

March 29, 2011

Rick Potts
The Colinas Group, Inc.
509 N. Virginia Avenue
Winter Park, FL 32789

RE: Workorder: A1101554 Sumter Co Landfill GW Sampling

Dear Rick Potts:

Enclosed are the analytical results for sample(s) received by the laboratory on Thursday, March 03, 2011. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Myrna Santiago
msantiago@aellab.com

Enclosures

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SAMPLE SUMMARY

Workorder: A1101554 Sumter Co Landfill GW Sampling

Lab ID	Sample ID	Matrix	Date Collected	Date Received
A1101554001	EQ BLANK	Water	3/2/2011 09:20	3/3/2011 13:01
A1101554002	MW-2	Water	3/3/2011 11:40	3/3/2011 13:01
A1101554003	MW-4	Water	3/2/2011 14:40	3/3/2011 13:01
A1101554004	MW-4A	Water	3/2/2011 15:25	3/3/2011 13:01
A1101554005	MW-4B	Water	3/2/2011 13:52	3/3/2011 13:01
A1101554006	MW-6A	Water	3/3/2011 09:33	3/3/2011 13:01
A1101554007	MW-8	Water	3/2/2011 11:35	3/3/2011 13:01
A1101554008	MW-9A	Water	3/2/2011 10:42	3/3/2011 13:01
A1101554009	MW-10	Water	3/2/2011 12:55	3/3/2011 13:01
A1101554010	MW-11	Water	3/3/2011 10:45	3/3/2011 13:01

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ANALYTICAL RESULTS

Workorder: A1101554 Sumter Co Landfill GW Sampling

Lab ID: **A1101554001**
Sample ID: **EQ BLANK**

Date Received: 03/03/11 13:01 Matrix: Water
Date Collected: 03/02/11 09:20

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A Analytical Method: SW-846 6010					
Aluminum	61	ug/L	U	1	200	61	3/10/2011 19:41	J
Cadmium	0.32	ug/L	U	1	0.60	0.32	3/10/2011 19:41	J
Chromium	0.52	ug/L	I	1	4.0	0.50	3/10/2011 19:41	J
Iron	38	ug/L	U	1	200	38	3/10/2011 19:41	J
Manganese	1.0	ug/L		1	1.0	0.24	3/10/2011 19:41	J
Sodium	0.026	mg/L	U	1	0.20	0.026	3/10/2011 19:41	J
Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A Analytical Method: SW-846 6020					
Antimony	0.099	ug/L	I	1	0.60	0.073	3/8/2011 00:12	J
Lead	0.076	ug/L	U	1	0.70	0.076	3/8/2011 00:12	J
Silver	0.059	ug/L	U	1	0.30	0.059	3/8/2011 00:12	J
Thallium	0.067	ug/L	U	1	0.20	0.067	3/8/2011 00:12	J
Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A					
Mercury	0.014	ug/L	U	1	0.10	0.014	3/9/2011 15:14	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0, Water			Analytical Method: EPA 300.0					
Chloride	0.81	mg/L	U	1	10	0.81	3/3/2011 20:12	A
Fluoride	0.15	mg/L	U	1	0.20	0.15	3/3/2011 20:12	A
Nitrate	0.043	mg/L	U	1	0.20	0.043	3/3/2011 20:12	A
Analysis Desc: Ammonia,E350.1, Water			Analytical Method: EPA 350.1					
Ammonia (N)	0.069	mg/L	I	1	0.10	0.025	3/8/2011 14:22	T
Analysis Desc: Tot Dissolved Solids, SM2540C			Analytical Method: SM 2540C					
Total Dissolved Solids	10	mg/L	U	1	10	10	3/7/2011 13:37	T

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ANALYTICAL RESULTS

Workorder: A1101554 Sumter Co Landfill GW Sampling

Lab ID: **A1101554002**

Date Received: 03/03/11 13:01 Matrix: Water

Sample ID: **MW-2**

Date Collected: 03/03/11 11:40

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: FIELD - Conductance			Analytical Method: DISRES					
Conductance	320	umhos/cm		1			3/3/2011 13:40	A^
Dissolved Oxygen	5.72	mg/L		1			3/3/2011 13:40	A^
Groundwater Elevation	43.11	feet		1			3/3/2011 13:40	A^
Temperature	25.66	°C		1			3/3/2011 11:40	A^
Turbidity	0.79	NTU		1			3/3/2011 13:40	A^
pH	6.97	pH unit		1			3/3/2011 13:40	A^
METALS								
Analysis Desc: SW846 6010B Analysis, Water			Preparation Method: SW-846 3010A Analytical Method: SW-846 6010					
Aluminum	61	ug/L	U	1	200	61	3/10/2011 19:16	J
Cadmium	0.32	ug/L	U	1	0.60	0.32	3/10/2011 19:16	J
Chromium	1.0	ug/L	I	1	4.0	0.50	3/10/2011 19:16	J
Iron	38	ug/L	U	1	200	38	3/10/2011 19:16	J
Manganese	2.3	ug/L		1	1.0	0.24	3/10/2011 19:16	J
Sodium	3.9	mg/L		1	0.20	0.026	3/10/2011 19:16	J
Analysis Desc: SW846 6020B Analysis, Total			Preparation Method: SW-846 3010A Analytical Method: SW-846 6020					
Antimony	1.0	ug/L		1	0.60	0.073	3/8/2011 01:07	J
Lead	0.076	ug/L	U	1	0.70	0.076	3/8/2011 01:07	J
Silver	0.059	ug/L	U	1	0.30	0.059	3/8/2011 01:07	J
Thallium	0.067	ug/L	U	1	0.20	0.067	3/8/2011 01:07	J
Analysis Desc: SW846 7470A Analysis, Water			Preparation Method: SW-846 7470A Analytical Method: SW-846 7470A					
Mercury	0.014	ug/L	U	1	0.10	0.014	3/9/2011 15:19	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0, Water			Analytical Method: EPA 300.0					
Chloride	5.8	mg/L	I	1	10	0.81	3/3/2011 20:29	A
Fluoride	0.15	mg/L	U	1	0.20	0.15	3/3/2011 20:29	A
Nitrate	2.1	mg/L		1	0.20	0.043	3/3/2011 20:29	A
Analysis Desc: Ammonia,E350.1, Water			Analytical Method: EPA 350.1					
Ammonia (N)	0.030	mg/L	I	1	0.10	0.025	3/8/2011 14:22	T

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ANALYTICAL RESULTS

Workorder: A1101554 Sumter Co Landfill GW Sampling

Lab ID: **A1101554002**

Date Received: 03/03/11 13:01 Matrix: Water

Sample ID: **MW-2**

Date Collected: 03/03/11 11:40

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540C						
Total Dissolved Solids	190	mg/L		1	10	10	3/7/2011 13:37	T

Lab ID: **A1101554003**

Date Received: 03/03/11 13:01 Matrix: Water

Sample ID: **MW-4**

Date Collected: 03/02/11 14:40

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: FIELD - Conductance		Analytical Method: DISRES						
Conductance	608	umhos/cm		1			3/2/2011 14:40	A^
Dissolved Oxygen	0.59	mg/L		1			3/2/2011 14:40	A^
Groundwater Elevation	42.95	feet		1			3/2/2011 14:40	A^
Temperature	26.54	°C		1			3/2/2011 14:40	A^
Turbidity	9.25	NTU		1			3/2/2011 14:40	A^
pH	7.15	pH unit		1			3/2/2011 14:40	A^

METALS

Analysis Desc: SW846 6010B
Analysis,Water

Preparation Method: SW-846 3010A
Analytical Method: SW-846 6010

Aluminum	820	ug/L		1	200	61	3/10/2011 19:46	J
Cadmium	0.32	ug/L	U	1	0.60	0.32	3/10/2011 19:46	J
Chromium	29	ug/L		1	4.0	0.50	3/10/2011 19:46	J
Iron	220	ug/L		1	200	38	3/10/2011 19:46	J
Manganese	14	ug/L		1	1.0	0.24	3/10/2011 19:46	J
Sodium	40	mg/L		1	0.20	0.026	3/10/2011 19:46	J

Analysis Desc: SW846 6020B
Analysis,Total

Preparation Method: SW-846 3010A
Analytical Method: SW-846 6020

Antimony	0.36	ug/L	I	1	0.60	0.073	3/8/2011 01:17	J
Lead	0.52	ug/L	I	1	0.70	0.076	3/8/2011 01:17	J
Silver	0.059	ug/L	U	1	0.30	0.059	3/8/2011 01:17	J
Thallium	0.091	ug/L	I	1	0.20	0.067	3/8/2011 01:17	J

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ANALYTICAL RESULTS

Workorder: A1101554 Sumter Co Landfill GW Sampling

Lab ID: **A1101554003**

Date Received: 03/03/11 13:01 Matrix: Water

Sample ID: **MW-4**

Date Collected: 03/02/11 14:40

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 7470A		Preparation Method: SW-846 7470A						
Analysis, Water		Analytical Method: SW-846 7470A						
Mercury	0.014	ug/L	U	1	0.10	0.014	3/9/2011 15:21	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0,Water		Analytical Method: EPA 300.0						
Chloride	21	mg/L		1	10	0.81	3/3/2011 20:45	A
Fluoride	0.15	mg/L	U	1	0.20	0.15	3/3/2011 20:45	A
Nitrate	8.1	mg/L		1	0.20	0.043	3/3/2011 20:45	A
Analysis Desc: Ammonia,E350.1,Water		Analytical Method: EPA 350.1						
Ammonia (N)	0.030	mg/L	I	1	0.10	0.025	3/8/2011 14:22	T
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540C						
Total Dissolved Solids	350	mg/L		1	10	10	3/7/2011 13:37	T

Lab ID: **A1101554004**

Date Received: 03/03/11 13:01 Matrix: Water

Sample ID: **MW-4A**

Date Collected: 03/02/11 15:25

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: FIELD - Conductance		Analytical Method: DISRES						
Conductance	679	umhos/cm		1			3/2/2011 15:25	A^
Dissolved Oxygen	0.3	mg/L		1			3/2/2011 15:25	A^
Groundwater Elevation	43.13	feet		1			3/2/2011 15:25	A^
Temperature	26.52	°C		1			3/2/2011 15:25	A^
Turbidity	7.51	NTU		1			3/2/2011 15:25	A^
pH	7.02	pH unit		1			3/2/2011 15:25	A^

METALS

Analysis Desc: SW846 6010B		Preparation Method: SW-846 3010A						
Analysis, Water		Analytical Method: SW-846 6010						
Aluminum	100	ug/L	I	1	200	61	3/10/2011 19:50	J

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ANALYTICAL RESULTS

Workorder: A1101554 Sumter Co Landfill GW Sampling

Lab ID: **A1101554004**

Date Received: 03/03/11 13:01 Matrix: Water

Sample ID: **MW-4A**

Date Collected: 03/02/11 15:25

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cadmium	0.32	ug/L	U	1	0.60	0.32	3/10/2011 19:50	J
Chromium	2.7	ug/L	I	1	4.0	0.50	3/10/2011 19:50	J
Iron	38	ug/L	U	1	200	38	3/10/2011 19:50	J
Manganese	7.6	ug/L		1	1.0	0.24	3/10/2011 19:50	J
Sodium	26	mg/L		1	0.20	0.026	3/10/2011 19:50	J

Analysis Desc: SW846 6020B
Analysis, Total

Preparation Method: SW-846 3010A

Analytical Method: SW-846 6020

Antimony	0.16	ug/L	I	1	0.60	0.073	3/8/2011 01:26	J
Lead	0.076	ug/L	U	1	0.70	0.076	3/8/2011 01:26	J
Silver	0.059	ug/L	U	1	0.30	0.059	3/8/2011 01:26	J
Thallium	0.22	ug/L		1	0.20	0.067	3/8/2011 01:26	J

Analysis Desc: SW846 7470A
Analysis, Water

Preparation Method: SW-846 7470A

Analytical Method: SW-846 7470A

Mercury	0.014	ug/L	U	1	0.10	0.014	3/9/2011 15:23	J
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WET CHEMISTRY

Analysis Desc: IC,E300.0,Water

Analytical Method: EPA 300.0

Chloride	27	mg/L		1	10	0.81	3/3/2011 21:34	A
Fluoride	0.15	mg/L	U	1	0.20	0.15	3/3/2011 21:34	A
Nitrate	12	mg/L		2	0.40	0.085	3/4/2011 08:55	A

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	0.025	mg/L	U	1	0.10	0.025	3/8/2011 14:22	T
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Analysis Desc: Tot Dissolved
Solids,SM2540C

Analytical Method: SM 2540C

Total Dissolved Solids	430	mg/L		1	10	10	3/7/2011 13:37	T
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Lab ID: **A1101554005**

Date Received: 03/03/11 13:01 Matrix: Water

Sample ID: **MW-4B**

Date Collected: 03/02/11 13:52

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
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FIELD PARAMETERS

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ANALYTICAL RESULTS

Workorder: A1101554 Sumter Co Landfill GW Sampling

Lab ID: **A1101554005**

Date Received: 03/03/11 13:01 Matrix: Water

Sample ID: **MW-4B**

Date Collected: 03/02/11 13:52

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: FIELD - Conductance		Analytical Method: DISRES						
Conductance	148	umhos/cm		1			3/2/2011 13:52	A^
Dissolved Oxygen	4.02	mg/L		1			3/2/2011 13:52	A^
Groundwater Elevation	43.16	feet		1			3/2/2011 13:52	A^
Temperature	26.12	°C		1			3/2/2011 13:52	A^
Turbidity	9.04	NTU		1			3/2/2011 13:52	A^
pH	8.6	pH unit		1			3/2/2011 13:52	A^

METALS

Analysis Desc: SW846 6010B		Preparation Method: SW-846 3010A						
Analysis, Water		Analytical Method: SW-846 6010						
Aluminum	720	ug/L		1	200	61	3/10/2011 19:56	J
Cadmium	0.32	ug/L	U	1	0.60	0.32	3/10/2011 19:56	J
Chromium	120	ug/L		1	4.0	0.50	3/10/2011 19:56	J
Iron	640	ug/L		1	200	38	3/10/2011 19:56	J
Manganese	18	ug/L		1	1.0	0.24	3/10/2011 19:56	J
Sodium	9.0	mg/L		1	0.20	0.026	3/10/2011 19:56	J

Analysis Desc: SW846 6020B		Preparation Method: SW-846 3010A						
Analysis, Total		Analytical Method: SW-846 6020						
Antimony	0.17	ug/L	I	1	0.60	0.073	3/8/2011 01:35	J
Lead	0.20	ug/L	I	1	0.70	0.076	3/8/2011 01:35	J
Silver	0.059	ug/L	U	1	0.30	0.059	3/8/2011 01:35	J
Thallium	0.067	ug/L	U	1	0.20	0.067	3/8/2011 01:35	J

Analysis Desc: SW846 7470A		Preparation Method: SW-846 7470A						
Analysis, Water		Analytical Method: SW-846 7470A						
Mercury	0.040	ug/L	I	1	0.10	0.014	3/9/2011 15:24	J

WET CHEMISTRY

Analysis Desc: IC,E300.0, Water		Analytical Method: EPA 300.0						
Chloride	5.4	mg/L	I	1	10	0.81	3/3/2011 22:40	A
Fluoride	0.15	mg/L	U	1	0.20	0.15	3/3/2011 22:40	A
Nitrate	3.4	mg/L		1	0.20	0.043	3/3/2011 22:40	A

Analysis Desc: Ammonia,E350.1, Water		Analytical Method: EPA 350.1						
Ammonia (N)	0.030	mg/L	I	1	0.10	0.025	3/8/2011 14:22	T

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ANALYTICAL RESULTS

Workorder: A1101554 Sumter Co Landfill GW Sampling

Lab ID: **A1101554005**

Date Received: 03/03/11 13:01 Matrix: Water

Sample ID: **MW-4B**

Date Collected: 03/02/11 13:52

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540C						
Total Dissolved Solids	84	mg/L		1	10	10	3/7/2011 13:37	T

Lab ID: **A1101554006**

Date Received: 03/03/11 13:01 Matrix: Water

Sample ID: **MW-6A**

Date Collected: 03/03/11 09:33

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: FIELD - Conductance		Analytical Method: DISRES						
Conductance	264	umhos/cm		1			3/3/2011 09:33	A^
Dissolved Oxygen	7.04	mg/L		1			3/3/2011 09:33	A^
Groundwater Elevation	43.21	feet		1			3/3/2011 09:33	A^
Temperature	24.4	°C		1			3/3/2011 09:33	A^
Turbidity	4.93	NTU		1			3/3/2011 09:33	A^
pH	6.92	pH unit		1			3/3/2011 09:33	A^

METALS

Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540C						
Total Dissolved Solids	200	mg/L		1	10	10	3/7/2011 13:37	T
Analysis Desc: SW846 6010B Analysis,Water		Preparation Method: SW-846 3010A Analytical Method: SW-846 6010						
Aluminum	61	ug/L	U	1	200	61	3/10/2011 20:00	J
Cadmium	0.32	ug/L	U	1	0.60	0.32	3/10/2011 20:00	J
Chromium	5.2	ug/L		1	4.0	0.50	3/10/2011 20:00	J
Iron	38	ug/L	U	1	200	38	3/10/2011 20:00	J
Manganese	1.0	ug/L		1	1.0	0.24	3/10/2011 20:00	J
Sodium	3.0	mg/L		1	0.20	0.026	3/10/2011 20:00	J
Analysis Desc: SW846 6020B Analysis,Total		Preparation Method: SW-846 3010A Analytical Method: SW-846 6020						
Antimony	0.083	ug/L	I	1	0.60	0.073	3/8/2011 01:45	J

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ANALYTICAL RESULTS

Workorder: A1101554 Sumter Co Landfill GW Sampling

Lab ID: **A1101554006**
Sample ID: **MW-6A**

Date Received: 03/03/11 13:01 Matrix: Water
Date Collected: 03/03/11 09:33

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Lead	0.076	ug/L	U	1	0.70	0.076	3/8/2011 01:45	J
Silver	0.059	ug/L	U	1	0.30	0.059	3/8/2011 01:45	J
Thallium	0.067	ug/L	U	1	0.20	0.067	3/8/2011 01:45	J

Analysis Desc: SW846 7470A
Analysis, Water

Preparation Method: SW-846 7470A
Analytical Method: SW-846 7470A

Mercury	0.018	ug/L	I	1	0.10	0.014	3/9/2011 15:26	J
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METALS

Analysis Desc: IC,E300.0, Water

Analytical Method: EPA 300.0

Chloride	8.8	mg/L	I	1	10	0.81	3/3/2011 22:56	A
Fluoride	0.15	mg/L	U	1	0.20	0.15	3/3/2011 22:56	A
Nitrate	6.3	mg/L		1	0.20	0.043	3/3/2011 22:56	A

Analysis Desc: Ammonia,E350.1, Water

Analytical Method: EPA 350.1

Ammonia (N)	0.025	mg/L	U	1	0.10	0.025	3/8/2011 14:22	T
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Lab ID: **A1101554007**
Sample ID: **MW-8**

Date Received: 03/03/11 13:01 Matrix: Water
Date Collected: 03/02/11 11:35

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
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FIELD PARAMETERS

Analysis Desc: FIELD - Conductance

Analytical Method: DISRES

Conductance	358	umhos/cm		1			3/2/2011 11:35	A^
Dissolved Oxygen	4.56	mg/L		1			3/2/2011 11:35	A^
Groundwater Elevation	44.14	feet		1			3/2/2011 11:35	A^
Temperature	24.12	°C		1			3/2/2011 11:35	A^
Turbidity	0.86	NTU		1			3/2/2011 11:35	A^
pH	7.1	pH unit		1			3/2/2011 11:35	A^

METALS

Analysis Desc: SW846 6010B
Analysis, Water

Preparation Method: SW-846 3010A
Analytical Method: SW-846 6010

Aluminum	61	ug/L	U	1	200	61	3/10/2011 20:26	J
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ANALYTICAL RESULTS

Workorder: A1101554 Sumter Co Landfill GW Sampling

Lab ID: **A1101554007**

Date Received: 03/03/11 13:01 Matrix: Water

Sample ID: **MW-8**

Date Collected: 03/02/11 11:35

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cadmium	0.32	ug/L	U	1	0.60	0.32	3/10/2011 20:26	J
Chromium	3.6	ug/L	I	1	4.0	0.50	3/10/2011 20:26	J
Iron	38	ug/L	U	1	200	38	3/10/2011 20:26	J
Manganese	0.87	ug/L	I	1	1.0	0.24	3/10/2011 20:26	J
Sodium	5.3	mg/L		1	0.20	0.026	3/10/2011 20:26	J

Analysis Desc: SW846 6020B
Analysis, Total

Preparation Method: SW-846 3010A

Analytical Method: SW-846 6020

Antimony	0.095	ug/L	I	1	0.60	0.073	3/8/2011 01:54	J
Lead	0.076	ug/L	U	1	0.70	0.076	3/8/2011 01:54	J
Silver	0.059	ug/L	U	1	0.30	0.059	3/8/2011 01:54	J
Thallium	0.067	ug/L	U	1	0.20	0.067	3/8/2011 01:54	J

Analysis Desc: SW846 7470A
Analysis, Water

Preparation Method: SW-846 7470A

Analytical Method: SW-846 7470A

Mercury	0.047	ug/L	I	1	0.10	0.014	3/9/2011 15:28	J
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WET CHEMISTRY

Analysis Desc: IC,E300.0,Water

Analytical Method: EPA 300.0

Chloride	9.1	mg/L	I	1	10	0.81	3/3/2011 23:13	A
Fluoride	0.15	mg/L	U	1	0.20	0.15	3/3/2011 23:13	A
Nitrate	2.1	mg/L		1	0.20	0.043	3/3/2011 23:13	A

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	0.039	mg/L	I	1	0.10	0.025	3/8/2011 14:22	T
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Analysis Desc: Tot Dissolved Solids,SM2540C

Analytical Method: SM 2540C

Total Dissolved Solids	210	mg/L		1	10	10	3/8/2011 08:55	T
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Lab ID: **A1101554008**

Date Received: 03/03/11 13:01 Matrix: Water

Sample ID: **MW-9A**

Date Collected: 03/02/11 10:42

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
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FIELD PARAMETERS

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ANALYTICAL RESULTS

Workorder: A1101554 Sumter Co Landfill GW Sampling

Lab ID: **A1101554008**
Sample ID: **MW-9A**

Date Received: 03/03/11 13:01 Matrix: Water
Date Collected: 03/02/11 10:42

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: FIELD - Conductance		Analytical Method: DISRES						
Conductance	887	umhos/cm		1			3/2/2011 10:42	A^
Dissolved Oxygen	0.35	mg/L		1			3/2/2011 10:42	A^
Groundwater Elevation	42.14	feet		1			3/2/2011 10:42	A^
Temperature	25.03	°C		1			3/2/2011 10:42	A^
Turbidity	5.73	NTU		1			3/2/2011 10:42	A^
pH	6.35	pH unit		1			3/2/2011 10:42	A^
METALS								
Analysis Desc: SW846 6010B		Preparation Method: SW-846 3010A						
Analysis, Water		Analytical Method: SW-846 6010						
Aluminum	360	ug/L		1	200	61	3/10/2011 20:31	J
Cadmium	1.3	ug/L		1	0.60	0.32	3/10/2011 20:31	J
Chromium	3.8	ug/L	I	1	4.0	0.50	3/10/2011 20:31	J
Iron	630	ug/L		1	200	38	3/10/2011 20:31	J
Manganese	81	ug/L		1	1.0	0.24	3/10/2011 20:31	J
Sodium	19	mg/L		1	0.20	0.026	3/10/2011 20:31	J
Analysis Desc: SW846 6020B		Preparation Method: SW-846 3010A						
Analysis, Total		Analytical Method: SW-846 6020						
Antimony	0.11	ug/L	I	1	0.60	0.073	3/8/2011 02:03	J
Lead	0.096	ug/L	I	1	0.70	0.076	3/8/2011 02:03	J
Silver	0.059	ug/L	U	1	0.30	0.059	3/8/2011 02:03	J
Thallium	0.16	ug/L	I	1	0.20	0.067	3/8/2011 02:03	J
Analysis Desc: SW846 7470A		Preparation Method: SW-846 7470A						
Analysis, Water		Analytical Method: SW-846 7470A						
Mercury	0.55	ug/L		1	0.10	0.014	3/9/2011 15:29	J
WET CHEMISTRY								
Analysis Desc: IC,E300.0, Water		Analytical Method: EPA 300.0						
Chloride	21	mg/L		1	10	0.81	3/3/2011 23:29	A
Fluoride	0.15	mg/L	U	1	0.20	0.15	3/3/2011 23:29	A
Nitrate	0.60	mg/L		1	0.20	0.043	3/3/2011 23:29	A
Analysis Desc: Ammonia,E350.1, Water		Analytical Method: EPA 350.1						
Ammonia (N)	0.41	mg/L		1	0.10	0.025	3/8/2011 14:22	T

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ANALYTICAL RESULTS

Workorder: A1101554 Sumter Co Landfill GW Sampling

Lab ID: **A1101554008** Date Received: 03/03/11 13:01 Matrix: Water
Sample ID: **MW-9A** Date Collected: 03/02/11 10:42

Sample Description: Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540C						
Total Dissolved Solids	500	mg/L		1	10	10	3/8/2011 08:55	T

Lab ID: **A1101554009** Date Received: 03/03/11 13:01 Matrix: Water
Sample ID: **MW-10** Date Collected: 03/02/11 12:55

Sample Description: Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: FIELD - Conductance		Analytical Method: DISRES						
Conductance	513	umhos/cm		1			3/2/2011 12:55	A^
Dissolved Oxygen	1.55	mg/L		1			3/2/2011 12:55	A^
Groundwater Elevation	43.18	feet		1			3/2/2011 12:55	A^
Temperature	25.2	°C		1			3/2/2011 12:55	A^
Turbidity	13.2	NTU		1			3/2/2011 12:55	A^
pH	6.87	pH unit		1			3/2/2011 12:55	A^

METALS

Analysis Desc: SW846 6010B		Preparation Method: SW-846 3010A						
Analysis,Water		Analytical Method: SW-846 6010						
Aluminum	1300	ug/L		1	200	61	3/10/2011 20:36	J
Cadmium	0.32	ug/L	U	1	0.60	0.32	3/10/2011 20:36	J
Chromium	19	ug/L		1	4.0	0.50	3/10/2011 20:36	J
Iron	600	ug/L		1	200	38	3/10/2011 20:36	J
Manganese	22	ug/L		1	1.0	0.24	3/10/2011 20:36	J
Sodium	6.1	mg/L		1	0.20	0.026	3/10/2011 20:36	J
Analysis Desc: SW846 6020B		Preparation Method: SW-846 3010A						
Analysis,Total		Analytical Method: SW-846 6020						
Antimony	0.20	ug/L	I	1	0.60	0.073	3/8/2011 02:12	J
Lead	0.72	ug/L		1	0.70	0.076	3/8/2011 02:12	J
Silver	0.059	ug/L	U	1	0.30	0.059	3/8/2011 02:12	J
Thallium	0.067	ug/L	U	1	0.20	0.067	3/8/2011 02:12	J

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ANALYTICAL RESULTS

Workorder: A1101554 Sumter Co Landfill GW Sampling

Lab ID: **A1101554009**

Date Received: 03/03/11 13:01 Matrix: Water

Sample ID: **MW-10**

Date Collected: 03/02/11 12:55

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: SW846 7470A		Preparation Method: SW-846 7470A						
Analysis, Water		Analytical Method: SW-846 7470A						
Mercury	0.014	ug/L	U	1	0.10	0.014	3/9/2011 15:31	J

WET CHEMISTRY

Analysis Desc: IC,E300.0,Water		Analytical Method: EPA 300.0						
Chloride	8.0	mg/L	I	1	10	0.81	3/4/2011 00:18	A
Fluoride	0.15	mg/L	U	1	0.20	0.15	3/4/2011 00:18	A
Nitrate	3.0	mg/L		1	0.20	0.043	3/4/2011 00:18	A
Analysis Desc: Ammonia,E350.1,Water		Analytical Method: EPA 350.1						
Ammonia (N)	0.071	mg/L	I	1	0.10	0.025	3/8/2011 14:22	T
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540C						
Total Dissolved Solids	290	mg/L		1	10	10	3/8/2011 08:55	T

Lab ID: **A1101554010**

Date Received: 03/03/11 13:01 Matrix: Water

Sample ID: **MW-11**

Date Collected: 03/03/11 10:45

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: FIELD - Conductance		Analytical Method: DISRES						
Conductance	544	umhos/cm		1			3/3/2011 10:45	A^
Dissolved Oxygen	0.7	mg/L		1			3/3/2011 10:45	A^
Groundwater Elevation	43.06	feet		1			3/3/2011 10:45	A^
Temperature	25.69	°C		1			3/3/2011 10:45	A^
Turbidity	13.4	NTU		1			3/3/2011 10:45	A^
pH	6.55	pH unit		1			3/3/2011 10:45	A^

METALS

Analysis Desc: SW846 6010B		Preparation Method: SW-846 3010A						
Analysis, Water		Analytical Method: SW-846 6010						
Aluminum	960	ug/L		1	200	61	3/10/2011 20:40	J

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ANALYTICAL RESULTS

Workorder: A1101554 Sumter Co Landfill GW Sampling

Lab ID: **A1101554010**

Date Received: 03/03/11 13:01 Matrix: Water

Sample ID: **MW-11**

Date Collected: 03/03/11 10:45

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cadmium	2.6	ug/L		1	0.60	0.32	3/10/2011 20:40	J
Chromium	6.6	ug/L		1	4.0	0.50	3/10/2011 20:40	J
Iron	170	ug/L	I	1	200	38	3/10/2011 20:40	J
Manganese	4.6	ug/L		1	1.0	0.24	3/10/2011 20:40	J
Sodium	9.6	mg/L		1	0.20	0.026	3/10/2011 20:40	J

Analysis Desc: SW846 6020B
Analysis, Total

Preparation Method: SW-846 3010A

Analytical Method: SW-846 6020

Antimony	0.13	ug/L	I	1	0.60	0.073	3/8/2011 02:22	J
Lead	0.75	ug/L		1	0.70	0.076	3/8/2011 02:22	J
Silver	0.059	ug/L	U	1	0.30	0.059	3/8/2011 02:22	J
Thallium	0.086	ug/L	I	1	0.20	0.067	3/8/2011 02:22	J

Analysis Desc: SW846 7470A
Analysis, Water

Preparation Method: SW-846 7470A

Analytical Method: SW-846 7470A

Mercury	0.067	ug/L	I	1	0.10	0.014	3/9/2011 15:33	J
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WET CHEMISTRY

Analysis Desc: IC,E300.0,Water

Analytical Method: EPA 300.0

Chloride	4.2	mg/L	I	1	10	0.81	3/4/2011 00:35	A
Fluoride	0.15	mg/L	U	1	0.20	0.15	3/4/2011 00:35	A
Nitrate	4.3	mg/L		1	0.20	0.043	3/4/2011 00:35	A

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	0.025	mg/L	U	1	0.10	0.025	3/8/2011 14:22	T
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Analysis Desc: Tot Dissolved
Solids,SM2540C

Analytical Method: SM 2540C

Total Dissolved Solids	300	mg/L		1	10	10	3/8/2011 08:55	T
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ANALYTICAL RESULTS QUALIFIERS

Workorder: A1101554 Sumter Co Landfill GW Sampling

PARAMETER QUALIFIERS

- U The compound was analyzed for but not detected.
- I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

LAB QUALIFIERS

- A DOH Certification #E53076(AEL-A)(FL NELAC Certification)
- A^ Not Certified
- J DOH Certification #E82574(AEL-JAX)(FL NELAC Certification)
- T DOH Certification #E84589(AEL-T)(FL NELAC Certification)

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QUALITY CONTROL DATA

Workorder: A1101554 Sumter Co Landfill GW Sampling

QC Batch: WCAa/18547 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Prepared:
Associated Lab Samples: A1101554001, A1101554002, A1101554003, A1101554004

METHOD BLANK: 694858

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Fluoride	mg/L	0.15	0.15	U
Chloride	mg/L	0.81	0.81	U
Nitrate	mg/L	0.043	0.043	U

LABORATORY CONTROL SAMPLE: 694859

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Fluoride	mg/L	3	2.8	92	90-110	
Chloride	mg/L	30	28	92	90-110	
Nitrate	mg/L	3	2.8	93	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 694860 694861 Original: A1101545001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Fluoride	mg/L	0.06	3	2.8	2.8	93	92	90-110	0	10	
Chloride	mg/L			0.81	0.81U				0	10	
Nitrate	mg/L	6.3	3	9.3	9.3	99	99	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 694862 694863 Original: A1101554003

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Fluoride	mg/L			0.15	0.15U				0	10	
Chloride	mg/L	21	10	31	31	95	98	90-110	1	10	
Nitrate	mg/L			0.043	0.043U				0	10	

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QUALITY CONTROL DATA

Workorder: A1101554 Sumter Co Landfill GW Sampling

QC Batch: WCAa/18548 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Prepared:
Associated Lab Samples: A1101554005, A1101554006, A1101554007, A1101554008, A1101554009, A1101554010

METHOD BLANK: 694913

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Fluoride	mg/L	0.15	0.15 U
Chloride	mg/L	0.81	0.81 U
Nitrate	mg/L	0.043	0.043 U

LABORATORY CONTROL SAMPLE: 694914

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
Fluoride	mg/L	3	2.7	91	90-110
Chloride	mg/L	30	27	92	90-110
Nitrate	mg/L	3	2.8	93	90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 694915 694916 Original: A1101554008

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Fluoride	mg/L			0.15	0.15U				0	10	
Chloride	mg/L	21	10	30	30	96	93	90-110	1	10	
Nitrate	mg/L			0.043	0.043U				0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 694917 694918 Original: A1101554010

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Fluoride	mg/L	0.07	3	2.8	2.8	92	93	90-110	1	10	
Chloride	mg/L			0.81	0.81U				0	10	
Nitrate	mg/L	4.3	3	7.2	7.2	97	99	90-110	1	10	

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QUALITY CONTROL DATA

Workorder: A1101554 Sumter Co Landfill GW Sampling

QC Batch: DGMj/22402 Analysis Method: SW-846 6020
QC Batch Method: SW-846 3010A Prepared: 03/05/2011 14:30
Associated Lab Samples: A1101554001, A1101554002, A1101554003, A1101554004, A1101554005, A1101554006, A1101554007, A1101554008,

METHOD BLANK: 695353

Parameter	Units	Blank Result	Reporting Limit Qualifiers
METALS			
Silver	ug/L	0.059	0.059 U
Antimony	ug/L	0.073	0.073 U
Thallium	ug/L	0.067	0.067 U
Lead	ug/L	0.076	0.076 U

LABORATORY CONTROL SAMPLE & LCSD: 695354 695355

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
METALS									
Silver	ug/L	100	97	98	97	98	85-115	1	20
Antimony	ug/L	100	100	100	101	102	85-115	2	20
Thallium	ug/L	100	96	97	96	97	85-115	1	20
Lead	ug/L	100	96	97	96	97	85-115	1	20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 695356 695357 Original: A1101554001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
METALS										
Silver	ug/L	0.035	100	96	95	96	95	70-130	2	20
Antimony	ug/L	0.099	100	100	99	100	99	70-130	1	20
Thallium	ug/L	0.028	100	96	95	96	95	70-130	1	20
Lead	ug/L	-0.19	100	96	95	96	95	70-130	2	20

QC Batch: WCAI/35416 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Prepared:
Associated Lab Samples: A1101554001, A1101554002, A1101554003, A1101554004, A1101554005, A1101554006

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QUALITY CONTROL DATA

Workorder: A1101554 Sumter Co Landfill GW Sampling

METHOD BLANK: 695441

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Total Dissolved Solids	mg/L	10	10 U

LABORATORY CONTROL SAMPLE: 695442

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
Total Dissolved Solids	mg/L	660	650	99	

SAMPLE DUPLICATE: 695443

Original: A1101499001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
WET CHEMISTRY					
Total Dissolved Solids	mg/L	640	640	0	

SAMPLE DUPLICATE: 695444

Original: A1101554006

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
WET CHEMISTRY					
Total Dissolved Solids	mg/L	200	200	3	

QC Batch: WCAI/35439

Analysis Method: SM 2540C

QC Batch Method: SM 2540C

Prepared:

Associated Lab Samples: A1101554007, A1101554008, A1101554009, A1101554010

METHOD BLANK: 696267

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Total Dissolved Solids	mg/L	10	10 U

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QUALITY CONTROL DATA

Workorder: A1101554 Sumter Co Landfill GW Sampling

LABORATORY CONTROL SAMPLE: 696268

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	660	660	100		

SAMPLE DUPLICATE: 696269

Original: A1101519001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	1600	1600	1		

SAMPLE DUPLICATE: 696270

Original: T1102970005

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	640	610	4		

QC Batch: WCA1/35449

Analysis Method: EPA 350.1

QC Batch Method: EPA 350.1

Prepared:

Associated Lab Samples: A1101554001, A1101554002, A1101554003, A1101554004, A1101554005, A1101554006

METHOD BLANK: 696619

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Ammonia (N)	mg/L	0.025	0.025 U	

LABORATORY CONTROL SAMPLE: 696620

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	1	1.1	105	90-110	

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QUALITY CONTROL DATA

Workorder: A1101554 Sumter Co Landfill GW Sampling

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 696621 696622 Original: A1101554006

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY Ammonia (N)	mg/L	0.015	1	0.98	0.99	98	99	90-110	1	10	

QC Batch: WCAI/35450 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Prepared:
Associated Lab Samples: A1101554007, A1101554008, A1101554009, A1101554010

METHOD BLANK: 696624

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY Ammonia (N)	mg/L	0.025	0.025	U

LABORATORY CONTROL SAMPLE: 696625

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY Ammonia (N)	mg/L	1	1.1	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 696626 696627 Original: T1102730002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY Ammonia (N)	mg/L	0.07	1	0.98	1.0	91	93	90-110	3	10	

QC Batch: DGMj/22421 Analysis Method: SW-846 7470A
QC Batch Method: SW-846 7470A Prepared: 03/09/2011 10:15
Associated Lab Samples: A1101554001, A1101554002, A1101554003, A1101554004, A1101554005, A1101554006, A1101554007, A1101554008,

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QUALITY CONTROL DATA

Workorder: A1101554 Sumter Co Landfill GW Sampling

METHOD BLANK: 697491

Parameter	Units	Blank Result	Reporting Limit Qualifiers
METALS			
Mercury	ug/L	0.014	0.014 U

LABORATORY CONTROL SAMPLE & LCSD: 697492 697493

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
METALS									
Mercury	ug/L	2	2.1	2.1	104	103	80-120	1	20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 697494 697495 Original: J1101723001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
METALS										
Mercury	ug/L	0.013	2	2.0	2.1	102	106	80-120	4	20

QC Batch: DGMj/22424

Analysis Method: SW-846 6010

QC Batch Method: SW-846 3010A

Prepared: 03/10/2011 07:00

Associated Lab Samples: A1101554001, A1101554002, A1101554003, A1101554004, A1101554005, A1101554006, A1101554007, A1101554008,

METHOD BLANK: 698202

Parameter	Units	Blank Result	Reporting Limit Qualifiers
METALS			
Aluminum	ug/L	61	61 U
Cadmium	ug/L	0.32	0.32 U
Chromium	ug/L	0.50	0.50 U
Iron	ug/L	38	38 U
Manganese	ug/L	0.24	0.24 U
Sodium	mg/L	0.026	0.026 U

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QUALITY CONTROL DATA

Workorder: A1101554 Sumter Co Landfill GW Sampling

LABORATORY CONTROL SAMPLE & LCSD: 698203 698204

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS										
Aluminum	ug/L	25000	26000	25000	101	100	80-120	1	20	
Cadmium	ug/L	400	380	380	96	95	80-120	0	20	
Chromium	ug/L	400	380	380	96	96	80-120	0	20	
Iron	ug/L	25000	27000	26000	105	104	80-120	1	20	
Manganese	ug/L	400	380	390	96	97	80-120	1	20	
Sodium	mg/L	50	51	51	101	101	80-120	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 698205 698206 Original: A1101554002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Aluminum	ug/L	19	25000	25000	26000	100	102	75-125	2	20	
Cadmium	ug/L	-0.12	400	370	380	93	95	75-125	2	20	
Chromium	ug/L	1	400	380	380	94	96	75-125	2	20	
Iron	ug/L	24	25000	26000	27000	104	106	75-125	2	20	
Manganese	ug/L	2.3	400	380	390	94	96	75-125	2	20	
Sodium	mg/L	3.9	50	54	56	100	103	75-125	3	20	

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: A1101554 Sumter Co Landfill GW Sampling

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
A1101554001	EQ BLANK			EPA 300.0	WCAa/18547
A1101554002	MW-2			EPA 300.0	WCAa/18547
A1101554003	MW-4			EPA 300.0	WCAa/18547
A1101554004	MW-4A			EPA 300.0	WCAa/18547
A1101554005	MW-4B			EPA 300.0	WCAa/18548
A1101554006	MW-6A			EPA 300.0	WCAa/18548
A1101554007	MW-8			EPA 300.0	WCAa/18548
A1101554008	MW-9A			EPA 300.0	WCAa/18548
A1101554009	MW-10			EPA 300.0	WCAa/18548
A1101554010	MW-11			EPA 300.0	WCAa/18548
A1101554001	EQ BLANK	SW-846 3010A	DGMj/22402	SW-846 6020	ICMj/17343
A1101554002	MW-2	SW-846 3010A	DGMj/22402	SW-846 6020	ICMj/17343
A1101554003	MW-4	SW-846 3010A	DGMj/22402	SW-846 6020	ICMj/17343
A1101554004	MW-4A	SW-846 3010A	DGMj/22402	SW-846 6020	ICMj/17343
A1101554005	MW-4B	SW-846 3010A	DGMj/22402	SW-846 6020	ICMj/17343
A1101554006	MW-6A	SW-846 3010A	DGMj/22402	SW-846 6020	ICMj/17343
A1101554007	MW-8	SW-846 3010A	DGMj/22402	SW-846 6020	ICMj/17343
A1101554008	MW-9A	SW-846 3010A	DGMj/22402	SW-846 6020	ICMj/17343
A1101554009	MW-10	SW-846 3010A	DGMj/22402	SW-846 6020	ICMj/17343
A1101554010	MW-11	SW-846 3010A	DGMj/22402	SW-846 6020	ICMj/17343
A1101554001	EQ BLANK			SM 2540C	WCAt/35416
A1101554002	MW-2			SM 2540C	WCAt/35416
A1101554003	MW-4			SM 2540C	WCAt/35416
A1101554004	MW-4A			SM 2540C	WCAt/35416
A1101554005	MW-4B			SM 2540C	WCAt/35416
A1101554006	MW-6A			SM 2540C	WCAt/35416
A1101554007	MW-8			SM 2540C	WCAt/35439
A1101554008	MW-9A			SM 2540C	WCAt/35439
A1101554009	MW-10			SM 2540C	WCAt/35439

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: A1101554 Sumter Co Landfill GW Sampling

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
A1101554010	MW-11			SM 2540C	WCAt/35439
A1101554001	EQ BLANK			EPA 350.1	WCAt/35449
A1101554002	MW-2			EPA 350.1	WCAt/35449
A1101554003	MW-4			EPA 350.1	WCAt/35449
A1101554004	MW-4A			EPA 350.1	WCAt/35449
A1101554005	MW-4B			EPA 350.1	WCAt/35449
A1101554006	MW-6A			EPA 350.1	WCAt/35449
A1101554007	MW-8			EPA 350.1	WCAt/35450
A1101554008	MW-9A			EPA 350.1	WCAt/35450
A1101554009	MW-10			EPA 350.1	WCAt/35450
A1101554010	MW-11			EPA 350.1	WCAt/35450
A1101554001	EQ BLANK	SW-846 7470A	DGMj/22421	SW-846 7470A	CVAj/16960
A1101554002	MW-2	SW-846 7470A	DGMj/22421	SW-846 7470A	CVAj/16960
A1101554003	MW-4	SW-846 7470A	DGMj/22421	SW-846 7470A	CVAj/16960
A1101554004	MW-4A	SW-846 7470A	DGMj/22421	SW-846 7470A	CVAj/16960
A1101554005	MW-4B	SW-846 7470A	DGMj/22421	SW-846 7470A	CVAj/16960
A1101554006	MW-6A	SW-846 7470A	DGMj/22421	SW-846 7470A	CVAj/16960
A1101554007	MW-8	SW-846 7470A	DGMj/22421	SW-846 7470A	CVAj/16960
A1101554008	MW-9A	SW-846 7470A	DGMj/22421	SW-846 7470A	CVAj/16960
A1101554009	MW-10	SW-846 7470A	DGMj/22421	SW-846 7470A	CVAj/16960
A1101554010	MW-11	SW-846 7470A	DGMj/22421	SW-846 7470A	CVAj/16960
A1101554001	EQ BLANK	SW-846 3010A	DGMj/22424	SW-846 6010	ICPj/21443
A1101554002	MW-2	SW-846 3010A	DGMj/22424	SW-846 6010	ICPj/21443
A1101554003	MW-4	SW-846 3010A	DGMj/22424	SW-846 6010	ICPj/21443
A1101554004	MW-4A	SW-846 3010A	DGMj/22424	SW-846 6010	ICPj/21443
A1101554005	MW-4B	SW-846 3010A	DGMj/22424	SW-846 6010	ICPj/21443
A1101554006	MW-6A	SW-846 3010A	DGMj/22424	SW-846 6010	ICPj/21443
A1101554007	MW-8	SW-846 3010A	DGMj/22424	SW-846 6010	ICPj/21443
A1101554008	MW-9A	SW-846 3010A	DGMj/22424	SW-846 6010	ICPj/21443

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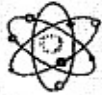
QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: A1101554 Sumter Co Landfill GW Sampling

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
A1101554009	MW-10	SW-846 3010A	DGMj/22424	SW-846 6010	ICPj/21443
A1101554010	MW-11	SW-846 3010A	DGMj/22424	SW-846 6010	ICPj/21443
A1101554002	MW-2	DISRES	FLDa/	DISRES	FLDa/
A1101554003	MW-4	DISRES	FLDa/	DISRES	FLDa/
A1101554004	MW-4A	DISRES	FLDa/	DISRES	FLDa/
A1101554005	MW-4B	DISRES	FLDa/	DISRES	FLDa/
A1101554006	MW-6A	DISRES	FLDa/	DISRES	FLDa/
A1101554007	MW-8	DISRES	FLDa/	DISRES	FLDa/
A1101554008	MW-9A	DISRES	FLDa/	DISRES	FLDa/
A1101554009	MW-10	DISRES	FLDa/	DISRES	FLDa/
A1101554010	MW-11	DISRES	FLDa/	DISRES	FLDa/

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Florida Radiochemistry Services, Inc.

Contact: Michael J. Naumann

5456 Hoffner Ave., Suite 201 Orlando, FL 32812

Phone: (407) 382-7733 Fax: (407) 382-7744

Certification I. D. # E83033

Work Order #: 1103040

Report Date: 03/16/11

Report to:

Advanced Environmental Laboratories, Inc.

528 S. North Lake Blvd., Ste. 1016

Altamonte Springs, FL 32701

Attention: Myrna Santiago

I do hereby affirm that this record contains no willful misrepresentations and that this information given by me is true to the best of my knowledge and belief. I further certify that the methods and quality control measures used to produce these laboratory results were implemented in accordance with the requirements of this laboratory's certification and NELAC Standards. The test results in this report relate only to the samples received.

Signed


Michael J. Naumann - President

Date

3-16-11

Page 1 of 5



Florida Radiochemistry Services, Inc.

Sample Login

Client:	Advanced Environmental Laboratories, Inc.	Date / Time Received 03/04/11 09:00	Work order # 1103040
Client Contact:	Myrna Santiago		
Client P.O.			
Project I.D.	A1101554		
Lab Sample I.D.	Client Sample I.D.	Sample Date/Time	Analysis Requested
1103040-01	A1101554001	03/02/11 09:20	Ga, Ra226, Ra228
1103040-02	A1101554002	03/02/11 11:40	Ga, Ra226, Ra228
1103040-03	A1101554003	03/02/11 14:40	Ga, Ra226, Ra228
1103040-04	A1101554004	03/02/11 15:25	Ga, Ra226, Ra228
1103040-05	A1101554005	03/02/11 13:52	Ga, Ra226, Ra228
1103040-06	A1101554006	03/03/11 09:33	Ga, Ra226, Ra228
1103040-07	A1101554007	03/02/11 11:35	Ga, Ra226, Ra228
1103040-08	A1101554008	03/02/11 10:42	Ga, Ra226, Ra228
1103040-09	A1101554009	03/02/11 12:55	Ga, Ra226, Ra228
1103040-10	A1101554010	03/03/11 10:45	Ga, Ra226, Ra228



Florida Radiochemistry Services, Inc.

Analysis Report

Lab Sample I.D.	1103040-01	1103040-02	1103040-03	1103040-04	1103040-05
Client I.D.	A1101554001	A1101554002	A1101554003	A1101554004	A1101554005
Gross Alpha	.07U	1.5	7.6	3.6	2.6
Error +/-	0.4	1.2	1.6	0.8	1.0
MDL	0.7	1.5	1.7	0.9	0.9
EPA Method	900.0	900.0	900.0	900.0	900.0
Prep Date	03/08/11	03/08/11	03/08/11	03/08/11	03/08/11
Prep Time	06:26	06:26	06:26	06:26	06:26
Analysis Date	03/09/11	03/09/11	03/09/11	03/09/11	03/09/11
Analysis Time	06:51	06:51	13:23	10:18	06:59
Analyst	MJN	MJN	MJN	MJN	MJN
Radium 226	0.1	0.4	0.8	0.9	0.4
Error +/-	0.1	0.2	0.3	0.3	0.2
MDL	0.1	0.2	0.2	0.1	0.2
EPA Method	903.1	903.1	903.1	903.1	903.1
Prep Date	03/07/11	03/07/11	03/07/11	03/07/11	03/07/11
Prep Time	10:12	10:12	10:12	10:12	10:12
Analysis Date	03/15/11	03/15/11	03/15/11	03/15/11	03/15/11
Analysis Time	13:47	13:47	13:47	13:47	13:47
Analyst	MJN	MJN	MJN	MJN	MJN
Radium 228	0.8U	0.7U	0.7	0.6U	0.7U
Error +/-	0.5	0.5	0.5	0.4	0.5
MDL	0.8	0.7	0.7	0.6	0.7
EPA Method	Ra-05	Ra-05	Ra-05	Ra-05	Ra-05
Prep Date	03/07/11	03/07/11	03/07/11	03/07/11	03/07/11
Prep Time	10:12	10:12	10:12	10:12	10:12
Analysis Date	03/14/11	03/14/11	03/14/11	03/14/11	03/14/11
Analysis Time	13:33	13:33	13:33	13:34	13:34
Analyst	PJ	PJ	PJ	PJ	PJ
Units	pCi/l	pCi/l	pCi/l	pCi/l	pCi/l



Florida Radiochemistry Services, Inc.

Analysis Report

Lab Sample I.D.	1103040-06	1103040-07	1103040-08	1103040-09	1103040-10
Client I.D.	A1101554006	A1101554007	A1101554008	A1101554009	A1101554010
Gross Alpha	2.1	1.2U	6.4	9.9	15.4
Error +/-	1.1	0.8	1.9	1.1	1.8
MDL	1.1	1.2	2.2	0.8	1.4
EPA Method	900.0	900.0	900.0	900.0	900.0
Prep Date	03/08/11	03/08/11	03/08/11	03/08/11	03/08/11
Prep Time	06:26	06:26	06:26	06:26	06:26
Analysis Date	03/09/11	03/09/11	03/09/11	03/09/11	03/09/11
Analysis Time	06:59	10:14	13:23	10:18	13:23
Analyst	MJN	MJN	MJN	MJN	MJN
Radium 226	1.3	0.7	2.4	1.7	3.5
Error +/-	0.3	0.3	0.4	0.4	0.5
MDL	0.1	0.2	0.2	0.1	0.2
EPA Method	903.1	903.1	903.1	903.1	903.1
Prep Date	03/07/11	03/07/11	03/07/11	03/07/11	03/07/11
Prep Time	10:12	10:12	10:12	10:12	10:12
Analysis Date	03/15/11	03/15/11	03/15/11	03/15/11	03/15/11
Analysis Time	14:52	14:52	14:52	14:52	14:52
Analyst	MJN	MJN	MJN	MJN	MJN
Radium 228	0.6U	0.7U	0.8	0.7U	0.6U
Error +/-	0.4	0.4	0.4	0.4	0.4
MDL	0.6	0.7	0.6	0.7	0.6
EPA Method	Ra-05	Ra-05	Ra-05	Ra-05	Ra-05
Prep Date	03/07/11	03/07/11	03/07/11	03/07/11	03/07/11
Prep Time	10:12	10:12	10:12	10:12	10:12
Analysis Date	03/14/11	03/14/11	03/14/11	03/14/11	03/14/11
Analysis Time	13:34	13:34	14:49	14:49	14:49
Analyst	PJ	PJ	PJ	PJ	PJ
Units	pCi/l	pCi/l	pCi/l	pCi/l	pCi/l



QA Page

Analyte	Sample #	Date Analyzed	Sample Result	Amount Spiked	Spike Result	Spike /Dup Result	Spike % Rec.	Spike Dup % Rpd
Gross Alpha	1103040-02	03/09/11	1.5	10.2	10.4	8.8	87	16.7
Radium 226	1103040-06	03/15/11	1.3	25.2	25.7	26.5	97	3.1
Radium 228	1103040-06	03/14/11	<0.6	4.5	3.7	3.8	82	2.7

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

Chain of Custody

Document 174173 - HBN 43058

Results Requested By 3/15/2011

Myrna Santiago
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Jacksonville, FL 32216
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Fax (904)363-9354

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Orlando, FL 32812-2517
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Well	Date	Time	Sample	Volume	Container	Preservative	HNO3	DNR	EPA 803.1	EPA 806	EPA 800	LAB USE ONLY
2	Plant 6 Well 27	3/2/2011 15:45	A1101556002	Drinking Water	2				X	X	X	
4	MW-2	3/2/2011 11:40	A1101554002	Water	2			X	X	X		
6	MW-4A	3/2/2011 15:25	A1101554004	Water	2			X	X	X		
8	MW-6A	3/3/2011 09:33	A1101554006	Water	2			X	X	X		
10	MW-9A	3/2/2011 10:42	A1101554008	Water	2			X	X	X		
12	MW-11	3/3/2011 10:45	A1101554010	Water	2			X	X	X		

GROUNDWATER SAMPLING LOG

SITE NAME: **Sumter County Landfill** SITE LOCATION: **Sumterville, FL** DATE: **3/2/11**
WELL NO: **MW-4B** SAMPLE ID: **MW-4B**

PURGING DATA

WELL 2" PVC TUBING 3/8" DIAMETER (inches): **3/8"** WELL SCREEN INTERVAL DEPTH: **30.67'** STATIC DEPTH TO WATER (feet): **30.67'** 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: $1 \text{ Well Vol} = (38.49' - 30.67') \times .16 \text{ gallons/foot} = 1.2512 \text{ gallons}$

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
only fill out if applicable: $1 \text{ Equip Vol} = .02 \text{ gallons} + (.006 \text{ gallons/foot} \times 34' + 1.70 \text{ gallons}) = 1.70 \text{ gallons}$

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): **~34'** FINAL PUMP OR TUBING DEPTH IN WELL (feet): **~34'** PURGING INITIATED AT: **1323** PURGING ENDED AT: **1340** TOTAL VOLUME PURGED (gallons): **1.70**

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1336	1.30	1.30	.1	30.74	8.56	26.08	148	4.08	10.2	Clear	None
1338	.2	1.50	.1	30.74	8.58	26.09	148	4.10	9.77	Clear	None
1340	.2	1.70	.1	30.74	8.60	26.12	148	4.02	9.04	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; 6" = 1.02; 8" = 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 SIGNATURE: *[Signature]* SAMPLING INITIATED AT: **1341** SAMPLING ENDED AT: **1352**

PUMP OR TUBING DEPTH IN WELL (feet): **~34'** SAMPLE PUMP FLOW RATE (ml per minute): **< 250 ml** TUBING MATERIAL CODE: **PE**

FIELD DECONTAMINATION: ☒ Y ☐ N FIELD-FILTERED: ☒ Y ☐ N FILTER SIZE: **µm** 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-4B	2	PE	1 Ltr	HN03	None	—	GrossAlpha, RA226RA228	ESP
"	1	PE	500 mL	H2S04	None	—	Total Ammonia	ESP
"	1	PE	500 mL	HN03	None	—	Metals	ESP
"	1	PE	500 mL	None	None	—	Chloride, Fluoride, Nitrate, TDS	ESP

REMARKS:

1323: ~~Start~~ Inserted SS ESP and dedicated 3/8" PE tubing to ~34' stop and began purging @ .1 gpm.

1328: WL 30.75' @ .1 gpm, GW is slightly turbid @ 27 NTUs.

1335: WL 30.74' @ .1 gpm, drawdown is stable. GW is clear. DO is high @ 4.38 mg/L, but is typical for this well. Will use optimum stabilization criteria below.

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 = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump
RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

GROUNDWATER SAMPLING LOG

SITE NAME: Sumter County Landfill		SITE LOCATION: Sumterville, FL	
WELL NO: MW-6A	SAMPLE ID: MW-6A	DATE: 3/3/11	

PURGING DATA

WELL 2" PVC	TUBING 3/8"	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH 34.33' 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)				
= (50.84' feet - 34.33' feet) X 60' gallons/foot = 1.515 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 60') + .125 gallons = .505 gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): ~45'	FINAL PUMP OR TUBING DEPTH IN WELL (feet): ~45'	PURGING INITIATED AT: 0852	PURGING ENDED AT: 0922	TOTAL VOLUME PURGED (gallons): 1.5

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
0918	13	13	.5	34.41'	6.54	24.38	263	6.97	6.41	Clear	None
0920	1	14	.5	34.41'	6.73	24.38	263	7.00	6.62	Clear	None
0922	1	15	.5	34.41'	6.92	24.40	264	7.04	4.93	Clear	None
<i>No stream</i>											

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: <i>[Signature]</i>		SAMPLING INITIATED AT: 0923	SAMPLING ENDED AT: 0933
PUMP OR TUBING DEPTH IN WELL (feet): ~45'		SAMPLE PUMP FLOW RATE (mL per minute): < 250 mL		MATERIAL CODE: PE	
FIELD DECONTAMINATION: (Y) N		FIELD-FILTERED: (Y) N FILTER SIZE: µm		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	—	Gross Alpha, RA226RA228	ESP
"	1	PE	250 mL	H2SO4	None	—	Total Ammonia	ESP
"	1	PE	250 mL	HN03	None	—	Metals	ESP
"	12	PE	500 mL	None	None	—	Chloride, Fluoride, Nitrate, TDS	ESP

REMARKS:
0852: Inserted SS ESP and new 3/8" PE tub. to ~45' btoe and began purging @ .5 gpm. This well is typically extremely turbid at beginning of purge requiring over purging at a higher rate of flow to clean it up.
0915: WL 34.41' @ .5 gpm, GW is clear @ 9 NTUs. WL is stable.
0917: WL 34.41' @ .5 gpm. DO is high @ 6.91 mg/L, but is typical for this well. Will use optional stabilization criteria below.

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)

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).

GROUNDWATER SAMPLING LOG

SITE NAME: Sumter County Landfill		SITE LOCATION: Sumterville, FL	
WELL NO: MW-8	SAMPLE ID: MW-8	DATE: 3/2/11	

PURGING DATA

WELL 2" PVC DIAMETER (inches):	TUBING 3/8" DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH 25.12 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)											
= (43.24' feet - 25.12' feet) X 0.0006 gallons/foot = 0.125 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 = 0.02 gallons + (0.006 gallons/foot X 43' feet) + 0.125 gallons = 0.403 gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): ~38'	FINAL PUMP OR TUBING DEPTH IN WELL (feet): ~38'	PURGING INITIATED AT: 1110	PURGING ENDED AT: 1124	TOTAL VOLUME PURGED (gallons): 4.2							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1120	0.3	0.3	0.3	25.20	7.12	24.13	361	4.57	1.84	Clear	None
1122	0.6	0.9	0.3	25.20	7.11	24.14	360	4.56	1.43	Clear	None
1124	0.6	1.5	0.3	25.20	7.10	24.12	358	4.56	0.86	Clear	None
No Screen											
WELL CAPACITY (Gallons Per Foot): 0.76" = 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: <i>[Signature]</i>		SAMPLING INITIATED AT: 1125	SAMPLING ENDED AT: 1135			
PUMP OR TUBING DEPTH IN WELL (feet): ~38'		SAMPLE PUMP FLOW RATE (mL per minute): < 250 mL		TUBING MATERIAL CODE: PE				
FIELD DECONTAMINATION: <input checked="" type="radio"/> Y <input type="radio"/> N		FIELD-FILTERED: <input checked="" type="radio"/> Y <input type="radio"/> N Filtration Equipment Type: _____		FILTER SIZE: _____ µm DUPLICATE: <input checked="" type="radio"/> Y <input type="radio"/> 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-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	—	Metals	ESP
"	12	PE	500 mL	None	None	—	Chloride, Fluoride, Nitrate, TDS	ESP

REMARKS:

1110: Inserted SS ESP and ded. cased 3/8" PE tubing to ~38' bto c and began purging @ 0.3 gpm.

1117: WL 25.20' @ 0.3 gpm, GW is clear.

1119: WL 25.20' @ 0.3 gpm, drawdown is stable. DO is high @ 4.62 mg/L, but is typical for this well. Will use optional stabilization criteria below.

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

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 nationally & 5 NTU for 10% turbidimetry in natural


GROUNDWATER SAMPLING LOG

SITE NAME: Sumter County Landfill		SITE LOCATION: Sumterville, FL	
WELL NO: MW-9A	SAMPLE ID: MW-9A	DATE: 3/2/11	

PURGING DATA

WELL 2" PVC	TUBING 3/8"	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH 32.12 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)											
= (50.17' 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 50 feet) + .125 gallons = .445 gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): ~4.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): ~4.5	PURGING INITIATED AT: 0936	PURGING ENDED AT: 1030	TOTAL VOLUME PURGED (gallons): 26.6							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1026	.25	25	4.84	38.70	6.31	25.05	889	.53	9.35	Clear	None
1028	.8	25.8	.4	38.70	6.33	25.04	885	.44	2.76	Clear	Same
1030	.8	26.6	.4	38.71	6.35	25.03	887	.35	5.73	Clear	None
No screen											
WELL CAPACITY (Gallons Per Foot): 0.76" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 6" = 1.02; 8" = 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: 1031	SAMPLING ENDED AT: 1042
PUMP OR TUBING DEPTH IN WELL (feet): ~4.5		SAMPLE PUMP FLOW RATE (ml per minute):		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)
MW-9A	2	PE	1 Ltr	HN03	None
"	1	PE	500 mL	H2SO4	None
"	1	PE	200 mL	HN03	None
"	12	PE	500 mL	None	None
				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
				GrossAlpha, RA226RA228	ESP
				Total Ammonia	ESP
				Metals	ESP
				Chloride, Fluoride, Nitrate, TDS	ESP

REMARKS:

0936: Inserted SS ESP and dedicated 3/8" PE tubing to ~4.5' slot and began purging @ .5 gpm. This well is typically extremely turbid at beginning of purge requiring over purging to clean it up.

1016: Turbidity is @ 30 NTUs, continuing purge.

1022: WL 38.71' @ .5 gpm, GW is clear. Turbidity is @ 14 NTUs.

1024: WL 38.71' @ .5 gpm, drawdown is stable. Reduced flow slightly for field measurements.

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

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; and pH: all readings ≤ 5 NTU; or 4.00 to 8.00.

GROUNDWATER SAMPLING LOG

SITE NAME: Sumter County Landfill		SITE LOCATION: Sumterville, FL	
WELL NO: MW-10	SAMPLE ID: MW-10	DATE: 3/2/11	

PURGING DATA

WELL 2" PVC DIAMETER (inches):	TUBING 3/8" DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 25.10	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 feet) + .125 gallons = gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): ~40'	FINAL PUMP OR TUBING DEPTH IN WELL (feet): ~40'	PURGING INITIATED AT: 1204	PURGING ENDED AT: 1242	TOTAL VOLUME PURGED (gallons): 13.68							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1228	12	12	.5	28.62	6.91	25.14	520	1.81	11.8	Clear	Slight
1238	120	13.20	.12	25.80	6.86	25.08	512	1.50	13.5	Clear	Same
1240	.24	13.44	.12	25.73	6.86	25.16	513	1.52	12.3	Clear	Same
1242	.24	13.68	.12	25.60	6.87	25.20	513	1.55	13.2	Clear	Same
No Show											
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; 6" = 1.02; 8" = 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: 1243	SAMPLING ENDED AT: 1255
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		DUPLICATE: Y (N)	
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)
MW-10	2	PE	1 Ltr	HN03	None
"	1	PE	250 mL	H2SO4	None
"	1	PE	250 mL	HN03	None
"	12	PE	600 mL	None	None
INTENDED ANALYSIS AND/OR METHOD				SAMPLING EQUIPMENT CODE	
Gross Alpha, RA226RA228				ESP	
Total Ammonia				ESP	
Metals				ESP	
Chloride, Fluoride, Nitrate, TDS				ESP	

REMARKS:

1204: Inserted SS ESP and dedicated 3/8" PE tubing to ~40' b/c and began purging @ .5 gpm. This well is typically extremely turbid at beginning of purge requiring over purging at a higher rate of flow to clean it up.

1212: WL 28.55' @ .5 gpm, GW is clearing up nicely. Turbidity is @ 45 NTUs, continuing purge.

1222: WL 28.62' @ .5 gpm, GW is clear @ 16 NTUs.

1224: WL 28.62' @ .5 gpm, drawdown is stable.

1228: Reduced flow to .12 gpm in effort to lower DO. Is high @ 1.81 mg/L.

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; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

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)

GROUNDWATER SAMPLING LOG

SITE NAME: Sumter County Landfill		SITE LOCATION: Sumterville, FL	
WELL NO: MW-11	SAMPLE ID: MW-11	DATE: 3/3/11	

PURGING DATA

WELL 2" PVC	TUBING 3/8"	WELL SCREEN INTERVAL	STATIC DEPTH 27.15'	PURGE PUMP TYPE							
DIAMETER (inches):	DIAMETER (inches):	DEPTH: feet to feet	TO WATER (feet):	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' feet) + .125 gallons = .385 gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): ~35'	FINAL PUMP OR TUBING DEPTH IN WELL (feet): ~35'	PURGING INITIATED AT: 1013	PURGING ENDED AT: 1032	TOTAL VOLUME PURGED (gallons): 9.5							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1028	2.5	2.5	.5	27.31	6.55	25.69	534	.83	17.0	Clear	None
1030	1	3.5	.5	27.30	6.56	25.69	539	.73	15.1	Clear	None
1032	1	4.5	.5	27.30	6.55	25.69	544	.70	13.4	Clear	None
No screen											
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/SIGNATURES: <i>[Signature]</i>		SAMPLING INITIATED AT: 1033	SAMPLING ENDED AT: 1045
PUMP OR TUBING DEPTH IN WELL (feet): ~35'		SAMPLE PUMP FLOW RATE (mL per minute): < 250 mL		MATERIAL CODE: PE	
FIELD DECONTAMINATION: (Y) N		FIELD-FILTERED: (Y) (N) FILTER SIZE: µm		DUPLICATE: Y (N)	
Filtration Equipment Type:					
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)
MW-11	2	PE	1 Ltr	HN03	None
"	1	PE	500 mL	H2S04	None
"	1	PE	250 mL	HN03	None
"	12	PE	500 mL	None	None
INTENDED ANALYSIS AND/OR METHOD				SAMPLING EQUIPMENT CODE	
GrossAlpha, RA226, RA228				ESP	
Total Ammonia				ESP	
Metals				ESP	
Chloride, Fluoride, Nitrate, TDS				ESP	

REMARKS:

1013: Inserted SS ESP and dedicated 3/8" PE tubing to ~35' b/c and began purging @ .5 gpm. This well typically is extremely turbid at beginning of purge requiring over purging to clean it up.

1023: Turbidity is @ 15 NTUs. WL 27.31 @ .5 gpm, draw down is stable.

1027: WL 27.31 @ .5 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 APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump

EQUIPMENT CODES: RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

Notes: 1. The above do not constitute all the information required by Chapter 62-180, 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)

PURGING DATA

PURGING DATA

SAMPLING DATA

REMARKS:

Field decont. SS ESP, WL probe, and 5 gallon PE bucket IAW DEP-SOP-001/01, FL 1000 and poured 2 gallons of DI water into PE bucket. Inserted SS ESP and WL probe and started pump. Circulated DI water through pump and over WL probe for several minutes. Collected EOB samples from 5 gallon PE bucket using an intermediate container.

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 Tran; O = Other (Specify)

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: $\pm 5\%$; Dissolved Oxygen: all readings $\geq 20\%$ saturation (see Table FS 2200-2), optionally, $\pm .02$ mg/L or $\pm 10\%$ (whichever is greater); Turbidity: all readings ≤ 20 NTU or ± 5 NTU or $\pm 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: Sumter County Landfill		SITE LOCATION: Sumterville, FL	
WELL NO: MW-4A	SAMPLE ID: MW-4A	DATE: 3/2/11	

PURGING DATA

WELL 2" PVC DIAMETER (Inches):	TUBING 3/8" DIAMETER (Inches):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH 32.6' 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)											
= (45.23' feet - 32.6' feet) X 1.245 gallons/foot = 16.2 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 45') + .125 gallons = .405 gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): ~40'	FINAL PUMP OR TUBING DEPTH IN WELL (feet): ~40'	PURGING INITIATED AT: 1454	PURGING ENDED AT: 1511	TOTAL VOLUME PURGED (gallons): 5.20							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µS/cm)	DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1507	5.30	5.30	.1	32.64	7.07	26.30	677	.28	8.55	Clear	None
1509	.2	5.50	.1	32.64	7.05	26.32	677	.30	8.53	Clear	None
1511	.2	5.70	.1	32.64	7.02	26.52	679	.30	7.51	Clear	None
No screen											
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" = 0.0008; 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: 1512	SAMPLING ENDED AT: 1525			
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 Filtration Equipment Type: _____		FILTER SIZE: _____ µm				
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	---	Gross Alpha, RA226RA228	ESP
"	1	PE	500 mL	H2S04	None	---	Total Ammonia	ESP
"	1	PE	500 mL	HN03	None	---	Metals	ESP
"	12	PE	500 mL	None	None	---	Chloride, Fluoride, Nitrate, TDS	ESP

REMARKS:
1454: Inserted SS ESP and dedicated 3/8" PE tubing for 40' stop and began purging @ .5 gpm. This well typically is turbid at beginning of purge requiring over purging at a higher flow rate to clean it up.
1500: Turbidity is @ 23 NTUs, continuing to purge.
1504: Turbidity is @ 13 NTUs, reduced flow to .1 gpm.
1506: WL 32.64 @ .1 gpm, GW is clear. Drawdown is 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; RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

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 ≤ 70 NTU, optionally, ± 5 NTU or ± 10% (whichever is greater)



Advanced
Environmental Laboratories, Inc.

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CLIENT NAME: The Colinas Group, Inc.		PROJECT LOCATION: Sumter Co. Landfill - GW Sampling		BOTTLE SIZE & TYPE 1LP		ANALYSIS REQUIRED Gross Alpha		PRESERVATION N		NO. COUNT 6		MATRIX W		SAMPLING DATE 3/2/11		TIME 0920		Grab Comp G		SAMPLE DESCRIPTION Equipment Blank		SAMPLE ID	
ADDRESS: 509 North Virginia Ave		P.O. NUMBER/PROJECT NUMBER: P-431		1LP		Ra 226 + Ra 228		N		6		W		3/2/11		1140		G		MW-2			
PHONE: 407-622-8176		PROJECT LOCATION: Sumterville, FL		250 mL P		SB, AI, Cd, Cr, Fe, Pb, Mn, Hg, Ag, Na, TI		N		6		W		3/2/11		1440		G		MW-4			
FAX: 407-622-8196		REMARKS/SPECIAL INSTRUCTIONS:		250 mL P		TDS		-		6		W		3/2/11		1525		G		MW-4A			
CONTACT: Dale Clayton				125 mL P		Ammonia		S		6		W		3/2/11		1352		G		MW-4B			
SAMPLED BY: Dale Clayton				125 mL P		F, Cl, NO3		-		6		W		3/2/11		0933		G		MW-6A			
TURN AROUND TIME: □ STANDARD □ RUSH				125 mL P						6		W		3/2/11		1135		G		MW-8			
				125 mL P						6		W		3/2/11		1042		G		MW-9A			
				125 mL P						6		W		3/2/11		1255		G		MW-10			
				125 mL P						6		W		3/2/11		1045		G		MW-11			

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge
 Received on ice ☒ Des ☐ No ☐ Temp taken from sample ☐ Temp from temp blank ☐ Where required, pH checked
 Form revised 2/8/03

Relinquished by: [Signature] Date: 3/2/11 Time: 1301
 Received by: [Signature] Date: 3/2/11 Time: 1341

FOR DRINKING WATER USE:
 (Where PWS information not otherwise supplied) PWS ID: _____
 Contained Person: _____ Phone: _____
 Supplier of Water: _____
 Site Address: _____