

June 3, 2011

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

RE: Workorder: A1103556 Sumter Co Landfill - GW Sampli

Dear Rick Potts:

Enclosed are the analytical results for sample(s) received by the laboratory on Wednesday, May 18, 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: A1103556 Sumter Co Landfill - GW Sampli

Lab ID	Sample ID	Matrix	Date Collected	Date Received
A1103556001	EQ Blank	Water	5/17/2011 10:45	5/18/2011 14:46
A1103556002	MW-2	Water	5/18/2011 12:05	5/18/2011 14:46
A1103556003	MW-4	Water	5/17/2011 13:20	5/18/2011 14:46
A1103556004	MW-4A	Water	5/17/2011 12:30	5/18/2011 14:46
A1103556005	MW-4B	Water	5/17/2011 14:15	5/18/2011 14:46
A1103556006	MW-6A	Water	5/18/2011 13:20	5/18/2011 14:46
A1103556007	MW-8	Water	5/18/2011 10:15	5/18/2011 14:46
A1103556008	MW-9A	Water	5/18/2011 09:35	5/18/2011 14:46
A1103556009	MW-10	Water	5/18/2011 11:15	5/18/2011 14:46
A1103556010	MW-11	Water	5/17/2011 11:45	5/18/2011 14:46

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## ANALYTICAL RESULTS

Workorder: A1103556 Sumter Co Landfill - GW Sampli

Lab ID: **A1103556001**

Date Received: 05/18/11 14:46 Matrix: Water

Sample ID: **EQ Blank**

Date Collected: 05/17/11 10:45

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>METALS</b>								
Analysis Desc: SW846 6010B			Preparation Method: SW-846 3010A					
Analysis, Water			Analytical Method: SW-846 6010					
Aluminum	210	ug/L		1	200	61	5/20/2011 17:32	J
Cadmium	0.32	ug/L	U	1	0.60	0.32	5/20/2011 17:32	J
Chromium	0.76	ug/L	I	1	4.0	0.50	5/20/2011 17:32	J
Iron	38	ug/L	U	1	200	38	5/20/2011 17:32	J
Manganese	0.62	ug/L	I	1	1.0	0.24	5/20/2011 17:32	J
Sodium	0.032	mg/L	I	1	0.20	0.026	5/20/2011 17:32	J
Analysis Desc: SW846 6020B			Preparation Method: SW-846 3010A					
Analysis, Total			Analytical Method: SW-846 6020					
Antimony	0.51	ug/L	I	1	0.60	0.073	5/26/2011 01:59	J
Lead	0.076	ug/L	U	1	0.70	0.076	5/26/2011 01:59	J
Silver	0.059	ug/L	U	1	0.30	0.059	5/26/2011 01:59	J
Thallium	0.067	ug/L	U	1	0.20	0.067	5/26/2011 01:59	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	5/19/2011 16:26	J
<b>WET CHEMISTRY</b>								
Analysis Desc: IC,E300.0,Water			Analytical Method: EPA 300.0					
Chloride	1.2	mg/L	U	1	10	1.2	5/19/2011 15:36	A
Fluoride	0.0098	mg/L	U	1	0.20	0.0098	5/19/2011 15:36	A
Nitrate	0.053	mg/L	U	1	0.20	0.053	5/19/2011 15:36	A
Analysis Desc: Ammonia,E350.1,Water			Analytical Method: EPA 350.1					
Ammonia (N)	0.025	mg/L	U	1	0.10	0.025	5/23/2011 11:56	T
Analysis Desc: Tot Dissolved Solids,SM2540C			Analytical Method: SM 2540C					
Total Dissolved Solids	10	mg/L	U	1	10	10	5/23/2011 09:28	T

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## ANALYTICAL RESULTS

Workorder: A1103556 Sumter Co Landfill - GW Sampli

Lab ID: **A1103556002**

Date Received: 05/18/11 14:46 Matrix: Water

Sample ID: **MW-2**

Date Collected: 05/18/11 12:05

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>FIELD PARAMETERS</b>								
Analysis Desc: FIELD - Conductance			Analytical Method: DISRES					
Conductance	210	umhos/cm		1			5/18/2011 12:05	A^
Dissolved Oxygen	5.02	mg/L		1			5/18/2011 12:05	A^
Groundwater Elevation	44.67	feet		1			5/18/2011 12:05	A^
Temperature	25.54	°C		1			5/18/2011 12:05	A^
Turbidity	0.55	NTU		1			5/18/2011 12:05	A^
pH	6.94	pH unit		1			5/18/2011 12:05	A^
<b>METALS</b>								
Analysis Desc: Ammonia,E350.1,Water			Analytical Method: EPA 350.1					
Ammonia (N)	0.025	mg/L	U	1	0.10	0.025	5/23/2011 11:56	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	5/20/2011 12:53	J
Cadmium	0.32	ug/L	U	1	0.60	0.32	5/20/2011 12:53	J
Chromium	0.50	ug/L	U	1	4.0	0.50	5/20/2011 12:53	J
Iron	38	ug/L	U	1	200	38	5/20/2011 12:53	J
Manganese	0.26	ug/L	I	1	1.0	0.24	5/20/2011 12:53	J
Sodium	0.085	mg/L	I	1	0.20	0.026	5/20/2011 12:53	J
Analysis Desc: SW846 6020B Analysis,Total			Preparation Method: SW-846 3010A Analytical Method: SW-846 6020					
Antimony	0.47	ug/L	I	1	0.60	0.073	5/26/2011 02:08	J
Lead	0.076	ug/L	U	1	0.70	0.076	5/26/2011 02:08	J
Silver	0.059	ug/L	U	1	0.30	0.059	5/26/2011 02:08	J
Thallium	0.067	ug/L	U	1	0.20	0.067	5/26/2011 02:08	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	5/19/2011 16:16	J
<b>WET CHEMISTRY</b>								
Analysis Desc: IC,E300.0,Water			Analytical Method: EPA 300.0					
Chloride	6.8	mg/L	I	1	10	1.2	5/19/2011 15:52	A
Fluoride	0.0098	mg/L	U	1	0.20	0.0098	5/19/2011 15:52	A
Nitrate	2.8	mg/L		1	0.20	0.053	5/19/2011 15:52	A

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## ANALYTICAL RESULTS

Workorder: A1103556 Sumter Co Landfill - GW Sampli

Lab ID: **A1103556002** Date Received: 05/18/11 14:46 Matrix: Water  
Sample ID: **MW-2** Date Collected: 05/18/11 12:05

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	120	mg/L		1	10	10	5/23/2011 09:28	T

Lab ID: **A1103556003** Date Received: 05/18/11 14:46 Matrix: Water  
Sample ID: **MW-4** Date Collected: 05/17/11 13:20

Sample Description: Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>FIELD PARAMETERS</b>								
Analysis Desc: FIELD - Conductance		Analytical Method: DISRES						
Conductance	587	umhos/cm		1			5/17/2011 13:20	A^
Dissolved Oxygen	1.26	mg/L		1			5/17/2011 13:20	A^
Groundwater Elevation	44.48	feet		1			5/17/2011 13:20	A^
Temperature	25.87	°C		1			5/17/2011 13:20	A^
Turbidity	8.21	NTU		1			5/17/2011 13:20	A^
pH	7.07	pH unit		1			5/17/2011 13:20	A^

### METALS

Analysis Desc: SW846 6010B		Preparation Method: SW-846 3010A						
Analysis,Water		Analytical Method: SW-846 6010						
Aluminum	280	ug/L		1	200	61	5/20/2011 12:58	J
Cadmium	0.32	ug/L	U	1	0.60	0.32	5/20/2011 12:58	J
Chromium	17	ug/L		1	4.0	0.50	5/20/2011 12:58	J
Iron	130	ug/L	I	1	200	38	5/20/2011 12:58	J
Manganese	5.2	ug/L		1	1.0	0.24	5/20/2011 12:58	J
Sodium	40	mg/L		1	0.20	0.026	5/20/2011 12:58	J
Analysis Desc: SW846 6020B		Preparation Method: SW-846 3010A						
Analysis,Total		Analytical Method: SW-846 6020						
Antimony	0.22	ug/L	I	1	0.60	0.073	5/26/2011 02:18	J
Lead	0.52	ug/L	I	1	0.70	0.076	5/26/2011 02:18	J
Silver	0.059	ug/L	U	1	0.30	0.059	5/26/2011 02:18	J
Thallium	0.067	ug/L	U	1	0.20	0.067	5/26/2011 02:18	J

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## ANALYTICAL RESULTS

Workorder: A1103556 Sumter Co Landfill - GW Sampli

Lab ID: **A1103556003** Date Received: 05/18/11 14:46 Matrix: Water  
Sample ID: **MW-4** Date Collected: 05/17/11 13:20

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	<b>0.014</b>	ug/L	<b>U</b>	<b>1</b>	0.10	0.014	5/19/2011 16:27	J
<b>WET CHEMISTRY</b>								
Analysis Desc: IC,E300.0,Water		Analytical Method: EPA 300.0						
Chloride	<b>20</b>	mg/L		<b>1</b>	10	1.2	5/19/2011 16:41	A
Fluoride	<b>0.040</b>	mg/L	<b>I</b>	<b>1</b>	0.20	0.0098	5/19/2011 16:41	A
Nitrate	<b>7.7</b>	mg/L		<b>1</b>	0.20	0.053	5/19/2011 16:41	A
Analysis Desc: Ammonia,E350.1,Water		Analytical Method: EPA 350.1						
Ammonia (N)	<b>0.025</b>	mg/L	<b>U</b>	<b>1</b>	0.10	0.025	5/23/2011 11:56	T
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540C						
Total Dissolved Solids	<b>350</b>	mg/L		<b>1</b>	10	10	5/23/2011 09:28	T

Lab ID: **A1103556004** Date Received: 05/18/11 14:46 Matrix: Water  
Sample ID: **MW-4A** Date Collected: 05/17/11 12:30

Sample Description: Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: FIELD - Conductance		Analytical Method: DISRES						
Conductance	<b>673</b>	umhos/cm		<b>1</b>			5/17/2011 12:30	A^
Dissolved Oxygen	<b>0.89</b>	mg/L		<b>1</b>			5/17/2011 12:30	A^
Groundwater Elevation	<b>44.66</b>	feet		<b>1</b>			5/17/2011 12:30	A^
Temperature	<b>26.27</b>	°C		<b>1</b>			5/17/2011 12:30	A^
Turbidity	<b>4.45</b>	NTU		<b>1</b>			5/17/2011 12:30	A^
pH	<b>6.88</b>	pH unit		<b>1</b>			5/17/2011 12:30	A^

### METALS

Analysis Desc: SW846 6010B		Preparation Method: SW-846 3010A						
Analysis, Water		Analytical Method: SW-846 6010						
Aluminum	<b>61</b>	ug/L	<b>U</b>	<b>1</b>	200	61	5/20/2011 13:03	J

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## ANALYTICAL RESULTS

Workorder: A1103556 Sumter Co Landfill - GW Sampli

Lab ID: **A1103556004**

Date Received: 05/18/11 14:46 Matrix: Water

Sample ID: **MW-4A**

Date Collected: 05/17/11 12:30

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	5/20/2011 13:03	J
Chromium	1.5	ug/L	I	1	4.0	0.50	5/20/2011 13:03	J
Iron	38	ug/L	U	1	200	38	5/20/2011 13:03	J
Manganese	2.1	ug/L		1	1.0	0.24	5/20/2011 13:03	J
Sodium	26	mg/L		1	0.20	0.026	5/20/2011 13:03	J

Analysis Desc: SW846 6020B  
Analysis, Total

Preparation Method: SW-846 3010A

Analytical Method: SW-846 6020

Antimony	0.11	ug/L	I	1	0.60	0.073	5/26/2011 02:27	J
Lead	0.076	ug/L	U	1	0.70	0.076	5/26/2011 02:27	J
Silver	0.059	ug/L	U	1	0.30	0.059	5/26/2011 02:27	J
Thallium	0.17	ug/L	I	1	0.20	0.067	5/26/2011 02:27	J

Analysis Desc: SW846 7470A  
Analysis, Water

Preparation Method: SW-846 7470A

Analytical Method: SW-846 7470A

Mercury	0.033	ug/L	I	1	0.10	0.014	5/19/2011 16:29	J
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### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water

Analytical Method: EPA 300.0

Chloride	27	mg/L		1	10	1.2	5/19/2011 16:58	A
Fluoride	0.0098	mg/L	U	1	0.20	0.0098	5/19/2011 16:58	A
Nitrate	14	mg/L		2	0.40	0.11	5/19/2011 17:14	A

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	0.025	mg/L	U	1	0.10	0.025	5/23/2011 11:56	T
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Analysis Desc: Tot Dissolved Solids,SM2540C

Analytical Method: SM 2540C

Total Dissolved Solids	420	mg/L		1	10	10	5/23/2011 09:28	T
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Lab ID: **A1103556005**

Date Received: 05/18/11 14:46 Matrix: Water

Sample ID: **MW-4B**

Date Collected: 05/17/11 14:15

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: A1103556 Sumter Co Landfill - GW Sampli

Lab ID: **A1103556005**

Date Received: 05/18/11 14:46 Matrix: Water

Sample ID: **MW-4B**

Date Collected: 05/17/11 14:15

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: FIELD - Conductance		Analytical Method: DISRES						
Conductance	126	umhos/cm		1			5/17/2011 14:15	A^
Dissolved Oxygen	5.67	mg/L		1			5/17/2011 14:15	A^
Groundwater Elevation	44.69	feet		1			5/17/2011 14:15	A^
Temperature	25.77	°C		1			5/17/2011 14:15	A^
Turbidity	6.07	NTU		1			5/17/2011 14:15	A^
pH	8.69	pH unit		1			5/17/2011 14:15	A^

### METALS

Analysis Desc: SW846 6010B  
Analysis, Water

Preparation Method: SW-846 3010A

Analytical Method: SW-846 6010

Aluminum	460	ug/L		1	200	61	5/20/2011 13:09	J
Cadmium	0.32	ug/L	U	1	0.60	0.32	5/20/2011 13:09	J
Chromium	3.9	ug/L	I	1	4.0	0.50	5/20/2011 13:09	J
Iron	38	ug/L	U	1	200	38	5/20/2011 13:09	J
Manganese	0.24	ug/L	U	1	1.0	0.24	5/20/2011 13:09	J
Sodium	9.6	mg/L		1	0.20	0.026	5/20/2011 13:09	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	5/26/2011 02:36	J
Lead	0.26	ug/L	I	1	0.70	0.076	5/26/2011 02:36	J
Silver	0.059	ug/L	U	1	0.30	0.059	5/26/2011 02:36	J
Thallium	0.067	ug/L	U	1	0.20	0.067	5/26/2011 02:36	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	5/19/2011 16:34	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	1.2	5/19/2011 17:31	A
Fluoride	0.0098	mg/L	U	1	0.20	0.0098	5/19/2011 17:31	A
Nitrate	3.3	mg/L		1	0.20	0.053	5/19/2011 17:31	A

Analysis Desc: Ammonia,E350.1, Water

Analytical Method: EPA 350.1

Ammonia (N)	0.025	mg/L	U	1	0.10	0.025	5/23/2011 11:56	T
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## ANALYTICAL RESULTS

Workorder: A1103556 Sumter Co Landfill - GW Sampli

Lab ID: **A1103556005**

Date Received: 05/18/11 14:46 Matrix: Water

Sample ID: **MW-4B**

Date Collected: 05/17/11 14:15

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	<b>72</b>	<b>mg/L</b>		<b>1</b>	10	10	5/23/2011 09:28	T

Lab ID: **A1103556006**

Date Received: 05/18/11 14:46 Matrix: Water

Sample ID: **MW-6A**

Date Collected: 05/18/11 13:20

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>FIELD PARAMETERS</b>								
Analysis Desc: FIELD - Conductance		Analytical Method: DISRES						
Conductance	<b>257</b>	<b>umhos/cm</b>		<b>1</b>			5/18/2011 13:20	A^
Dissolved Oxygen	<b>7.54</b>	<b>mg/L</b>		<b>1</b>			5/18/2011 13:20	A^
Groundwater Elevation	<b>44.89</b>	<b>feet</b>		<b>1</b>			5/18/2011 13:20	A^
Temperature	<b>24.76</b>	<b>°C</b>		<b>1</b>			5/18/2011 13:20	A^
Turbidity	<b>9.2</b>	<b>NTU</b>		<b>1</b>			5/18/2011 13:20	A^
pH	<b>7.57</b>	<b>pH unit</b>		<b>1</b>			5/18/2011 13:20	A^

### METALS

Analysis Desc: SW846 6010B		Preparation Method: SW-846 3010A						
Analysis, Water		Analytical Method: SW-846 6010						
Aluminum	<b>61</b>	<b>ug/L</b>	<b>U</b>	<b>1</b>	200	61	5/20/2011 13:14	J
Cadmium	<b>0.32</b>	<b>ug/L</b>	<b>U</b>	<b>1</b>	0.60	0.32	5/20/2011 13:14	J
Chromium	<b>8.2</b>	<b>ug/L</b>		<b>1</b>	4.0	0.50	5/20/2011 13:14	J
Iron	<b>38</b>	<b>ug/L</b>	<b>U</b>	<b>1</b>	200	38	5/20/2011 13:14	J
Manganese	<b>0.89</b>	<b>ug/L</b>	<b>I</b>	<b>1</b>	1.0	0.24	5/20/2011 13:14	J
Sodium	<b>3.0</b>	<b>mg/L</b>		<b>1</b>	0.20	0.026	5/20/2011 13:14	J
Analysis Desc: SW846 6020B		Preparation Method: SW-846 3010A						
Analysis, Total		Analytical Method: SW-846 6020						
Antimony	<b>0.073</b>	<b>ug/L</b>	<b>U</b>	<b>1</b>	0.60	0.073	5/26/2011 02:45	J
Lead	<b>0.076</b>	<b>ug/L</b>	<b>U</b>	<b>1</b>	0.70	0.076	5/26/2011 02:45	J
Silver	<b>0.059</b>	<b>ug/L</b>	<b>U</b>	<b>1</b>	0.30	0.059	5/26/2011 02:45	J
Thallium	<b>0.067</b>	<b>ug/L</b>	<b>U</b>	<b>1</b>	0.20	0.067	5/26/2011 02:45	J

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## ANALYTICAL RESULTS

Workorder: A1103556 Sumter Co Landfill - GW Sampli

Lab ID: **A1103556006**

Date Received: 05/18/11 14:46 Matrix: Water

Sample ID: **MW-6A**

Date Collected: 05/18/11 13:20

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	0.028	ug/L	I	1	0.10	0.014	5/19/2011 16:36	J
<b>WET CHEMISTRY</b>								
Analysis Desc: IC,E300.0,Water		Analytical Method: EPA 300.0						
Chloride	8.6	mg/L	I	1	10	1.2	5/19/2011 17:47	A
Fluoride	0.0098	mg/L	U	1	0.20	0.0098	5/19/2011 17:47	A
Nitrate	6.6	mg/L		1	0.20	0.053	5/19/2011 17:47	A
Analysis Desc: Ammonia,E350.1,Water		Analytical Method: EPA 350.1						
Ammonia (N)	0.025	mg/L	U	1	0.10	0.025	5/23/2011 11:56	T
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540C						
Total Dissolved Solids	190	mg/L		1	10	10	5/23/2011 09:28	T

Lab ID: **A1103556007**

Date Received: 05/18/11 14:46 Matrix: Water

Sample ID: **MW-8**

Date Collected: 05/18/11 10:15

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: FIELD - Conductance		Analytical Method: DISRES						
Conductance	345	umhos/cm		1			5/18/2011 10:15	A^
Dissolved Oxygen	4.78	mg/L		1			5/18/2011 10:15	A^
Groundwater Elevation	45.84	feet		1			5/18/2011 10:15	A^
Temperature	23.8	°C		1			5/18/2011 10:15	A^
Turbidity	2.44	NTU		1			5/18/2011 10:15	A^
pH	7	pH unit		1			5/18/2011 10:15	A^

### METALS

Analysis Desc: SW846 6010B		Preparation Method: SW-846 3010A						
Analysis, Water		Analytical Method: SW-846 6010						
Aluminum	61	ug/L	U	1	200	61	5/20/2011 13:19	J

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## ANALYTICAL RESULTS

Workorder: A1103556 Sumter Co Landfill - GW Sampli

Lab ID: **A1103556007**

Date Received: 05/18/11 14:46 Matrix: Water

Sample ID: **MW-8**

Date Collected: 05/18/11 10:15

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	5/20/2011 13:19	J
Chromium	3.6	ug/L	I	1	4.0	0.50	5/20/2011 13:19	J
Iron	38	ug/L	U	1	200	38	5/20/2011 13:19	J
Manganese	0.57	ug/L	I	1	1.0	0.24	5/20/2011 13:19	J
Sodium	5.2	mg/L		1	0.20	0.026	5/20/2011 13:19	J

Analysis Desc: SW846 6020B  
Analysis, Total

Preparation Method: SW-846 3010A

Analytical Method: SW-846 6020

Antimony	0.073	ug/L	I	1	0.60	0.073	5/26/2011 02:55	J
Lead	0.076	ug/L	U	1	0.70	0.076	5/26/2011 02:55	J
Silver	0.059	ug/L	U	1	0.30	0.059	5/26/2011 02:55	J
Thallium	0.067	ug/L	U	1	0.20	0.067	5/26/2011 02:55	J

Analysis Desc: SW846 7470A  
Analysis, Water

Preparation Method: SW-846 7470A

Analytical Method: SW-846 7470A

Mercury	0.019	ug/L	I	1	0.10	0.014	5/19/2011 16:38	J
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### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water

Analytical Method: EPA 300.0

Chloride	8.7	mg/L	I	1	10	1.2	5/19/2011 18:03	A
Fluoride	0.0098	mg/L	U	1	0.20	0.0098	5/19/2011 18:03	A
Nitrate	2.1	mg/L		1	0.20	0.053	5/19/2011 18:03	A

Analysis Desc: Ammonia,E350.1,Water

Analytical Method: EPA 350.1

Ammonia (N)	0.025	mg/L	U	1	0.10	0.025	5/23/2011 11:56	T
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Analysis Desc: Tot Dissolved  
Solids,SM2540C

Analytical Method: SM 2540C

Total Dissolved Solids	210	mg/L		1	10	10	5/23/2011 09:28	T
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Lab ID: **A1103556008**

Date Received: 05/18/11 14:46 Matrix: Water

Sample ID: **MW-9A**

Date Collected: 05/18/11 09:35

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: A1103556 Sumter Co Landfill - GW Sampli

Lab ID: **A1103556008**  
Sample ID: **MW-9A**

Date Received: 05/18/11 14:46 Matrix: Water  
Date Collected: 05/18/11 09:35

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: FIELD - Conductance		Analytical Method: DISRES						
Conductance	898	umhos/cm		1			5/18/2011 09:35	A^
Dissolved Oxygen	0.67	mg/L		1			5/18/2011 09:35	A^
Groundwater Elevation	43.67	feet		1			5/18/2011 09:35	A^
Temperature	25.06	°C		1			5/18/2011 09:35	A^
Turbidity	14.1	NTU		1			5/18/2011 09:35	A^
pH	6.39	pH unit		1			5/18/2011 09:35	A^

### METALS

Analysis Desc: SW846 6010B		Preparation Method: SW-846 3010A						
Analysis, Water		Analytical Method: SW-846 6010						
Aluminum	550	ug/L		1	200	61	5/20/2011 13:45	J
Cadmium	1.4	ug/L		1	0.60	0.32	5/20/2011 13:45	J
Chromium	9.4	ug/L		1	4.0	0.50	5/20/2011 13:45	J
Iron	940	ug/L		1	200	38	5/20/2011 13:45	J
Manganese	91	ug/L		1	1.0	0.24	5/20/2011 13:45	J
Sodium	20	mg/L		1	0.20	0.026	5/20/2011 13:45	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	5/26/2011 03:04	J
Lead	0.55	ug/L	I	1	0.70	0.076	5/26/2011 03:04	J
Silver	0.059	ug/L	U	1	0.30	0.059	5/26/2011 03:04	J
Thallium	0.13	ug/L	I	1	0.20	0.067	5/26/2011 03:04	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	5/19/2011 16:39	J

### WET CHEMISTRY

Analysis Desc: IC,E300.0, Water		Analytical Method: EPA 300.0						
Chloride	24	mg/L		1	10	1.2	5/19/2011 18:20	A
Fluoride	0.090	mg/L	I	1	0.20	0.0098	5/19/2011 18:20	A
Nitrate	0.24	mg/L		1	0.20	0.053	5/19/2011 18:20	A

Analysis Desc: Ammonia,E350.1, Water		Analytical Method: EPA 350.1						
Ammonia (N)	0.40	mg/L		1	0.10	0.025	5/23/2011 11:56	T

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## ANALYTICAL RESULTS

Workorder: A1103556 Sumter Co Landfill - GW Sampli

Lab ID: **A1103556008**

Date Received: 05/18/11 14:46 Matrix: Water

Sample ID: **MW-9A**

Date Collected: 05/18/11 09:35

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	<b>540</b>	<b>mg/L</b>		<b>1</b>	10	10	5/23/2011 09:28	T

Lab ID: **A1103556009**

Date Received: 05/18/11 14:46 Matrix: Water

Sample ID: **MW-10**

Date Collected: 05/18/11 11:15

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
<b>FIELD PARAMETERS</b>								
Analysis Desc: FIELD - Conductance		Analytical Method: DISRES						
Conductance	<b>540</b>	<b>umhos/cm</b>		<b>1</b>			5/18/2011 11:15	A^
Dissolved Oxygen	<b>1.47</b>	<b>mg/L</b>		<b>1</b>			5/18/2011 11:15	A^
Groundwater Elevation	<b>44.78</b>	<b>feet</b>		<b>1</b>			5/18/2011 11:15	A^
Temperature	<b>25.09</b>	<b>°C</b>		<b>1</b>			5/18/2011 11:15	A^
Turbidity	<b>18.2</b>	<b>NTU</b>		<b>1</b>			5/18/2011 11:15	A^
pH	<b>6.84</b>	<b>pH unit</b>		<b>1</b>			5/18/2011 11:15	A^

### METALS

Analysis Desc: SW846 6010B		Preparation Method: SW-846 3010A						
Analysis,Water		Analytical Method: SW-846 6010						
Aluminum	<b>610</b>	<b>ug/L</b>		<b>1</b>	200	61	5/20/2011 13:50	J
Cadmium	<b>0.32</b>	<b>ug/L</b>	<b>U</b>	<b>1</b>	0.60	0.32	5/20/2011 13:50	J
Chromium	<b>7.7</b>	<b>ug/L</b>		<b>1</b>	4.0	0.50	5/20/2011 13:50	J
Iron	<b>570</b>	<b>ug/L</b>		<b>1</b>	200	38	5/20/2011 13:50	J
Manganese	<b>23</b>	<b>ug/L</b>		<b>1</b>	1.0	0.24	5/20/2011 13:50	J
Sodium	<b>6.9</b>	<b>mg/L</b>		<b>1</b>	0.20	0.026	5/20/2011 13:50	J
Analysis Desc: SW846 6020B		Preparation Method: SW-846 3010A						
Analysis,Total		Analytical Method: SW-846 6020						
Antimony	<b>0.22</b>	<b>ug/L</b>	<b>I</b>	<b>1</b>	0.60	0.073	5/26/2011 01:04	J
Lead	<b>0.67</b>	<b>ug/L</b>	<b>I</b>	<b>1</b>	0.70	0.076	5/26/2011 01:04	J
Silver	<b>0.059</b>	<b>ug/L</b>	<b>U</b>	<b>1</b>	0.30	0.059	5/26/2011 01:04	J
Thallium	<b>0.14</b>	<b>ug/L</b>	<b>I</b>	<b>1</b>	0.20	0.067	5/26/2011 01:04	J

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## ANALYTICAL RESULTS

Workorder: A1103556 Sumter Co Landfill - GW Sampli

Lab ID: **A1103556009**

Date Received: 05/18/11 14:46 Matrix: Water

Sample ID: **MW-10**

Date Collected: 05/18/11 11:15

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	<b>0.033</b>	ug/L	I	1	0.10	0.014	5/19/2011 16:41	J

### WET CHEMISTRY

Analysis Desc: IC,E300.0,Water		Analytical Method: EPA 300.0						
Chloride	<b>7.4</b>	mg/L	I	1	10	1.2	5/19/2011 19:09	A
Fluoride	<b>0.0098</b>	mg/L	U	1	0.20	0.0098	5/19/2011 19:09	A
Nitrate	<b>2.5</b>	mg/L		1	0.20	0.053	5/19/2011 19:09	A
Analysis Desc: Ammonia,E350.1,Water		Analytical Method: EPA 350.1						
Ammonia (N)	<b>0.025</b>	mg/L	U	1	0.10	0.025	5/23/2011 11:56	T
Analysis Desc: Tot Dissolved Solids,SM2540C		Analytical Method: SM 2540C						
Total Dissolved Solids	<b>300</b>	mg/L		1	10	10	5/23/2011 09:28	T

Lab ID: **A1103556010**

Date Received: 05/18/11 14:46 Matrix: Water

Sample ID: **MW-11**

Date Collected: 05/17/11 11:45

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Analysis Desc: FIELD - Conductance		Analytical Method: DISRES						
Conductance	<b>532</b>	umhos/cm		1			5/17/2011 11:45	A^
Dissolved Oxygen	<b>1.56</b>	mg/L		1			5/17/2011 11:45	A^
Groundwater Elevation	<b>44.57</b>	feet		1			5/17/2011 11:45	A^
Temperature	<b>25.59</b>	°C		1			5/17/2011 11:45	A^
Turbidity	<b>12.8</b>	NTU		1			5/17/2011 11:45	A^
pH	<b>6.28</b>	pH unit		1			5/17/2011 11:45	A^

### METALS

Analysis Desc: SW846 6010B		Preparation Method: SW-846 3010A						
Analysis, Water		Analytical Method: SW-846 6010						
Aluminum	<b>420</b>	ug/L		1	200	61	5/20/2011 12:04	J

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## ANALYTICAL RESULTS

Workorder: A1103556 Sumter Co Landfill - GW Sampli

Lab ID: **A1103556010**

Date Received: 05/18/11 14:46 Matrix: Water

Sample ID: **MW-11**

Date Collected: 05/17/11 11:45

Sample Description:

Location:

Parameters	Results	Units	Qual	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Cadmium	1.7	ug/L		1	0.60	0.32	5/20/2011 12:04	J
Chromium	7.5	ug/L		1	4.0	0.50	5/20/2011 12:04	J
Iron	100	ug/L	I	1	200	38	5/20/2011 12:04	J
Manganese	3.6	ug/L		1	1.0	0.24	5/20/2011 12:04	J
Sodium	9.1	mg/L		1	0.20	0.026	5/20/2011 12:04	J

Analysis Desc: SW846 6020B  
Analysis, Total

Preparation Method: SW-846 3010A

Analytical Method: SW-846 6020

Antimony	0.10	ug/L	I	1	0.60	0.073	5/26/2011 03:13	J
Lead	0.62	ug/L	I	1	0.70	0.076	5/26/2011 03:13	J
Silver	0.059	ug/L	U	1	0.30	0.059	5/26/2011 03:13	J
Thallium	0.067	ug/L	U	1	0.20	0.067	5/26/2011 03:13	J

Analysis Desc: SW846 7470A  
Analysis, Water

Preparation Method: SW-846 7470A

Analytical Method: SW-846 7470A

Mercury	0.084	ug/L	I	1	0.10	0.014	5/19/2011 16:43	J
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### WET CHEMISTRY

Analysis Desc: IC, E300.0, Water

Analytical Method: EPA 300.0

Chloride	3.8	mg/L	I	1	10	1.2	5/19/2011 20:15	A
Fluoride	0.090	mg/L	I	1	0.20	0.0098	5/19/2011 20:15	A
Nitrate	4.8	mg/L		1	0.20	0.053	5/19/2011 20:15	A

Analysis Desc: Ammonia, E350.1, Water

Analytical Method: EPA 350.1

Ammonia (N)	0.025	mg/L	U	1	0.10	0.025	5/23/2011 11:56	T
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Analysis Desc: Tot Dissolved  
Solids, SM2540C

Analytical Method: SM 2540C

Total Dissolved Solids	300	mg/L		1	10	10	5/23/2011 09:28	T
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## ANALYTICAL RESULTS QUALIFIERS

Workorder: A1103556 Sumter Co Landfill - GW Sampli

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### 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: A1103556 Sumter Co Landfill - GW Sampli

QC Batch: DGMJ/22807 Analysis Method: SW-846 6010  
QC Batch Method: SW-846 3010A Prepared: 05/19/2011 10:30  
Associated Lab Samples: A1103556001, A1103556002, A1103556003, A1103556004, A1103556005, A1103556006, A1103556007, A1103556008,

METHOD BLANK: 738576

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
<b>METALS</b>				
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

LABORATORY CONTROL SAMPLE & LCSD: 738577 738578

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
<b>METALS</b>										
Aluminum	ug/L	25000	26000	25000	101	97	80-120	4	20	
Cadmium	ug/L	400	390	380	96	95	80-120	1	20	
Chromium	ug/L	400	390	380	97	95	80-120	2	20	
Iron	ug/L	25000	26000	24000	100	96	80-120	4	20	
Manganese	ug/L	400	390	380	98	96	80-120	2	20	
Sodium	mg/L	50	51	49	101	97	80-120	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 738579 738580 Original: A1103556010

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
<b>METALS</b>											
Aluminum	ug/L	420	25000	26000	26000	102	102	75-125	0	20	
Cadmium	ug/L	1.7	400	380	370	94	93	75-125	1	20	
Chromium	ug/L	7.5	400	390	390	96	96	75-125	1	20	
Iron	ug/L	100	25000	25000	25000	100	100	75-125	0	20	
Manganese	ug/L	3.6	400	390	390	97	96	75-125	1	20	
Sodium	mg/L	9.1	50	60	60	102	102	75-125	0	20	

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## QUALITY CONTROL DATA

Workorder: A1103556 Sumter Co Landfill - GW Sampli

QC Batch: DGMJ/22810 Analysis Method: SW-846 7470A  
QC Batch Method: SW-846 7470A Prepared: 05/19/2011 12:15  
Associated Lab Samples: A1103556001, A1103556002, A1103556003, A1103556004, A1103556005, A1103556006, A1103556007, A1103556008,  
METHOD BLANK: 738977

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

LABORATORY CONTROL SAMPLE & LCSD: 738978 738979

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS										
Mercury	ug/L	2	2.2	2.2	109	112	80-120	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 738980 738981 Original: A1103556002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Mercury	ug/L	0.0049	2	2.3	2.3	114	113	80-120	2	20	

QC Batch: WCAa/18823 Analysis Method: EPA 300.0  
QC Batch Method: EPA 300.0 Prepared:  
Associated Lab Samples: A1103556001, A1103556002, A1103556003, A1103556004, A1103556005, A1103556006, A1103556007, A1103556008,  
METHOD BLANK: 739609

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			
Fluoride	mg/L	0.0098	0.0098 U
Chloride	mg/L	1.2	1.2 U
Nitrate	mg/L	0.053	0.053 U

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## QUALITY CONTROL DATA

Workorder: A1103556 Sumter Co Landfill - GW Sampli

LABORATORY CONTROL SAMPLE: 739610

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Fluoride	mg/L	3	3.0	100	90-110	
Chloride	mg/L	30	28	92	90-110	
Nitrate	mg/L	3	2.8	94	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 739611 739612 Original: A1103556002

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	3	3.0	3.0	99	99	90-110	0	10	
Nitrate	mg/L	2.8	3	5.7	5.7	97	97	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 739613 739614 Original: A1103556008

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Chloride	mg/L	24	10	33	33	92	92	90-110	0	10	

QC Batch: WCAa/18824

Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0

Prepared:

Associated Lab Samples: A1103556010

METHOD BLANK: 739643

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Fluoride	mg/L	0.0098	0.0098 U	
Chloride	mg/L	1.2	1.2 U	
Nitrate	mg/L	0.053	0.053 U	

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## QUALITY CONTROL DATA

Workorder: A1103556 Sumter Co Landfill - GW Sampli

LABORATORY CONTROL SAMPLE: 739644

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Fluoride	mg/L	3	2.9	97	90-110	
Chloride	mg/L	30	27	91	90-110	
Nitrate	mg/L	3	2.8	94	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 739645 739646 Original: A1103557004

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Fluoride	mg/L	0	3	2.9	2.9	95	97	90-110	1	10	
Nitrate	mg/L	3.5	3	6.4	6.4	97	98	90-110	0	10	

QC Batch: DGMj/22818

Analysis Method: SW-846 6020

QC Batch Method: SW-846 3010A

Prepared: 05/20/2011 05:30

Associated Lab Samples: A1103556001, A1103556002, A1103556003, A1103556004, A1103556005, A1103556006, A1103556007, A1103556008,

METHOD BLANK: 739665

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: 739666 739667

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	103	104	85-115	1	20	
Thallium	ug/L	100	98	100	98	100	85-115	2	20	
Lead	ug/L	100	98	100	98	100	85-115	2	20	

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## QUALITY CONTROL DATA

Workorder: A1103556 Sumter Co Landfill - GW Sampli

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 739668 739669 Original: A1103556009

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
<b>METALS</b>											
Silver	ug/L	0.021	100	96	97	96	97	70-130	1	20	
Antimony	ug/L	0.22	100	100	100	102	103	70-130	1	20	
Thallium	ug/L	0.14	100	100	100	100	102	70-130	1	20	
Lead	ug/L	0.67	100	100	100	101	102	70-130	0	20	

QC Batch: WCAI/36723

Analysis Method: SM 2540C

QC Batch Method: SM 2540C

Prepared:

Associated Lab Samples: A1103556001, A1103556002, A1103556003, A1103556004, A1103556005, A1103556006, A1103556007, A1103556008,

METHOD BLANK: 740231

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

LABORATORY CONTROL SAMPLE: 740232

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
<b>WET CHEMISTRY</b>						
Total Dissolved Solids	mg/L		690			

SAMPLE DUPLICATE: 740233 Original: A1103475001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
<b>WET CHEMISTRY</b>						
Total Dissolved Solids	mg/L	410	430	3		

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## QUALITY CONTROL DATA

Workorder: A1103556 Sumter Co Landfill - GW Sampli

SAMPLE DUPLICATE: 740234

Original: A1103557001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifiers
WET CHEMISTRY					
Total Dissolved Solids	mg/L	76	74	3	
QC Batch:	WCAI/36726		Analysis Method:	EPA 350.1	
QC Batch Method:	EPA 350.1		Prepared:		
Associated Lab Samples:	A1103556001, A1103556002				

METHOD BLANK: 740346

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

LABORATORY CONTROL SAMPLE: 740347

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY					
Ammonia (N)	mg/L	1	0.95	95	90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 740348 740349 Original: A1103556002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD Qualifiers
WET CHEMISTRY										
Ammonia (N)	mg/L	0	1	0.93	0.90	93	90	90-110	3	10

QC Batch: WCAI/36727 Analysis Method: EPA 350.1  
QC Batch Method: EPA 350.1 Prepared:  
Associated Lab Samples: A1103556003, A1103556004, A1103556005, A1103556006, A1103556007, A1103556008, A1103556009, A1103556010

METHOD BLANK: 740352

Parameter	Units	Blank Result	Reporting Limit Qualifiers
WET CHEMISTRY			

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## QUALITY CONTROL DATA

Workorder: A1103556 Sumter Co Landfill - GW Sampli

METHOD BLANK: 740352

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

LABORATORY CONTROL SAMPLE: 740353

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits Qualifiers
WET CHEMISTRY Ammonia (N)	mg/L	1	0.95	95	90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 740354 740355 Original: A1103597002

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	1.1	1	2.0	2.0	92	91	90-110	1	10	

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: A1103556 Sumter Co Landfill - GW Sampli

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
A1103556001	EQ Blank	SW-846 3010A	DGMj/22807	SW-846 6010	ICPj/21660
A1103556002	MW-2	SW-846 3010A	DGMj/22807	SW-846 6010	ICPj/21660
A1103556003	MW-4	SW-846 3010A	DGMj/22807	SW-846 6010	ICPj/21660
A1103556004	MW-4A	SW-846 3010A	DGMj/22807	SW-846 6010	ICPj/21660
A1103556005	MW-4B	SW-846 3010A	DGMj/22807	SW-846 6010	ICPj/21660
A1103556006	MW-6A	SW-846 3010A	DGMj/22807	SW-846 6010	ICPj/21660
A1103556007	MW-8	SW-846 3010A	DGMj/22807	SW-846 6010	ICPj/21660
A1103556008	MW-9A	SW-846 3010A	DGMj/22807	SW-846 6010	ICPj/21660
A1103556009	MW-10	SW-846 3010A	DGMj/22807	SW-846 6010	ICPj/21660
A1103556010	MW-11	SW-846 3010A	DGMj/22807	SW-846 6010	ICPj/21660
A1103556001	EQ Blank	SW-846 7470A	DGMj/22810	SW-846 7470A	CVAj/17053
A1103556002	MW-2	SW-846 7470A	DGMj/22810	SW-846 7470A	CVAj/17053
A1103556003	MW-4	SW-846 7470A	DGMj/22810	SW-846 7470A	CVAj/17053
A1103556004	MW-4A	SW-846 7470A	DGMj/22810	SW-846 7470A	CVAj/17053
A1103556005	MW-4B	SW-846 7470A	DGMj/22810	SW-846 7470A	CVAj/17053
A1103556006	MW-6A	SW-846 7470A	DGMj/22810	SW-846 7470A	CVAj/17053
A1103556007	MW-8	SW-846 7470A	DGMj/22810	SW-846 7470A	CVAj/17053
A1103556008	MW-9A	SW-846 7470A	DGMj/22810	SW-846 7470A	CVAj/17053
A1103556009	MW-10	SW-846 7470A	DGMj/22810	SW-846 7470A	CVAj/17053
A1103556010	MW-11	SW-846 7470A	DGMj/22810	SW-846 7470A	CVAj/17053
A1103556001	EQ Blank			EPA 300.0	WCAa/18823
A1103556002	MW-2			EPA 300.0	WCAa/18823
A1103556003	MW-4			EPA 300.0	WCAa/18823
A1103556004	MW-4A			EPA 300.0	WCAa/18823
A1103556005	MW-4B			EPA 300.0	WCAa/18823
A1103556006	MW-6A			EPA 300.0	WCAa/18823
A1103556007	MW-8			EPA 300.0	WCAa/18823
A1103556008	MW-9A			EPA 300.0	WCAa/18823
A1103556009	MW-10			EPA 300.0	WCAa/18823
A1103556010	MW-11			EPA 300.0	WCAa/18824

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: A1103556 Sumter Co Landfill - GW Sampli

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
A1103556001	EQ Blank	SW-846 3010A	DGMj/22818	SW-846 6020	ICMj/17396
A1103556002	MW-2	SW-846 3010A	DGMj/22818	SW-846 6020	ICMj/17396
A1103556003	MW-4	SW-846 3010A	DGMj/22818	SW-846 6020	ICMj/17396
A1103556004	MW-4A	SW-846 3010A	DGMj/22818	SW-846 6020	ICMj/17396
A1103556005	MW-4B	SW-846 3010A	DGMj/22818	SW-846 6020	ICMj/17396
A1103556006	MW-6A	SW-846 3010A	DGMj/22818	SW-846 6020	ICMj/17396
A1103556007	MW-8	SW-846 3010A	DGMj/22818	SW-846 6020	ICMj/17396
A1103556008	MW-9A	SW-846 3010A	DGMj/22818	SW-846 6020	ICMj/17396
A1103556009	MW-10	SW-846 3010A	DGMj/22818	SW-846 6020	ICMj/17396
A1103556010	MW-11	SW-846 3010A	DGMj/22818	SW-846 6020	ICMj/17396
A1103556001	EQ Blank			SM 2540C	WCAt/36723
A1103556002	MW-2			SM 2540C	WCAt/36723
A1103556003	MW-4			SM 2540C	WCAt/36723
A1103556004	MW-4A			SM 2540C	WCAt/36723
A1103556005	MW-4B			SM 2540C	WCAt/36723
A1103556006	MW-6A			SM 2540C	WCAt/36723
A1103556007	MW-8			SM 2540C	WCAt/36723
A1103556008	MW-9A			SM 2540C	WCAt/36723
A1103556009	MW-10			SM 2540C	WCAt/36723
A1103556010	MW-11			SM 2540C	WCAt/36723
A1103556001	EQ Blank			EPA 350.1	WCAt/36726
A1103556002	MW-2			EPA 350.1	WCAt/36726
A1103556003	MW-4			EPA 350.1	WCAt/36727
A1103556004	MW-4A			EPA 350.1	WCAt/36727
A1103556005	MW-4B			EPA 350.1	WCAt/36727
A1103556006	MW-6A			EPA 350.1	WCAt/36727
A1103556007	MW-8			EPA 350.1	WCAt/36727
A1103556008	MW-9A			EPA 350.1	WCAt/36727
A1103556009	MW-10			EPA 350.1	WCAt/36727
A1103556010	MW-11			EPA 350.1	WCAt/36727

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: A1103556 Sumter Co Landfill - GW Sampli

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
A1103556002	MW-2	DISRES	FLDa/	DISRES	FLDa/
A1103556003	MW-4	DISRES	FLDa/	DISRES	FLDa/
A1103556004	MW-4A	DISRES	FLDa/	DISRES	FLDa/
A1103556005	MW-4B	DISRES	FLDa/	DISRES	FLDa/
A1103556006	MW-6A	DISRES	FLDa/	DISRES	FLDa/
A1103556007	MW-8	DISRES	FLDa/	DISRES	FLDa/
A1103556008	MW-9A	DISRES	FLDa/	DISRES	FLDa/
A1103556009	MW-10	DISRES	FLDa/	DISRES	FLDa/
A1103556010	MW-11	DISRES	FLDa/	DISRES	FLDa/

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## PURGING DATA

## PURGING DATA

## SAMPLING DATA

REMARKS:

Field decont. 5 gal PE bucket, SS ESP, and WL probe IAW DEP-308-001/01, FC 1000. Poured 2 gallons of DI water into PE bucket, inserted SS ESP and WL probe and circulated DI water through pump and over WL probe for ~ 5 minutes. Collected EOB samples with an intermediate container.

**MATERIAL CODES:** AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; 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:  $\pm 0.2$  units; Temperature:  $\pm 0.2$  degrees C; Specific Conductance:  $\pm 5\%$ ; Dissolved Oxygen: all readings  $\leq 20\%$  saturation (see Table FS 2200-2), optionally,  $\pm .02$  mg/L or  $\pm 10\%$  (whichever is greater); Turbidity: all readings  $\leq 20$  NTU, optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)



# GROUNDWATER SAMPLING LOG

SITE NAME: <b>Sumter County Landfill</b>		SITE LOCATION: <b>Sumterville, FL</b>	
WELL NO: <b>MW-2</b>	SAMPLE ID: <b>MW-2</b>	DATE: <b>5/18/11</b>	

## PURGING DATA

WELL 2" PVC	TUBING 3/8"	WELL SCREEN INTERVAL	STATIC DEPTH <b>24.46'</b>	PURGE PUMP TYPE							
DIAMETER (inches):	DIAMETER (inches):	DEPTH: feet to feet	TO WATER (feet):	OR BAILER: <b>PP</b>							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY											
only fill out if applicable											
<b>1 Well Vol = (24.57' - 24.46') X .16 gallons/foot = 1.936 gallons</b>											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME											
only fill out if applicable											
<b>1 Equip Vol = .02 gallons + (.006 gallons/foot X feet) + .125 gallons = gallons</b>											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~26'</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~26'</b>	PURGING INITIATED AT: <b>1135</b>	PURGING ENDED AT: <b>1153</b>	TOTAL VOLUME PURGED (gallons): <b>1.62</b>							
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)
1149	1.22	1.22	.1	24.57	6.96	25.53	209	5.11	1.20	Clear	None
1151	.2	1.42	.1	24.57	6.96	25.53	209	5.02	0.79	Clear	None
1153	.2	1.62	.1	24.57	6.94	25.54	210	5.02	0.55	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: <b>H. L. Claytor, Colinas Group, Inc.</b>		SAMPLER(S) / SIGNATURES: 		SAMPLING INITIATED AT: <b>1154</b>	SAMPLING ENDED AT: <b>1205</b>			
PUMP OR TUBING DEPTH IN WELL (feet): <b>~26'</b>		SAMPLE PUMP FLOW RATE (mL per minute): <b>&lt; 250 mL</b>		TUBING MATERIAL CODE: <b>PE</b>				
FIELD DECONTAMINATION: <b>(Y) N/A</b>		FIELD-FILTERED: <b>Y</b> <b>(N)</b> FILTER SIZE: _____ µm		DUPLICATE: <b>Y</b> <b>(N)</b>				
SAMPLE CONTAINER SPECIFICATION		SAMPLE PRESERVATION		INTENDED ANALYSIS AND/OR METHOD				
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	—	Gross Alpha, RA226RA228	APP
"	1	PE	250 mL	H2S04	None	—	Total Ammonia	APP
"	1	PE	250 mL	HN03	None	—	Metals	APP
"	1	PE	500 mL	None	None	—	Chloride, Fluoride, Nitrate, TDS	APP

### REMARKS:

1135: Set dedicated 1/4" PE tubing @ ~26' b/c and began purging @ .07 gpm with a PP.

1141: WL 24.52' @ .07 gpm, GW is clear. Increased flow to .10 gpm.

1145: WL 24.56' @ .1 gpm. DO is high @ 5.19 mg/L, but is typical for this well. Will use optional stabilization criteria below.

1148: WL 24.57' @ .1 gpm, drawdown is stable. GW is clear. DO is still high @ 5.15 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: 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): pH: ± 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: <b>Sumter County Landfill</b>		SITE LOCATION: <b>Sumterville, FL</b>	
WELL NO: <b>MW-4</b>	SAMPLE ID: <b>MW-4</b>	DATE: <b>5/17/11</b>	

## PURGING DATA

WELL 2" PVC	TUBING 3/8"	WELL SCREEN INTERVAL	STATIC DEPTH <b>25.88'</b>	PURGE PUMP TYPE							
DIAMETER (inches):	DIAMETER (inches):	DEPTH: feet to feet	TO WATER (feet):	OR BAILER: <b>ESP</b>							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY											
only fill out if applicable)											
= ( <b>36.35'</b> feet - feet ) X gallons/foot = gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME <b>X 3 = 1.083</b>											
(only fill out if applicable)											
1 Equip Vol = .02 gallons + ( .006 gallons/foot X <b>36'</b> feet ) + .125 gallons = <b>1.361</b> gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~31'</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~31'</b>	PURGING INITIATED AT: <b>1246</b>	PURGING ENDED AT: <b>1308</b>	TOTAL VOLUME PURGED (gallons): <b>6.60</b>							
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)
<b>1259</b>	<b>3.90</b>	<b>3.90</b>	<b>.30</b>	<b>26.25</b>	<b>7.25</b>	<b>25.91</b>	<b>585</b>	<b>1.66</b>	<b>24.6</b>	<b>Clear</b>	<b>None</b>
<b>1304</b>	<b>1.50</b>	<b>5.40</b>	<b>.30</b>	<b>26.27</b>	<b>7.12</b>	<b>25.80</b>	<b>585</b>	<b>1.51</b>	<b>11.2</b>	<b>Clear</b>	<b>None</b>
<b>1306</b>	<b>.60</b>	<b>6.00</b>	<b>.30</b>	<b>26.27</b>	<b>7.08</b>	<b>25.83</b>	<b>586</b>	<b>1.32</b>	<b>9.97</b>	<b>Clear</b>	<b>None</b>
<b>1308</b>	<b>.60</b>	<b>6.60</b>	<b>.30</b>	<b>26.27</b>	<b>7.07</b>	<b>25.87</b>	<b>587</b>	<b>1.26</b>	<b>8.21</b>	<b>Clear</b>	<b>None</b>
<b>No Sheen</b>											
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: <b>H. L. Claytor, Colinas Group, Inc.</b>				SAMPLE(S) SIGNATURES: 				SAMPLING INITIATED AT: <b>1309</b>		SAMPLING ENDED AT: <b>1320</b>	
PUMP OR TUBING DEPTH IN WELL (feet): <b>~31'</b>				SAMPLE PUMP FLOW RATE (mL per minute): <b>&lt; 250 mL</b>				TUBING MATERIAL CODE: <b>PE</b>			
FIELD DECONTAMINATION: <input checked="" type="radio"/> Y <input type="radio"/> N				FIELD-FILTERED: <input checked="" type="radio"/> Y <input type="radio"/> N FILTER SIZE: _____ µm				DUPLICATE: <input type="radio"/> Y <input checked="" type="radio"/> 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					
<b>MW-4</b>	<b>2</b>	<b>PE</b>	<b>1 Ltr</b>	<b>HN03</b>	<b>None</b>	<b>—</b>	<b>GrossAlpha, RA226RA228</b>		<b>ESP</b>		
"	<b>1</b>	<b>PE</b>	<b>250 mL</b>	<b>H2S04</b>	<b>None</b>	<b>—</b>	<b>Ammonia</b>		<b>ESP</b>		
"	<b>1</b>	<b>PE</b>	<b>250 mL</b>	<b>HN03</b>	<b>None</b>	<b>—</b>	<b>Metals</b>		<b>ESP</b>		
"	<b>1</b>	<b>PE</b>	<b>500 mL</b>	<b>None</b>	<b>None</b>	<b>—</b>	<b>Chloride, Fluoride, Nitrate, TDS</b>		<b>ESP</b>		

### REMARKS:

**1246:** Inserted SS ESP and 3/8" dedicated PE tubing to ~31' bto c and began purging @ .30 gpm. GW is turbid and is typical for this well at beginning of purge. Will over purge to clean it up.

**1256:** Turbidity is @ 18.5 NTUs, WL 26.25' @ .3 gpm.

**1258:** WL 26.25' @ .3 gpm, drawdown is stable. GW is clear.

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 ≤ 20 NTU, optionally ± 5 NTU or ± 10% (whichever is greater)



# GROUNDWATER SAMPLING LOG

SITE NAME: <b>Sumter County Landfill</b>		SITE LOCATION: <b>Sumterville, FL</b>	
WELL NO: <b>MW-4A</b>	SAMPLE ID: <b>MW-4A</b>	DATE: <b>5/17/11</b>	

## PURGING DATA

WELL <b>2" PVC</b>	TUBING <b>3/8"</b>	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH <b>31.07</b> TO WATER (feet):	PURGE PUMP TYPE OR BAILER: <b>ESP</b>							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <b>45.23'</b> feet - feet ) X gallons/foot = gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME <b>X3 = 1.245</b> (only fill out if applicable) <b>1 Equip Vol = .02 gallons + (.006 gallons/foot X 45' feet) + .125 gallons = .415 gallons</b>											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~40'</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~40'</b>	PURGING INITIATED AT: <b>1202</b>	PURGING ENDED AT: <b>1221</b>	TOTAL VOLUME PURGED (gallons): <b>2.60</b>							
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)
1217	6.00	6.00	.4	31.21	6.86	26.27	673	1.16	6.87	Clear	None
1219	.8	6.80	.4	31.20	6.97	26.27	673	1.00	5.71	Clear	None
1221	.8	7.60	.4	31.20	6.88	26.27	673	.89	4.45	Clear	None
<b>No Sheen</b>											
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: <b>H. L. Claytor, Colinas Group, Inc.</b>		SAMPLER(S) SIGNATURES: 		SAMPLING INITIATED AT: <b>1222</b>	SAMPLING ENDED AT: <b>1230</b>
PUMP OR TUBING DEPTH IN WELL (feet): <b>~40'</b>		SAMPLE PUMP FLOW RATE (mL per minute): <b>&lt; 250 mL</b>		TUBING MATERIAL CODE: <b>PE</b>	
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 type="radio"/> Y <input checked="" type="radio"/> N	
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)
MW-4A	2	PE	1 Ltr	HN03	None
"	1	PE	250 mL	H2S04	None
"	1	PE	250 mL	HN03	None
"	1	PE	500 mL	None	None
				FINAL pH	INTENDED ANALYSIS AND/OR METHOD
				---	GrossAlpha, RA228RA228
				---	Total Ammonia
				---	Metals
				---	Chloride, Fluoride, Nitrate, TDS

### REMARKS:

1202: ~~SS~~ Inserted SS ESP and dedicated 3/8" PE tubing up to ~40' to c and began purging @ .4 gpm. GW is extremely turbid, but is typical for this well. Requires higher flow rate and over purging to clean it up.

1214: Turbidity is @ 13 NTUs, WL 31.21' @ .4 gpm.

1216: WL 31.21' @ .4 gpm, drawdown is stable. GW is clear.

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: 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: <b>Sumter County Landfill</b>		SITE LOCATION: <b>Sumterville, FL</b>	
WELL NO: <b>MW-4B</b>	SAMPLE ID: <b>MW-4B</b>	DATE: <b>5/17/11</b>	

## PURGING DATA

WELL <b>2" PVC</b>	TUBING <b>3/8"</b>	WELL SCREEN INTERVAL	STATIC DEPTH <b>29.14'</b>	PURGE PUMP TYPE							
DIAMETER (Inches):	DIAMETER (Inches):	DEPTH: feet to feet	TO WATER (feet):	OR BAILER: <b>ESP</b>							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY											
only fill out if applicable											
$1 \text{ Well Vol} = (29.14' - 29.14') \times 0.16 \text{ gallons/foot} = 0 \text{ gallons}$											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME											
only fill out if applicable											
$1 \text{ Equip Vol} = .02 \text{ gallons} + (.006 \text{ gallons/foot} \times 33' \text{ feet}) + .125 \text{ gallons} = 0.323 \text{ gallons}$											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~33'</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~33'</b>	PURGING INITIATED AT: <b>1342</b>	PURGING ENDED AT: <b>1404</b>	TOTAL VOLUME PURGED (gallons): <b>6.50</b>							
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)
1400	5.50	5.50	.25	29.21	8.65	25.26	127	6.46	6.86	Clear	None
1402	.5	6.00	.25	29.20	8.67	25.24	126	6.02	6.34	Clear	None
1404	.5	6.50	.25	29.19	8.69	25.22	126	5.67	6.07	Clear	None
No Shear											
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: <b>H. L. Claytor, Colinas Group, Inc.</b>		SAMPLED BY SIGNATURES: 		SAMPLING INITIATED AT: <b>1405</b>	SAMPLING ENDED AT: <b>1415</b>
PUMP OR TUBING DEPTH IN WELL (feet): <b>~33'</b>		SAMPLE PUMP FLOW RATE (mL per minute): <b>&lt; 250 mL</b>		TUBING MATERIAL CODE: <b>PE</b>	
FIELD DECONTAMINATION: <b>(Y) N</b>		FIELD-FILTERED: <b>Y (N)</b> FILTER SIZE: <b>µm</b>		DUPLICATE: <b>Y (N)</b>	
Filtration Equipment Type:					
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)
MW-4B	2	PE	1 Ltr	HN03	None
"	1	PE	250 mL	H2S04	None
"	1	PE	250 mL	HN03	None
"	1	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:

1342: Inserted SS ESP and dedicated 3/8" PE tubing to ~33' bto c and began purging @ .509 gpm.

1346: Reduced flow to .25 gpm. GW is clear. DO is high @ 6.80 mg/L, but is typical for this well. Will purge until stable. pH is at 8.60 but also is typical for this well. WL 29.19' @ .25 gpm.

1359: WL 29.20' @ .25 gpm, DO is @ 6.37 mg/L and fluctuating. 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: 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:  $\pm 0.2$  units; Temperature:  $\pm 0.2$  degrees C; Specific Conductance:  $\pm 5\%$ ; Dissolved Oxygen: all readings  $\leq 20\%$  saturation (see Table FS 2200-2), optionally,  $\pm .02$  mg/L or  $\pm 10\%$  (whichever is greater); Turbidity: all readings  $\leq 20$  NTU, optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)



DEP-SOP-001/01  
Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

SITE NAME: <b>Sumter County Landfill</b>	SITE LOCATION: <b>Sumterville, FL</b>
WELL NO: <b>MW-6A</b>	SAMPLE ID: <b>MW-6A</b>
DATE: <b>5/18/11</b>	

**PURGING DATA**

WELL <b>2" PVC</b>	TUBING <b>3/8"</b>	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH <b>32.65</b> TO WATER (feet):	PURGE PUMP TYPE OR BAILER: <b>ESP</b>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
= ( <b>50.84'</b> feet - <b>32.65'</b> feet ) X <b>0.0006</b> gallons/foot = <b>0.18</b> gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME <b>X3 = 1.335</b> (only fill out if applicable)				
1 Equip Vol = <b>.02</b> gallons + ( <b>.006</b> gallons/foot X <b>50'</b> ) + <b>.125</b> gallons = <b>.445</b> gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~45'</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~45'</b>	PURGING INITIATED AT: <b>1240</b>	PURGING ENDED AT: <b>1310</b>	TOTAL VOLUME PURGED (gallons): <b>18.40</b>

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)
1258	12.40	12.40	.3	32.66	7.48	25.48	260	6.56	28.8	Clear	None
1306	4.4	16.80	.5	32.68	7.56	26.79	257	7.40	12.6	Clear	None
1308	1	17.80	.5	32.68	7.59	26.80	257	7.53	11.1	Clear	None
1310	1	18.80	.5	32.68	7.57	26.76	257	7.54	9.20	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: <b>H. L. Claytor, Colinas Group, Inc.</b>	SAMPLER(S) SIGNATURES: 	SAMPLING INITIATED AT: <b>1311</b>	SAMPLING ENDED AT: <b>1320</b>
PUMP OR TUBING DEPTH IN WELL (feet): <b>~45'</b>	SAMPLE PUMP FLOW RATE (mL per minute): <b>&lt; 250 mL</b>	TUBING MATERIAL CODE: <b>PE</b>	
FIELD DECONTAMINATION: <input checked="" type="radio"/> Y <input type="radio"/> N	FIELD-FILTERED: <input checked="" type="radio"/> Y <input type="radio"/> N FILTER SIZE: <b>0.45 µm</b>	DUPLICATE: <input type="radio"/> Y <input checked="" type="radio"/> 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	—	Metals	ESP
"	1	PE	500 mL	None	None	—	Chloride, Fluoride, Nitrate, TDS	ESP

**REMARKS:**

1240: Inserted SS ESP and dedicated 3/8" PE tubing to ~45' static and began purging @ 1 gpm. GW is extremely turbid (milky white), but is typical for this well. Requires high rate of flow and over purging to clean it up.

1250: Turbidity is @ 22 NTUs, continuing purge. Reduced flow to .3 gpm.

1253: Turbidity is @ 17 NTUs, WL 32.66' @ .3 gpm. DO is high @ 6.70 mg/L, but is typical for this well. W-11 use optional stabilization criteria: a Gatoal (Cover)

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: <b>Sumter County Landfill</b>		SITE LOCATION: <b>Sumterville, FL</b>	
WELL NO: <b>MW-8</b>	SAMPLE ID: <b>MW-8</b>	DATE: <b>5/18/11</b>	

## PURGING DATA

WELL <b>2" PVC</b>	TUBING <b>3/8"</b>	WELL SCREEN INTERVAL	STATIC DEPTH <b>23.42</b>	PURGE PUMP TYPE							
DIAMETER (inches):	DIAMETER (inches):	DEPTH: feet to feet	TO WATER (feet):	OR BAILER: <b>ESP</b>							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY											
only fill out if applicable											
= ( <b>43.24'</b> feet - feet ) X gallons/foot = gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME <b>1.209</b>											
(only fill out if applicable)											
1 Equip Vol = .02 gallons + ( .006 gallons/foot X <b>43'</b> feet ) + .125 gallons = <b>1.403</b> gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~38'</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~38'</b>	PURGING INITIATED AT: <b>0952</b>	PURGING ENDED AT: <b>1005</b>	TOTAL VOLUME PURGED (gallons): <b>5.20</b>							
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)
1001	3.60	3.60	.4	23.48	6.99	23.79	346	4.99	5.27	Clear	None
1003	.8	4.40	.4	23.48	6.99	23.80	346	4.82	3.32	Clear	None
1005	.8	5.20	.4	23.48	7.00	23.80	345	4.78	2.44	Clear	None
No shoen											
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: <b>H. L. Claytor, Colinas Group, Inc.</b>		SAMPLED BY SIGNATURES: 		SAMPLING INITIATED AT: <b>1006</b>	SAMPLING ENDED AT: <b>1015</b>			
PUMP OR TUBING DEPTH IN WELL (feet): <b>~38'</b>		SAMPLE PUMP FLOW RATE (mL per minute): <b>&lt; 250 mL</b>		TUBING MATERIAL CODE: <b>PE</b>				
FIELD DECONTAMINATION: <b>(Y) N</b>		FIELD-FILTERED: <b>Y (N)</b> FILTER SIZE: <b>µm</b>		DUPLICATE: <b>Y (N)</b>				
SAMPLE CONTAINER SPECIFICATION		SAMPLE PRESERVATION		INTENDED ANALYSIS AND/OR METHOD				
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	---	Gross Alpha, RA226RA228	ESP
"	1	PE	250 mL	H2S04	None	---	Total Ammonia	ESP
"	1	PE	250 mL	HN03	None	---	Metals	ESP
"	1	PE	500 mL	None	None	---	Chloride, Fluoride, Nitrate, TDS	ESP

### REMARKS:

0952: Inserted SS ESP and dedicated 3/8" PE tubing to ~38' b/c and began purging @ .4 gpm.

0958: WL 23.48' @ .4 gpm, GW is clear.

1000: WL 23.48' @ .4 gpm, drawdown is stable. GW is clear. DO is high @ 4.98 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; 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)



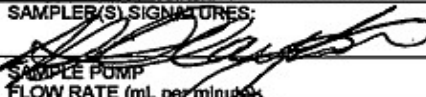
# GROUNDWATER SAMPLING LOG

SITE NAME: <b>Sumter County Landfill</b>		SITE LOCATION: <b>Sumterville, FL</b>	
WELL NO: <b>MW-9A</b>	SAMPLE ID: <b>MW-9A</b>	DATE: <b>5/18/11</b>	

## PURGING DATA

WELL <b>2" PVC</b>	TUBING <b>3/8"</b>	WELL SCREEN INTERVAL	STATIC DEPTH <b>30.59</b>	PURGE PUMP TYPE							
DIAMETER (inches):	DIAMETER (inches):	DEPTH: feet to feet	TO WATER (feet):	OR BAILER: <b>ESP</b>							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY											
only fill out if applicable)											
= ( <b>50.17'</b> feet - feet ) X gallons/foot = gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME <b>X3 = 1.335</b>											
(only fill out if applicable)											
1 Equip Vol = .02 gallons + ( .006 gallons/foot X <b>50'</b> feet ) + .125 gallons = <b>.445</b> gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~45'</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~45'</b>	PURGING INITIATED AT: <b>0852</b>	PURGING ENDED AT: <b>0925</b>	TOTAL VOLUME PURGED (gallons): <b>21.70</b>							
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)
<b>0921</b>	<b>20.10</b>	<b>20.10</b>	<b>.4</b>	<b>34.69</b>	<b>6.43</b>	<b>25.07</b>	<b>901</b>	<b>.79</b>	<b>15.5</b>	<b>Clear</b>	<b>None</b>
<b>0923</b>	<b>.8</b>	<b>20.90</b>	<b>.4</b>	<b>34.67</b>	<b>6.40</b>	<b>25.07</b>	<b>899</b>	<b>.71</b>	<b>16.2</b>	<b>Clear</b>	<b>None</b>
<b>0925</b>	<b>.8</b>	<b>21.70</b>	<b>.4</b>	<b>34.69</b>	<b>6.39</b>	<b>25.06</b>	<b>898</b>	<b>.67</b>	<b>14.1</b>	<b>Clear</b>	<b>None</b>
<b>No screen</b>											
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: <b>H. L. Claytor, Colinas Group, Inc.</b>		SAMPLER(S) SIGNATURES: 		SAMPLING INITIATED AT: <b>0926</b>	SAMPLING ENDED AT: <b>0935</b>		
PUMP OR TUBING DEPTH IN WELL (feet): <b>~45'</b>		SAMPLE PUMP FLOW RATE (mL per minute):		TUBING MATERIAL CODE: <b>PE</b>			
FIELD DECONTAMINATION: <input checked="" type="radio"/> Y <input type="radio"/> N		FIELD-FILTERED: <input checked="" type="radio"/> Y <input type="radio"/> N		FILTER SIZE: _____ µm			
SAMPLE CONTAINER SPECIFICATION		SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	SAMPLING EQUIPMENT CODE
<b>MW-9A</b>	<b>2</b>	<b>PE</b>	<b>1 Ltr</b>	<b>HN03</b>	<b>None</b>	<b>—</b>	<b>GrossAlpha, RA226RA228</b>
<b>"</b>	<b>1</b>	<b>PE</b>	<b>250 mL</b>	<b>H2S04</b>	<b>None</b>	<b>—</b>	<b>Total Ammonia</b>
<b>"</b>	<b>1</b>	<b>PE</b>	<b>250 mL</b>	<b>HN03</b>	<b>None</b>	<b>—</b>	<b>Metals</b>
<b>"</b>	<b>1</b>	<b>PE</b>	<b>500 mL</b>	<b>None</b>	<b>None</b>	<b>—</b>	<b>Chloride, Fluoride, Nitrate, TDS</b>

REMARKS:  
 0852: Inserted SS ESP and dedicated 3/8" PE tubing to ~45' Etoc and began purging @ 1.25 gpm. GW is extremely turbid and is typical for this well, requiring a high rate of flow to clean it up. Will over purge until clear.

0902: Reduced flow to .4 gpm. Turbidity is @ 257 NTUs. Continuing purge.

0907: Turbidity is @ 32 NTUs, continuing purge.

0912: Turbidity is @ 25 NTUs, continuing purge.

0916: Turbidity is @ 17 NTUs, WL 34.69 @ .4 gpm.

Notes: 1) Used a graduated 5 gallon bucket and timed to measure purge volumes 0919: WL 34.69 @ .4 gpm, drawdown is stable.  
 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: <b>Sumter County Landfill</b>		SITE LOCATION: <b>Sumterville, FL</b>	
WELL NO: <b>MW-10</b>	SAMPLE ID: <b>MW-10</b>	DATE: <b>5/18/11</b>	

## PURGING DATA

WELL 2" PVC	TUBING 3/8"	WELL SCREEN INTERVAL	STATIC DEPTH <b>23.50'</b>	PURGE PUMP TYPE							
DIAMETER (inches):	DIAMETER (inches):	DEPTH: feet to feet	TO WATER (feet):	OR BAILER: <b>ESP</b>							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY											
(only fill out if applicable)											
= ( <b>45.35'</b> feet - feet ) X gallons/foot = gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME <b>x3= 1.245</b>											
(only fill out if applicable)											
1 Equip Vol = <b>.02</b> gallons + ( <b>.006</b> gallons/foot X <b>45'</b> feet ) + <b>.125</b> gallons = <b>1.415</b> gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~40'</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~40'</b>	PURGING INITIATED AT: <b>1032</b>	PURGING ENDED AT: <b>1105</b>	TOTAL VOLUME PURGED (gallons): <b>25.35</b>							
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)
<b>1101</b>	<b>24.55</b>	<b>24.55</b>	<b>.2</b>	<b>24.06</b>	<b>6.82</b>	<b>24.82</b>	<b>536</b>	<b>1.56</b>	<b>15.6</b>	<b>Clear</b>	<b>None</b>
<b>1103</b>	<b>.4</b>	<b>24.95</b>	<b>.2</b>	<b>24.06</b>	<b>6.82</b>	<b>24.92</b>	<b>532</b>	<b>1.54</b>	<b>17.9</b>	<b>Clear</b>	<b>None</b>
<b>1105</b>	<b>.4</b>	<b>25.35</b>	<b>.2</b>	<b>24.06</b>	<b>6.84</b>	<b>25.09</b>	<b>540</b>	<b>1.47</b>	<b>18.2</b>	<b>Clear</b>	<b>None</b>
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: <b>H. L. Claytor, Colinas Group, Inc.</b>		SAMPLER(S) SIGNATURES: 		SAMPLING INITIATED AT: <b>1106</b>	SAMPLING ENDED AT: <b>1115</b>			
PUMP OR TUBING DEPTH IN WELL (feet): <b>~40'</b>		SAMPLE PUMP FLOW RATE (mL per minute): <b>&lt; 250 mL</b>		MATERIAL CODE: <b>PE</b>				
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: <b>N</b>		FILTER SIZE: <b>µm</b>				
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
<b>MW-10</b>	<b>2</b>	<b>PE</b>	<b>1 Ltr</b>	<b>HN03</b>	<b>None</b>	<b>—</b>	<b>GrossAlpha, RA226RA228</b>	<b>ESP</b>
<b>"</b>	<b>1</b>	<b>PE</b>	<b>250 mL</b>	<b>H2S04</b>	<b>None</b>	<b>—</b>	<b>Total Ammonia</b>	<b>ESP</b>
<b>"</b>	<b>1</b>	<b>PE</b>	<b>250 mL</b>	<b>HN03</b>	<b>None</b>	<b>—</b>	<b>Metals</b>	<b>ESP</b>
<b>"</b>	<b>1</b>	<b>PE</b>	<b>500 mL</b>	<b>None</b>	<b>None</b>	<b>—</b>	<b>Chloride, Fluoride, Nitrate, TDS</b>	<b>ESP</b>

REMARKS:

1032: Inserted SS ESP and dedicated 3/8" PE tubing to ~40' btoe and began purging @ 1105 gpm. GW is extremely turbid at beginning of purge requiring a high rate of flow and over purging to clean it up. Is typical for this well.

1042: Turbidity is @ 50 NTUs, continuing purge.

1057: Turbidity is @ 17 NTUs, reduced flow to .5 gpm. DO is high @ 3.60 mg/L but dropping. Continuing purge.

1057: DO is @ 1.74 mg/L, WL 24.80' @ .5 gpm, reduced flow to .2 gpm to get DO to drop.

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)



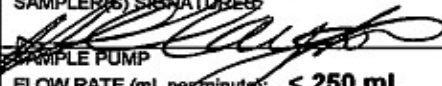
# GROUNDWATER SAMPLING LOG

SITE NAME: <b>Sumter County Landfill</b>		SITE LOCATION: <b>Sumterville, FL</b>	
WELL NO: <b>MW-11</b>	SAMPLE ID: <b>MW-11</b>	DATE: <b>5/17/11</b>	

## PURGING DATA

WELL 2" PVC DIAMETER (inches):	TUBING 3/8" DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH <b>25.64</b> TO WATER (feet):	PURGE PUMP TYPE OR BAILER: <b>ESP</b>							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)											
= ( <b>40.15'</b> feet - feet ) X gallons/foot = gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME <b>x3 = 1.155</b> (only fill out if applicable)											
1 Equip Vol = <b>.02</b> gallons + ( <b>.006</b> gallons/foot X <b>40'</b> feet ) + <b>.125</b> gallons = <b>.285</b> gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~35'</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~35'</b>	PURGING INITIATED AT: <b>1055</b>	PURGING ENDED AT: <b>1132</b>	TOTAL VOLUME PURGED (gallons): <b>22.25</b>							
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)
1121	20.00	20.00	.5	25.85	5.99	25.32	533	1.94	11.0	Clear	None
1128	1.75	21.75	.25	25.71	6.21	25.48	532	1.58	12.9	Clear	None
1130	.5	22.25	.25	25.71	6.25	25.52	531	1.58	13.3	Clear	None
1132	.5	22.75	.25	25.71	6.28	25.59	532	1.56	12.8		
No Sheen											
WELL CAPACITY (Gallons Per Foot): 0.78" = 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: <b>H. L. Claytor, Colinas Group, Inc.</b>		SAMPLER(S) SIGNATURES: 		SAMPLING INITIATED AT: <b>1133</b>	SAMPLING ENDED AT: <b>1145</b>
PUMP OR TUBING DEPTH IN WELL (feet): <b>~35'</b>		SAMPLE PUMP FLOW RATE (mL per minute): <b>&lt; 250 mL</b>		TUBING MATERIAL CODE: <b>PE</b>	
FIELD DECONTAMINATION: <input checked="" type="radio"/> Y <input type="radio"/> N		FIELD-FILTERED: <input checked="" type="radio"/> Y <input type="radio"/> N FILTER SIZE: <b>µm</b>		DUPLICATE: <input type="radio"/> Y <input checked="" type="radio"/> N	
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	250 mL	H2S04	None
"	1	PE	250 mL	HN03	None
"	1	PE	500 mL	None	None
				INTENDED ANALYSIS AND/OR METHOD	
				Gross Alpha, RA226, RA228	
				Total Ammonia	
				Metals	
				Chloride, Fluoride, Nitrate, TDS	
				ESP	

REMARKS:  
1055: Set SS ESP and dedicated 3/8" PE tubing @ ~35' bto c and began purging @ .5 gpm. GW is extremely turbid requiring higher rate of flow during purging to clean it up, is typical for this well.  
1105: WL 25.71 @ .5 gpm, turbidity is @ 24 NTUs, continuing purge.  
1110: WL 25.80 @ .5 gpm, turbidity is @ 25 NTUs, increased flow to 1.5 gpm.  
1117: Turbidity is @ 16 NTUs, reduced flow to .5 gpm. WL 25.85' bto c and stable. (over)

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)



# 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 #: 1105154

Report Date: 06/03/11

Report to:

Advanced Environmental Laboratories, Inc.  
528 S. North Lake Blvd., Ste. 1016  
Altamonte Springs, FL 32701  
Attention: Jordan Shaffer

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

6-3-11

Page 1 of 5



## Florida Radiochemistry Services, Inc.

### Sample Login

<b>Client:</b>	<b>Advanced Environmental Laboratories, Inc.</b>	<b>Date / Time Received</b>	<b>Work order #</b>
<b>Client Contact:</b>	<b>Jordan Shaffer</b>	<b>05/19/11 10:04</b>	<b>1105154</b>
<b>Client P.O.</b>			
<b>Project I.D.</b>	<b>A1103556</b>		

<b>Lab Sample I.D.</b>	<b>Client Sample I.D.</b>	<b>Sample Date/Time</b>	<b>Analysis Requested</b>
1105154-01	A1103556001	05/17/11 10:45	Ga, Ra226, Ra228
1105154-02	A1103556002	05/17/11 12:05	Ga, Ra226, Ra228
1105154-03	A1103556003	05/17/11 13:20	Ga, Ra226, Ra228
1105154-04	A1103556004	05/17/11 12:30	Ga, Ra226, Ra228
1105154-05	A1103556005	05/17/11 14:15	Ga, Ra226, Ra228
1105154-06	A1103556006	05/17/11 13:20	Ga, Ra226, Ra228
1105154-07	A1103556007	05/17/11 10:15	Ga, Ra226, Ra228
1105154-08	A1103556008	05/17/11 09:35	Ga, Ra226, Ra228
1105154-09	A1103556009	05/17/11 11:15	Ga, Ra226, Ra228
1105154-10	A1103556010	05/17/11 11:45	Ga, Ra226, Ra228





# Florida Radiochemistry Services, Inc.

## Analysis Report

Lab Sample I.D.	1105154-01	1105154-02	1105154-03	1105154-04	1105154-05	1105154-06
Client I.D.	A1103556001	A1103556002	A1103556003	A1103556004	A1103556005	A1103556006
Gross Alpha	0.7U	1.4U	7.1	3.5	1.6	1.1U
Error +/-	0.5	0.9	1.1	1.3	0.9	0.9
MDL	0.7	1.4	0.8	1.5	0.9	1.1
EPA Method	900.0	900.0	900.0	900.0	900.0	900.0
Prep Date	05/23/11	05/23/11	05/23/11	05/23/11	05/23/11	05/23/11
Prep Time	06:22	06:22	06:22	06:22	06:22	06:22
Analysis Date	05/24/11	05/24/11	05/24/11	05/24/11	05/24/11	05/24/11
Analysis Time	10:30	10:30	13:29	17:03	10:30	10:32
Analyst	MJN	MJN	MJN	MJN	MJN	MJN
Radium 226	0.2U	0.4	1.1	1.0	0.4	0.4
Error +/-	0.1	0.1	0.2	0.2	0.1	0.2
MDL	0.2	0.2	0.2	0.1	0.2	0.2
EPA Method	903.1	903.1	903.1	903.1	903.1	903.1
Prep Date	05/23/11	05/23/11	05/23/11	05/23/11	05/23/11	05/23/11
Prep Time	10:20	10:20	10:20	10:20	10:20	10:20
Analysis Date	05/31/11	05/31/11	05/31/11	05/31/11	05/31/11	05/31/11
Analysis Time	10:18	11:21	11:21	11:21	11:21	11:21
Analyst	MJN	MJN	MJN	MJN	MJN	MJN
Radium 228	0.9U	1.3	0.9U	0.8U	0.9U	0.9U
Error +/-	0.6	0.6	0.6	0.5	0.6	0.6
MDL	0.9	0.9	0.9	0.8	0.9	0.9
EPA Method	Ra-05	Ra-05	Ra-05	Ra-05	Ra-05	Ra-05
Prep Date	05/23/11	05/23/11	05/23/11	05/23/11	05/23/11	05/23/11
Prep Time	10:20	10:20	10:20	10:20	10:20	10:20
Analysis Date	05/31/11	05/31/11	05/31/11	05/31/11	05/31/11	05/31/11
Analysis Time	11:27	11:27	11:27	12:38	12:38	12:38
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. 1105154-07 1105154-08 1105154-09 1105154-10

Client I.D. A1103556007 A1103556008 A1103556009 A1103556010

Gross Alpha	1.7	10.7	10.3	13.1
Error +/-	1.2	1.8	1.3	1.5
MDL	1.4	1.5	1.0	1.1
EPA Method	900.0	900.0	900.0	900.0
Prep Date	05/23/11	05/23/11	05/23/11	05/23/11
Prep Time	06:22	06:22	06:22	06:22
Analysis Date	05/24/11	05/24/11	05/24/11	05/24/11
Analysis Time	10:32	13:32	13:32	13:29
Analyst	MJN	MJN	MJN	MJN

Radium 226	0.9	3.1	2.0	3.3
Error +/-	0.3	0.5	0.4	0.5
MDL	0.2	0.2	0.2	0.3
EPA Method	903.1	903.1	903.1	903.1
Prep Date	05/23/11	05/23/11	05/23/11	05/23/11
Prep Time	10:20	10:20	10:20	10:20
Analysis Date	06/01/11	06/01/11	06/01/11	06/01/11
Analysis Time	13:31	13:31	13:31	13:31
Analyst	MJN	MJN	MJN	MJN

Radium 228	0.8U	0.9	0.8U	0.7
Error +/-	0.5	0.5	0.5	0.5
MDL	0.8	0.8	0.8	0.7
EPA Method	Ra-05	Ra-05	Ra-05	Ra-05
Prep Date	05/23/11	05/23/11	05/23/11	05/23/11
Prep Time	14:19	14:19	14:19	14:19
Analysis Date	05/31/11	05/31/11	05/31/11	05/31/11
Analysis Time	13:57	13:57	13:57	15:01
Analyst	PJ	PJ	PJ	PJ

Units	pCi/l	pCi/l	pCi/l	pCi/l
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# 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	1105154-07	05/24/11	1.7	10.2	11.3	10.2	94	10.2
Radium 226	1105136-02	05/31/11	0.7	25.2	24.9	23.3	96	6.6
Radium 228	1105136-02	05/31/11	<1.0	10.4	10.6	10.3	102	2.9

	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 183344 - HBN 50430

Report To		Sub-contract To		Results Requested By 5/30/2011												
Jordan Shaffer Advanced Environmental Laboratories, Inc 528 S. North Lake Blvd, Suite 1016 Altamonte Springs, FL 32701 Phone (407)937-1594 Fax (407)937-1597		FLRAD-Orlando-FL Florida Radiochemistry 5456 Hoffner Rd. Suite 201 Orlando, FL 32812-2517 Phone Fax		Requested Analysis												
Item	Sample ID	Collect Date/Time	Lab ID	Matrix	HNO3	Preserved Containers	EPA 803	EPA 805	EPA 808							
1	I-95 Elevated Tank	5/17/2011 14:30	A1103527001	Drinking Water	2			X								
2	Eq Blank	5/17/2011 10:45	A1103556001	Water	2			X								
3	MW-2	5/18/2011 12:05	A1103556002	Water	2			X								
4	MW-4	5/17/2011 13:20	A1103556003	Water	2			X								
5	MW-4A	5/17/2011 12:30	A1103556004	Water	2			X								
6	MW-4B	5/17/2011 14:15	A1103556005	Water	2			X								
7	MW-6A	5/18/2011 13:20	A1103556006	Water	2			X								
8	MW-8	5/18/2011 10:15	A1103556007	Water	2			X								
9	MW-9A	5/18/2011 09:35	A1103556008	Water	2			X								
10	MW-10	5/18/2011 11:15	A1103556009	Water	2			X								
11	MW-11	5/17/2011 11:45	A1103556010	Water	2			X								

LAB USE ONLY







**Environmental Laboratories, Inc.**

Received on ice ☒ Yes ☐ No ☐ Temp taken from sample ☐ Temp from temp blank ☐ Where required, pH checked ☐ Temperature when received 2 (in degrees celcius)

Device used for measuring Temp by unique identifier (circle IR temp gun used) J: 9A G: LT-1 LT-2 T: 10A A: 3A

Form revised 28/08

	Relinquished by:	Date	Time	Received by:	Date	Time
1	<i>[Signature]</i>	5/18/14	1446	<i>[Signature]</i>	5/18/14	1446
2						
3						
4						