitored	Field Filtered (Y/N)	NELAC Lab Certification # (DOHE)	Analysis Method	Analysis Date/Time	Analysis Result	Detection Limit	Units	Qual
001105	Aluminum	N	E83182	EPA 200.8	2/9/2010 3:05:00PM	351	68.0	ug/L	
000610	Ammonia as N	N	E83182	EPA 350.1	2/8/2010 1:32:00PM	0.035	0.010	mg/L	
001097	Antimony	N	E83182	EPA 200.8	2/9/2010 3:05:00PM	0.700	0.700	ug/L	U
001027	Cadmium	N	E83182	EPA 200.8	2/9/2010 3:05:00PM	1.10	1.10	ug/L	U
000940	Chloride	N	E83182	EPA 300.0	2/5/2010 12:38:00PM	8.2	0.24	mg/L	
001034	Chromium	N	E83182	EPA 200.8	2/9/2010 3:05:00PM	11.6	4.50	ug/L	
000299	Dissolved Oxygen	N	E83182	Field	2/3/2010 4:22:00PM	1.98	0.00	mg/L	
000951	Fluoride	N	E83182	EPA 300.0	2/5/2010 12:38:00PM	0.03	0.03	mg/L	U
001045	Iron	N	E83182	EPA 200.8	2/9/2010 3:05:00PM	825	38.0	ug/L	
001051	Lead	N	E83182	EPA 200.8	2/9/2010 3:05:00PM	1.20	1.20	ug/L	U
001055	Manganese	N	E83182	EPA 200.8	2/9/2010 3:05:00PM	28.8	2.00	ug/L	
071900	Mercury	N	E83182	EPA 245.1	3/3/2010 7:39:00AM	0.024	0.024	ug/L	U
000620	Nitrate as N	N	E83182	EPA 300.0	2/5/2010 12:38:00PM	3.2	0.10	mg/L	
000400	pH	N	E83182	Field	2/3/2010 4:22:00PM	6.93		pH Units	
001077	Silver	N	E83182	EPA 200.8	2/9/2010 3:05:00PM	0.200	0.200	ug/L	U
000929	Sodium	N	E83182	EPA 200.8	2/9/2010 3:05:00PM	7.28	0.320	mg/L	
000094	Specific Conductance (EC)	N	E83182	Field	2/3/2010 4:22:00PM	537	0	umhos/cm	
000010	Temperature	N	E83182	Field	2/3/2010 4:22:00PM	24.69	0.00	Degrees C	
001059	Thallium	N	E83182	EPA 200.8	2/9/2010 3:05:00PM	0.260	0.260	ug/L	U
000515	Total Dissolved Solids	N	E83182	SM18 2540C	2/9/2010 12:35:00AM	320	10	mg/L	
082078	Turbidity	N	E83182	Field	2/3/2010 4:22:00PM	15.20	0.00	NTU	
082545	Water Elevation	N	E83182	Field	2/3/2010 4:22:00PM	44.09		Ft	

Total Parameters Monitored: 22

* Well purging is the process of pumping the well prior to sampling in order to obtain a representative ground water sample.

Form Produced by FDEP Validator software

Facility Name: SUMTER COUNTY VOL. RED. & LANDFILL

PARAMETER MONITORING REPORT

Rule 62-701

WACS Report Type: SEMGW

Description: Semiannual Gw: 62-701.510(8)(A) (1 Pages)

WACS Facility ID #: 53008

WACS Testsite ID #: 21213

WACS Testsite Name: MW-11

Water Classification: G-II
(i.e.: LC - Leachate, G-II, SW-IIIF)

* Well Purged prior to Sample Collection? (Y/N): Y

Sample Date/Time: 2/4/2010 1:45:00PM

Sampling Method: Submersible Pump

Permitted Well Type: DE - Detection

STORET Code	Parameter Monitored	Field Filtered (Y/N)	NELAC Lab Certification # (DOHE)	Analysis Method	Analysis Date/Time	Analysis Result	Detection Limit	Units	Qual
001105	Aluminum	N	E83182	EPA 200.8	2/9/2010 3:12:00PM	355	68.0	ug/L	
000610	Ammonia as N	N	E83182	EPA 350.1	2/8/2010 1:33:00PM	0.010	0.010	mg/L	U
001097	Antimony	N	E83182	EPA 200.8	2/9/2010 3:12:00PM	0.700	0.700	ug/L	U
001027	Cadmium	N	E83182	EPA 200.8	2/9/2010 3:12:00PM	2.89	1.10	ug/L	I
000940	Chloride	N	E83182	EPA 300.0	2/5/2010 4:00:00PM	3.5	0.24	mg/L	I
001034	Chromium	N	E83182	EPA 200.8	2/9/2010 3:12:00PM	6.22	4.50	ug/L	I
000299	Dissolved Oxygen	N	E83182	Field	2/4/2010 1:45:00PM	1.27	0.00	mg/L	
000951	Fluoride	N	E83182	EPA 300.0	2/5/2010 4:00:00PM	0.03	0.03	mg/L	U
001045	Iron	N	E83182	EPA 200.8	2/9/2010 3:12:00PM	83.1	38.0	ug/L	
001051	Lead	N	E83182	EPA 200.8	2/9/2010 3:12:00PM	1.20	1.20	ug/L	U
001055	Manganese	N	E83182	EPA 200.8	2/9/2010 3:12:00PM	4.37	2.00	ug/L	I
071900	Mercury	N	E83182	EPA 245.1	3/3/2010 7:43:00AM	0.032	0.024	ug/L	I
000620	Nitrate as N	N	E83182	EPA 300.0	2/5/2010 4:00:00PM	5.0	0.10	mg/L	
000400	pH	N	E83182	Field	2/4/2010 1:45:00PM	6.65		pH Units	
001077	Silver	N	E83182	EPA 200.8	2/9/2010 3:12:00PM	0.200	0.200	ug/L	U
000929	Sodium	N	E83182	EPA 200.8	2/9/2010 3:12:00PM	10.6	0.320	mg/L	
000094	Specific Conductance (EC)	N	E83182	Field	2/4/2010 1:45:00PM	594	0	umhos/cm	
000010	Temperature	N	E83182	Field	2/4/2010 1:45:00PM	26.02	0.00	Degrees C	
001059	Thallium	N	E83182	EPA 200.8	2/9/2010 3:12:00PM	0.260	0.260	ug/L	U
000515	Total Dissolved Solids	N	E83182	SM18 2540C	2/9/2010 12:35:00AM	340	10	mg/L	
082078	Turbidity	N	E83182	Field	2/4/2010 1:45:00PM	10.96	0.00	NTU	
082545	Water Elevation	N	E83182	Field	2/4/2010 1:45:00PM	44.09		Ft	

Total Parameters Monitored: 22

* Well purging is the process of pumping the well prior to sampling in order to obtain a representative ground water sample.

Form Produced by FDEP Validator software

Florida Radiochemistry Services, Inc.

Analysis Report

Lab Sample I.D.	1002051-01	1002051-02	1002051-03	1002051-04	1002051-05	1002051-06
Client I.D.	MW-2	MW-4	MW-4B	MW-4A	MW-6A	MW-8
Gross Alpha	1.4U	3.8	2.5	1.6	1.2U	1.3U
Error +/-	0.9	0.8	1.1	1.1	0.9	1.0
MDL	1.4	0.8	1.2	1.6	1.2	1.3
EPA Method	900.0	900.0	900.0	900.0	900.0	900.0
Prep Date	02/15/10	02/15/10	02/15/10	02/15/10	02/15/10	02/15/10
Prep Time	09:08	09:08	09:08	09:08	09:08	09:08
Analysis Date	02/16/10	02/16/10	02/16/10	02/16/10	02/16/10	02/16/10
Analysis Time	07:12	15:21	07:53	15:20	07:53	07:53
Analyst	MJN	MJN	MJN	MJN	MJN	MJN
Radium 226	0.5	1.0	0.7	2.3	0.2U	0.5
Error +/-	0.2	0.2	0.2	0.2	0.1	0.2
MDL	0.2	0.2	0.1	0.1	0.2	0.2
EPA Method	903.1	903.1	903.1	903.1	903.1	903.1
Prep Date	02/10/10	02/10/10	02/10/10	02/10/10	02/10/10	02/10/10
Prep Time	10:10	10:10	10:10	10:10	10:10	10:10
Analysis Date	02/17/10	02/17/10	02/17/10	02/17/10	02/17/10	02/17/10
Analysis Time	11:42	11:42	11:42	11:42	11:42	13:51
Analyst	MJN	MJN	MJN	MJN	MJN	MJN
Radium 228	0.7U	0.8U	0.7U	0.8U	0.7U	0.8U
Error +/-	0.4	0.5	0.5	0.5	0.4	0.5
MDL	0.7	0.8	0.7	0.8	0.7	0.8
EPA Method	Ra-05	Ra-05	Ra-05	Ra-05	Ra-05	Ra-05
Prep Date	02/10/10	02/10/10	02/10/10	02/10/10	02/10/10	02/10/10
Prep Time	10:10	10:10	10:10	10:10	10:10	10:10
Analysis Date	02/17/10	02/17/10	02/17/10	02/17/10	02/17/10	02/17/10
Analysis Time	11:10	11:10	12:11	12:11	12:11	13:17
Analyst	PJ	PJ	PJ	PJ	PJ	PJ
Units	pCi/l	pCi/l	pCi/l	pCi/l	pCi/l	pCi/l

Florida Radiochemistry Services, Inc.

Analysis Report

Lab Sample I.D.	1002051-07	1002051-08	1002051-09	1002051-10
Client I.D.	MW-9A	MW-10	MW-11	EQUIPMENT BLANK
Gross Alpha	6.3	7.0	13.4	0.7U
Error +/-	1.6	1.2	1.7	0.5
MDL	1.6	0.9	1.2	0.7
EPA Method	900.0	900.0	900.0	900.0
Prep Date	02/15/10	02/15/10	02/15/10	02/15/10
Prep Time	09:08	09:08	09:08	09:08
Analysis Date	02/16/10	02/16/10	02/16/10	02/16/10
Analysis Time	15:20	15:20	15:20	07:53
Analyst	MJN	MJN	MJN	MJN
Radium 226	2.2	1.3	3.7	0.1
Error +/-	0.4	0.3	0.5	0.1
MDL	0.2	0.2	0.2	0.1
EPA Method	903.1	903.1	903.1	903.1
Prep Date	02/10/10	02/10/10	02/10/10	02/10/10
Prep Time	10:10	10:10	10:10	10:10
Analysis Date	02/17/10	02/17/10	02/17/10	02/17/10
Analysis Time	13:51	13:51	13:51	14:54
Analyst	MJN	MJN	MJN	MJN
Radium 228	0.9U	0.8U	0.8U	0.7U
Error +/-	0.6	0.5	0.6	0.5
MDL	0.9	0.8	0.8	0.7
EPA Method	Ra-05	Ra-05	Ra-05	Ra-05
Prep Date	02/10/10	02/10/10	02/10/10	02/10/10
Prep Time	10:10	10:10	10:10	10:10
Analysis Date	02/17/10	02/17/10	02/17/10	02/17/10
Analysis Time	13:17	14:18	14:18	14:18
Analyst	PJ	PJ	PJ	PJ
Units	pCi/l	pCi/l	pCi/l	pCi/l

DEP-SOP-001/01
Form FD 9000-24

,30

GROUNDWATER SAMPLING LOG

SITE NAME: Sumter County Landfill	SITE LOCATION: Sumterville, FL	
WELL NO: MW-2	SAMPLE ID: MW-2	DATE: 2/4/10

PURGING DATA

WELL DIAMETER (inches): 2" PVC	TUBING DIAMETER (inches): 3/8"	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 24.69	PURGE PUMP TYPE OR BAILER: ~~ESP~~ PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
1 Well Vol = (31.92' feet – 24.69' feet) X .16 gallons/foot = 1.1568 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
1 Equip Vol = .02 gallons + (.006 gallons/foot X 28' feet) + .125 gallons = .315 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): ~26'	FINAL PUMP OR TUBING DEPTH IN WELL (feet): ~26	PURGING INITIATED AT: 1403	PURGING ENDED AT: 1421	TOTAL VOLUME PURGED (gallons): 1.60

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (mS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1417	1.20	1.20	.10	24.82'	6.94	26.16	.279	4.55	1.79	Clear	None
1419	.20	1.40	.10	24.82'	6.87	26.19	.271	4.54	.84	Clear	None
1421	.20	1.60	.10	24.82'	6.81	26.22	.264	4.42	.62	Clear	None
								No Sheen			

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: H. L. Claytor, Colinas Group, Inc.	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1422	SAMPLING ENDED AT: 1435
PUMP OR TUBING DEPTH IN WELL (feet): ~26'	SAMPLE PUMP FLOW RATE (mL per minute): < 250 mL	TUBING MATERIAL CODE: PE	
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
MW-2	2	PE	1 Ltr	HN03	None	—	GrossAlpha, RA226RA228	~~ESP~~ APP
"	1	PE	250 mL	H2S04	None	—	Total Ammonia	~~ESP~~ APP
"	1	PE	250 mL	HN03	None	—	Al,Fe,Mn,Hg,Na	~~ESP~~ APP
"	1	PE	500 mL	None	None	—	Chloride,Fluoride, Nitrate, TDS	~~ESP~~ APP

REMARKS:
1403: Set dedicated 1/4" PE tubing @ ~ 26' btoc and began purging @ .06 gpm.

1408: Increased flow to .10 gpm, GW is clear.

1411: WL 24.82' @ .10 gpm

1415: WL 24.82' @ .10 gpm, drawdown is stable. GW is clear. DO is high @ 4.29 mg/L. Will use optional stabilization criteria for DO if necessary.

Notes: 1) Used a graduated 5 gallon bucket and timed to measure purge volumes
2) Packed samples on ice immediately upon collection

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)y

Notes: 1. The above do not constitute all the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)H: ± 0.2 units; Temperature: ± 0.2 degrees C; Specific Conductance: ± 5%; Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± .02 mg/L or ± 10% (whichever is greater); Turbidity: all readings ≤ 20 NTU, optionally ± 5 NTU or ± 10% (whichever is greater)

DEP-SOP-001/01
Form FD 9000-24

GROUNDWATER SAMPLING LOG

1160
5.25

SITE NAME: Sumter County Landfill	SITE LOCATION: Sumterville, FL	
WELL NO: MW-4	SAMPLE ID: MW-4	DATE: 2/4/10

PURGING DATA

WELL DIAMETER (inches): 2" PVC	TUBING DIAMETER (inches): .3/8"	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 26.23	PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (36.35' feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME X3 = 1.083
(only fill out if applicable)
1 Equip Vol = .02 gallons + (.006 gallons/foot X 36. ~~30~~ feet) + .125 gallons = .361 ~~.375~~ gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): ~31'	FINAL PUMP OR TUBING DEPTH IN WELL (feet): ~31'	PURGING INITIATED AT: 1115	PURGING ENDED AT: 1147	TOTAL VOLUME PURGED (gallons): 8.49

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (mS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1143	8.01	8.01	.12	26.41'	7.22	26.40	.702	1.32	14.2	Clear	Slight Sulfur
1145	.24	8.25	.12	26.41'	7.21	26.47	.705	1.15	12.3	Clear	Same
1147	.24	8.49	.12	26.41'	7.21	26.52	.707	1.11	10.87	Clear	Same
								No sheen			

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: H. L. Claytor, Colinas Group, Inc.	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1148	SAMPLING ENDED AT: 1200
PUMP OR TUBING DEPTH IN WELL (feet): ~31'	SAMPLE PUMP FLOW RATE (mL per minute): < 250 mL	TUBING MATERIAL CODE: PE	
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
MW-4	2	PE	1 Ltr	HN03	None	—	GrossAlpha, RA226RA228	ESP
"	1	PE	250 mL	H2S04	None	—	Ammonia	ESP
"	1	PE	250 mL	HN03	None	—	Al,Fe,Mn,Hg,Na	ESP
"	1	PE	500 mL	None	None	—	Chloride,Fluoride, Nitrate, TDS	ESP

REMARKS:
1115: Inserted ~~me~~ SS ESP and dedicated 3/8" PE tubing to ~31' BTOC and began purging @ .2 gpm.

1118: WL 26.70' @ .2 gpm, well is slowly drawing down. GW is turbid. Increased flow to .25 gpm to clean out well.

1125: Turbidity is at 43 NTUs, reduced flow to .12 gpm.

1133: Turbidity is @ 28 NTUs, continuing to purge @ .12 gpm. WL 26.43'.

1138: Turbidity @ 19 NTUs, WL 26.42'.

Notes: 1) Used a graduated 5 gallon bucket and timed to measure purge volumes
2) Packed samples on ice immediately upon collection

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)y

Notes: 1. The above do not constitute all the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)H: ± 0.2 units; Temperature: ± 0.2 degrees C; Specific Conductance: ± 5%; Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± .02 mg/L or ± 10% (whichever is greater); Turbidity: all readings ≤ 20 NTU, optionally ± 5 NTU or ± 10% (whichever is greater)

2.00
.84
1.50
.72

DEP-SOP-001/01
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Sumter County Landfill	SITE LOCATION: Sumterville, FL	
WELL NO: MW-4A	SAMPLE ID: MW-4A	DATE: 2/4/10

PURGING DATA

WELL DIAMETER (inches): 2" PVC	TUBING DIAMETER (inches): 3/8"	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 31.43	PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (45.23' feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME X3 = 1.245
(only fill out if applicable)
1 Equip Vol = .02 gallons + (.006 gallons/foot X 45' feet) + .125 gallons = .415 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): ~40'	FINAL PUMP OR TUBING DEPTH IN WELL (feet): ~40'	PURGING INITIATED AT: 1012	PURGING ENDED AT: 1039	TOTAL VOLUME PURGED (gallons): 5.54

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (mS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1035	5.06	5.06	.12	31.47'	6.84	26.13	.718	.80	16.2	Clear	None
1037	.24	5.30	.12	31.47'	6.96	26.24	.723	.59	11.8	Clear	None
1039	.24	5.54	.12		7.00	26.30	.726	.58	10.39	Clear	None
								No Sheen			

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: H. L. Claytor, Colinas Group, Inc.	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1040	SAMPLING ENDED AT: 1050
PUMP OR TUBING DEPTH IN WELL (feet): ~40'	SAMPLE PUMP FLOW RATE (mL per minute): < 250 mL	TUBING MATERIAL CODE: PE	
FIELD DECONTAMINATION: (Y) / N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
MW-4A	2	PE	1 Ltr	HN03	None	—	GrossAlpha, RA226RA228	ESP
"	1	PE	250 mL	H2S04	None	—	Total Ammonia	ESP
"	1	PE	250 mL	HN03	None	—	Al,Fe,Mn,Hg,Na	ESP
"	1	PE	500 mL	None	None	—	Chloride,Fluoride, Nitrate, TDS	ESP

REMARKS:
1012: Inserted SS ESP and dedicated 3/8" PE tubing to ~40' btoc and began purging @ .4 gpm. GW is turbid.
1017: Reduced flow to .12 gpm, GW is clearing up nicely.
1024: GW is slowly getting turbid at lower flow rate. Increased flow to .3 gpm.
1029: Turbidity @ 26 NTU's, reduced flow to .12 gpm.
1032: Turbidity has dropped to 16 NTU's, WL 31.48' @ .12 gpm.

Notes: 1) Used a graduated 5 gallon bucket and timed to measure purge volumes
2) Packed samples on ice immediately upon collection

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)y

Notes: 1. The above do not constitute all the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)H: ± 0.2 units; Temperature: ± 0.2 degrees C; Specific Conductance: ± 5%; Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± .02 mg/L or ± 10% (whichever is greater); Turbidity: all readings ≤ 20 NTU, optionally ± 5 NTU or ± 10% (whichever is greater)

DEP-SOP-001/01
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Sumter County Landfill		SITE LOCATION: Sumterville, FL
WELL NO: MW-4B	SAMPLE ID: MW-4B	DATE: 2/4/10

PURGING DATA

WELL DIAMETER (inches): 2" PVC	TUBING DIAMETER (inches): 3/8"	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 29.50	PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (38.49' feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME X3 = 1.029
(only fill out if applicable)
1 Equip Vol = .02 gallons + (.006 gallons/foot X 38' feet) + .125 gallons = .343 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): ~33'	FINAL PUMP OR TUBING DEPTH IN WELL (feet): ~33'	PURGING INITIATED AT: 1219	PURGING ENDED AT: 1237	TOTAL VOLUME PURGED (gallons): 2.16

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (mS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1233	1.68	1.68	.12	29.55	9.11	25.88	.148	5.15	4.56	Clear	None
1235	.24	1.92	.12	29.54	9.12	25.93	.148	5.13	4.27	Clear	None
1237	.24	2.16	.12	29.54	9.13	25.83	.148	5.05	4.08	Clear	None

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: H. L. Claytor, Colinas Group, Inc.	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1238	SAMPLING ENDED AT: 1248
PUMP OR TUBING DEPTH IN WELL (feet): ~33'	SAMPLE PUMP FLOW RATE (mL per minute): < 250 mL	TUBING MATERIAL CODE: PE	
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
MW-4B	2	PE	1 Ltr	HN03	None	—	GrossAlpha, RA226RA228	ESP
"	1	PE	250 mL	H2S04	None	—	Total Ammonia	ESP
"	1	PE	250 mL	HN03	None	—	Al,Fe,Mn,Hg,Na	ESP
"	1	PE	500 mL	None	None	—	Chloride,Fluoride, Nitrate, TDS	ESP

REMARKS:
1219: Inserted SS ESP and dedicated 3/8" PE tubing to ~33' btoc and began purging @ .12 gpm.
1227: WL 29.55' @ .12 gpm, GW is clear. DO is high @ 5.34 mg/L, but slowly dropping.
1232: DO still high @ 5.17 mg/L. Will use optional stabilization criteria below. WL 29.55' @ .12 gpm, drawdown is stable. GW is clear. Ph is high @ 9.11.

Notes: 1) Used a graduated 5 gallon bucket and timed to measure purge volumes
2) Packed samples on ice immediately upon collection

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)y

Notes: 1. The above do not constitute all the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)H: ± 0.2 units; Temperature: ± 0.2 degrees C; Specific Conductance: ± 5%; Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± .02 mg/L or ± 10% (whichever is greater); Turbidity: all readings ≤ 20 NTU, optionally ± 5 NTU or ± 10% (whichever is greater)

1.00
6.00
5.00
.36
.36

DEP-SOP-001/01
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Sumter County Landfill	SITE LOCATION: Sumterville, FL	
WELL NO: MW-6A	SAMPLE ID: MW-6A	DATE: 2/4/10

PURGING DATA

WELL DIAMETER (inches): 2" PVC	TUBING DIAMETER (inches): 3/8"	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 33.07	PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (50.84' feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
1 Equip Vol = .02 gallons + (.006 gallons/foot X ~~48'~~ 50' feet) + .125 gallons = ~~.775~~ gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): ~45'	FINAL PUMP OR TUBING DEPTH IN WELL (feet): ~45'	PURGING INITIATED AT: 1530	PURGING ENDED AT: 1604	TOTAL VOLUME PURGED (gallons): 14.72

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (mS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1600	12.72	12.72	.5	33.14'	7.78	24.64	.281	6.77	12.4	Clear	None
1602	1.00	13.72	.5	33.14'	7.78	24.62	.281	6.72	13.4	Clear	None
1604	1.00	14.72	.5	33.14'	7.79	24.62	.281	6.68	12.2	Clear	None
								NO Sheen			

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: H. L. Claytor, Colinas Group, Inc.	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1605	SAMPLING ENDED AT: 1615
PUMP OR TUBING DEPTH IN WELL (feet): ~45'	SAMPLE PUMP FLOW RATE (mL per minute): < 250 mL	TUBING MATERIAL CODE: PE	
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
MW-6A	2	PE	1 Ltr	HN03	None	—	GrossAlpha, RA226RA228	ESP
"	1	PE	250 mL	H2S04	None	—	Total Ammonia	ESP
"	1	PE	250 mL	HN03	None	—	Al,Fe,Mn,Hg,Na	ESP
"	1	PE	500 mL	None	None	—	Chloride,Fluoride, Nitrate, TDS	ESP

REMARKS:
1530: Inserted SS ESP and dedicated 3/8" PE tubing to ~45'. Stbc and began purging @ .5 gpm. This well historically has extremely high turbidity at beginning of purge and requires over purging to clean it up. GW is milky white.
1540: GW is clearing up nicely, reduced flow to .12 gpm.
1543: GW is getting extremely turbid again. Increased flow to .5 gpm.
1550: WL 33.16' @ .5 gpm, drawdown is stable. Turbidity is @ 19 NTUs.
1555: DO is high @ 6.56 mg/L. Reduced flow to .12 gpm to try and lower DO.

Notes: 1) Used a graduated 5 gallon bucket and timed to measure purge volumes
2) Packed samples on ice immediately upon collection
(over)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)y

Notes: 1. The above do not constitute all the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)H: ± 0.2 units; Temperature: ± 0.2 degrees C; Specific Conductance: ± 5%; Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± .02 mg/L or ± 10% (whichever is greater); Turbidity: all readings ≤ 20 NTU, optionally ± 5 NTU or ± 10% (whichever is greater)

DEP-SOP-001/01
Form FD 9000-24

1.60
4.00
2.00

GROUNDWATER SAMPLING LOG

SITE NAME: Sumter County Landfill	SITE LOCATION: Sumterville, FL	
WELL NO: MW-8	SAMPLE ID: MW-8	DATE: 2/3/10

PURGING DATA

WELL DIAMETER (inches): 2" PVC	TUBING DIAMETER (inches): 3/8"	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 23.80	PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (43.24' feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME x3 = 1.209
(only fill out if applicable)
1 Equip Vol = .02 gallons + (.006 gallons/foot X ~~40~~ 43' ~~38~~ feet) + .125 gallons = .403 ~~.50~~ gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): ~38'	FINAL PUMP OR TUBING DEPTH IN WELL (feet): ~38'	PURGING INITIATED AT: ~~1412~~	PURGING ENDED AT: 1438	TOTAL VOLUME PURGED (gallons): 8.40

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (mS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1434	7.60	7.60	.20	23.85	7.19	24.17	.435	8.52	4.54	Clear	None
1436	.40	8.00	.20	23.85	7.19	24.17	.435	3.54	3.38	Clear	None
1438	.40	8.40	.20	23.85	7.19	24.13	.434	3.50	3.50	Clear	None
							No Sheen				

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: H. L. Claytor, Colinas Group, Inc.	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1440	SAMPLING ENDED AT: 1450
PUMP OR TUBING DEPTH IN WELL (feet): ~38'	SAMPLE PUMP FLOW RATE (mL per minute): < 250 mL	TUBING MATERIAL CODE: PE	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
MW-8	2	PE	1 Ltr	HN03	None	—	GrossAlpha, RA226RA228	ESP
"	1	PE	250 mL	H2S04	None	—	Total Ammonia	ESP
"	1	PE	250 mL	HN03	None	—	Al,Fe,Mn,Hg,Na	ESP
"	1	PE	500 mL	None	None	—	Chloride,Fluoride, Nitrate, TDS	ESP

REMARKS:
1412: Inserted SS ESP and dedicated 3/8" PE tubing to ~ 38' btoc and began purging @ .2 gpm.
1417: WL 23.85' @ .2 gpm, GW is turbid but slowly clearing up.
1420: GW is still turbid, there is a lot of debris (dead ants mostly) in well. Increased flow to 1 gpm to clean out well.
1424: GW has cleared up nicely, @ 10 NTU's, reduced flow to .200 gpm.
1427: WL 23.84' @ .2 gpm, drawdown is stable. GW is clear. DO is high @ 4.10 mg/L.

Notes: 1) Used a graduated 5 gallon bucket and timed to measure purge volumes (over)
2) Packed samples on ice immediately upon collection

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)y

Notes: 1. The above do not constitute all the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)H: ± 0.2 units; Temperature: ± 0.2 degrees C; Specific Conductance: ± 5%; Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± .02 mg/L or ± 10% (whichever is greater); Turbidity: all readings ≤ 20 NTU, optionally ± 5 NTU or ± 10% (whichever is greater)

DEP-SOP-001/01
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Sumter County Landfill		SITE LOCATION: Sumterville, FL
WELL NO: MW-9A	SAMPLE ID: MW-9A	DATE: 2/3/10

PURGING DATA

WELL DIAMETER (inches): 2" PVC	TUBING DIAMETER (inches): 3/8"	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 30.83'	PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (50.17' feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME X 3= 1.335 .445
(only fill out if applicable)
1 Equip Vol = .02 gallons + (.006 gallons/foot X 50' feet) + .125 gallons = 1.78 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): ~45'	FINAL PUMP OR TUBING DEPTH IN WELL (feet): ~45'	PURGING INITIATED AT: 1226	PURGING ENDED AT: 1326	TOTAL VOLUME PURGED (gallons): 12.00

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (mS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1322	11.20	11.20	.20	33.34'	6.56	25.18	.877	.63	16.2	Clear	None
1324	.40	11.60	.20	33.34'	6.56	25.20	.876	.57	10.4	Clear	None
1326	.40	12.00	.20	33.34'	6.55	25.20	.876	.54	8.51	Clear	None
								No Sheen			

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: H. L. Claytor, Colinas Group, Inc.	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1327	SAMPLING ENDED AT: 1335
PUMP OR TUBING DEPTH IN WELL (feet): ~45'	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE: PE	
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
MW-9A	2	PE	1 Ltr	HN03	None	—	GrossAlpha, RA226RA228	ESP
"	1	PE	250 mL	H2S04	None	—	Total Ammonia	ESP
"	1	PE	250 mL	HN03	None	—	Al,Fe,Mn,Hg,Na	ESP
"	1	PE	500 mL	None	None	—	Chloride,Fluoride, Nitrate, TDS	ESP

REMARKS:
1226: Inserted SS ESP and dedicated 3/8" PE tubing to ~45' Stoc and began purging @ .2 gpm. This well historically is extremely turbid at beginning of purge and requires ovr purging to clean it up.
1315: GW has cleared up nicely, WL 33.32' @ .2 gpm and Stable.

Notes: 1) Used a graduated 5 gallon bucket and timed to measure purge volumes
2) Packed samples on ice immediately upon collection

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)y

Notes: 1. The above do not constitute all the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)H: ± 0.2 units; Temperature: ± 0.2 degrees C; Specific Conductance: ± 5%; Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± .02 mg/L or ± 10% (whichever is greater); Turbidity: all readings ≤ 20 NTU, optionally ± 5 NTU or ± 10% (whichever is greater)

5.00
.75
6.00
11.25
.50
.30 .30 .12

DEP-SOP-001/01
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Sumter County Landfill	SITE LOCATION: Sumterville, FL	
WELL NO: MW-10	SAMPLE ID: MW-10	DATE: 8/3/10

PURGING DATA

WELL DIAMETER (inches): 2" PVC	TUBING DIAMETER (inches): 3/8"	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 23.90	PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (45.35' feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
1 Equip Vol = .02 gallons + (.006 gallons/foot X 47' feet) + .125 gallons = .425 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): ~40'	FINAL PUMP OR TUBING DEPTH IN WELL (feet): ~40'	PURGING INITIATED AT: 1517	PURGING ENDED AT: 1611	TOTAL VOLUME PURGED (gallons): 24.76

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (mS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1607	24.52	24.52	.06	24.64'	6.94	24.64	.543	1.79	18.0	Clear	None
1609	.12	24.64	.06	24.64'	6.95	24.72	.538	1.89	17.4	Clear	None
1611	.12	24.76	.06	24.64'	6.93	24.69	.537	1.98	15.2	Clear	None
									No Sheen		

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: H. L. Claytor, Colinas Group, Inc.	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1612	SAMPLING ENDED AT: 1622
PUMP OR TUBING DEPTH IN WELL (feet): ~40'	SAMPLE PUMP FLOW RATE (mL per minute): < 250 mL	TUBING MATERIAL CODE: PE	
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
MW-10	2	PE	1 Ltr	HN03	None	—	GrossAlpha, RA226RA228	ESP
"	1	PE	250 mL	H2S04	None	—	Total Ammonia	ESP
"	1	PE	250 mL	HN03	None	—	Al,Fe,Mn,Hg,Na	ESP
"	1	PE	500 mL	None	None	—	Chloride,Fluoride, Nitrate, TDS	ESP

REMARKS:
1517: Inserted SS ESP and dedicated 3/8" PE tubing to ~40' btoc and began purging @ .25 gpm. This well historically has high turbidity at beginning of purge and requires over purging to clean it up.

1532: GW is clearing up nicely, ~~reduced~~ reduced flow to .25 gpm.

1534: Reduced flow to .15 gpm.

1536: Turbidity is slowly going up at lower flow rate. Increased flow to 1 gpm.

Notes: 1) Used a graduated 5 gallon bucket and timed to measure purge volumes (over)
2) Packed samples on ice immediately upon collection

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)y

Notes: 1. The above do not constitute all the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)H: ± 0.2 units; Temperature: ± 0.2 degrees C; Specific Conductance: ± 5%; Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± .02 mg/L or ± 10% (whichever is greater); Turbidity: all readings ≤ 20 NTU, optionally ± 5 NTU or ± 10% (whichever is greater)

3-5

DEP-SOP-001/01
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Sumter County Landfill	SITE LOCATION: Sumterville, FL	
WELL NO: MW-11	SAMPLE ID: MW-11	DATE: 2/4/10

PURGING DATA

WELL DIAMETER (inches): 2" PVC	TUBING DIAMETER (inches): 3/8"	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 25.95	PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (40.15' feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME X3 = 1.155
(only fill out if applicable)
1 Equip Vol = .02 gallons + (.006 gallons/foot X 40 ~~43~~ feet) + .125 gallons = ~~405~~ .385 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): ~35'	FINAL PUMP OR TUBING DEPTH IN WELL (feet): ~35'	PURGING INITIATED AT: 1309	PURGING ENDED AT: 1334	TOTAL VOLUME PURGED (gallons): 7.46

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (mS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1322	4.22	4.22	.12	26.03'	6.61	26.00	.558	1.58	19.7	Clear	None
1324	.24	4.46	.12	26.02'	6.61	26.01	.561	1.54	22.7	Clear	None
1330	1.80	6.26	.13 ~~.12~~	26.12'	6.63	25.99	.582	1.34	13.7	Clear	None
1332	.60	6.86	.3	26.12'	6.63	26.06	.589	1.31	13.0	Clear	None
1334	.60	7.46	.3	26.12'	6.65	26.02	.594	1.27	10.96	Clear	None
								No sheen			

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: H. L. Claytor, Colinas Group, Inc.	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1335	SAMPLING ENDED AT: 1345
PUMP OR TUBING DEPTH IN WELL (feet): ~35'	SAMPLE PUMP FLOW RATE (mL per minute): < 250 mL	TUBING MATERIAL CODE: PE	
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
MW-11	2	PE	1 Ltr	HN03	None	—	GrossAlpha, RA226,RA228	ESP
"	1	PE	250 mL	H2S04	None	—	Total Ammonia	ESP
"	1	PE	250 mL	HN03	None	—	Al,Fe,Mn,Hg,Na	ESP
"	1	PE	500 mL	None	None	—	Chloride,Fluoride, Nitrate, TDS	ESP

REMARKS:
1309: Inserted SS ESP and dedicated 3/8" PE tubing to ~35' & started pump and began purging @ .5 gpm. This well historically has high turbidity at beginning of purge. Will over purge to clean it up.
1316: GW has cleared up nicely, reduced flow to .12 gpm.
1319: WL 26.04' @ .12 gpm, GW is clear.
1321: WL 26.03' @ .12 gpm, drawdown is stable. GW is clear.
1324: Turbidity is 30.NTU up at lower rate of flow, increased flow to .3 gpm

Notes: 1) Used a graduated 5 gallon bucket and timed to measure purge volumes
2) Packed samples on ice immediately upon collection

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)y

Notes: 1. The above do not constitute all the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)H: ± 0.2 units; Temperature: ± 0.2 degrees C; Specific Conductance: ± 5%; Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± .02 mg/L or ± 10% (whichever is greater); Turbidity: all readings ≤ 20 NTU, optionally ± 5 NTU or ± 10% (whichever is greater)

DEP-SOP-001/01
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Sumter County Landfill	SITE LOCATION: Sumterville, FL	
WELL NO: NA	SAMPLE ID: EQB	DATE: 2/3/10

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (mS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
	NA										

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: H. L. Claytor, Colinas Group, Inc.	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1205	SAMPLING ENDED AT: 1215
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute): < 250 mL	TUBING MATERIAL CODE: PE	
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
EQB	2	PE	1 Ltr	HN03	None	—	GrossAlpha, RA226RA228	ESP
"	1	PE	250 mL	H2S04	None	—	Total Ammonia	ESP
"	1	PE	250 mL	HN03	None	—	Al,Fe,Mn,Hg,Na	ESP
"	1	PE	500 mL	None	None	—	Chloride,Fluoride, Nitrate, TDS	ESP
"		Various	Various	Various	None	—	Appendix I Parameters	ESP

REMARKS:

Field decon'd SS ESP and WL probe IAW DEP-SOP-001/01, FC1000 and placed pump and WL probe into a field decon'd 3 gallon bucket. Poured 1 gallon of DI water over pump and WL probe into bucket and circulated DI water through pump and over WL probe for ~ 3 minutes, then collected samples.

Notes: 1) Used a graduated 5 gallon bucket and timed to measure purge volumes
2) Packed samples on ice immediately upon collection

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)y

Notes: 1. The above do not constitute all the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)H: ± 0.2 units; Temperature: ± 0.2 degrees C; Specific Conductance: ± 5%; Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2), optionally, ± .02 mg/L or ± 10% (whichever is greater); Turbidity: all readings ≤ 20 NTU, optionally ± 5 NTU or ± 10% (whichever is greater)

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ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

10775 Central Port Dr. Orlando, FL 32824 (407) 826-5314 Fax (407) 850-6945
4810 Executive Park Court, Suite 211 Jacksonville, FL 32216-6069 (904) 296-3007 Fax (904) 296-6210
1015 Passport Way Cary, NC 27513 (919) 677-1669 Fax (919) 677-9846

Page 1 of 1

Client Name	The Colinas Group (CO016)
Address	509 N. Virginia Ave.
City/ST/Zip	Winter Park, FL 32789
Tel	(407) 622-8176
Fax	(407) 622-8196
Sampler(s) Name, Affiliation (Print)	Dale Clayton
Sampler(s) Signature	[signature]
Project Number	53008
Project Name/Desc	SUMTER COUNTY VOL. REQ. & LANDFILL
PO # / Billing Info	
Reporting Contact	Rick Potts
Billing Contact	Rick Potts
Facility # (if required)	

Requested Turnaround Times
Note: Rush requests subject to acceptance by the facility
X Standard
___ Expedited
Due __/__/__

Lab Workorder: A000572

Requested Analyses: ~~8260~~ | ~~8260B Appendix 1 FL~~ | Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Hg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn,Hg | Ammonia 350.1 | Chloride 300,Fluoride 300,Nitrate as N 300,TDS SM2540C | Gross Alpha,Radium 226,Radium 228

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	~~8260~~	~~8260B Appendix 1 FL~~	Metals	Ammonia 350.1	Chloride/Fluoride/Nitrate/TDS	Gross Alpha, Radium 226, Radium 228	Sample Comments
	Preservation (See Codes)								IN	IS	I	IN	
	MW-2	2/4/10	1435	G	GW	85	X	X	X	X	X	X	
	MW-4	2/4/10	1600	G	GW	85	X	X	X	X	X	X	
	MW-4B	2/4/10	1248	G	GW	85	X	X	X	X	X	X	
	MW-4A	2/4/10	1050	G	GW	85	X	X	X	X	X	X	
	MW-6A	2/4/10	1615	G	GW	85	X	X	X	X	X	X	
	MW-8	2/3/10	1450	G	GW	85	X	X	X	X	X	X	
	MW-9A	2/3/10	1335	G	GW	85	X	X	X	X	X	X	
	MW-10	2/3/10	1622	G	GW	85	X	X	X	X	X	X	
	MW-11	2/4/10	1345	G	GW	85	X	X	X	X	X	X	
	EQUIPMENT BLANK	2/3/10	1215	G	GW	85	X	X	X	X	X	X	
	TRIP BLANK	—	—	G	GW	2		X					Run Trip Blank

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time
[signature]	2/2/10 1115	[signature]	2/2/10 1115	[signature]	2/2/10 1115
		[signature]	2/5/10 1105	[signature]	2/5 1105
		Relinquished By	Date/Time	Received By	Date/Time

Comments:

Cooler #'s & Temps on Receipt: C-481 ?°C C-377 1°C

Condition Upon Receipt: X Acceptable ___ Unacceptable

Matrix: GW-Groundwater SO-Soil SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments)
Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

Note: All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist.

Facility Name: SUMTER COUNTY VOL. RED. & LANDFILL

PARAMETER MONITORING REPORT

Rule 62-701

WACS Report Type: SEMGW

Description: Semiannual Gw: 62-701.510(8)(A) (1 Pages)

WACS Facility ID #: 53008

WACS Testsite ID #:

WACS Testsite Name: EQUIPMENT BLANK

Water Classification: G-II
(i.e.: LC - Leachate, G-II, SW-IIIF)

* Well Purged prior to Sample Collection? (Y/N): N

Sample Date/Time: 2/3/2010 12:15:00PM

Sampling Method: Grab

Permitted Well Type: Not Provided

STORET Code	Parameter Monitored	Field Filtered (Y/N)	NELAC Lab Certification # (DOHE)	Analysis Method	Analysis Date/Time	Analysis Result	Detection Limit	Units	Qual
001105	Aluminum	N	E83182	EPA 200.8	2/9/2010 2:17:00PM	68.0	68.0	ug/L	U
000610	Ammonia as N	N	E83182	EPA 350.1	2/8/2010 1:37:00PM	0.010	0.010	mg/L	U
001097	Antimony	N	E83182	EPA 200.8	2/9/2010 2:17:00PM	0.700	0.700	ug/L	U
001027	Cadmium	N	E83182	EPA 200.8	2/9/2010 2:17:00PM	1.10	1.10	ug/L	U
000940	Chloride	N	E83182	EPA 300.0	2/5/2010 11:46:00AM	1.6	0.24	mg/L	I
001034	Chromium	N	E83182	EPA 200.8	2/9/2010 2:17:00PM	4.50	4.50	ug/L	U
000951	Fluoride	N	E83182	EPA 300.0	2/5/2010 11:46:00AM	0.03	0.03	mg/L	U
001045	Iron	N	E83182	EPA 200.8	2/9/2010 2:17:00PM	38.0	38.0	ug/L	U
001051	Lead	N	E83182	EPA 200.8	2/9/2010 2:17:00PM	1.20	1.20	ug/L	U
001055	Manganese	N	E83182	EPA 200.8	2/9/2010 2:17:00PM	2.00	2.00	ug/L	U
071900	Mercury	N	E83182	EPA 245.1	3/3/2010 7:46:00AM	0.024	0.024	ug/L	U
000620	Nitrate as N	N	E83182	EPA 300.0	2/5/2010 11:46:00AM	2.4	0.10	mg/L	
001077	Silver	N	E83182	EPA 200.8	2/9/2010 2:17:00PM	0.200	0.200	ug/L	U
000929	Sodium	N	E83182	EPA 200.8	2/9/2010 2:17:00PM	0.320	0.320	mg/L	U
001059	Thallium	N	E83182	EPA 200.8	2/9/2010 2:17:00PM	0.260	0.260	ug/L	U
000515	Total Dissolved Solids	N	E83182	SM18 2540C	2/9/2010 12:35:00AM	42	10	mg/L	

Total Parameters Monitored: 16

* Well purging is the process of pumping the well prior to sampling in order to obtain a representative ground water sample.

Form Produced by FDEP Validator software

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Field Instrument Calibration Records

INSTRUMENT (MAKE/MODEL#) **YSI 556/Lamotte 2020e** **INSTRUMENT #** _____

PARAMETERS:

☒ TEMPERATURE ☒ CONDUCTIVITY ☐ SALINITY ☒ pH ☐ ORP
☒ TURBIDITY ☐ RESIDUAL CL ☒ DO ☐ OTHER _____

STANDARDS: *[Bracket calibrated meters pH 4 – 7 and Turbidity 1 – 10 NTU's]*

Standard A *Oakton pH Standard 4.01 Units Exp: 7/2011*

Standard B *Oakton pH Standard 7.00 Units Exp: 7/2011*

Standard C *Oakton Conductivity Standard .447 mS/cm Exp: 4/2010*

Standard D *Lamotte 1 NTU Standard Exp: 3/2011*

Standard E *Lamotte 10 NTU Standard Exp: 1/2011*

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS	
2/4/10	0945	A	4.01	4.01		Yes	IC	[illegible]	pH
		B	7.00	7.00					pH
		C	.447	.447					Cond
		–	–	9.71					DO
		–	–	16.78					Temp
		D	1	1.00					Turb
		E	10	10.00					Turb
2/4/10	1000	A	4.01	4.05		Yes	ICV	[illegible]	pH
		B	7.00	6.98					pH
		C	.447	.444					Cond
		–	–	9.68					DO
		–	–	16.93					Temp
		D	1	1.00					Turb
		E	10	10.00					Turb
		A	4.01						pH
		B	7.00						pH
		C	.447						Cond
		–	–						DO
		–	–						Temp
		D	1						Turb
		E	10						Turb

DEP-SOP-001/01: Form FD 9000-8 (June 20, 2001) Page ___of____

Field Instrument Calibration Records

INSTRUMENT (MAKE/MODEL#) **YSI 556/Lamotte 2020e** **INSTRUMENT #** _____

PARAMETERS:

☒ TEMPERATURE ☒ CONDUCTIVITY ☐ SALINITY ☒ pH ☐ ORP

☒ TURBIDITY ☐ RESIDUAL CL ☒ DO ☐ OTHER _____

STANDARDS: *[Bracket calibrated meters pH 4 – 7 and Turbidity 1 – 10 NTU's]*

Standard A *Oakton pH Standard 4.01 Units Exp: 7/2011*

Standard B *Oakton pH Standard 7.00 Units Exp: 7/2011*

Standard C *Oakton Conductivity Standard .447 mS/cm Exp: 4/2010*

Standard D *Lamotte 1 NTU Standard Exp: 3/2011*

Standard E *Lamotte 10 NTU Standard Exp: 1/2011*

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS	
2/3/10	1300	A	4.01	4.01		Yes	IC	[illegible]	pH
		B	7.00	7.00					pH
		C	.447	.447					Cond
		--	--	9.82					DO
		--	--	16.22					Temp
		D	1	1.03					Turb
		E	10	10.00					Turb
2/3/10	1315	A	4.01	4.02		Yes	ICV	[illegible]	pH
		B	7.00	7.00					pH
		C	.447	.442					Cond
		--	--	9.81					DO
		--	--	16.26					Temp
		D	1	.95					Turb
		E	10	10.00					Turb
		A	4.01						pH
		B	7.00						pH
		C	.447						Cond
		--	--						DO
		--	--						Temp
		D	1						Turb
		E	10						Turb

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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: MW-2					Lab ID: A000572-01		Sampled: 02/04/10 12:49		Received: 02/05/10 11:05
Parameter	**Hold Date/Time(s)**				**Prep Date/Time(s)**		**Analysis Date/Time(s)**		
EPA 200.8	08/03/10				02/05/10	13:07	2/9/2010	12:38	
EPA 245.1	03/04/10				03/02/10	15:18	3/3/2010	07:11	
EPA 300.0	02/06/10	14:35			02/05/10	10:00	2/5/2010	14:01	
EPA 300.0	03/04/10				02/05/10	10:00	2/5/2010	14:01	
EPA 350.1	03/04/10				02/08/10	11:25	2/8/2010	13:16	
Field	02/04/10	14:49			02/04/10	14:35	2/4/2010	14:35	
Field	02/05/10	14:35	02/05/10	14:35	02/04/10	14:35	2/4/2010	14:35	
Field	02/06/10	14:35			02/04/10	14:35	2/4/2010	14:35	
SM18 2540C	02/11/10				02/07/10	10:18	2/9/2010	00:35	

Client ID: MW-4					Lab ID: A000572-02		Sampled: 02/04/10 12:00		Received: 02/05/10 11:05
Parameter	**Hold Date/Time(s)**				**Prep Date/Time(s)**		**Analysis Date/Time(s)**		
EPA 200.8	08/03/10				02/05/10	13:07	2/9/2010	13:28	
EPA 245.1	03/04/10				03/02/10	15:18	3/3/2010	07:14	
EPA 300.0	02/06/10	12:00			02/05/10	10:00	2/5/2010	14:18	
EPA 300.0	03/04/10				02/05/10	10:00	2/5/2010	14:18	
EPA 350.1	03/04/10				02/08/10	11:25	2/8/2010	13:25	
Field	02/04/10	12:14			02/04/10	12:00	2/4/2010	12:00	
Field	02/05/10	12:00	02/05/10	12:00	02/04/10	12:00	2/4/2010	12:00	
Field	02/06/10	12:00			02/04/10	12:00	2/4/2010	12:00	
SM18 2540C	02/11/10				02/07/10	10:18	2/9/2010	00:35	

Client ID: MW-4B					Lab ID: A000572-03		Sampled: 02/04/10 12:48		Received: 02/05/10 11:05
Parameter	**Hold Date/Time(s)**				**Prep Date/Time(s)**		**Analysis Date/Time(s)**		
EPA 200.8	08/03/10				02/05/10	13:07	2/9/2010	14:24	
EPA 245.1	03/04/10				03/02/10	15:18	3/3/2010	07:18	
EPA 300.0	02/06/10	12:48			02/05/10	10:00	2/5/2010	14:35	
EPA 300.0	03/04/10				02/05/10	10:00	2/5/2010	14:35	
EPA 350.1	03/04/10				02/08/10	11:25	2/8/2010	13:26	
Field	02/04/10	13:02			02/04/10	12:48	2/4/2010	12:48	
Field	02/05/10	12:48	02/05/10	12:48	02/04/10	12:48	2/4/2010	12:48	
Field	02/06/10	12:48			02/04/10	12:48	2/4/2010	12:48	
SM18 2540C	02/11/10				02/07/10	10:18	2/9/2010	00:35	

Client ID: MW-4A	Lab ID: A000572-04	Sampled: 02/04/10 10:50	Received: 02/05/10 11:05

Parameter	Hold Date/Time(s)				Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 200.8	08/03/10				02/05/10	13:07	2/9/2010	14:31
EPA 245.1	03/04/10				03/02/10	15:18	3/3/2010	07:27
EPA 300.0	02/06/10	10:50			02/05/10	10:00	2/5/2010	15:26
EPA 300.0	03/04/10				02/05/10	10:00	2/5/2010	15:26
EPA 350.1	03/04/10				02/08/10	11:25	2/8/2010	13:27
Field	02/04/10	11:04			02/04/10	10:50	2/4/2010	10:50
Field	02/05/10	10:50	02/05/10	10:50	02/04/10	10:50	2/4/2010	10:50
Field	02/06/10	10:50			02/04/10	10:50	2/4/2010	10:50
SM18 2540C	02/11/10				02/07/10	10:18	2/9/2010	00:35

Client ID: MW-6A	Lab ID: A000572-05	Sampled: 02/04/10 16:15	Received: 02/05/10 11:05

Parameter	Hold Date/Time(s)				Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 200.8	08/03/10				02/05/10	13:07	2/9/2010	14:41
EPA 245.1	03/04/10				03/02/10	15:18	3/3/2010	07:30
EPA 300.0	02/06/10	16:15			02/05/10	10:00	2/5/2010	15:43
EPA 300.0	03/04/10				02/05/10	10:00	2/5/2010	15:43
EPA 350.1	03/04/10				02/08/10	11:25	2/8/2010	13:29
Field	02/04/10	16:29			02/04/10	16:15	2/4/2010	16:15
Field	02/05/10	16:15	02/05/10	16:15	02/04/10	16:15	2/4/2010	16:15
Field	02/06/10	16:15			02/04/10	16:15	2/4/2010	16:15
SM18 2540C	02/11/10				02/07/10	10:18	2/9/2010	00:35

Client ID: MW-8	Lab ID: A000572-06	Sampled: 02/03/10 14:50	Received: 02/05/10 11:05

Parameter	Hold Date/Time(s)				Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 200.8	08/02/10				02/05/10	13:07	2/9/2010	14:48
EPA 245.1	03/03/10				03/02/10	15:18	3/3/2010	07:33
EPA 300.0	02/05/10	14:50			02/05/10	10:00	2/5/2010	12:21
EPA 300.0	03/03/10				02/05/10	10:00	2/5/2010	12:21
EPA 350.1	03/03/10				02/08/10	11:25	2/8/2010	13:30
Field	02/03/10	15:04			02/03/10	14:50	2/3/2010	14:50
Field	02/04/10	14:50	02/04/10	14:50	02/03/10	14:50	2/3/2010	14:50
Field	02/05/10	14:50			02/03/10	14:50	2/3/2010	14:50
SM18 2540C	02/10/10				02/07/10	10:18	2/9/2010	00:35

Client ID: MW-9A	Lab ID: A000572-07	Sampled: 02/03/10 13:35	Received: 02/05/10 11:05

Parameter	Hold Date/Time(s)				Prep Date/Time(s)		Analysis Date/Time(s)	
EPA 200.8	08/02/10				02/05/10	13:07	2/9/2010	14:55
EPA 245.1	03/03/10				03/02/10	15:18	3/3/2010	07:36
EPA 300.0	02/05/10	13:35			02/05/10	10:00	2/5/2010	12:03
EPA 300.0	03/03/10				02/05/10	10:00	2/5/2010	12:03
EPA 350.1	03/03/10				02/08/10	11:25	2/8/2010	13:31
Field	02/03/10	13:49			02/03/10	13:35	2/3/2010	13:35
Field	02/04/10	13:35	02/04/10	13:35	02/03/10	13:35	2/3/2010	13:35
Field	02/05/10	13:35			02/03/10	13:35	2/3/2010	13:35
SM18 2540C	02/10/10				02/07/10	10:18	2/9/2010	00:35

Client ID: MW-10			Lab ID: A000572-08		Received: 02/03/10 10:22		Reported: 02/08/10 11:05
Parameter	**Hold Date/Time(s)**				**Prep Date/Time(s)**		**Analysis Date/Time(s)**
EPA 200.8	08/02/10				02/05/10	13:07	2/9/2010 15:05
EPA 245.1	03/03/10				03/02/10	15:18	3/3/2010 07:39
EPA 300.0	02/05/10	16:22			02/05/10	10:00	2/5/2010 12:38
EPA 300.0	03/03/10				02/05/10	10:00	2/5/2010 12:38
EPA 350.1	03/03/10				02/08/10	11:25	2/8/2010 13:32
Field	02/03/10	16:36			02/03/10	16:22	2/3/2010 16:22
Field	02/04/10	16:22	02/04/10	16:22	02/03/10	16:22	2/3/2010 16:22
Field	02/05/10	16:22			02/03/10	16:22	2/3/2010 16:22
SM18 2540C	02/10/10				02/07/10	10:18	2/9/2010 00:35

Client ID: MW-11			Lab ID: A000572-09		Received: 02/03/10 10:22		Reported: 02/08/10 11:05
Parameter	**Hold Date/Time(s)**				**Prep Date/Time(s)**		**Analysis Date/Time(s)**
EPA 200.8	08/03/10				02/05/10	13:07	2/9/2010 15:12
EPA 245.1	03/04/10				03/02/10	15:18	3/3/2010 07:43
EPA 300.0	02/06/10	13:45			02/05/10	10:00	2/5/2010 16:00
EPA 300.0	03/04/10				02/05/10	10:00	2/5/2010 16:00
EPA 350.1	03/04/10				02/08/10	11:25	2/8/2010 13:33
Field	02/04/10	13:59			02/04/10	13:45	2/4/2010 13:45
Field	02/05/10	13:45	02/05/10	13:45	02/04/10	13:45	2/4/2010 13:45
Field	02/06/10	13:45			02/04/10	13:45	2/4/2010 13:45
SM18 2540C	02/11/10				02/07/10	10:18	2/9/2010 00:35

Client ID: EQUIPMENT BLANK			Lab ID: A000572-10		Received: 02/03/10 10:22		Reported: 02/08/10 11:05
Parameter	**Hold Date/Time(s)**				**Prep Date/Time(s)**		**Analysis Date/Time(s)**
EPA 200.8	08/02/10				02/05/10	13:07	2/9/2010 14:17
EPA 245.1	03/03/10				03/02/10	15:18	3/3/2010 07:46
EPA 300.0	02/05/10	12:15			02/05/10	10:00	2/5/2010 11:46
EPA 300.0	03/03/10				02/05/10	10:00	2/5/2010 11:46
EPA 350.1	03/03/10				02/08/10	11:25	2/8/2010 13:37
SM18 2540C	02/10/10				02/07/10	10:18	2/9/2010 00:35

QUALITY CONTROL

Metals by EPA 200 Series Methods - Quality Control

Batch 0B05015 - EPA 3005A

Blank (0B05015-BLK1) Prepared: 02/05/2010 13:07 Analyzed: 02/09/2010 12:22

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	68.0	U	100	ug/L							
Antimony	0.700	U	20.0	ug/L							
Cadmium	1.10	U	3.00	ug/L							
Chromium	4.50	U	10.0	ug/L							
Iron	38.0	U	50.0	ug/L							
Lead	1.20	U	5.00	ug/L							
Manganese	2.00	U	10.0	ug/L							
Silver	0.200	U	1.00	ug/L							
Sodium	0.320	U	1.00	mg/L							
Thallium	0.260	U	1.00	ug/L							

LCS (0B05015-BS1) Prepared: 02/05/2010 13:07 Analyzed: 02/09/2010 12:29

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	1010		100	ug/L	1000		101	85-115			
Antimony	49.0		20.0	ug/L	50.0		98	85-115			
Cadmium	50.5		3.00	ug/L	50.0		101	85-115			
Chromium	506		10.0	ug/L	500		101	85-115			
Iron	1020		50.0	ug/L	1000		102	85-115			
Lead	501		5.00	ug/L	500		100	85-115			
Manganese	504		10.0	ug/L	500		101	85-115			
Silver	50.3		1.00	ug/L	50.0		101	85-115			
Sodium	24.7		1.00	mg/L	25.0		99	85-115			
Thallium	50.5		1.00	ug/L	50.0		101	85-115			

Matrix Spike (0B05015-MS1) Prepared: 02/05/2010 13:07 Analyzed: 02/09/2010 12:46

Source: A000572-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	1070		100	ug/L	1000	68.0 U	107	85-115			
Antimony	50.3		20.0	ug/L	50.0	0.700 U	101	85-115			
Cadmium	50.6		3.00	ug/L	50.0	1.10 U	101	85-115			
Chromium	519		10.0	ug/L	500	4.50 U	104	85-115			
Iron	1060		50.0	ug/L	1000	38.0 U	106	85-115			
Lead	505		5.00	ug/L	500	1.20 U	101	85-115			
Manganese	522		10.0	ug/L	500	2.00 U	104	85-115			
Silver	50.3		1.00	ug/L	50.0	0.200 U	101	85-115			
Sodium	30.2		1.00	mg/L	25.0	4.53	103	85-115			
Thallium	51.1		1.00	ug/L	50.0	0.260 U	102	85-115			

Matrix Spike Dup (0B05015-MSD1) Prepared: 02/05/2010 13:07 Analyzed: 02/09/2010 12:54

Source: A000572-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	1090		100	ug/L	1000	68.0 U	109	85-115	1	20	
Antimony	51.3		20.0	ug/L	50.0	0.700 U	103	85-115	2	20	
Cadmium	51.1		3.00	ug/L	50.0	1.10 U	102	85-115	1	20	

QUALITY CONTROL

Metals by EPA 200 Series Methods - Quality Control

Batch 0B05015 - EPA 3005A

Matrix Spike Dup (0B05015-MSD1) Continued Prepared: 02/05/2010 13:07 Analyzed: 02/09/2010 12:54

Source: A000572-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chromium	522		10.0	ug/L	500	4.50 U	104	85-115	0.6	20	
Iron	1050		50.0	ug/L	1000	38.0 U	105	85-115	1	20	
Lead	508		5.00	ug/L	500	1.20 U	102	85-115	0.6	20	
Manganese	525		10.0	ug/L	500	2.00 U	105	85-115	0.5	20	
Silver	50.8		1.00	ug/L	50.0	0.200 U	102	85-115	0.8	20	
Sodium	30.5		1.00	mg/L	25.0	4.53	104	85-115	1	20	
Thallium	51.1		1.00	ug/L	50.0	0.260 U	102	85-115	0.04	20	

Post Spike (0B05015-PS1) Prepared: 02/09/2010 12:00 Analyzed: 02/09/2010 13:03

Source: A000572-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Aluminum	103		10.0	ug/L	98.0	0.711	104	75-125			
Antimony	4.98		2.00	ug/L	4.90	0.060	100	75-125			
Cadmium	4.87		0.300	ug/L	4.90	-0.007	100	75-125			
Chromium	50.0		1.00	ug/L	49.0	0.033	102	75-125			
Iron	99.7		5.00	ug/L	98.0	1.34	100	75-125			
Lead	47.9		0.500	ug/L	49.0	0.022	98	75-125			
Manganese	50.3		1.00	ug/L	49.0	0.111	102	75-125			
Silver	4.75		0.100	ug/L	4.90	0.007	97	75-125			
Sodium	2910		100	ug/L	2450	444	101	75-125			
Thallium	4.89		0.100	ug/L	4.90	0.011	100	75-125			

Batch 0C02009 - EPA 7470A

Blank (0C02009-BLK1) Prepared: 03/02/2010 15:18 Analyzed: 03/03/2010 06:50

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	0.024	U	0.200	ug/L							

LCS (0C02009-BS1) Prepared: 03/02/2010 15:18 Analyzed: 03/03/2010 06:53

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	5.41		0.200	ug/L	5.00		108	85-115			

Matrix Spike (0C02009-MS1) Prepared: 03/02/2010 15:18 Analyzed: 03/03/2010 06:59

Source: A001125-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	5.80		0.200	ug/L	5.00	0.024 U	116	85-115			QM-07, QM-11

Matrix Spike Dup (0C02009-MSD1) Prepared: 03/02/2010 15:18 Analyzed: 03/03/2010 07:02

Source: A001125-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	7.16		0.200	ug/L	5.00	0.024 U	143	85-115	21	10	QM-07, QM-11

QUALITY CONTROL

Metals by EPA 200 Series Methods - Quality Control

Batch 0C02009 - EPA 7470A

Post Spike (0C02009-PS1) Prepared: 03/03/2010 06:00 Analyzed: 03/03/2010 07:05

Source: A001125-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Mercury	5.52		0.200	ug/L	5.61	-0.013	99	0-200			

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 0B05015 - EPA 3005A

Blank (0B05015-BLK1) Prepared: 02/05/2010 13:07 Analyzed: 02/09/2010 16:46

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Iron	38.0	U	50.0	ug/L							
Manganese	2.00	U	10.0	ug/L							
Sodium	0.320	U	1.00	mg/L							

LCS (0B05015-BS1) Prepared: 02/05/2010 13:07 Analyzed: 02/09/2010 12:29

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Iron	1020		50.0	ug/L	1000		102	80-120			
Manganese	504		10.0	ug/L	500		101	80-120			
Sodium	24.7		1.00	mg/L	25.0		99	80-120			

Matrix Spike (0B05015-MS1) Prepared: 02/05/2010 13:07 Analyzed: 02/09/2010 12:46

Source: A000572-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Iron	1060		50.0	ug/L	1000	38.0 U	106	75-125			
Manganese	522		10.0	ug/L	500	2.00 U	104	75-125			
Sodium	30.2		1.00	mg/L	25.0	4.53	103	75-125			

Matrix Spike Dup (0B05015-MSD1) Prepared: 02/05/2010 13:07 Analyzed: 02/09/2010 12:54

Source: A000572-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Iron	1050		50.0	ug/L	1000	38.0 U	105	75-125	1	20	
Manganese	525		10.0	ug/L	500	2.00 U	105	75-125	0.5	20	
Sodium	30.5		1.00	mg/L	25.0	4.53	104	75-125	1	20	

Post Spike (0B05015-PS1) Prepared: 02/09/2010 12:00 Analyzed: 02/09/2010 13:03

Source: A000572-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Iron	99.7		5.00	ug/L	98.0	1.34	100	80-120			
Manganese	50.3		1.00	ug/L	49.0	0.111	102	80-120			
Sodium	2910		100	ug/L	2450	444	101	80-120			

Batch AA10172 - 0B05015

QUALITY CONTROL

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Serial Dilution (AA10172-SRD1) Prepared: 02/08/2010 00:00 Analyzed: 02/09/2010 13:11

Source: A000572-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sodium	4.81	I	5.00	ug/L		4.53			6	10	

Serial Dilution (AA10172-SRD2) Prepared: 02/08/2010 00:00 Analyzed: 02/09/2010 21:01

Source: A000722-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sodium	51.4		0.500	ug/L						10	

Serial Dilution (AA10172-SRD3) Prepared: 02/08/2010 00:00 Analyzed: 02/10/2010 02:57

Source: A000553-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Sodium	41.8		0.500	ug/L						10	

Serial Dilution (AA10172-SRD4) Prepared: 02/08/2010 00:00 Analyzed: 02/09/2010 18:32

Source: A000562-01RE1

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Manganese	44000		2000	ug/L		44400			0.9	10	
Sodium	64.0	U	200	ug/L		64.0 U				10	

Classical Chemistry Parameters - Quality Control

Batch 0B05001 - NO PREP

Blank (0B05001-BLK1) Prepared: 02/05/2010 09:00 Analyzed: 02/05/2010 09:53

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	0.24	U	5.0	mg/L							
Fluoride	0.03	U	0.20	mg/L							
Nitrate as N	0.10	U	1.0	mg/L							

LCS (0B05001-BS1) Prepared: 02/05/2010 09:00 Analyzed: 02/05/2010 10:10

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	50		5.0	mg/L	50.0		100	90-110			
Fluoride	1.1		0.20	mg/L	0.998		106	90-110			
Nitrate as N	10		1.0	mg/L	10.0		100	90-110			

Matrix Spike (0B05001-MS1) Prepared: 02/05/2010 10:37 Analyzed: 02/05/2010 14:52

Source: A000572-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	54		5.0	mg/L	51.0	4.1	97	90-110			
Fluoride	1.1		0.20	mg/L	1.02	0.03 U	107	90-110			
Nitrate as N	14		1.0	mg/L	10.2	4.1	100	90-110			

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 0B05001 - NO PREP

Matrix Spike Dup (0B05001-MSD1) Prepared: 02/05/2010 10:37 Analyzed: 02/05/2010 15:09

Source: A000572-03

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloride	55		5.0	mg/L	51.0	4.1	99	90-110	2	10	
Fluoride	1.1		0.20	mg/L	1.02	0.03 U	110	90-110	3	10	
Nitrate as N	14		1.0	mg/L	10.2	4.1	101	90-110	1	10	

Batch 0B07003 - NO PREP

Blank (0B07003-BLK1) Prepared: 02/07/2010 10:18 Analyzed: 02/09/2010 00:35

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Dissolved Solids	10	U	10	mg/L							

LCS (0B07003-BS1) Prepared: 02/07/2010 10:18 Analyzed: 02/09/2010 00:35

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Dissolved Solids	300		10	mg/L	300		101	88-111			

Duplicate (0B07003-DUP1) Prepared: 02/07/2010 10:18 Analyzed: 02/09/2010 00:35

Source: A000444-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Dissolved Solids	340		10	mg/L		340			0.6	10	

Batch 0B08018 - NO PREP

Blank (0B08018-BLK1) Prepared: 02/08/2010 11:25 Analyzed: 02/08/2010 13:07

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Ammonia as N	0.010	U	0.020	mg/L							

LCS (0B08018-BS1) Prepared: 02/08/2010 11:25 Analyzed: 02/08/2010 13:14

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Ammonia as N	0.95		0.020	mg/L	1.00		95	90-110			

Matrix Spike (0B08018-MS1) Prepared: 02/08/2010 11:25 Analyzed: 02/08/2010 13:17

Source: A000572-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Ammonia as N	0.94		0.020	mg/L	1.00	0.010 U	94	90-110			

Matrix Spike Dup (0B08018-MSD1) Prepared: 02/08/2010 11:25 Analyzed: 02/08/2010 13:18

Source: A000572-01

Analyte	Result	Flag	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Ammonia as N	0.94		0.020	mg/L	1.00	0.010 U	94	90-110	0.1	10	

QUALITY CONTROL

Classical Chemistry Parameters - Quality Control

Batch 0B08018 - NO PREP

Florida Radiochemistry Services, Inc.

Sample Login

Client:	**Enco-Orlando**	**Date / Time Received**	**Work order #**
		02/08/10 08:43	**1002051**
Client Contact:	**Marcia Colon**		
Client P.O.			
Project I.D.	**A000572**		

Lab Sample I.D.	Client Sample I.D.	Sample Date/Time	Analysis Requested
1002051-01	MW-2	02/04/10 14:35	Ga, Ra226, Ra228
1002051-02	MW-4	02/04/10 12:00	Ga, Ra226, Ra228
1002051-03	MW-4B	02/04/10 12:48	Ga, Ra226, Ra228
1002051-04	MW-4A	02/04/10 10:50	Ga, Ra226, Ra228
1002051-05	MW-6A	02/04/10 16:15	Ga, Ra226, Ra228
1002051-06	MW-8	02/04/10 14:50	Ga, Ra226, Ra228
1002051-07	MW-9A	02/04/10 13:35	Ga, Ra226, Ra228
1002051-08	MW-10	02/04/10 16:22	Ga, Ra226, Ra228
1002051-09	MW-11	02/04/10 13:45	Ga, Ra226, Ra228
1002051-10	EQUIPMENT BLANK	02/04/10 12:15	Ga, Ra226, Ra228

Florida Radiochemistry Services, Inc.

QA Page

Analyte	Sample #	Date Analyzed	Sample Result	Amount Spiked	Spike Result	Spike /Dup Result	Spike % Rec.	Spike Dup % Rpd
Gross Alpha	1002049-01	02/16/10	<1.3	10.2	10.7	10.1	105	5.8
Radium 226	1002053-01	02/17/10	0.2	25.2	24.3	27.2	96	11.3
Radium 228	1002053-01	02/17/10	<0.8	5.5	5.1	4.9	93	4.0

	Quality Control Limits	
	% RPD	% Rec.
Gross Alpha	25.0	60-125
Radium 226	23.4	78-125
Radium 228	23.9	67-125

SUBCONTRACT ORDER

ENCO Orlando

A000572

Sub Lab ID	Originating Lab ID	Client Matrix	Date Sampled	Sample Comments
	MW-10	Ground Water	03-Feb-10 16:22	

Analysis	Due	Expires	Analysis Comments
Gross Alpha	12-Feb-10 15:00	03-Feb-10 16:22	
Radium 226	12-Feb-10 15:00	17-Feb-10 16:22	
Radium 228	12-Feb-10 15:00	17-Feb-10 16:22	
Containers Supplied:			
1LP+HNO3 (A)	1LP+HNO3 (B)		

Sub Lab ID	Originating Lab ID	Client Matrix	Date Sampled	Sample Comments
	MW-11	Ground Water	04-Feb-10 13:45	

Analysis	Due	Expires	Analysis Comments
Gross Alpha	12-Feb-10 15:00	04-Feb-10 13:45	
Radium 226	12-Feb-10 15:00	18-Feb-10 13:45	
Radium 228	12-Feb-10 15:00	18-Feb-10 13:45	
Containers Supplied:			
1LP+HNO3 (A)	1LP+HNO3 (B)		

Sub Lab ID	Originating Lab ID	Client Matrix	Date Sampled	Sample Comments
	EQUIPMENT BLANK	Ground Water	03-Feb-10 12:15	

Analysis	Due	Expires	Analysis Comments
Gross Alpha	12-Feb-10 15:00	03-Feb-10 12:15	
Radium 226	12-Feb-10 15:00	17-Feb-10 12:15	
Radium 228	12-Feb-10 15:00	17-Feb-10 12:15	
Containers Supplied:			
1LP+HNO3 (A)	1LP+HNO3 (B)		

Released By	Date	Received By	Date
		KWoods	2/8/10 8:43
Released By	Date	Received By	Date

SUBCONTRACT ORDER

ENCO Orlando

A000572

Sub Lab ID	Originating Lab ID	Client Matrix	Date Sampled	Sample Comments
	MW-4A	Ground Water	04-Feb-10 10:50	

Analysis	Due	Expires	Analysis Comments
Gross Alpha	12-Feb-10 15:00	04-Feb-10 10:50	
Radium 226	12-Feb-10 15:00	18-Feb-10 10:50	
Radium 228	12-Feb-10 15:00	18-Feb-10 10:50	
Containers Supplied:			
1LP+HNO3 (A)	1LP+HNO3 (B)		

Sub Lab ID	Originating Lab ID	Client Matrix	Date Sampled	Sample Comments
	MW-6A	Ground Water	04-Feb-10 16:15	

Analysis	Due	Expires	Analysis Comments
Gross Alpha	12-Feb-10 15:00	04-Feb-10 16:15	
Radium 226	12-Feb-10 15:00	18-Feb-10 16:15	
Radium 228	12-Feb-10 15:00	18-Feb-10 16:15	
Containers Supplied:			
1LP+HNO3 (A)	1LP+HNO3 (B)		

Sub Lab ID	Originating Lab ID	Client Matrix	Date Sampled	Sample Comments
	MW-8	Ground Water	03-Feb-10 14:50	

Analysis	Due	Expires	Analysis Comments
Gross Alpha	12-Feb-10 15:00	03-Feb-10 14:50	
Radium 226	12-Feb-10 15:00	17-Feb-10 14:50	
Radium 228	12-Feb-10 15:00	17-Feb-10 14:50	
Containers Supplied:			
1LP+HNO3 (A)	1LP+HNO3 (B)		

Sub Lab ID	Originating Lab ID	Client Matrix	Date Sampled	Sample Comments
	MW-9A	Ground Water	03-Feb-10 13:35	

Analysis	Due	Expires	Analysis Comments
Gross Alpha	12-Feb-10 15:00	03-Feb-10 13:35	
Radium 226	12-Feb-10 15:00	17-Feb-10 13:35	
Radium 228	12-Feb-10 15:00	17-Feb-10 13:35	
Containers Supplied:			
1LP+HNO3 (A)	1LP+HNO3 (B)		

Released By	Date	Received By	Date
		KWinds	2/8/10 3:43
Released By	Date	Received By	Date

SUBCONTRACT ORDER

ENCO Orlando

A000572

SENDING LABORATORY:

ENCO Orlando
10775 Central Port Drive
Orlando, FL 32824
Phone: 407.826.5314
Fax: 407.850.6945
Project Manager: Marcia Colon

RECEIVING LABORATORY:

FL Rad-Chem
5456 Hoffner Ave, Suite 201
Orlando, FL 32812
Phone :(407) 382-7733
Fax: (407) 382-7744
Project State of Origin: Florida

Sub Lab ID	Originating Lab ID	Client Matrix	Date Sampled	Sample Comments
	MW-2	Ground Water	04-Feb-10 14:35	

Analysis	Due	Expires	Analysis Comments
Gross Alpha	12-Feb-10 15:00	04-Feb-10 14:35	
Radium 226	12-Feb-10 15:00	18-Feb-10 14:35	
Radium 228	12-Feb-10 15:00	18-Feb-10 14:35	
Containers Supplied:			
1LP+HNO3 (A)	1LP+HNO3 (B)		

Sub Lab ID	Originating Lab ID	Client Matrix	Date Sampled	Sample Comments
	MW-4	Ground Water	04-Feb-10 12:00	

Analysis	Due	Expires	Analysis Comments
Gross Alpha	12-Feb-10 15:00	04-Feb-10 12:00	
Radium 226	12-Feb-10 15:00	18-Feb-10 12:00	
Radium 228	12-Feb-10 15:00	18-Feb-10 12:00	
Containers Supplied:			
1LP+HNO3 (A)	1LP+HNO3 (B)		

Sub Lab ID	Originating Lab ID	Client Matrix	Date Sampled	Sample Comments
	MW-4B	Ground Water	04-Feb-10 12:48	

Analysis	Due	Expires	Analysis Comments
Gross Alpha	12-Feb-10 15:00	04-Feb-10 12:48	
Radium 226	12-Feb-10 15:00	18-Feb-10 12:48	
Radium 228	12-Feb-10 15:00	18-Feb-10 12:48	
Containers Supplied:			
1LP+HNO3 (A)	1LP+HNO3 (B)		

Released By	Date	Received By	Date
			2/8/10 8:43
Released By	Date	Received By	Date