DENR USE ONLY: ☐ Paper Report ☐ Electronic Data - Email CD (data loaded: Yes / No) Doc/Event #: 13870

NC DENR
Division of Waste Management - Solid Waste

Environmental Monitoring Reporting Form

Notice: This form and any information attached to it are "Public Records" as defined in NC General Statute 132-1. As such, these documents are available for inspection and examination by any person upon request (NC General Statute 132-6).

Instructions:

- **Prepare one form for each individually monitored unit.**
- **Please type or print legibly.**
- Attach a notification table with values that attain or exceed NC 2L groundwater standards or NC 2B surface water standards. The notification must include a preliminary analysis of the cause and significance of each value. (e.g. naturally occurring, off-site source, pre-existing condition, etc.).
- Attach a notification table of any groundwater or surface water values that equal or exceed the reporting limits.
- Attach a notification table of any methane gas values that attain or exceed explosive gas levels. This includes any structures on or nearby the facility (NCAC 13B .1629 (4)(a)(i).
- In accordance with NC General Statutes Chapter 89C and 89E and NC Solid Waste Management Rules 15A NCAC 13B, be sure to affix a seal to the bottom of this page, when applicable.
- Send the original signed and sealed form, any tables, and Electronic Data Deliverable to: Compliance Unit, NCDENR-DWM, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27699-1646.

Solid Waste Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

Terraquest Environmental Consultants, P.C.

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Ryan D. Kerins Phone: (919) 563-9091

E-mail: rdkerins@terraquestpc.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Lee County Landfill	331 Landfill Rd, Sanford, NC 27332	53-01	.1600	October 4&5, 2010

Environmental Status: (Check all that apply)

☐ Initial/Background Monitoring ☒ Detection Monitoring ☐ Assessment Monitoring ☐ Corrective Action

Type of data submitted: (Check all that apply)

☒ Groundwater monitoring data from monitoring wells
☐ Groundwater monitoring data from private water supply wells
☐ Leachate monitoring data
☒ Surface water monitoring data
☐ Methane gas monitoring data
☐ Corrective action data (specify)
☐ Other(specify)

Notification attached?

☐ No. No groundwater or surface water standards were exceeded.
☒ Yes, a notification of values exceeding a groundwater or surface water standard is attached. It includes a list of groundwater and surface water monitoring points, dates, analytical values, NC 2L groundwater standard, NC 2B surface water standard or NC Solid Waste GWPS and preliminary analysis of the cause and significance of any concentration.
☐ Yes, a notification of values exceeding an explosive methane gas limit is attached. It includes the methane monitoring points, dates, sample values and explosive methane gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

Ryan D. Kerins	Project Manager	(919) 563-9091
Facility Representative Name (Print)	Title	(Area Code) Telephone Number
Signature	10-14-10 Date	Affix NC Licensed/ Professional Geologist/Engineer Seal here:

NORTH CAROLINA LICENSED SEAL 1185 GEOLOGIST MICHAEL J. BROWN

Revised 01/2007

TERRAquest
ENVIRONMENTAL CONSULTANTS, P.C.

October 14, 2010

RECEIVED
OCT 18 2010
DIVISION OF WASTE MANAGEMENT

Ms. Jaclynne Drummond
Division of Waste Management - Solid Waste Section
401 Oberlin Road, Suite 150
Raleigh, NC 27605

Re: Semi-Annual Groundwater Monitoring Event (October 2010)
Lee County Landfill - Sanford, NC
NCDWM-Solid Waste Section Permit # 53-01
Terraquest Project No. 02296

Dear Ms. Drummond:

On behalf of the Lee County Department of Public Works, Terraquest Environmental Consultants, P.C. is reporting the results of a biannual ground and surface water sampling event that took place at the Lee County Landfill in Sanford, NC on October 4 and 5, 2010. In accordance with the NCDWM-SW's reporting requirements, a Solid Waste Section Environmental Monitoring Reporting Form is attached. The data from the event including analytical results, groundwater elevations, and field measured groundwater parameter data is summarized on the attached Table 1. The location of the site is shown on Figure 1, the vicinity of the site on Figure 2, and site's layout on Figure 3. Figure 4 presents the recent potentiometric surface. The full analytical report is also attached. The following summarizes the event:

On October 4, 2010, Terraquest personnel sampled monitoring wells MW5, MW6, MW9, MW13, and MW14, and collected one surface water sample, SW2. Due to a mixup in the field, Terraquest personnel returned to the site and collected a sample from MW12 on October 5, 2010. All of the water samples were analyzed per EPA Methods 8260A Appendix I and 8 RCRA Metals. All water samples were collected following technical methods and standard procedures as outlined on the enclosed sheets. Terraquest personnel also collected dissolved oxygen, pH, temperature, and conductivity measurements from each of the sampled monitoring wells following purging of the well. These measurements are listed on the attached Table 1.

The analytical results revealed detectable concentrations of petroleum-type compounds by the 8260A Appendix I sampling method in monitoring well MW12 only. Benzene, was reported at a concentration in excess of the standard set forth under Title 15A of the North Carolina Administrative Code Subchapter 2L .0202(g). Results of the 8 RCRA Metals analysis indicate that all of the monitoring wells and the surface water sample had a detection of at least one metal. The analytical results are summarized in Table 1.

A potentiometric surface map (Figure 4) depicting an interpreted groundwater flow direction at the site as measured on October4, 2010 is attached. Based upon the water levels in the monitoring wells, the groundwater flow direction is to the southeast toward Mare Branch Creek. This flow direction conforms with historical flow directions. Table 1 lists the groundwater elevations for the monitoring wells.

If you have any questions regarding the sampling event or analytical report, please contact Ryan Kerins at (919) 563-9091 or Mr. Joseph Cherry of the Lee County Public Works Department at (919) 774-8440. Thank you.

Sincerely,

TERRAQUEST ENVIRONMENTAL CONSULTANTS, P.C.

NORTH CAROLINA LICENSED SEAL 1185 GEOLOGIST MICHAEL J. BROWN

Ryan D. Kerins
Project Manager

Michael J. Brown, P.G.
President

Attachments:
- Solid Waste Section Environmental Monitoring Reporting Form
- Table 1 – Groundwater Data 10/4/10 – 10/5/10
- Figure 1 – Site Location Map
- Figure 2 – Site Vicinity Map
- Figure 3 – Site Layout Map
- Figure 4 – Potentiometric Surface Map (10/4/10)
- Analytical Report
- Technical Methods/Standard Procedures

Table 1
Date: 10/14/10

GROUNDWATER DATA 10/4/10 - 10/5/10
Facility Name: Lee County Landfill

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	COLLECT DATE	EXTRACTION DATE*	ANALYSIS DATE
53-01	MW4	SW328	328	Top Of Casing	345.9	feet					
53-01	MW4	SW318	318	Depth To Water	15.31	feet					
53-01	MW4		427	Groundwater Elevation	330.6	feet					
53-01	MW5	SW328	328	Top Of Casing	351.1	feet					
53-01	MW5	SW318	318	Depth To Water	6.55	feet					
53-01	MW5			Groundwater Elevation	344.6	feet					
53-01	MW5	SW320	320	pH (field)	6.44						
53-01	MW5	SW356	356	Dissolved Oxygen	2.14	mg/L					
53-01	MW5	SW325	325	Temperature	17.5	deg. C					
53-01	MW5	SW323	323	Conductivity	130	microS/sec					
53-01	MW5	71-43-2	16	Benzene	1	ug/L	U				
53-01	MW5	108-88-3	196	Toluene	5	ug/L	U				
53-01	MW5	100-41-4	110	Ethylbenzene	1	ug/L	U				
53-01	MW5	1330-20-7	346	Total Xylenes	3	ug/L	U				
53-01	MW5	7439-97-6	132	Mercury	0.20	ug/L	U				
53-01	MW5	7440-38-2	14	Arsenic	22	ug/L	U	1	10/4/10	*	10/7/10
53-01	MW5	7440-39-3	15	Barium	360	ug/L	U	1	10/4/10	*	10/7/10
53-01	MW5	7440-43-9	34	Cadmium	5	ug/L	U	1	10/4/10	*	10/7/10
53-01	MW5	7440-47-3	51	Chromium	7	ug/L	J	1	10/4/10	*	10/7/10
53-01	MW5	7439-92-1	131	Lead	26	ug/L	U	1	10/4/10	*	10/7/10
53-01	MW5	7782-49-2	183	Selenium	7	ug/L	J	1	10/4/10	*	10/7/10
53-01	MW5	7440-22-4	184	Silver	10	ug/L	U	1	10/4/10	*	10/7/10
53-01	MW6	SW328	328	Top Of Casing	402.1	feet					
53-01	MW6	SW318	318	Depth To Water	9.94	feet					
53-01	MW6		427	Groundwater Elevation	392.2	feet					
53-01	MW6	SW320	320	pH (field)	3.97						
53-01	MW6	SW356	356	Dissolved Oxygen	2.11	mg/L					
53-01	MW6	SW325	325	Temperature	18.1	deg. C					
53-01	MW6	SW324	324	Conductivity	23	microS/sec					
53-01	MW6	71-43-2	16	Benzene	1	ug/L	U	1	10/4/10	*	10/7/10
53-01	MW6	108-88-3	196	Toluene	5	ug/L	U	1	10/4/10	*	10/7/10
53-01	MW6	100-41-4	110	Ethylbenzene	1	ug/L	U	1	10/4/10	*	10/7/10
53-01	MW6	1330-20-7	346	Total Xylenes	3	ug/L	U	1	10/4/10	*	10/7/10
53-01	MW6	7439-97-6	132	Mercury	0.20	ug/L	U	1	10/4/10	*	10/7/10
53-01	MW6	91-20-3	148	Napthalene	5	ug/L	U	1	10/4/10	*	10/7/10
53-01	MW6			1,2,4-Trimethylbenzene	1	ug/L	U	1	10/4/10	*	10/7/10
53-01	MW6	7440-38-2	14	Arsenic	9.7	ug/L	J	1	10/4/10	*	10/7/10
53-01	MW6	7440-39-3	15	Barium	77	ug/L	U	1	10/4/10	*	10/7/10
53-01	MW6	7440-43-9	34	Cadmium	5	ug/L	U	1	10/4/10	*	10/7/10
53-01	MW6	7440-47-3	51	Chromium	10	ug/L	U	1	10/4/10	*	10/7/10
53-01	MW6	7439-92-1	131	Lead	4.3	ug/L	J	1	10/4/10	*	10/7/10
53-01	MW6	7782-49-2	183	Selenium	10	ug/L	J	1	10/4/10	*	10/7/10
53-01	MW6	7440-22-4	184	Silver	10	ug/L	U	1	10/4/10	*	10/7/10
53-01	MW7	SW328	328	Top Of Casing	360.3	feet					
53-01	MW7	SW318	318	Depth To Water	11.06	feet					
53-01	MW7		427	Groundwater Elevation	349.2	feet					

Note:
1. * Technically, this sample set didn't have any extractions. The metals were prepped and digested. The volatiles aren't involved in any extraction process. They are loaded directly onto the instrument.

Table 1 (continued)
Date: 10/14/10

GROUNDWATER DATA 10/4/10 - 10/5/10
Facility Name: Lee County Landfill

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION	COLLECT DATE	EXTRACTION	ANALYSIS DATE
53-01	MW9	SW328	328	Top Of Casing	384.2	feet					
53-01	MW9	SW318	318	Depth To Water	9.38	feet					
53-01	MW9		427	Groundwater Elevation	374.8	feet					
53-01	MW9	SW320	320	pH (field)	3.59						
53-01	MW9	SW356	356	Dissolved Oxygen	4.04	mg/L					
53-01	MW9	SW325	325	Temperature	20	deg. C					
53-01	MW9	SW324	324	Conductivity	42	microS/sec					
53-01	MW9	71-43-2	16	Benzene	1	ug/L	U	1	10/4/10	*	10/7/10
53-01	MW9	108-88-3	196	Toluene	5	ug/L	U	1	10/4/10	*	10/7/10
53-01	MW9	100-41-4	110	Ethylbenzene	1	ug/L	U	1	10/4/10	*	10/7/10
53-01	MW9	1330-20-7	346	Total Xylenes	3	ug/L	U	1	10/4/10	*	10/7/10
53-01	MW9	7439-97-6	132	Mercury	0.20	ug/L	U	1	10/4/10	*	10/7/10
53-01	MW9	7440-38-2	14	Arsenic	16	ug/L	JP1	1	10/4/10	*	10/6/10
53-01	MW9	7440-39-3	15	Barium	98	ug/L	U	1	10/4/10	*	10/6/10
53-01	MW9	7440-43-9	34	Cadmium	0.90	ug/L	JP1	1	10/4/10	*	10/6/10
53-01	MW9	7440-47-3	51	Chromium	10	ug/L	U	1	10/4/10	*	10/6/10
53-01	MW9	7439-92-1	131	Lead	3.8	ug/L	JP1	1	10/4/10	*	10/6/10
53-01	MW9	7782-49-2	183	Selenium	20	ug/L	U	1	10/4/10	*	10/6/10
53-01	MW9	7440-22-4	184	Silver	10	ug/L	U	1	10/4/10	*	10/6/10
53-01	MW10	SW328	328	Top Of Casing	377.0	feet					
53-01	MW10	SW318	318	Depth To Water	9.16	feet					
53-01	MW10		427	Groundwater Elevation	367.8	feet					
53-01	MW11	SW328	328	Top Of Casing	399.6	feet					
53-01	MW11	SW318	318	Depth To Water	11.06	feet					
53-01	MW11		427	Groundwater Elevation	388.5	feet					
53-01	MW12	SW328	328	Top Of Casing	337.4	feet					
53-01	MW12	SW318	318	Depth To Water	4.42	feet					
53-01	MW12		427	Groundwater Elevation	333	feet					
53-01	MW12	SW320	320	pH (field)	5.59						
53-01	MW12	SW356	356	Dissolved Oxygen	1.32	mg/L					
53-01	MW12	SW325	325	Temperature	19.5	deg. C					
53-01	MW12	SW324	324	Conductivity	1,454	microS/sec					
53-01	MW12	71-43-2	16	Benzene	2.8	ug/L	U	1	10/5/2010	*	10/7/2010
53-01	MW12	108-88-3	196	Toluene	0.40	ug/L	J	1	10/5/2010	*	10/7/2010
53-01	MW12	100-41-4	110	Ethylbenzene	1	ug/L	U	1	10/5/2010	*	10/7/2010
53-01	MW12	1330-20-7	346	Total Xylenes	3	ug/L	U	1	10/5/2010	*	10/7/2010
53-01	MW12	108-20-3	366	Di-isopropyl ether	1	ug/L	U	1	10/5/2010	*	10/7/2010
53-01	MW12	108-90-7	39	Chlorobenzene	8.7	ug/L	U	1	10/5/2010	*	10/7/2010
53-01	MW12	75-00-3	41	Chloroethane	.89	ug/L	U	1	10/5/2010	*	10/7/2010
53-01	MW12	95-50-1	69	1,2-Dichlorobenzene	1	ug/L	U	1	10/5/2010	*	10/7/2010
53-01	MW12			1,3-Dichlorobenzene	1	ug/L	U	1	10/5/2010	*	10/7/2010
53-01	MW12	106-46-7	71	1,4-Dichlorobenzene	2.9	ug/L	U	1	10/5/2010	*	10/7/2010
53-01	MW12	75-71-8	74	Dichlorodifluoromethane	5	ug/L	U	1	10/5/2010	*	10/7/2010
53-01	MW12	75-34-3	75	1,1-Dichloroethane	9.3	ug/L	U	1	10/5/2010	*	10/7/2010
53-01	MW12	107-06-2	76	1,2-Dichloroethane	0.38	ug/L	J	1	10/5/2010	*	10/7/2010
53-01	MW12	98-82-8	367	Isopropylbenzene	0.64	ug/L	J	1	10/5/2010	*	10/7/2010
53-01	MW12	75-09-2	140	Methylene Chloride	5	ug/L	U	1	10/5/2010	*	10/7/2010
53-01	MW12			2-Chlorotoluene	1	ug/L	U	1	10/5/2010	*	10/7/2010
53-01	MW12	91-20-3	148	Napthalene	5	ug/L	U	1	10/5/2010	*	10/7/2010
53-01	MW12			n-Propylbenzene	1	ug/L	U	1	10/5/2010	*	10/7/2010

Note:
1. * Technically, this sample set didn't have any extractions. The metals were prepped and digested. The volatiles aren't involved in any extraction process. They are loaded directly onto the instrument.

Table 1 (continued)
Date: 10/14/10

GROUNDWATER DATA 10/4/10 - 10/5/10
Facility Name: Lee County Landfill

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION	COLLECT DATE	EXTRACTION	ANALYSIS DATE
53-01	MW12	7439-97-6	132	Mercury	0.20	ug/L	U	1	10/5/2010	*	10/7/2010
53-01	MW12	7440-38-2	14	Arsenic	7.8	ug/L	JP1	1	10/5/2010	*	10/8/2010
53-01	MW12	7440-39-3	15	Barium	1,600	ug/L	U	1	10/5/2010	*	10/8/2010
53-01	MW12	7440-43-9	34	Cadmium	1.5	ug/L	JP1	1	10/5/2010	*	10/8/2010
53-01	MW12	7440-47-3	51	Chromium	2.1	ug/L	JP1	1	10/5/2010	*	10/8/2010
53-01	MW12	7439-92-1	131	Lead	5	ug/L	U	1	10/5/2010	*	10/8/2010
53-01	MW12	7782-49-2	183	Selenium	20	ug/L	U	1	10/5/2010	*	10/8/2010
53-01	MW12	7440-22-4	184	Silver	7.5	ug/L	JP1J6	1	10/5/2010	*	10/8/2010
53-01	MW13	SW328	328	Top Of Casing	363.93	feet					
53-01	MW13	SW318	318	Depth To Water	10.55	feet					
53-01	MW13		427	Groundwater Elevation	353.4	feet					
53-01	MW13	SW320	320	pH (field)	4.59						
53-01	MW13	SW356	356	Dissolved Oxygen	1.00	mg/L					
53-01	MW13	SW325	325	Temperature	18.4	deg. C					
53-01	MW13	SW324	324	Conductivity	48	microS/sec					
53-01	MW13	71-43-2	16	Benzene	1	ug/L	U	1	10/4/10	*	10/7/2010
53-01	MW13	108-88-3	196	Toluene	5	ug/L	U	1	10/4/10	*	10/7/2010
53-01	MW13	100-41-4	110	Ethylbenzene	1	ug/L	U	1	10/4/10	*	10/7/2010
53-01	MW13	1330-20-7	346	Total Xylenes	3	ug/L	U	1	10/4/10	*	10/7/2010
53-01	MW13	7439-97-6	132	Mercury	0.20	ug/L	U	1	10/4/10	*	10/7/2010
53-01	MW13	7440-38-2	14	Arsenic	13	ug/L	J	1	10/4/10	*	10/7/2010
53-01	MW13	7440-39-3	15	Barium	280	ug/L	U	1	10/4/10	*	10/7/2010
53-01	MW13	7440-43-9	34	Cadmium	5	ug/L	U	1	10/4/10	*	10/7/2010
53-01	MW13	7440-47-3	51	Chromium	1.8	ug/L	J	1	10/4/10	*	10/7/2010
53-01	MW13	7439-92-1	131	Lead	7.7	ug/L	U	1	10/4/10	*	10/7/2010
53-01	MW13	7782-49-2	183	Selenium	20	ug/L	U	1	10/4/10	*	10/7/2010
53-01	MW13	7440-22-4	184	Silver	1	ug/L	U	1	10/4/10	*	10/7/2010
53-01	MW14	SW328	328	Top Of Casing	358.61	feet					
53-01	MW14	SW318	318	Depth To Water	8.09	feet					
53-01	MW14		427	Groundwater Elevation	350.5	feet					
53-01	MW14	SW320	320	pH (field)	5.22						
53-01	MW14	SW356	356	Dissolved Oxygen	0.82	mg/L					
53-01	MW14	SW325	325	Temperature	18.2	deg. C					
53-01	MW14	SW324	324	Conductivity	69	microS/sec					
53-01	MW14	71-43-2	16	Benzene	1	ug/L	U	1	10/4/10	*	10/7/2010
53-01	MW14	108-88-3	196	Toluene	5	ug/L	U	1	10/4/10	*	10/7/2010
53-01	MW14	100-41-4	110	Ethylbenzene	1	ug/L	U	1	10/4/10	*	10/7/2010
53-01	MW14	1330-20-7	346	Total Xylenes	3	ug/L	U	1	10/4/10	*	10/7/2010
53-01	MW14	7439-97-6	132	Mercury	0.20	ug/L	U	1	10/4/10	*	10/7/2010
53-01	MW14	7440-38-2	14	Arsenic	9.4	ug/L	U	1	10/4/10	*	10/7/2010
53-01	MW14	7440-39-3	15	Barium	140	ug/L	J	1	10/4/10	*	10/7/2010
53-01	MW14	7440-43-9	34	Cadmium	5	ug/L	U	1	10/4/10	*	10/7/2010
53-01	MW14	7440-47-3	51	Chromium	5.3	ug/L	J	1	10/4/10	*	10/7/2010
53-01	MW14	7439-92-1	131	Lead	68	ug/L	U	1	10/4/10	*	10/7/2010
53-01	MW14	7782-49-2	183	Selenium	20	ug/L	U	1	10/4/10	*	10/7/2010
53-01	MW14	7440-22-4	184	Silver	10	ug/L	U	1	10/4/10	*	10/7/2010

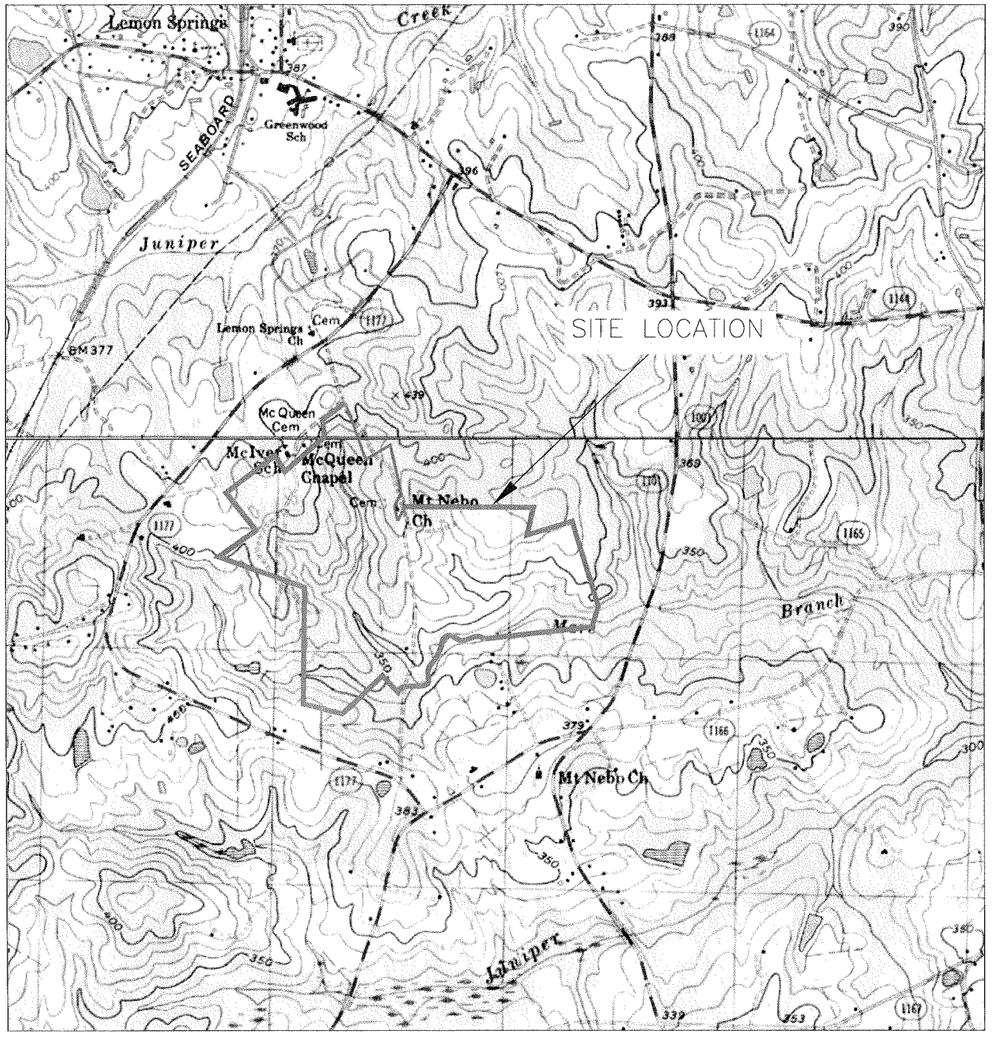
Note:
1. * Technically, this sample set didn't have any extractions. The metals were prepped and digested. The volatiles aren't involved in any extraction process. They are loaded directly onto the instrument.

Table 1 (continued)
Date: 10/14/10

GROUNDWATER DATA 10/4/10 - 10/5/10
Facility Name: Lee County Landfill

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION	COLLECT DATE	EXTRACTION	ANALYSIS DATE
53-01	SW2	71-43-2	16	Benzene	1	ug/L	U	1	10/4/10	*	10/7/2010
53-01	SW2	108-88-3	196	Toluene	5	ug/L	U	1	10/4/10	*	10/7/2010
53-01	SW2	100-41-4	110	Ethylbenzene	1	ug/L	U	1	10/4/10	*	10/7/2010
53-01	SW2	1330-20-7	346	Total Xylenes	3	ug/L	U	1	10/4/10	*	10/7/2010
53-01	SW2	7439-97-6	132	Mercury	0.20	ug/L	U	1	10/4/10	*	10/7/2010
53-01	SW2	7440-38-2	14	Arsenic	20	ug/L	U	1	10/4/10	*	10/7/2010
53-01	SW2	7440-39-3	15	Barium	94	ug/L	U	1	10/4/10	*	10/7/2010
53-01	SW2	7440-43-9	34	Cadmium	5	ug/L	U	1	10/4/10	*	10/7/2010
53-01	SW2	7440-47-3	51	Chromium	10	ug/L	U	1	10/4/10	*	10/7/2010
53-01	SW2	7439-92-1	131	Lead	5	ug/L	U	1	10/4/10	*	10/7/2010
53-01	SW2	7782-49-2	183	Selenium	20	ug/L	U	1	10/4/10	*	10/7/2010
53-01	SW2	7440-22-4	184	Silver	10	ug/L	U	1	10/4/10	*	10/7/2010

Note:
1. * Technically, this sample set didn't have any extractions. The metals were prepped and digested. The volatiles aren't involved in any extraction process. They are loaded directly onto the instrument.



N

MAP SOURCE: USGS 7.5 MINUTE TOPOGRAPHICS – SANFORD AND MURCHISONTOWN, NC

GRAPHIC SCALE

0' 2000' 4000'

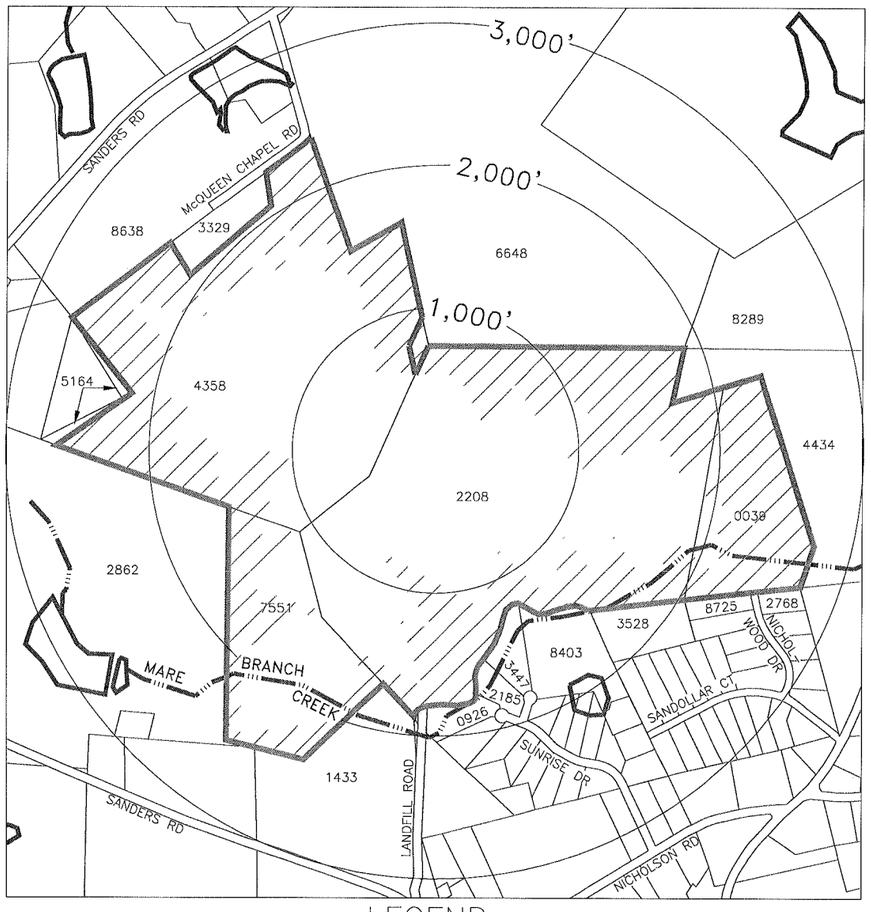
TERRAquest

ENVIRONMENTAL CONSULTANTS, P.C.

SITE LOCATION MAP
LEE COUNTY LANDFILL
331 LANDFILL ROAD
LEE COUNTY, NORTH CAROLINA

LEE COUNTY PUBLIC WORKS — SANFORD, NC

PROJECT NO.	02296	DRAWN BY:	RDK	DATE:	10/14/10
SCALE:	1" = 2000'	CHECKED BY:	JRG/MJB	FIGURE NO.	1



LEGEND

- LANDFILL PROPERTY BOUNDARY
- PARCEL BOUNDARIES
- DISTANCE FROM LANDFILL CENTER
- SURFACE WATER BODY
- 2106 TAX PARCEL ID (SEE TABLE 1)

GRAPHIC SCALE (1" = 1,000')

0' 500' 1,000' 2,000'

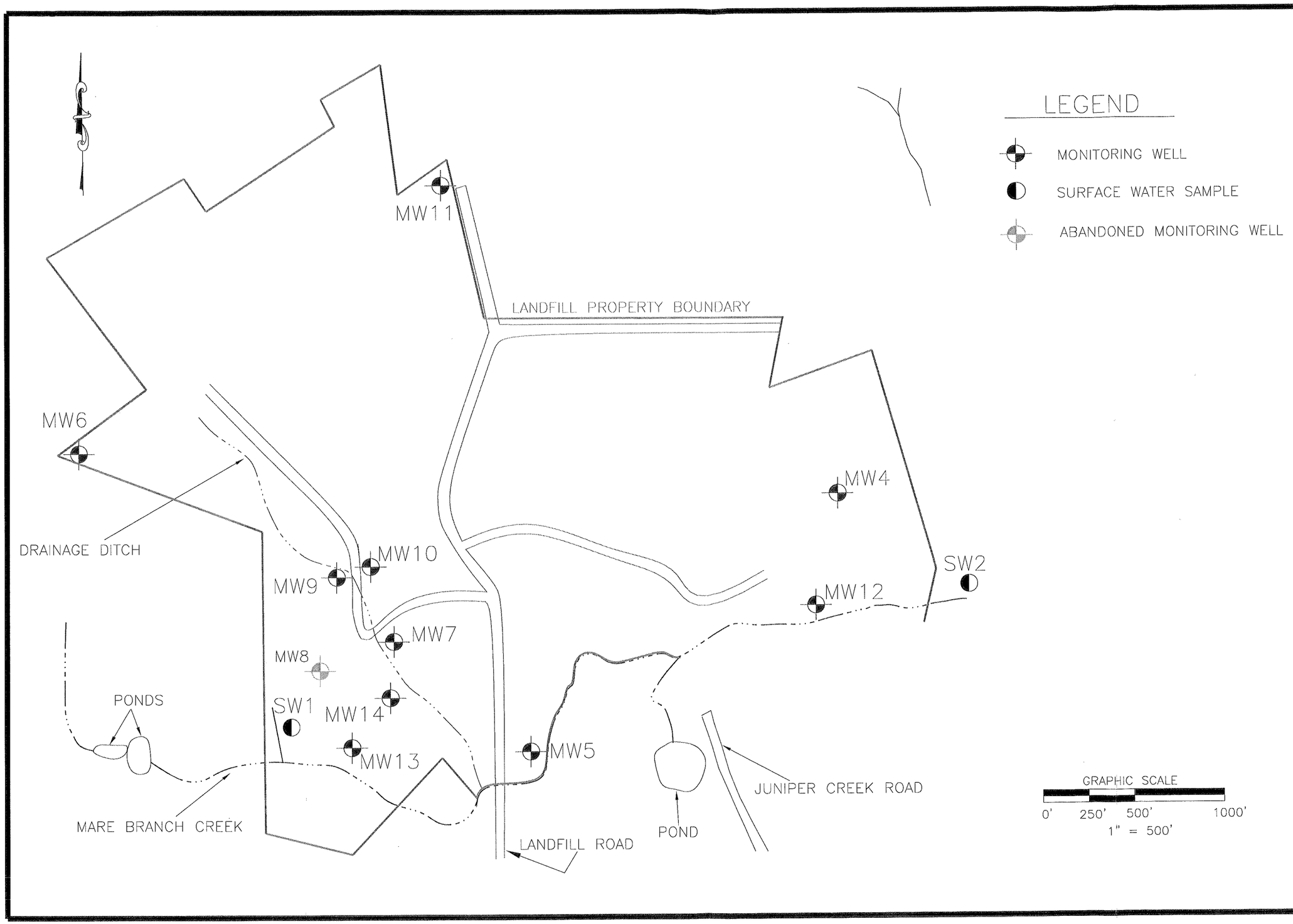
(NOTE: MAP ADAPTED FROM INFORMATION PROVIDED BY THE LEE COUNTY DEPARTMENT OF STRATEGIC SERVICES)

TERRAquest
ENVIRONMENTAL CONSULTANTS, P.C.

SITE VICINITY MAP
LEE COUNTY LANDFILL
331 LANDFILL ROAD
SANFORD, LEE COUNTY, NC 27332

LKEE COUNTY PUBLIC WORKS — SANFORD, NC

PROJECT NO.	02296	DRAWN BY:	RDK	DATE:	10/14/10
SCALE:	1" = 1,000'	CHECKED BY:	MJB	FIGURE NO.	2



SITE LAYOUT MAP
LEE COUNTY LANDFILL
SANFORD, NC

LEE COUNTY PUBLIC WORKS DEPARTMENT

PROJECT NO: 02296	CHECKED BY: MJB/JRG	FIGURE NO.	3
SCALE: 1" = 500'	DRAWN BY: JRG/RDK	DATE:	10/14/10

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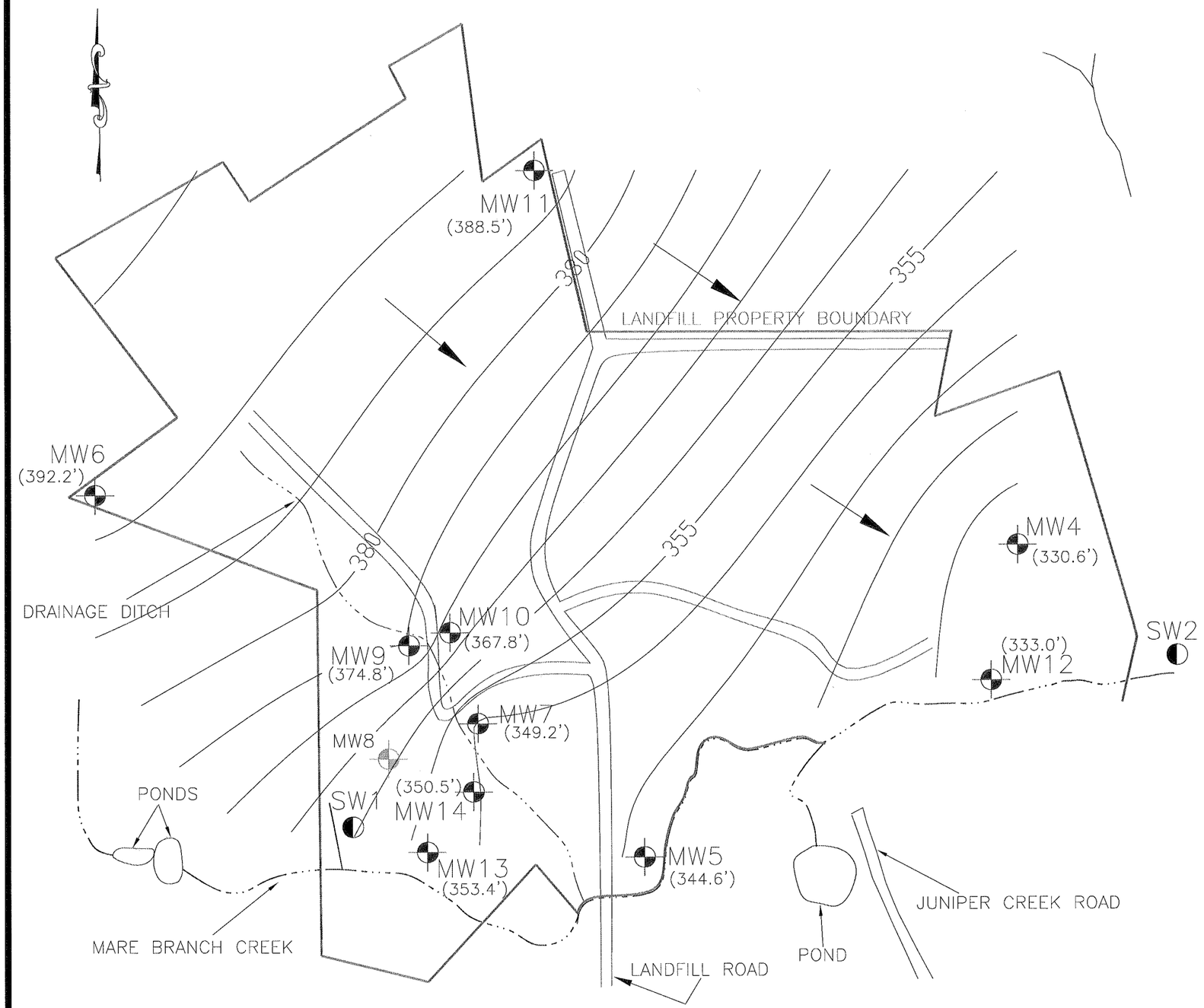

LEGEND

- MONITORING WELL
- SURFACE WATER SAMPLE
- ABANDONED MONITORING WELL

Groundwater elevations as measured on 10/4/10 are listed next to each well in feet.

The interpreted direction of groundwater flow is displayed by the arrows located perpendicular to the contour lines.

GRAPHIC SCALE

0' 250' 500' 1000'

1" = 500'

POTENTIOMETRIC SURFACE MAP (4/9/08)

LEE COUNTY LANDFILL

SANFORD, NC

LEE COUNTY PUBLIC WORKS DEPARTMENT

PROJECT NO: 02296	CHECKED BY: MJB/JRG	FIGURE NO.	4
SCALE: 1" = 500'	DRAWN BY: JRG/RDK	DATE:	10/14/10

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Tax I.D. 62-0814289

Est. 1970

Mr. Ryan Kerins
TerraQuest Environmental Consultants PC
100 East Ruffin Street
Mebane, NC 27302

Report Summary

Monday October 11, 2010

Report Number: L482435
Samples Received: 10/06/10
Client Project: 02296

Description: Lee County Landfill

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Jimmy Hunt

Jimmy Hunt, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002,NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,
TX - T104704245, OK-9915

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Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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REPORT OF ANALYSIS

Mr. Ryan Kerins
TerraQuest Environmental Consultant
100 East Ruffin Street
Mebane, NC 27302

October 11, 2010

ESC Sample # : L482435-01

Site ID :

Project # : 02296

Date Received : October 06, 2010
Description : Lee County Landfill

Sample ID : MW5

Collected By : Andy Wrenn
Collection Date : 10/04/10 10:35

Parameter	Result	MDL	RDL	Units	Method	Date	Dil.	SWSL
Mercury	U	0.017	0.20	ug/l	7470A	10/08/10	1	.2
Arsenic	22.	6.5	20.	ug/l	6010B	10/07/10	1	10
Barium	360	1.0	5.0	ug/l	6010B	10/07/10	1	100
Cadmium	U	0.80	5.0	ug/l	6010B	10/07/10	1	1
Chromium	7.0	1.7	10.	ug/l	6010B	10/07/10	1	10
Lead	26.	1.8	5.0	ug/l	6010B	10/07/10	1	10
Selenium	7.1	6.3	20.	ug/l	6010B	10/07/10	1	10
Silver	U	3.3	10.	ug/l	6010B	10/07/10	1	10
Volatile Organics								
Acetone	U	16.	50.	ug/l	6200B	10/07/10	1	100
Acrolein	U	7.6	50.	ug/l	6200B	10/07/10	1	53
Acrylonitrile	U	1.9	10.	ug/l	6200B	10/07/10	1	200
Benzene	U	0.23	1.0	ug/l	6200B	10/07/10	1	1
Bromobenzene	U	0.23	1.0	ug/l	6200B	10/07/10	1	
Bromodichloromethane	U	0.23	1.0	ug/l	6200B	10/07/10	1	1
Bromoform	U	0.37	1.0	ug/l	6200B	10/07/10	1	3
Bromomethane	U	1.6	5.0	ug/l	6200B	10/07/10	1	10
n-Butylbenzene	U	0.31	1.0	ug/l	6200B	10/07/10	1	
sec-Butylbenzene	U	0.22	1.0	ug/l	6200B	10/07/10	1	
tert-Butylbenzene	U	0.20	1.0	ug/l	6200B	10/07/10	1	
Carbon tetrachloride	U	0.20	1.0	ug/l	6200B	10/07/10	1	1
Chlorobenzene	U	0.30	1.0	ug/l	6200B	10/07/10	1	3
Chlorodibromomethane	U	0.24	1.0	ug/l	6200B	10/07/10	1	3
Chloroethane	U	0.87	5.0	ug/l	6200B	10/07/10	1	10
Chloroform	U	0.27	5.0	ug/l	6200B	10/07/10	1	5
Chloromethane	U	0.76	2.5	ug/l	6200B	10/07/10	1	1
2-Chlorotoluene	U	0.28	1.0	ug/l	6200B	10/07/10	1	
4-Chlorotoluene	U	0.20	1.0	ug/l	6200B	10/07/10	1	
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l	6200B	10/07/10	1	13
1,2-Dibromoethane	U	0.27	1.0	ug/l	6200B	10/07/10	1	1
Dibromomethane	U	0.35	1.0	ug/l	6200B	10/07/10	1	10
1,2-Dichlorobenzene	U	0.29	1.0	ug/l	6200B	10/07/10	1	5
1,3-Dichlorobenzene	U	0.29	1.0	ug/l	6200B	10/07/10	1	
1,4-Dichlorobenzene	U	0.31	1.0	ug/l	6200B	10/07/10	1	1
Dichlorodifluoromethane	U	1.6	5.0	ug/l	6200B	10/07/10	1	5
1,1-Dichloroethane	U	0.32	1.0	ug/l	6200B	10/07/10	1	5
1,2-Dichloroethane	U	0.25	1.0	ug/l	6200B	10/07/10	1	1
1,1-Dichloroethene	U	0.41	1.0	ug/l	6200B	10/07/10	1	5
cis-1,2-Dichloroethene	U	0.34	1.0	ug/l	6200B	10/07/10	1	5
trans-1,2-Dichloroethene	U	0.26	1.0	ug/l	6200B	10/07/10	1	5

U = ND (Not Detected)
SWSL = Solid Waste Section Limit
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
Note:
The reported analytical results relate only to the sample submitted.
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REPORT OF ANALYSIS

Mr. Ryan Kerins
TerraQuest Environmental Consultant
100 East Ruffin Street
Mebane, NC 27302

October 11, 2010

ESC Sample # : L482435-01

Site ID :

Project # : 02296

Date Received : October 06, 2010
Description : Lee County Landfill

Sample ID : MW5

Collected By : Andy Wrenn
Collection Date : 10/04/10 10:35

Parameter	Result	MDL	RDL	Units	Method	Date	Dil.	SWSL
1,2-Dichloropropane	U	0.39	1.0	ug/l	6200B	10/07/10	1	1
1,1-Dichloropropene	U	0.26	1.0	ug/l	6200B	10/07/10	1	5
1,3-Dichloropropane	U	0.28	1.0	ug/l	6200B	10/07/10	1	1
2,2-Dichloropropane	U	0.36	1.0	ug/l	6200B	10/07/10	1	15
Di-isopropyl ether	U	0.26	1.0	ug/l	6200B	10/07/10	1	
Ethylbenzene	U	0.22	1.0	ug/l	6200B	10/07/10	1	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l	6200B	10/07/10	1	10
Isopropylbenzene	U	0.20	1.0	ug/l	6200B	10/07/10	1	
p-Isopropyltoluene	U	0.31	1.0	ug/l	6200B	10/07/10	1	
2-Butanone (MEK)	U	3.4	10.	ug/l	6200B	10/07/10	1	100
Methylene Chloride	U	0.91	5.0	ug/l	6200B	10/07/10	1	1
4-Methyl-2-pentanone (MIBK)	U	1.7	10.	ug/l	6200B	10/07/10	1	100
Methyl tert-butyl ether	U	0.63	1.0	ug/l	6200B	10/07/10	1	
Naphthalene	U	0.98	5.0	ug/l	6200B	10/07/10	1	10
n-Propylbenzene	U	0.31	1.0	ug/l	6200B	10/07/10	1	
Styrene	U	0.24	1.0	ug/l	6200B	10/07/10	1	1
1,1,1,2-Tetrachloroethane	U	0.32	1.0	ug/l	6200B	10/07/10	1	5
1,1,2,2-Tetrachloroethane	U	0.25	1.0	ug/l	6200B	10/07/10	1	3
Tetrachloroethene	U	0.32	1.0	ug/l	6200B	10/07/10	1	1
Toluene	U	0.32	5.0	ug/l	6200B	10/07/10	1	1
1,2,3-Trichlorobenzene	U	0.32	1.0	ug/l	6200B	10/07/10	1	
1,2,4-Trichlorobenzene	U	0.35	1.0	ug/l	6200B	10/07/10	1	10
1,1,1-Trichloroethane	U	0.31	1.0	ug/l	6200B	10/07/10	1	1
1,1,2-Trichloroethane	U	0.29	1.0	ug/l	6200B	10/07/10	1	1
Trichloroethene	U	0.31	1.0	ug/l	6200B	10/07/10	1	1
Trichlorofluoromethane	U	1.1	5.0	ug/l	6200B	10/07/10	1	1
1,2,3-Trichloropropane	U	0.74	1.0	ug/l	6200B	10/07/10	1	1
1,2,4-Trimethylbenzene	U	0.18	1.0	ug/l	6200B	10/07/10	1	
1,3,5-Trimethylbenzene	U	0.33	1.0	ug/l	6200B	10/07/10	1	
Vinyl chloride	U	0.34	1.0	ug/l	6200B	10/07/10	1	1
o-Xylene	U	0.19	1.0	ug/l	6200B	10/07/10	1	5
m&p-Xylenes	U	0.64	2.0	ug/l	6200B	10/07/10	1	5
Surrogate Recovery								
Toluene-d8	101.			% Rec.	6200B	10/07/10	1	87
Dibromofluoromethane	101.			% Rec.	6200B	10/07/10	1	79
a,a,a-Trifluorotoluene	104.			% Rec.	6200B	10/07/10	1	84
4-Bromofluorobenzene	102.			% Rec.	6200B	10/07/10	1	75

U = ND (Not Detected)
SWSL = Solid Waste Section Limit
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REPORT OF ANALYSIS

Mr. Ryan Kerins
TerraQuest Environmental Consultant
100 East Ruffin Street
Mebane, NC 27302

October 11, 2010

ESC Sample # : L482435-02

Site ID :

Project # : 02296

Date Received : October 06, 2010
Description : Lee County Landfill

Sample ID : MW6

Collected By : Andy Wrenn
Collection Date : 10/04/10 12:30

Parameter	Result	MDL	RDL	Units	Method	Date	Dil.	SWSL
Mercury	U	0.017	0.20	ug/l	7470A	10/08/10	1	.2
Arsenic	9.7	6.5	20.	ug/l	6010B	10/07/10	1	10
Barium	77.	1.0	5.0	ug/l	6010B	10/07/10	1	100
Cadmium	U	0.80	5.0	ug/l	6010B	10/07/10	1	1
Chromium	U	1.7	10.	ug/l	6010B	10/07/10	1	10
Lead	4.3	1.8	5.0	ug/l	6010B	10/07/10	1	10
Selenium	10.	6.3	20.	ug/l	6010B	10/07/10	1	10
Silver	U	3.3	10.	ug/l	6010B	10/07/10	1	10
Volatile Organics								
Acetone	U	16.	50.	ug/l	6200B	10/07/10	1	100
Acrolein	U	7.6	50.	ug/l	6200B	10/07/10	1	53
Acrylonitrile	U	1.9	10.	ug/l	6200B	10/07/10	1	200
Benzene	U	0.23	1.0	ug/l	6200B	10/07/10	1	1
Bromobenzene	U	0.23	1.0	ug/l	6200B	10/07/10	1	
Bromodichloromethane	U	0.23	1.0	ug/l	6200B	10/07/10	1	1
Bromoform	U	0.37	1.0	ug/l	6200B	10/07/10	1	3
Bromomethane	U	1.6	5.0	ug/l	6200B	10/07/10	1	10
n-Butylbenzene	U	0.31	1.0	ug/l	6200B	10/07/10	1	
sec-Butylbenzene	U	0.22	1.0	ug/l	6200B	10/07/10	1	
tert-Butylbenzene	U	0.20	1.0	ug/l	6200B	10/07/10	1	
Carbon tetrachloride	U	0.20	1.0	ug/l	6200B	10/07/10	1	1
Chlorobenzene	U	0.30	1.0	ug/l	6200B	10/07/10	1	3
Chlorodibromomethane	U	0.24	1.0	ug/l	6200B	10/07/10	1	3
Chloroethane	U	0.87	5.0	ug/l	6200B	10/07/10	1	10
Chloroform	U	0.27	5.0	ug/l	6200B	10/07/10	1	5
Chloromethane	U	0.76	2.5	ug/l	6200B	10/07/10	1	1
2-Chlorotoluene	U	0.28	1.0	ug/l	6200B	10/07/10	1	
4-Chlorotoluene	U	0.20	1.0	ug/l	6200B	10/07/10	1	
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l	6200B	10/07/10	1	13
1,2-Dibromoethane	U	0.27	1.0	ug/l	6200B	10/07/10	1	1
Dibromomethane	U	0.35	1.0	ug/l	6200B	10/07/10	1	10
1,2-Dichlorobenzene	U	0.29	1.0	ug/l	6200B	10/07/10	1	5
1,3-Dichlorobenzene	U	0.29	1.0	ug/l	6200B	10/07/10	1	
1,4-Dichlorobenzene	U	0.31	1.0	ug/l	6200B	10/07/10	1	1
Dichlorodifluoromethane	U	1.6	5.0	ug/l	6200B	10/07/10	1	5
1,1-Dichloroethane	U	0.32	1.0	ug/l	6200B	10/07/10	1	5
1,2-Dichloroethane	U	0.25	1.0	ug/l	6200B	10/07/10	1	1
1,1-Dichloroethene	U	0.41	1.0	ug/l	6200B	10/07/10	1	5
cis-1,2-Dichloroethene	U	0.34	1.0	ug/l	6200B	10/07/10	1	5
trans-1,2-Dichloroethene	U	0.26	1.0	ug/l	6200B	10/07/10	1	5

U = ND (Not Detected)
SWSL = Solid Waste Section Limit
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
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REPORT OF ANALYSIS

October 11, 2010

Mr. Ryan Kerins
TerraQuest Environmental Consultant
100 East Ruffin Street
Mebane, NC 27302

ESC Sample # : L482435-02

Date Received : October 06, 2010
Description : Lee County Landfill

Site ID :

Sample ID : MW6

Project # : 02296

Collected By : Andy Wrenn
Collection Date : 10/04/10 12:30

Parameter	Result	MDL	RDL	Units	Method	Date	Dil.	SWSL
1,2-Dichloropropane	U	0.39	1.0	ug/l	6200B	10/07/10	1	1
1,1-Dichloropropene	U	0.26	1.0	ug/l	6200B	10/07/10	1	5
1,3-Dichloropropane	U	0.28	1.0	ug/l	6200B	10/07/10	1	1
2,2-Dichloropropane	U	0.36	1.0	ug/l	6200B	10/07/10	1	15
Di-isopropyl ether	U	0.26	1.0	ug/l	6200B	10/07/10	1	
Ethylbenzene	U	0.22	1.0	ug/l	6200B	10/07/10	1	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l	6200B	10/07/10	1	10
Isopropylbenzene	U	0.20	1.0	ug/l	6200B	10/07/10	1	
p-Isopropyltoluene	U	0.31	1.0	ug/l	6200B	10/07/10	1	
2-Butanone (MEK)	U	3.4	10.	ug/l	6200B	10/07/10	1	100
Methylene Chloride	U	0.91	5.0	ug/l	6200B	10/07/10	1	1
4-Methyl-2-pentanone (MIBK)	U	1.7	10.	ug/l	6200B	10/07/10	1	100
Methyl tert-butyl ether	U	0.63	1.0	ug/l	6200B	10/07/10	1	
Naphthalene	U	0.98	5.0	ug/l	6200B	10/07/10	1	10
n-Propylbenzene	U	0.31	1.0	ug/l	6200B	10/07/10	1	
Styrene	U	0.24	1.0	ug/l	6200B	10/07/10	1	1
1,1,1,2-Tetrachloroethane	U	0.32	1.0	ug/l	6200B	10/07/10	1	5
1,1,2,2-Tetrachloroethane	U	0.25	1.0	ug/l	6200B	10/07/10	1	3
Tetrachloroethene	U	0.32	1.0	ug/l	6200B	10/07/10	1	1
Toluene	U	0.32	5.0	ug/l	6200B	10/07/10	1	1
1,2,3-Trichlorobenzene	U	0.32	1.0	ug/l	6200B	10/07/10	1	
1,2,4-Trichlorobenzene	U	0.35	1.0	ug/l	6200B	10/07/10	1	10
1,1,1-Trichloroethane	U	0.31	1.0	ug/l	6200B	10/07/10	1	1
1,1,2-Trichloroethane	U	0.29	1.0	ug/l	6200B	10/07/10	1	1
Trichloroethene	U	0.31	1.0	ug/l	6200B	10/07/10	1	1
Trichlorofluoromethane	U	1.1	5.0	ug/l	6200B	10/07/10	1	1
1,2,3-Trichloropropane	U	0.74	1.0	ug/l	6200B	10/07/10	1	1
1,2,4-Trimethylbenzene	U	0.18	1.0	ug/l	6200B	10/07/10	1	
1,3,5-Trimethylbenzene	U	0.33	1.0	ug/l	6200B	10/07/10	1	
Vinyl chloride	U	0.34	1.0	ug/l	6200B	10/07/10	1	1
o-Xylene	U	0.19	1.0	ug/l	6200B	10/07/10	1	5
m&p-Xylenes	U	0.64	2.0	ug/l	6200B	10/07/10	1	5
Surrogate Recovery								
Toluene-d8	102.			% Rec.	6200B	10/07/10	1	87
Dibromofluoromethane	103.			% Rec.	6200B	10/07/10	1	79
a,a,a-Trifluorotoluene	108.			% Rec.	6200B	10/07/10	1	84
4-Bromofluorobenzene	98.3			% Rec.	6200B	10/07/10	1	75

U = ND (Not Detected)
SWSL = Solid Waste Section Limit
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
Note:
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Est. 1970

REPORT OF ANALYSIS

Mr. Ryan Kerins
TerraQuest Environmental Consultant
100 East Ruffin Street
Mebane, NC 27302

October 11, 2010

ESC Sample # : L482435-03

Site ID :

Project # : 02296

Date Received : October 06, 2010
Description : Lee County Landfill

Sample ID : MW9

Collected By : Andy Wrenn
Collection Date : 10/04/10 13:41

Parameter	Result	MDL	RDL	Units	Method	Date	Dil.	SWSL
Mercury	U	0.017	0.20	ug/l	7470A	10/08/10	1	.2
Arsenic	16.	6.5	20.	ug/l	6010B	10/06/10	1	10
Barium	98.	1.0	5.0	ug/l	6010B	10/06/10	1	100
Cadmium	0.90	0.80	5.0	ug/l	6010B	10/06/10	1	1
Chromium	U	1.7	10.	ug/l	6010B	10/06/10	1	10
Lead	3.8	1.8	5.0	ug/l	6010B	10/06/10	1	10
Selenium	U	6.3	20.	ug/l	6010B	10/06/10	1	10
Silver	U	3.3	10.	ug/l	6010B	10/06/10	1	10
Volatile Organics								
Acetone	U	16.	50.	ug/l	6200B	10/07/10	1	100
Acrolein	U	7.6	50.	ug/l	6200B	10/07/10	1	53
Acrylonitrile	U	1.9	10.	ug/l	6200B	10/07/10	1	200
Benzene	U	0.23	1.0	ug/l	6200B	10/07/10	1	1
Bromobenzene	U	0.23	1.0	ug/l	6200B	10/07/10	1	
Bromodichloromethane	U	0.23	1.0	ug/l	6200B	10/07/10	1	1
Bromoform	U	0.37	1.0	ug/l	6200B	10/07/10	1	3
Bromomethane	U	1.6	5.0	ug/l	6200B	10/07/10	1	10
n-Butylbenzene	U	0.31	1.0	ug/l	6200B	10/07/10	1	
sec-Butylbenzene	U	0.22	1.0	ug/l	6200B	10/07/10	1	
tert-Butylbenzene	U	0.20	1.0	ug/l	6200B	10/07/10	1	
Carbon tetrachloride	U	0.20	1.0	ug/l	6200B	10/07/10	1	1
Chlorobenzene	U	0.30	1.0	ug/l	6200B	10/07/10	1	3
Chlorodibromomethane	U	0.24	1.0	ug/l	6200B	10/07/10	1	3
Chloroethane	U	0.87	5.0	ug/l	6200B	10/07/10	1	10
Chloroform	U	0.27	5.0	ug/l	6200B	10/07/10	1	5
Chloromethane	U	0.76	2.5	ug/l	6200B	10/07/10	1	1
2-Chlorotoluene	U	0.28	1.0	ug/l	6200B	10/07/10	1	
4-Chlorotoluene	U	0.20	1.0	ug/l	6200B	10/07/10	1	
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l	6200B	10/07/10	1	13
1,2-Dibromoethane	U	0.27	1.0	ug/l	6200B	10/07/10	1	1
Dibromomethane	U	0.35	1.0	ug/l	6200B	10/07/10	1	10
1,2-Dichlorobenzene	U	0.29	1.0	ug/l	6200B	10/07/10	1	5
1,3-Dichlorobenzene	U	0.29	1.0	ug/l	6200B	10/07/10	1	
1,4-Dichlorobenzene	U	0.31	1.0	ug/l	6200B	10/07/10	1	1
Dichlorodifluoromethane	U	1.6	5.0	ug/l	6200B	10/07/10	1	5
1,1-Dichloroethane	U	0.32	1.0	ug/l	6200B	10/07/10	1	5
1,2-Dichloroethane	U	0.25	1.0	ug/l	6200B	10/07/10	1	1
1,1-Dichloroethene	U	0.41	1.0	ug/l	6200B	10/07/10	1	5
cis-1,2-Dichloroethene	U	0.34	1.0	ug/l	6200B	10/07/10	1	5
trans-1,2-Dichloroethene	U	0.26	1.0	ug/l	6200B	10/07/10	1	5

U = ND (Not Detected)
SWSL = Solid Waste Section Limit
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
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REPORT OF ANALYSIS

Mr. Ryan Kerins
TerraQuest Environmental Consultant
100 East Ruffin Street
Mebane, NC 27302

October 11, 2010

ESC Sample # : L482435-03

Site ID :

Project # : 02296

Date Received : October 06, 2010
Description : Lee County Landfill

Sample ID : MW9

Collected By : Andy Wrenn
Collection Date : 10/04/10 13:41

Parameter	Result	MDL	RDL	Units	Method	Date	Dil.	SWSL
1,2-Dichloropropane	U	0.39	1.0	ug/l	6200B	10/07/10	1	1
1,1-Dichloropropene	U	0.26	1.0	ug/l	6200B	10/07/10	1	5
1,3-Dichloropropane	U	0.28	1.0	ug/l	6200B	10/07/10	1	1
2,2-Dichloropropane	U	0.36	1.0	ug/l	6200B	10/07/10	1	15
Di-isopropyl ether	U	0.26	1.0	ug/l	6200B	10/07/10	1	
Ethylbenzene	U	0.22	1.0	ug/l	6200B	10/07/10	1	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l	6200B	10/07/10	1	10
Isopropylbenzene	U	0.20	1.0	ug/l	6200B	10/07/10	1	
p-Isopropyltoluene	U	0.31	1.0	ug/l	6200B	10/07/10	1	
2-Butanone (MEK)	U	3.4	10.	ug/l	6200B	10/07/10	1	100
Methylene Chloride	U	0.91	5.0	ug/l	6200B	10/07/10	1	1
4-Methyl-2-pentanone (MIBK)	U	1.7	10.	ug/l	6200B	10/07/10	1	100
Methyl tert-butyl ether	U	0.63	1.0	ug/l	6200B	10/07/10	1	
Naphthalene	U	0.98	5.0	ug/l	6200B	10/07/10	1	10
n-Propylbenzene	U	0.31	1.0	ug/l	6200B	10/07/10	1	
Styrene	U	0.24	1.0	ug/l	6200B	10/07/10	1	1
1,1,1,2-Tetrachloroethane	U	0.32	1.0	ug/l	6200B	10/07/10	1	5
1,1,2,2-Tetrachloroethane	U	0.25	1.0	ug/l	6200B	10/07/10	1	3
Tetrachloroethene	U	0.32	1.0	ug/l	6200B	10/07/10	1	1
Toluene	U	0.32	5.0	ug/l	6200B	10/07/10	1	1
1,2,3-Trichlorobenzene	U	0.32	1.0	ug/l	6200B	10/07/10	1	
1,2,4-Trichlorobenzene	U	0.35	1.0	ug/l	6200B	10/07/10	1	10
1,1,1-Trichloroethane	U	0.31	1.0	ug/l	6200B	10/07/10	1	1
1,1,2-Trichloroethane	U	0.29	1.0	ug/l	6200B	10/07/10	1	1
Trichloroethene	U	0.31	1.0	ug/l	6200B	10/07/10	1	1
Trichlorofluoromethane	U	1.1	5.0	ug/l	6200B	10/07/10	1	1
1,2,3-Trichloropropane	U	0.74	1.0	ug/l	6200B	10/07/10	1	1
1,2,4-Trimethylbenzene	U	0.18	1.0	ug/l	6200B	10/07/10	1	
1,3,5-Trimethylbenzene	U	0.33	1.0	ug/l	6200B	10/07/10	1	
Vinyl chloride	U	0.34	1.0	ug/l	6200B	10/07/10	1	1
o-Xylene	U	0.19	1.0	ug/l	6200B	10/07/10	1	5
m&p-Xylenes	U	0.64	2.0	ug/l	6200B	10/07/10	1	5
Surrogate Recovery								
Toluene-d8	101.			% Rec.	6200B	10/07/10	1	87
Dibromofluoromethane	103.			% Rec.	6200B	10/07/10	1	79
a,a,a-Trifluorotoluene	106.			% Rec.	6200B	10/07/10	1	84
4-Bromofluorobenzene	101.			% Rec.	6200B	10/07/10	1	75

U = ND (Not Detected)
SWSL = Solid Waste Section Limit
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
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REPORT OF ANALYSIS

Mr. Ryan Kerins
TerraQuest Environmental Consultant
100 East Ruffin Street
Mebane, NC 27302

October 11, 2010

ESC Sample # : L482435-04

Site ID :

Project # : 02296

Date Received : October 06, 2010
Description : Lee County Landfill

Sample ID : MW13

Collected By : Andy Wrenn
Collection Date : 10/04/10 11:43

Parameter	Result	MDL	RDL	Units	Method	Date	Dil.	SWSL
Mercury	U	0.017	0.20	ug/l	7470A	10/08/10	1	.2
Arsenic	13.	6.5	20.	ug/l	6010B	10/07/10	1	10
Barium	280	1.0	5.0	ug/l	6010B	10/07/10	1	100
Cadmium	U	0.80	5.0	ug/l	6010B	10/07/10	1	1
Chromium	1.8	1.7	10.	ug/l	6010B	10/07/10	1	10
Lead	7.7	1.8	5.0	ug/l	6010B	10/07/10	1	10
Selenium	U	6.3	20.	ug/l	6010B	10/07/10	1	10
Silver	U	3.3	10.	ug/l	6010B	10/07/10	1	10
Volatile Organics								
Acetone	U	16.	50.	ug/l	6200B	10/07/10	1	100
Acrolein	U	7.6	50.	ug/l	6200B	10/07/10	1	53
Acrylonitrile	U	1.9	10.	ug/l	6200B	10/07/10	1	200
Benzene	U	0.23	1.0	ug/l	6200B	10/07/10	1	1
Bromobenzene	U	0.23	1.0	ug/l	6200B	10/07/10	1	
Bromodichloromethane	U	0.23	1.0	ug/l	6200B	10/07/10	1	1
Bromoform	U	0.37	1.0	ug/l	6200B	10/07/10	1	3
Bromomethane	U	1.6	5.0	ug/l	6200B	10/07/10	1	10
n-Butylbenzene	U	0.31	1.0	ug/l	6200B	10/07/10	1	
sec-Butylbenzene	U	0.22	1.0	ug/l	6200B	10/07/10	1	
tert-Butylbenzene	U	0.20	1.0	ug/l	6200B	10/07/10	1	
Carbon tetrachloride	U	0.20	1.0	ug/l	6200B	10/07/10	1	1
Chlorobenzene	U	0.30	1.0	ug/l	6200B	10/07/10	1	3
Chlorodibromomethane	U	0.24	1.0	ug/l	6200B	10/07/10	1	3
Chloroethane	U	0.87	5.0	ug/l	6200B	10/07/10	1	10
Chloroform	U	0.27	5.0	ug/l	6200B	10/07/10	1	5
Chloromethane	U	0.76	2.5	ug/l	6200B	10/07/10	1	1
2-Chlorotoluene	U	0.28	1.0	ug/l	6200B	10/07/10	1	
4-Chlorotoluene	U	0.20	1.0	ug/l	6200B	10/07/10	1	
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l	6200B	10/07/10	1	13
1,2-Dibromoethane	U	0.27	1.0	ug/l	6200B	10/07/10	1	1
Dibromomethane	U	0.35	1.0	ug/l	6200B	10/07/10	1	10
1,2-Dichlorobenzene	U	0.29	1.0	ug/l	6200B	10/07/10	1	5
1,3-Dichlorobenzene	U	0.29	1.0	ug/l	6200B	10/07/10	1	
1,4-Dichlorobenzene	U	0.31	1.0	ug/l	6200B	10/07/10	1	1
Dichlorodifluoromethane	U	1.6	5.0	ug/l	6200B	10/07/10	1	5
1,1-Dichloroethane	U	0.32	1.0	ug/l	6200B	10/07/10	1	5
1,2-Dichloroethane	U	0.25	1.0	ug/l	6200B	10/07/10	1	1
1,1-Dichloroethene	U	0.41	1.0	ug/l	6200B	10/07/10	1	5
cis-1,2-Dichloroethene	U	0.34	1.0	ug/l	6200B	10/07/10	1	5
trans-1,2-Dichloroethene	U	0.26	1.0	ug/l	6200B	10/07/10	1	5

U = ND (Not Detected)
SWSL = Solid Waste Section Limit
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
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REPORT OF ANALYSIS

Mr. Ryan Kerins
TerraQuest Environmental Consultant
100 East Ruffin Street
Mebane, NC 27302

October 11, 2010

ESC Sample # : L482435-04

Date Received : October 06, 2010
Description : Lee County Landfill

Site ID :

Sample ID : MW13

Project # : 02296

Collected By : Andy Wrenn
Collection Date : 10/04/10 11:43

Parameter	Result	MDL	RDL	Units	Method	Date	Dil.	SWSL
1,2-Dichloropropane	U	0.39	1.0	ug/l	6200B	10/07/10	1	1
1,1-Dichloropropene	U	0.26	1.0	ug/l	6200B	10/07/10	1	5
1,3-Dichloropropane	U	0.28	1.0	ug/l	6200B	10/07/10	1	1
2,2-Dichloropropane	U	0.36	1.0	ug/l	6200B	10/07/10	1	15
Di-isopropyl ether	U	0.26	1.0	ug/l	6200B	10/07/10	1	
Ethylbenzene	U	0.22	1.0	ug/l	6200B	10/07/10	1	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l	6200B	10/07/10	1	10
Isopropylbenzene	U	0.20	1.0	ug/l	6200B	10/07/10	1	
p-Isopropyltoluene	U	0.31	1.0	ug/l	6200B	10/07/10	1	
2-Butanone (MEK)	U	3.4	10.	ug/l	6200B	10/07/10	1	100
Methylene Chloride	U	0.91	5.0	ug/l	6200B	10/07/10	1	1
4-Methyl-2-pentanone (MIBK)	U	1.7	10.	ug/l	6200B	10/07/10	1	100
Methyl tert-butyl ether	U	0.63	1.0	ug/l	6200B	10/07/10	1	
Naphthalene	U	0.98	5.0	ug/l	6200B	10/07/10	1	10
n-Propylbenzene	U	0.31	1.0	ug/l	6200B	10/07/10	1	
Styrene	U	0.24	1.0	ug/l	6200B	10/07/10	1	1
1,1,1,2-Tetrachloroethane	U	0.32	1.0	ug/l	6200B	10/07/10	1	5
1,1,2,2-Tetrachloroethane	U	0.25	1.0	ug/l	6200B	10/07/10	1	3
Tetrachloroethene	U	0.32	1.0	ug/l	6200B	10/07/10	1	1
Toluene	U	0.32	5.0	ug/l	6200B	10/07/10	1	1
1,2,3-Trichlorobenzene	U	0.32	1.0	ug/l	6200B	10/07/10	1	
1,2,4-Trichlorobenzene	U	0.35	1.0	ug/l	6200B	10/07/10	1	10
1,1,1-Trichloroethane	U	0.31	1.0	ug/l	6200B	10/07/10	1	1
1,1,2-Trichloroethane	U	0.29	1.0	ug/l	6200B	10/07/10	1	1
Trichloroethene	U	0.31	1.0	ug/l	6200B	10/07/10	1	1
Trichlorofluoromethane	U	1.1	5.0	ug/l	6200B	10/07/10	1	1
1,2,3-Trichloropropane	U	0.74	1.0	ug/l	6200B	10/07/10	1	1
1,2,4-Trimethylbenzene	U	0.18	1.0	ug/l	6200B	10/07/10	1	
1,3,5-Trimethylbenzene	U	0.33	1.0	ug/l	6200B	10/07/10	1	
Vinyl chloride	U	0.34	1.0	ug/l	6200B	10/07/10	1	1
o-Xylene	U	0.19	1.0	ug/l	6200B	10/07/10	1	5
m&p-Xylenes	U	0.64	2.0	ug/l	6200B	10/07/10	1	5
Surrogate Recovery								
Toluene-d8	102.			% Rec.	6200B	10/07/10	1	87
Dibromofluoromethane	102.			% Rec.	6200B	10/07/10	1	79
a,a,a-Trifluorotoluene	107.			% Rec.	6200B	10/07/10	1	84
4-Bromofluorobenzene	103.			% Rec.	6200B	10/07/10	1	75

U = ND (Not Detected)
SWSL = Solid Waste Section Limit
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
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REPORT OF ANALYSIS

Mr. Ryan Kerins
TerraQuest Environmental Consultant
100 East Ruffin Street
Mebane, NC 27302

October 11, 2010

ESC Sample # : L482435-05

Date Received : October 06, 2010
Description : Lee County Landfill

Site ID :

Sample ID : MW14

Project # : 02296

Collected By : Andy Wrenn
Collection Date : 10/04/10 11:17

Parameter	Result	MDL	RDL	Units	Method	Date	Dil.	SWSL
Mercury	U	0.017	0.20	ug/l	7470A	10/08/10	1	.2
Arsenic	9.4	6.5	20.	ug/l	6010B	10/07/10	1	10
Barium	140	1.0	5.0	ug/l	6010B	10/07/10	1	100
Cadmium	U	0.80	5.0	ug/l	6010B	10/07/10	1	1
Chromium	5.3	1.7	10.	ug/l	6010B	10/07/10	1	10
Lead	68.	1.8	5.0	ug/l	6010B	10/07/10	1	10
Selenium	U	6.3	20.	ug/l	6010B	10/07/10	1	10
Silver	U	3.3	10.	ug/l	6010B	10/07/10	1	10
Volatile Organics								
Acetone	U	16.	50.	ug/l	6200B	10/07/10	1	100
Acrolein	U	7.6	50.	ug/l	6200B	10/07/10	1	53
Acrylonitrile	U	1.9	10.	ug/l	6200B	10/07/10	1	200
Benzene	U	0.23	1.0	ug/l	6200B	10/07/10	1	1
Bromobenzene	U	0.23	1.0	ug/l	6200B	10/07/10	1	
Bromodichloromethane	U	0.23	1.0	ug/l	6200B	10/07/10	1	1
Bromoform	U	0.37	1.0	ug/l	6200B	10/07/10	1	3
Bromomethane	U	1.6	5.0	ug/l	6200B	10/07/10	1	10
n-Butylbenzene	U	0.31	1.0	ug/l	6200B	10/07/10	1	
sec-Butylbenzene	U	0.22	1.0	ug/l	6200B	10/07/10	1	
tert-Butylbenzene	U	0.20	1.0	ug/l	6200B	10/07/10	1	
Carbon tetrachloride	U	0.20	1.0	ug/l	6200B	10/07/10	1	1
Chlorobenzene	U	0.30	1.0	ug/l	6200B	10/07/10	1	3
Chlorodibromomethane	U	0.24	1.0	ug/l	6200B	10/07/10	1	3
Chloroethane	U	0.87	5.0	ug/l	6200B	10/07/10	1	10
Chloroform	U	0.27	5.0	ug/l	6200B	10/07/10	1	5
Chloromethane	U	0.76	2.5	ug/l	6200B	10/07/10	1	1
2-Chlorotoluene	U	0.28	1.0	ug/l	6200B	10/07/10	1	
4-Chlorotoluene	U	0.20	1.0	ug/l	6200B	10/07/10	1	
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l	6200B	10/07/10	1	13
1,2-Dibromoethane	U	0.27	1.0	ug/l	6200B	10/07/10	1	1
Dibromomethane	U	0.35	1.0	ug/l	6200B	10/07/10	1	10
1,2-Dichlorobenzene	U	0.29	1.0	ug/l	6200B	10/07/10	1	5
1,3-Dichlorobenzene	U	0.29	1.0	ug/l	6200B	10/07/10	1	
1,4-Dichlorobenzene	U	0.31	1.0	ug/l	6200B	10/07/10	1	1
Dichlorodifluoromethane	U	1.6	5.0	ug/l	6200B	10/07/10	1	5
1,1-Dichloroethane	U	0.32	1.0	ug/l	6200B	10/07/10	1	5
1,2-Dichloroethane	U	0.25	1.0	ug/l	6200B	10/07/10	1	1
1,1-Dichloroethene	U	0.41	1.0	ug/l	6200B	10/07/10	1	5
cis-1,2-Dichloroethene	U	0.34	1.0	ug/l	6200B	10/07/10	1	5
trans-1,2-Dichloroethene	U	0.26	1.0	ug/l	6200B	10/07/10	1	5

U = ND (Not Detected)
SWSL = Solid Waste Section Limit
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
Note:
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Reported: 10/10/10 13:47 Revised: 10/11/10 14:41

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REPORT OF ANALYSIS

Mr. Ryan Kerins
TerraQuest Environmental Consultant
100 East Ruffin Street
Mebane, NC 27302

October 11, 2010

ESC Sample # : L482435-05

Site ID :

Project # : 02296

Date Received : October 06, 2010
Description : Lee County Landfill

Sample ID : MW14

Collected By : Andy Wrenn
Collection Date : 10/04/10 11:17

Parameter	Result	MDL	RDL	Units	Method	Date	Dil.	SWSL
1,2-Dichloropropane	U	0.39	1.0	ug/l	6200B	10/07/10	1	1
1,1-Dichloropropene	U	0.26	1.0	ug/l	6200B	10/07/10	1	5
1,3-Dichloropropane	U	0.28	1.0	ug/l	6200B	10/07/10	1	1
2,2-Dichloropropane	U	0.36	1.0	ug/l	6200B	10/07/10	1	15
Di-isopropyl ether	U	0.26	1.0	ug/l	6200B	10/07/10	1	
Ethylbenzene	U	0.22	1.0	ug/l	6200B	10/07/10	1	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l	6200B	10/07/10	1	10
Isopropylbenzene	U	0.20	1.0	ug/l	6200B	10/07/10	1	
p-Isopropyltoluene	U	0.31	1.0	ug/l	6200B	10/07/10	1	
2-Butanone (MEK)	U	3.4	10.	ug/l	6200B	10/07/10	1	100
Methylene Chloride	U	0.91	5.0	ug/l	6200B	10/07/10	1	1
4-Methyl-2-pentanone (MIBK)	U	1.7	10.	ug/l	6200B	10/07/10	1	100
Methyl tert-butyl ether	U	0.63	1.0	ug/l	6200B	10/07/10	1	
Naphthalene	U	0.98	5.0	ug/l	6200B	10/07/10	1	10
n-Propylbenzene	U	0.31	1.0	ug/l	6200B	10/07/10	1	
Styrene	U	0.24	1.0	ug/l	6200B	10/07/10	1	1
1,1,1,2-Tetrachloroethane	U	0.32	1.0	ug/l	6200B	10/07/10	1	5
1,1,2,2-Tetrachloroethane	U	0.25	1.0	ug/l	6200B	10/07/10	1	3
Tetrachloroethene	U	0.32	1.0	ug/l	6200B	10/07/10	1	1
Toluene	U	0.32	5.0	ug/l	6200B	10/07/10	1	1
1,2,3-Trichlorobenzene	U	0.32	1.0	ug/l	6200B	10/07/10	1	
1,2,4-Trichlorobenzene	U	0.35	1.0	ug/l	6200B	10/07/10	1	10
1,1,1-Trichloroethane	U	0.31	1.0	ug/l	6200B	10/07/10	1	1
1,1,2-Trichloroethane	U	0.29	1.0	ug/l	6200B	10/07/10	1	1
Trichloroethene	U	0.31	1.0	ug/l	6200B	10/07/10	1	1
Trichlorofluoromethane	U	1.1	5.0	ug/l	6200B	10/07/10	1	1
1,2,3-Trichloropropane	U	0.74	1.0	ug/l	6200B	10/07/10	1	1
1,2,4-Trimethylbenzene	U	0.18	1.0	ug/l	6200B	10/07/10	1	
1,3,5-Trimethylbenzene	U	0.33	1.0	ug/l	6200B	10/07/10	1	
Vinyl chloride	U	0.34	1.0	ug/l	6200B	10/07/10	1	1
o-Xylene	U	0.19	1.0	ug/l	6200B	10/07/10	1	5
m&p-Xylenes	U	0.64	2.0	ug/l	6200B	10/07/10	1	5
Surrogate Recovery								
Toluene-d8	102.			% Rec.	6200B	10/07/10	1	87
Dibromofluoromethane	103.			% Rec.	6200B	10/07/10	1	79
a,a,a-Trifluorotoluene	107.			% Rec.	6200B	10/07/10	1	84
4-Bromofluorobenzene	101.			% Rec.	6200B	10/07/10	1	75

U = ND (Not Detected)
SWSL = Solid Waste Section Limit
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
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REPORT OF ANALYSIS

October 11, 2010

Mr. Ryan Kerins
TerraQuest Environmental Consultant
100 East Ruffin Street
Mebane, NC 27302

ESC Sample # : L482435-06

Date Received : October 06, 2010
Description : Lee County Landfill

Site ID :

Sample ID : SW2

Project # : 02296

Collected By : Andy Wrenn
Collection Date : 10/04/10 15:37

Parameter	Result	MDL	RDL	Units	Method	Date	Dil.	SWSL
Mercury	U	0.017	0.20	ug/l	7470A	10/08/10	1	.2
Arsenic	U	6.5	20.	ug/l	6010B	10/07/10	1	10
Barium	94.	1.0	5.0	ug/l	6010B	10/07/10	1	100
Cadmium	U	0.80	5.0	ug/l	6010B	10/07/10	1	1
Chromium	U	1.7	10.	ug/l	6010B	10/07/10	1	10
Lead	U	1.8	5.0	ug/l	6010B	10/07/10	1	10
Selenium	U	6.3	20.	ug/l	6010B	10/07/10	1	10
Silver	U	3.3	10.	ug/l	6010B	10/07/10	1	10
Volatile Organics								
Acetone	U	16.	50.	ug/l	6200B	10/07/10	1	100
Acrolein	U	7.6	50.	ug/l	6200B	10/07/10	1	53
Acrylonitrile	U	1.9	10.	ug/l	6200B	10/07/10	1	200
Benzene	U	0.23	1.0	ug/l	6200B	10/07/10	1	1
Bromobenzene	U	0.23	1.0	ug/l	6200B	10/07/10	1	
Bromodichloromethane	U	0.23	1.0	ug/l	6200B	10/07/10	1	1
Bromoform	U	0.37	1.0	ug/l	6200B	10/07/10	1	3
Bromomethane	U	1.6	5.0	ug/l	6200B	10/07/10	1	10
n-Butylbenzene	U	0.31	1.0	ug/l	6200B	10/07/10	1	
sec-Butylbenzene	U	0.22	1.0	ug/l	6200B	10/07/10	1	
tert-Butylbenzene	U	0.20	1.0	ug/l	6200B	10/07/10	1	
Carbon tetrachloride	U	0.20	1.0	ug/l	6200B	10/07/10	1	1
Chlorobenzene	U	0.30	1.0	ug/l	6200B	10/07/10	1	3
Chlorodibromomethane	U	0.24	1.0	ug/l	6200B	10/07/10	1	3
Chloroethane	U	0.87	5.0	ug/l	6200B	10/07/10	1	10
Chloroform	U	0.27	5.0	ug/l	6200B	10/07/10	1	5
Chloromethane	U	0.76	2.5	ug/l	6200B	10/07/10	1	1
2-Chlorotoluene	U	0.28	1.0	ug/l	6200B	10/07/10	1	
4-Chlorotoluene	U	0.20	1.0	ug/l	6200B	10/07/10	1	
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l	6200B	10/07/10	1	13
1,2-Dibromoethane	U	0.27	1.0	ug/l	6200B	10/07/10	1	1
Dibromomethane	U	0.35	1.0	ug/l	6200B	10/07/10	1	10
1,2-Dichlorobenzene	U	0.29	1.0	ug/l	6200B	10/07/10	1	5
1,3-Dichlorobenzene	U	0.29	1.0	ug/l	6200B	10/07/10	1	
1,4-Dichlorobenzene	U	0.31	1.0	ug/l	6200B	10/07/10	1	1
Dichlorodifluoromethane	U	1.6	5.0	ug/l	6200B	10/07/10	1	5
1,1-Dichloroethane	U	0.32	1.0	ug/l	6200B	10/07/10	1	5
1,2-Dichloroethane	U	0.25	1.0	ug/l	6200B	10/07/10	1	1
1,1-Dichloroethene	U	0.41	1.0	ug/l	6200B	10/07/10	1	5
cis-1,2-Dichloroethene	U	0.34	1.0	ug/l	6200B	10/07/10	1	5
trans-1,2-Dichloroethene	U	0.26	1.0	ug/l	6200B	10/07/10	1	5

U = ND (Not Detected)
SWSL = Solid Waste Section Limit
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
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REPORT OF ANALYSIS

October 11, 2010

Mr. Ryan Kerins
TerraQuest Environmental Consultant
100 East Ruffin Street
Mebane, NC 27302

ESC Sample # : L482435-06

Date Received : October 06, 2010
Description : Lee County Landfill

Site ID :

Sample ID : SW2

Project # : 02296

Collected By : Andy Wrenn
Collection Date : 10/04/10 15:37

Parameter	Result	MDL	RDL	Units	Method	Date	Dil.	SWSL
1,2-Dichloropropane	U	0.39	1.0	ug/l	6200B	10/07/10	1	1
1,1-Dichloropropene	U	0.26	1.0	ug/l	6200B	10/07/10	1	5
1,3-Dichloropropane	U	0.28	1.0	ug/l	6200B	10/07/10	1	1
2,2-Dichloropropane	U	0.36	1.0	ug/l	6200B	10/07/10	1	15
Di-isopropyl ether	U	0.26	1.0	ug/l	6200B	10/07/10	1	
Ethylbenzene	U	0.22	1.0	ug/l	6200B	10/07/10	1	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l	6200B	10/07/10	1	10
Isopropylbenzene	U	0.20	1.0	ug/l	6200B	10/07/10	1	
p-Isopropyltoluene	U	0.31	1.0	ug/l	6200B	10/07/10	1	
2-Butanone (MEK)	U	3.4	10.	ug/l	6200B	10/07/10	1	100
Methylene Chloride	U	0.91	5.0	ug/l	6200B	10/07/10	1	1
4-Methyl-2-pentanone (MIBK)	U	1.7	10.	ug/l	6200B	10/07/10	1	100
Methyl tert-butyl ether	U	0.63	1.0	ug/l	6200B	10/07/10	1	
Naphthalene	U	0.98	5.0	ug/l	6200B	10/07/10	1	10
n-Propylbenzene	U	0.31	1.0	ug/l	6200B	10/07/10	1	
Styrene	U	0.24	1.0	ug/l	6200B	10/07/10	1	1
1,1,1,2-Tetrachloroethane	U	0.32	1.0	ug/l	6200B	10/07/10	1	5
1,1,2,2-Tetrachloroethane	U	0.25	1.0	ug/l	6200B	10/07/10	1	3
Tetrachloroethene	U	0.32	1.0	ug/l	6200B	10/07/10	1	1
Toluene	U	0.32	5.0	ug/l	6200B	10/07/10	1	1
1,2,3-Trichlorobenzene	U	0.32	1.0	ug/l	6200B	10/07/10	1	
1,2,4-Trichlorobenzene	U	0.35	1.0	ug/l	6200B	10/07/10	1	10
1,1,1-Trichloroethane	U	0.31	1.0	ug/l	6200B	10/07/10	1	1
1,1,2-Trichloroethane	U	0.29	1.0	ug/l	6200B	10/07/10	1	1
Trichloroethene	U	0.31	1.0	ug/l	6200B	10/07/10	1	1
Trichlorofluoromethane	U	1.1	5.0	ug/l	6200B	10/07/10	1	1
1,2,3-Trichloropropane	U	0.74	1.0	ug/l	6200B	10/07/10	1	1
1,2,4-Trimethylbenzene	U	0.18	1.0	ug/l	6200B	10/07/10	1	
1,3,5-Trimethylbenzene	U	0.33	1.0	ug/l	6200B	10/07/10	1	
Vinyl chloride	U	0.34	1.0	ug/l	6200B	10/07/10	1	1
o-Xylene	U	0.19	1.0	ug/l	6200B	10/07/10	1	5
m&p-Xylenes	U	0.64	2.0	ug/l	6200B	10/07/10	1	5
Surrogate Recovery								
Toluene-d8	101.			% Rec.	6200B	10/07/10	1	87
Dibromofluoromethane	105.			% Rec.	6200B	10/07/10	1	79
a,a,a-Trifluorotoluene	107.			% Rec.	6200B	10/07/10	1	84
4-Bromofluorobenzene	101.			% Rec.	6200B	10/07/10	1	75

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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L482435-01	WG501994	SAMP	Chromium	R1414313	J
	WG501994	SAMP	Selenium	R1414313	J
	WG502012	SAMP	Styrene	R1418228	J4
L482435-02	WG501994	SAMP	Arsenic	R1414313	J
	WG501994	SAMP	Lead	R1414313	J
	WG501994	SAMP	Selenium	R1414313	J
	WG502012	SAMP	Styrene	R1418228	J4
L482435-03	WG501994	SAMP	Arsenic	R1414313	JP1
	WG501994	SAMP	Cadmium	R1414313	JP1
	WG501994	SAMP	Lead	R1414313	JP1
	WG502012	SAMP	Styrene	R1418228	J4
L482435-04	WG501994	SAMP	Arsenic	R1414313	J
	WG501994	SAMP	Chromium	R1414313	J
	WG502012	SAMP	Styrene	R1418228	J4
L482435-05	WG501994	SAMP	Arsenic	R1414313	J
	WG501994	SAMP	Chromium	R1414313	J
	WG502012	SAMP	Styrene	R1418228	J4
L482435-06	WG502012	SAMP	Styrene	R1418228	J4

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J4	The associated batch QC was outside the established quality control range for accuracy.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
10/11/10 at 14:41:28

TSR Signing Reports: 350
R5 - Desired TAT

No emails. Send 2 MeOH vials for VPH & 8260. Report all air samples in ppb by vol & acetone at 50ppb. Non-trust fund = $30 shipping. Paperless client. Attach VPH/EPH forms to CofCs.

Sample: L482435-01 Account: TURENV Received: 10/06/10 10:00 Due Date: 10/13/10 00:00 RPT Date: 10/10/10 13:47

Sample: L482435-02 Account: TURENV Received: 10/06/10 10:00 Due Date: 10/13/10 00:00 RPT Date: 10/10/10 13:47

Sample: L482435-03 Account: TURENV Received: 10/06/10 10:00 Due Date: 10/13/10 00:00 RPT Date: 10/10/10 13:47

Sample: L482435-04 Account: TURENV Received: 10/06/10 10:00 Due Date: 10/13/10 00:00 RPT Date: 10/10/10 13:47

Sample: L482435-05 Account: TURENV Received: 10/06/10 10:00 Due Date: 10/13/10 00:00 RPT Date: 10/10/10 13:47

Sample: L482435-06 Account: TURENV Received: 10/06/10 10:00 Due Date: 10/13/10 00:00 RPT Date: 10/10/10 13:47

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Tax I.D. 62-0814289

Est. 1970

TerraQuest Environmental Consultants PC
Mr. Ryan Kerins
100 East Ruffin Street

Mebane, NC 27302

Quality Assurance Report
Level II

L482435

October 11, 2010

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Arsenic	< .02	mg/l			WG501994	10/06/10 23:33
Barium	< .005	mg/l			WG501994	10/06/10 23:33
Cadmium	< .005	mg/l			WG501994	10/06/10 23:33
Chromium	< .01	mg/l			WG501994	10/06/10 23:33
Lead	< .005	mg/l			WG501994	10/06/10 23:33
Selenium	< .02	mg/l			WG501994	10/06/10 23:33
Silver	< .01	mg/l			WG501994	10/06/10 23:33
1,1,1,2-Tetrachloroethane	< .001	mg/l			WG502012	10/07/10 08:10
1,1,1-Trichloroethane	< .001	mg/l			WG502012	10/07/10 08:10
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG502012	10/07/10 08:10
1,1,2-Trichloroethane	< .001	mg/l			WG502012	10/07/10 08:10
1,1-Dichloroethane	< .001	mg/l			WG502012	10/07/10 08:10
1,1-Dichloroethene	< .001	mg/l			WG502012	10/07/10 08:10
1,1-Dichloropropene	< .001	mg/l			WG502012	10/07/10 08:10
1,2,3-Trichlorobenzene	< .001	mg/l			WG502012	10/07/10 08:10
1,2,3-Trichloropropane	< .001	mg/l			WG502012	10/07/10 08:10
1,2,4-Trichlorobenzene	< .001	mg/l			WG502012	10/07/10 08:10
1,2,4-Trimethylbenzene	< .001	mg/l			WG502012	10/07/10 08:10
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG502012	10/07/10 08:10
1,2-Dibromoethane	< .001	mg/l			WG502012	10/07/10 08:10
1,2-Dichlorobenzene	< .001	mg/l			WG502012	10/07/10 08:10
1,2-Dichloroethane	< .001	mg/l			WG502012	10/07/10 08:10
1,2-Dichloropropane	< .001	mg/l			WG502012	10/07/10 08:10
1,3,5-Trimethylbenzene	< .001	mg/l			WG502012	10/07/10 08:10
1,3-Dichlorobenzene	< .001	mg/l			WG502012	10/07/10 08:10
1,3-Dichloropropane	< .001	mg/l			WG502012	10/07/10 08:10
1,4-Dichlorobenzene	< .001	mg/l			WG502012	10/07/10 08:10
2,2-Dichloropropane	< .001	mg/l			WG502012	10/07/10 08:10
2-Butanone (MEK)	< .01	mg/l			WG502012	10/07/10 08:10
2-Chlorotoluene	< .001	mg/l			WG502012	10/07/10 08:10
4-Chlorotoluene	< .001	mg/l			WG502012	10/07/10 08:10
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG502012	10/07/10 08:10
Acetone	< .05	mg/l			WG502012	10/07/10 08:10
Acrolein	< .05	mg/l			WG502012	10/07/10 08:10
Acrylonitrile	< .01	mg/l			WG502012	10/07/10 08:10
Benzene	< .001	mg/l			WG502012	10/07/10 08:10
Bromobenzene	< .001	mg/l			WG502012	10/07/10 08:10
Bromodichloromethane	< .001	mg/l			WG502012	10/07/10 08:10
Bromoform	< .001	mg/l			WG502012	10/07/10 08:10
Bromomethane	< .005	mg/l			WG502012	10/07/10 08:10
Carbon tetrachloride	< .001	mg/l			WG502012	10/07/10 08:10
Chlorobenzene	< .001	mg/l			WG502012	10/07/10 08:10
Chlorodibromomethane	< .001	mg/l			WG502012	10/07/10 08:10
Chloroethane	< .001	mg/l			WG502012	10/07/10 08:10
Chloroform	< .005	mg/l			WG502012	10/07/10 08:10
Chloromethane	< .001	mg/l			WG502012	10/07/10 08:10
cis-1,2-Dichloroethene	< .001	mg/l			WG502012	10/07/10 08:10
Di-isopropyl ether	< .001	mg/l			WG502012	10/07/10 08:10
Dibromomethane	< .001	mg/l			WG502012	10/07/10 08:10
Dichlorodifluoromethane	< .005	mg/l			WG502012	10/07/10 08:10
Ethylbenzene	< .001	mg/l			WG502012	10/07/10 08:10
Hexachloro-1,3-butadiene	< .001	mg/l			WG502012	10/07/10 08:10
Isopropylbenzene	< .001	mg/l			WG502012	10/07/10 08:10
m&p-Xylenes	< .002	mg/l			WG502012	10/07/10 08:10
Methyl tert-butyl ether	< .001	mg/l			WG502012	10/07/10 08:10
Methylene Chloride	< .005	mg/l			WG502012	10/07/10 08:10
n-Butylbenzene	< .001	mg/l			WG502012	10/07/10 08:10

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Mt. Juliet, TN 37122
(615) 758-5858
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Fax (615) 758-5859

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Est. 1970

TerraQuest Environmental Consultants PC
Mr. Ryan Kerins
100 East Ruffin Street

Mebane, NC 27302

Quality Assurance Report
Level II

L482435

October 11, 2010

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
n-Propylbenzene	< .001	mg/l			WG502012	10/07/10 08:10
Naphthalene	< .005	mg/l			WG502012	10/07/10 08:10
o-Xylene	< .001	mg/l			WG502012	10/07/10 08:10
p-Isopropyltoluene	< .001	mg/l			WG502012	10/07/10 08:10
sec-Butylbenzene	< .001	mg/l			WG502012	10/07/10 08:10
Styrene	< .001	mg/l			WG502012	10/07/10 08:10
tert-Butylbenzene	< .001	mg/l			WG502012	10/07/10 08:10
Tetrachloroethene	< .001	mg/l			WG502012	10/07/10 08:10
Toluene	< .005	mg/l			WG502012	10/07/10 08:10
trans-1,2-Dichloroethene	< .001	mg/l			WG502012	10/07/10 08:10
Trichloroethene	< .001	mg/l			WG502012	10/07/10 08:10
Trichlorofluoromethane	< .005	mg/l			WG502012	10/07/10 08:10
Vinyl chloride	< .001	mg/l			WG502012	10/07/10 08:10
4-Bromofluorobenzene		% Rec.	98.00	75-128	WG502012	10/07/10 08:10
Dibromofluoromethane		% Rec.	103.1	79-125	WG502012	10/07/10 08:10
Toluene-d8		% Rec.	100.4	87-114	WG502012	10/07/10 08:10
a,a,a-Trifluorotoluene		% Rec.	105.4	84-114	WG502012	10/07/10 08:10
Mercury	< .0002	mg/l			WG502049	10/08/10 11:08

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Arsenic	mg/l	0.0120	0.0160	28.6*	20	L482435-03	WG501994
Barium	mg/l	0.0930	0.0980	4.91	20	L482435-03	WG501994
Cadmium	mg/l	0.00170	0.000900	61.5*	20	L482435-03	WG501994
Chromium	mg/l	0	0	0	20	L482435-03	WG501994
Lead	mg/l	0.00200	0.00380	62.1*	20	L482435-03	WG501994
Selenium	mg/l	0	0	0	20	L482435-03	WG501994
Silver	mg/l	0	0	0	20	L482435-03	WG501994
Mercury	mg/l	0	0	0	20	L482256-06	WG502049

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Arsenic	mg/l	1	1.00	100.	85-115	WG501994
Barium	mg/l	1	1.01	101.	85-115	WG501994
Cadmium	mg/l	1	1.08	108.	85-115	WG501994
Chromium	mg/l	1	1.06	106.	85-115	WG501994
Lead	mg/l	1	1.07	107.	85-115	WG501994
Selenium	mg/l	1	1.11	111.	85-115	WG501994
Silver	mg/l	1	1.05	105.	85-115	WG501994
1,1,1,2-Tetrachloroethane	mg/l	.025	0.0290	116.	75-134	WG502012
1,1,1-Trichloroethane	mg/l	.025	0.0257	103.	67-137	WG502012
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0295	118.	72-128	WG502012
1,1,2-Trichloroethane	mg/l	.025	0.0278	111.	79-123	WG502012
1,1-Dichloroethane	mg/l	.025	0.0242	96.8	67-133	WG502012
1,1-Dichloroethene	mg/l	.025	0.0216	86.2	60-130	WG502012
1,1-Dichloropropene	mg/l	.025	0.0247	98.6	68-132	WG502012
1,2,3-Trichlorobenzene	mg/l	.025	0.0284	114.	63-138	WG502012
1,2,3-Trichloropropane	mg/l	.025	0.0286	115.	68-130	WG502012
1,2,4-Trichlorobenzene	mg/l	.025	0.0270	108.	65-137	WG502012
1,2,4-Trimethylbenzene	mg/l	.025	0.0279	112.	72-135	WG502012
1,2-Dibromo-3-Chloropropane	mg/l	.025	0.0274	109.	55-134	WG502012

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Quality Assurance Report
Level II

L482435

October 11, 2010

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
1,2-Dibromoethane	mg/l	.025	0.0267	107.	75-126	WG502012
1,2-Dichlorobenzene	mg/l	.025	0.0266	106.	75-122	WG502012
1,2-Dichloroethane	mg/l	.025	0.0264	106.	63-137	WG502012
1,2-Dichloropropane	mg/l	.025	0.0262	105.	74-122	WG502012
1,3,5-Trimethylbenzene	mg/l	.025	0.0270	108.	73-134	WG502012
1,3-Dichlorobenzene	mg/l	.025	0.0275	110.	73-131	WG502012
1,3-Dichloropropane	mg/l	.025	0.0259	103.	77-119	WG502012
1,4-Dichlorobenzene	mg/l	.025	0.0244	97.7	70-121	WG502012
2,2-Dichloropropane	mg/l	.025	0.0244	97.6	46-151	WG502012
2-Butanone (MEK)	mg/l	.125	0.124	99.5	53-132	WG502012
2-Chlorotoluene	mg/l	.025	0.0259	104.	74-128	WG502012
4-Chlorotoluene	mg/l	.025	0.0268	107.	74-130	WG502012
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.142	114.	60-142	WG502012
Acetone	mg/l	.125	0.113	90.4	48-134	WG502012
Acrolein	mg/l	.125	0.163	130.	6-182	WG502012
Acrylonitrile	mg/l	.125	0.128	102.	60-140	WG502012
Benzene	mg/l	.025	0.0246	98.2	67-126	WG502012
Bromobenzene	mg/l	.025	0.0264	106.	76-123	WG502012
Bromodichloromethane	mg/l	.025	0.0290	116.	68-133	WG502012
Bromoform	mg/l	.025	0.0293	117.	60-139	WG502012
Bromomethane	mg/l	.025	0.0285	114.	45-175	WG502012
Carbon tetrachloride	mg/l	.025	0.0239	95.7	64-141	WG502012
Chlorobenzene	mg/l	.025	0.0265	106.	77-125	WG502012
Chlorodibromomethane	mg/l	.025	0.0286	114.	73-138	WG502012
Chloroethane	mg/l	.025	0.0284	114.	49-155	WG502012
Chloroform	mg/l	.025	0.0261	104.	66-126	WG502012
Chloromethane	mg/l	.025	0.0240	96.0	45-152	WG502012
cis-1,2-Dichloroethene	mg/l	.025	0.0262	105.	72-128	WG502012
Di-isopropyl ether	mg/l	.025	0.0247	98.9	63-139	WG502012
Dibromomethane	mg/l	.025	0.0290	116.	73-125	WG502012
Dichlorodifluoromethane	mg/l	.025	0.0251	100.	39-189	WG502012
Ethylbenzene	mg/l	.025	0.0259	104.	76-129	WG502012
Hexachloro-1,3-butadiene	mg/l	.025	0.0281	112.	67-135	WG502012
Isopropylbenzene	mg/l	.025	0.0247	98.8	73-132	WG502012
m&p-Xylenes	mg/l	.05	0.0519	104.	74-128	WG502012
Methyl tert-butyl ether	mg/l	.025	0.0249	99.6	51-142	WG502012
Methylene Chloride	mg/l	.025	0.0228	91.3	64-125	WG502012
n-Butylbenzene	mg/l	.025	0.0250	99.8	63-142	WG502012
n-Propylbenzene	mg/l	.025	0.0262	105.	71-132	WG502012
Naphthalene	mg/l	.025	0.0270	108.	56-145	WG502012
o-Xylene	mg/l	.025	0.0261	104.	78-128	WG502012
p-Isopropyltoluene	mg/l	.025	0.0272	109.	68-138	WG502012
sec-Butylbenzene	mg/l	.025	0.0271	108.	70-135	WG502012
Styrene	mg/l	.025	0.0383	153.*	78-130	WG502012
tert-Butylbenzene	mg/l	.025	0.0271	108.	72-134	WG502012
Tetrachloroethene	mg/l	.025	0.0263	105.	67-135	WG502012
Toluene	mg/l	.025	0.0252	101.	72-122	WG502012
trans-1,2-Dichloroethene	mg/l	.025	0.0253	101.	67-129	WG502012
Trichloroethene	mg/l	.025	0.0271	108.	74-126	WG502012
Trichlorofluoromethane	mg/l	.025	0.0260	104.	54-156	WG502012
Vinyl chloride	mg/l	.025	0.0246	98.3	55-153	WG502012
4-Bromofluorobenzene				103.4	75-128	WG502012
Dibromofluoromethane				101.6	79-125	WG502012
Toluene-d8				102.0	87-114	WG502012
a,a,a-Trifluorotoluene				107.3	84-114	WG502012
Mercury	mg/l	.003	0.00304	101.	85-115	WG502049

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Quality Assurance Report
Level II

L482435

October 11, 2010

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,1,1,2-Tetrachloroethane	mg/l	0.0285	0.0290	114.	75-134	1.80	20	WG502012
1,1,1-Trichloroethane	mg/l	0.0253	0.0257	101.	67-137	1.39	20	WG502012
1,1,2,2-Tetrachloroethane	mg/l	0.0284	0.0295	114.	72-128	3.80	20	WG502012
1,1,2-Trichloroethane	mg/l	0.0282	0.0278	113.	79-123	1.42	20	WG502012
1,1-Dichloroethane	mg/l	0.0248	0.0242	99.0	67-133	2.42	20	WG502012
1,1-Dichloroethene	mg/l	0.0214	0.0216	86.0	60-130	0.530	20	WG502012
1,1-Dichloropropene	mg/l	0.0252	0.0247	101.	68-132	2.02	20	WG502012
1,2,3-Trichlorobenzene	mg/l	0.0278	0.0284	111.	63-138	2.25	20	WG502012
1,2,3-Trichloropropane	mg/l	0.0279	0.0286	112.	68-130	2.50	20	WG502012
1,2,4-Trichlorobenzene	mg/l	0.0256	0.0270	102.	65-137	5.34	20	WG502012
1,2,4-Trimethylbenzene	mg/l	0.0281	0.0279	112.	72-135	0.850	20	WG502012
1,2-Dibromo-3-Chloropropane	mg/l	0.0258	0.0274	103.	55-134	5.92	20	WG502012
1,2-Dibromoethane	mg/l	0.0266	0.0267	106.	75-126	0.420	20	WG502012
1,2-Dichlorobenzene	mg/l	0.0261	0.0266	104.	75-122	1.97	20	WG502012
1,2-Dichloroethane	mg/l	0.0277	0.0264	111.	63-137	4.88	20	WG502012
1,2-Dichloropropane	mg/l	0.0269	0.0262	108.	74-122	2.43	20	WG502012
1,3,5-Trimethylbenzene	mg/l	0.0277	0.0270	111.	73-134	2.36	20	WG502012
1,3-Dichlorobenzene	mg/l	0.0281	0.0275	112.	73-131	2.13	20	WG502012
1,3-Dichloropropane	mg/l	0.0259	0.0259	104.	77-119	0.210	20	WG502012
1,4-Dichlorobenzene	mg/l	0.0242	0.0244	97.0	70-121	1.15	20	WG502012
2,2-Dichloropropane	mg/l	0.0269	0.0244	108.	46-151	9.82	20	WG502012
2-Butanone (MEK)	mg/l	0.119	0.124	95.0	53-132	4.82	20	WG502012
2-Chlorotoluene	mg/l	0.0267	0.0259	107.	74-128	3.05	20	WG502012
4-Chlorotoluene	mg/l	0.0267	0.0268	107.	74-130	0.430	20	WG502012
4-Methyl-2-pentanone (MIBK)	mg/l	0.133	0.142	107.	60-142	6.42	20	WG502012
Acetone	mg/l	0.109	0.113	87.0	48-134	3.48	20	WG502012
Acrolein	mg/l	0.170	0.163	136.	6-182	4.34	39	WG502012
Acrylonitrile	mg/l	0.125	0.128	100.	60-140	2.28	20	WG502012
Benzene	mg/l	0.0247	0.0246	99.0	67-126	0.400	20	WG502012
Bromobenzene	mg/l	0.0260	0.0264	104.	76-123	1.74	20	WG502012
Bromodichloromethane	mg/l	0.0284	0.0290	114.	68-133	2.10	20	WG502012
Bromoform	mg/l	0.0285	0.0293	114.	60-139	2.98	20	WG502012
Bromomethane	mg/l	0.0291	0.0285	116.	45-175	2.05	20	WG502012
Carbon tetrachloride	mg/l	0.0248	0.0239	99.0	64-141	3.70	20	WG502012
Chlorobenzene	mg/l	0.0268	0.0265	107.	77-125	1.34	20	WG502012
Chlorodibromomethane	mg/l	0.0278	0.0286	111.	73-138	2.85	20	WG502012
Chloroethane	mg/l	0.0292	0.0284	117.	49-155	2.62	20	WG502012
Chloroform	mg/l	0.0258	0.0261	103.	66-126	1.26	20	WG502012
Chloromethane	mg/l	0.0247	0.0240	99.0	45-152	2.95	20	WG502012
cis-1,2-Dichloroethene	mg/l	0.0269	0.0262	108.	72-128	2.63	20	WG502012
Di-isopropyl ether	mg/l	0.0242	0.0247	97.0	63-139	2.18	20	WG502012
Dibromomethane	mg/l	0.0285	0.0290	114.	73-125	1.82	20	WG502012
Dichlorodifluoromethane	mg/l	0.0262	0.0251	105.	39-189	4.35	24	WG502012
Ethylbenzene	mg/l	0.0268	0.0259	107.	76-129	3.23	20	WG502012
Hexachloro-1,3-butadiene	mg/l	0.0275	0.0281	110.	67-135	2.08	20	WG502012
Isopropylbenzene	mg/l	0.0250	0.0247	100.	73-132	1.35	20	WG502012
m&p-Xylenes	mg/l	0.0538	0.0519	108.	74-128	3.52	20	WG502012
Methyl tert-butyl ether	mg/l	0.0244	0.0249	98.0	51-142	1.94	20	WG502012
Methylene Chloride	mg/l	0.0228	0.0228	91.0	64-125	0.0600	20	WG502012
n-Butylbenzene	mg/l	0.0248	0.0250	99.0	63-142	0.670	20	WG502012
n-Propylbenzene	mg/l	0.0265	0.0262	106.	71-132	1.12	20	WG502012
Naphthalene	mg/l	0.0250	0.0270	100.	56-145	7.76	20	WG502012
o-Xylene	mg/l	0.0270	0.0261	108.	78-128	3.35	20	WG502012
p-Isopropyltoluene	mg/l	0.0277	0.0272	111.	68-138	1.67	20	WG502012
sec-Butylbenzene	mg/l	0.0275	0.0271	110.	70-135	1.36	20	WG502012
Styrene	mg/l	0.0383	0.0383	153*	78-130	0.0500	20	WG502012
tert-Butylbenzene	mg/l	0.0279	0.0271	111.	72-134	2.89	20	WG502012
Tetrachloroethene	mg/l	0.0272	0.0263	109.	67-135	3.36	20	WG502012
Toluene	mg/l	0.0253	0.0252	101.	72-122	0.640	20	WG502012
trans-1,2-Dichloroethene	mg/l	0.0257	0.0253	103.	67-129	1.64	20	WG502012

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L482435

October 11, 2010

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
Trichloroethene	mg/l	0.0267	0.0271	107.	74-126	1.42	20	WG502012
Trichlorofluoromethane	mg/l	0.0276	0.0260	110.	54-156	5.87	20	WG502012
Vinyl chloride	mg/l	0.0257	0.0246	103.	55-153	4.33	20	WG502012
4-Bromofluorobenzene				105.1	75-128			WG502012
Dibromofluoromethane				105.8	79-125			WG502012
Toluene-d8				100.5	87-114			WG502012
a,a,a-Trifluorotoluene				106.2	84-114			WG502012

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Arsenic	mg/l	0.997	0.0160	1	98.1	75-125	L482435-03	WG501994
Barium	mg/l	1.09	0.0980	1	99.2	75-125	L482435-03	WG501994
Cadmium	mg/l	1.05	0.000900	1	105.	75-125	L482435-03	WG501994
Chromium	mg/l	1.01	0	1	101.	75-125	L482435-03	WG501994
Lead	mg/l	1.03	0.00380	1	103.	75-125	L482435-03	WG501994
Selenium	mg/l	1.05	0	1	105.	75-125	L482435-03	WG501994
Silver	mg/l	1.02	0	1	102.	75-125	L482435-03	WG501994
1,1,1,2-Tetrachloroethane	mg/l	0.0258	0	.025	103.	45-152	L482435-01	WG502012
1,1,1-Trichloroethane	mg/l	0.0215	0	.025	86.1	31-161	L482435-01	WG502012
1,1,2,2-Tetrachloroethane	mg/l	0.0269	0	.025	107.	49-149	L482435-01	WG502012
1,1,2-Trichloroethane	mg/l	0.0251	0	.025	100.	46-145	L482435-01	WG502012
1,1-Dichloroethane	mg/l	0.0211	0	.025	84.5	30-159	L482435-01	WG502012
1,1-Dichloroethene	mg/l	0.0166	0	.025	66.2	10-162	L482435-01	WG502012
1,1-Dichloropropene	mg/l	0.0196	0	.025	78.4	14-162	L482435-01	WG502012
1,2,3-Trichlorobenzene	mg/l	0.0244	0	.025	97.7	32-143	L482435-01	WG502012
1,2,3-Trichloropropane	mg/l	0.0258	0	.025	103.	48-148	L482435-01	WG502012
1,2,4-Trichlorobenzene	mg/l	0.0222	0	.025	88.8	27-142	L482435-01	WG502012
1,2,4-Trimethylbenzene	mg/l	0.0238	0	.025	95.4	29-153	L482435-01	WG502012
1,2-Dibromo-3-Chloropropane	mg/l	0.0232	0	.025	92.8	37-148	L482435-01	WG502012
1,2-Dibromoethane	mg/l	0.0232	0	.025	92.8	41-149	L482435-01	WG502012
1,2-Dichlorobenzene	mg/l	0.0231	0	.025	92.6	40-139	L482435-01	WG502012
1,2-Dichloroethane	mg/l	0.0237	0	.025	94.6	29-167	L482435-01	WG502012
1,2-Dichloropropane	mg/l	0.0226	0	.025	90.3	39-148	L482435-01	WG502012
1,3,5-Trimethylbenzene	mg/l	0.0231	0	.025	92.4	33-149	L482435-01	WG502012
1,3-Dichlorobenzene	mg/l	0.0245	0	.025	97.9	32-148	L482435-01	WG502012
1,3-Dichloropropane	mg/l	0.0232	0	.025	92.7	44-142	L482435-01	WG502012
1,4-Dichlorobenzene	mg/l	0.0212	0	.025	84.6	32-136	L482435-01	WG502012
2,2-Dichloropropane	mg/l	0.0216	0	.025	86.2	14-158	L482435-01	WG502012
2-Butanone (MEK)	mg/l	0.104	0	.125	83.3	32-151	L482435-01	WG502012
2-Chlorotoluene	mg/l	0.0227	0	.025	90.9	35-147	L482435-01	WG502012
4-Chlorotoluene	mg/l	0.0230	0	.025	91.8	33-147	L482435-01	WG502012
4-Methyl-2-pentanone (MIBK)	mg/l	0.124	0	.125	99.4	40-160	L482435-01	WG502012
Acetone	mg/l	0.0924	0	.125	73.9	25-157	L482435-01	WG502012
Acrolein	mg/l	0.148	0	.125	118.	0-179	L482435-01	WG502012
Acrylonitrile	mg/l	0.111	0	.125	89.1	37-162	L482435-01	WG502012
Benzene	mg/l	0.0205	0	.025	82.1	16-158	L482435-01	WG502012
Bromobenzene	mg/l	0.0228	0	.025	91.0	37-147	L482435-01	WG502012
Bromodichloromethane	mg/l	0.0263	0	.025	105.	45-147	L482435-01	WG502012
Bromoform	mg/l	0.0260	0	.025	104.	38-152	L482435-01	WG502012
Bromomethane	mg/l	0.0186	0	.025	74.3	0-191	L482435-01	WG502012
Carbon tetrachloride	mg/l	0.0202	0	.025	80.8	22-168	L482435-01	WG502012
Chlorobenzene	mg/l	0.0232	0	.025	93.0	33-148	L482435-01	WG502012
Chlorodibromomethane	mg/l	0.0261	0	.025	104.	48-151	L482435-01	WG502012
Chloroethane	mg/l	0.0195	0	.025	78.2	4-176	L482435-01	WG502012
Chloroform	mg/l	0.0230	0	.025	91.9	37-147	L482435-01	WG502012
Chloromethane	mg/l	0.0145	0	.025	58.0	10-174	L482435-01	WG502012

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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(615) 758-5858
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Fax (615) 758-5859

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Est. 1970

TerraQuest Environmental Consultants PC
Mr. Ryan Kerins
100 East Ruffin Street

Mebane, NC 27302

Quality Assurance Report
Level II

L482435

October 11, 2010

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
cis-1,2-Dichloroethene	mg/l	0.0225	0	.025	90.1	29-156	L482435-01	WG502012
Di-isopropyl ether	mg/l	0.0220	0	.025	88.1	39-160	L482435-01	WG502012
Dibromomethane	mg/l	0.0247	0	.025	98.9	36-152	L482435-01	WG502012
Dichlorodifluoromethane	mg/l	0.0145	0	.025	57.9	0-200	L482435-01	WG502012
Ethylbenzene	mg/l	0.0225	0	.025	89.9	29-150	L482435-01	WG502012
Hexachloro-1,3-butadiene	mg/l	0.0232	0	.025	93.0	28-144	L482435-01	WG502012
Isopropylbenzene	mg/l	0.0210	0	.025	84.1	35-147	L482435-01	WG502012
m&p-Xylenes	mg/l	0.0439	0	.05	87.8	24-151	L482435-01	WG502012
Methyl tert-butyl ether	mg/l	0.0223	0	.025	89.2	24-167	L482435-01	WG502012
Methylene Chloride	mg/l	0.0194	0	.025	77.7	23-151	L482435-01	WG502012
n-Butylbenzene	mg/l	0.0207	0	.025	82.7	22-151	L482435-01	WG502012
n-Propylbenzene	mg/l	0.0219	0	.025	87.5	26-150	L482435-01	WG502012
Naphthalene	mg/l	0.0228	0	.025	91.1	24-160	L482435-01	WG502012
o-Xylene	mg/l	0.0231	0	.025	92.6	32-151	L482435-01	WG502012
p-Isopropyltoluene	mg/l	0.0231	0	.025	92.4	28-151	L482435-01	WG502012
sec-Butylbenzene	mg/l	0.0224	0	.025	89.5	32-149	L482435-01	WG502012
Styrene	mg/l	0.0333	0	.025	133.	38-149	L482435-01	WG502012
tert-Butylbenzene	mg/l	0.0234	0	.025	93.5	36-149	L482435-01	WG502012
Tetrachloroethene	mg/l	0.0209	0	.025	83.8	13-157	L482435-01	WG502012
Toluene	mg/l	0.0207	0	.025	82.7	22-152	L482435-01	WG502012
trans-1,2-Dichloroethene	mg/l	0.0194	0	.025	77.5	11-160	L482435-01	WG502012
Trichloroethene	mg/l	0.0216	0	.025	86.5	18-163	L482435-01	WG502012
Trichlorofluoromethane	mg/l	0.0186	0	.025	74.3	10-177	L482435-01	WG502012
Vinyl chloride	mg/l	0.0163	0	.025	65.1	0-179	L482435-01	WG502012
4-Bromofluorobenzene					103.6	75-128		WG502012
Dibromofluoromethane					103.0	79-125		WG502012
Toluene-d8					102.1	87-114		WG502012
a,a,a-Trifluorotoluene					104.6	84-114		WG502012
Mercury	mg/l	0.00314	0	.003	105.	70-130	L482256-06	WG502049

Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Arsenic	mg/l	1.03	0.997	101.	75-125	3.26	20	L482435-03	WG501994
Barium	mg/l	1.10	1.09	100.	75-125	0.913	20	L482435-03	WG501994
Cadmium	mg/l	1.05	1.05	105.	75-125	0	20	L482435-03	WG501994
Chromium	mg/l	1.05	1.01	105.	75-125	3.88	20	L482435-03	WG501994
Lead	mg/l	1.07	1.03	107.	75-125	3.81	20	L482435-03	WG501994
Selenium	mg/l	1.08	1.05	108.	75-125	2.82	20	L482435-03	WG501994
Silver	mg/l	1.03	1.02	103.	75-125	0.976	20	L482435-03	WG501994
1,1,1,2-Tetrachloroethane	mg/l	0.0271	0.0258	108.	45-152	5.12	21	L482435-01	WG502012
1,1,1-Trichloroethane	mg/l	0.0250	0.0215	99.8	31-161	14.8	23	L482435-01	WG502012
1,1,2,2-Tetrachloroethane	mg/l	0.0283	0.0269	113.	49-149	5.40	22	L482435-01	WG502012
1,1,2-Trichloroethane	mg/l	0.0260	0.0251	104.	46-145	3.33	20	L482435-01	WG502012
1,1-Dichloroethane	mg/l	0.0237	0.0211	94.7	30-159	11.4	21	L482435-01	WG502012
1,1-Dichloroethene	mg/l	0.0191	0.0166	76.5	10-162	14.4	23	L482435-01	WG502012
1,1-Dichloropropene	mg/l	0.0233	0.0196	93.1	14-162	17.1	23	L482435-01	WG502012
1,2,3-Trichlorobenzene	mg/l	0.0271	0.0244	108.	32-143	10.5	33	L482435-01	WG502012
1,2,3-Trichloropropane	mg/l	0.0260	0.0258	104.	48-148	0.960	23	L482435-01	WG502012
1,2,4-Trichlorobenzene	mg/l	0.0251	0.0222	100.	27-142	12.2	30	L482435-01	WG502012
1,2,4-Trimethylbenzene	mg/l	0.0256	0.0238	102.	29-153	7.01	27	L482435-01	WG502012
1,2-Dibromo-3-Chloropropane	mg/l	0.0253	0.0232	101.	37-148	8.69	27	L482435-01	WG502012
1,2-Dibromoethane	mg/l	0.0244	0.0232	97.7	41-149	5.22	21	L482435-01	WG502012
1,2-Dichlorobenzene	mg/l	0.0260	0.0231	104.	40-139	11.5	23	L482435-01	WG502012
1,2-Dichloroethane	mg/l	0.0254	0.0237	102.	29-167	7.04	21	L482435-01	WG502012

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Mt. Juliet, TN 37122
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TerraQuest Environmental Consultants PC
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Quality Assurance Report
Level II

L482435

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Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
1,2-Dichloropropane	mg/l	0.0249	0.0226	99.6	39-148	9.80	20	L482435-01	WG502012
1,3,5-Trimethylbenzene	mg/l	0.0253	0.0231	101.	33-149	8.91	26	L482435-01	WG502012
1,3-Dichlorobenzene	mg/l	0.0260	0.0245	104.	32-148	5.90	24	L482435-01	WG502012
1,3-Dichloropropane	mg/l	0.0236	0.0232	94.6	44-142	1.98	20	L482435-01	WG502012
1,4-Dichlorobenzene	mg/l	0.0237	0.0212	94.6	32-136	11.2	23	L482435-01	WG502012
2,2-Dichloropropane	mg/l	0.0259	0.0216	104.	14-158	18.3	23	L482435-01	WG502012
2-Butanone (MEK)	mg/l	0.109	0.104	87.4	32-151	4.74	26	L482435-01	WG502012
2-Chlorotoluene	mg/l	0.0247	0.0227	98.7	35-147	8.26	24	L482435-01	WG502012
4-Chlorotoluene	mg/l	0.0249	0.0230	99.7	33-147	8.30	25	L482435-01	WG502012
4-Methyl-2-pentanone (MIBK)	mg/l	0.131	0.124	104.	40-160	4.98	28	L482435-01	WG502012
Acetone	mg/l	0.0963	0.0924	77.0	25-157	4.07	26	L482435-01	WG502012
Acrolein	mg/l	0.153	0.148	122.	0-179	3.37	39	L482435-01	WG502012
Acrylonitrile	mg/l	0.117	0.111	93.4	37-162	4.69	24	L482435-01	WG502012
Benzene	mg/l	0.0231	0.0205	92.6	16-158	11.9	21	L482435-01	WG502012
Bromobenzene	mg/l	0.0242	0.0228	96.6	37-147	5.95	23	L482435-01	WG502012
Bromodichloromethane	mg/l	0.0285	0.0263	114.	45-147	8.15	20	L482435-01	WG502012
Bromoform	mg/l	0.0268	0.0260	107.	38-152	2.98	20	L482435-01	WG502012
Bromomethane	mg/l	0.0212	0.0186	84.7	0-191	13.0	35	L482435-01	WG502012
Carbon tetrachloride	mg/l	0.0233	0.0202	93.2	22-168	14.3	24	L482435-01	WG502012
Chlorobenzene	mg/l	0.0245	0.0232	98.1	33-148	5.39	22	L482435-01	WG502012
Chlorodibromomethane	mg/l	0.0268	0.0261	107.	48-151	2.83	21	L482435-01	WG502012
Chloroethane	mg/l	0.0220	0.0195	87.8	4-176	11.7	27	L482435-01	WG502012
Chloroform	mg/l	0.0251	0.0230	100.	37-147	8.92	21	L482435-01	WG502012
Chloromethane	mg/l	0.0173	0.0145	69.2	10-174	17.6	28	L482435-01	WG502012
cis-1,2-Dichloroethene	mg/l	0.0248	0.0225	99.0	29-156	9.51	22	L482435-01	WG502012
Di-isopropyl ether	mg/l	0.0235	0.0220	94.2	39-160	6.71	21	L482435-01	WG502012
Dibromomethane	mg/l	0.0259	0.0247	104.	36-152	4.79	20	L482435-01	WG502012
Dichlorodifluoromethane	mg/l	0.0169	0.0145	67.7	0-200	15.6	26	L482435-01	WG502012
Ethylbenzene	mg/l	0.0240	0.0225	96.1	29-150	6.64	24	L482435-01	WG502012
Hexachloro-1,3-butadiene	mg/l	0.0266	0.0232	106.	28-144	13.3	33	L482435-01	WG502012
Isopropylbenzene	mg/l	0.0231	0.0210	92.3	35-147	9.28	25	L482435-01	WG502012
m&p-Xylenes	mg/l	0.0481	0.0439	96.1	24-151	9.12	23	L482435-01	WG502012
Methyl tert-butyl ether	mg/l	0.0238	0.0223	95.1	24-167	6.34	22	L482435-01	WG502012
Methylene Chloride	mg/l	0.0216	0.0194	86.4	23-151	10.6	21	L482435-01	WG502012
n-Butylbenzene	mg/l	0.0239	0.0207	95.4	22-151	14.2	29	L482435-01	WG502012
n-Propylbenzene	mg/l	0.0246	0.0219	98.5	26-150	11.8	25	L482435-01	WG502012
Naphthalene	mg/l	0.0250	0.0228	100.	24-160	9.41	37	L482435-01	WG502012
o-Xylene	mg/l	0.0249	0.0231	99.7	32-151	7.43	23	L482435-01	WG502012
p-Isopropyltoluene	mg/l	0.0258	0.0231	103.	28-151	11.1	27	L482435-01	WG502012
sec-Butylbenzene	mg/l	0.0256	0.0224	102.	32-149	13.3	26	L482435-01	WG502012
Styrene	mg/l	0.0350	0.0333	140.	38-149	5.03	23	L482435-01	WG502012
tert-Butylbenzene	mg/l	0.0254	0.0234	102.	36-149	8.42	26	L482435-01	WG502012
Tetrachloroethene	mg/l	0.0231	0.0209	92.3	13-157	9.67	24	L482435-01	WG502012
Toluene	mg/l	0.0238	0.0207	95.1	22-152	14.0	22	L482435-01	WG502012
trans-1,2-Dichloroethene	mg/l	0.0220	0.0194	88.2	11-160	12.9	23	L482435-01	WG502012
Trichloroethene	mg/l	0.0248	0.0216	99.2	18-163	13.6	21	L482435-01	WG502012
Trichlorofluoromethane	mg/l	0.0236	0.0186	94.4	10-177	23.9	24	L482435-01	WG502012
Vinyl chloride	mg/l	0.0192	0.0163	76.9	0-179	16.6	26	L482435-01	WG502012
4-Bromofluorobenzene				99.44	75-128				WG502012
Dibromofluoromethane				103.0	79-125				WG502012
Toluene-d8				101.5	87-114				WG502012
a,a,a-Trifluorotoluene				107.4	84-114				WG502012
Mercury	mg/l	0.00310	0.00314	103.	70-130	1.28	20	L482256-06	WG502049

Batch number /Run number / Sample number cross reference

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

L482435

October 11, 2010

WG501994: R1414313: L482435-01 02 03 04 05 06
WG502012: R1418228: L482435-01 02 03 04 05 06
WG502049: R1418870: L482435-01 02 03 04 05 06

* * Calculations are performed prior to rounding of reported values .
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The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address:
TerraQuest Environmental Consultants PC
100 East Ruffin Street
Mebane,NC 27302

Billing Information:
Mr. Michael Brown
100 East Ruffin Street
Mebane,NC 27302

Report to: Ryan Kerins
Email to:
Project Description: Lee County Landfill
City/Sate Collected: Sanford, NC
Phone: (919) 563-9091
FAX: (919) 563-9095
Client Project #: 02296
ESC Key:
Collected by: (print) Andy Wrenn
Site/Facility ID#:
P.O.#:
Collected by (signature): Andy Wrenn
Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day.....200%
___ Next Day.....100%
___ Two Day.....50%
___ Three Day.....25%

Date Results Needed:
Email? __No__Yes
FAX? __No__Yes

Analysis/Container/Preservative

Chain of Custody
Page 1 of 1

ESC LABS
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone: (800) 767-5859
Phone: (615) 758-5858
Fax: (615) 758-5859

A014

CoCode: TURENV (lab use only)
Template/Prelogin
Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	6200B/40mL VOA/HCl	8RCRA Metals/500mL/Nitric Acid						Remarks/Contaminant	Sample # (lab only)
MW5	G	GW	—	10/4	1035	4	X	X							L482435-01
MW6	↓	↓	↓		1230	4	X	X							L482435-02
MW9					1341	4	X	X							-03
MW13					1143	4	X	X							-04
MW14					1117	4	X	X							-05
~~MW4~~					~~1503~~	~~4~~	~~X~~	~~X~~	Per Ryan Kerin						-06
SW2	✓	✓	✓	✓	1537	4	X	X							

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

pH _____ Temp _____
Flow _____ Other _____

Remarks: SWSL Reporting Required.

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☑ SWA	Condition: (lab use only)
Andy Wrenn	10/5/10	855	Danny Knoll		
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.4°C / Bottles Received: 24	CoC Seals Intact ___Y___N___NA
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 10/6/10 / Time: 1000	pH Checked: C2 / NCF:
			Blake Hand		

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Mr. Ryan Kerins
TerraQuest Environmental Consultants PC
100 East Ruffin Street
Mebane, NC 27302

Report Summary

Monday October 11, 2010

Report Number: L482431
Samples Received: 10/06/10
Client Project: 02296

Description: Lee County Landfill

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Jimmy Hunt

Jimmy Hunt , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002,NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,
TX - T104704245, OK-9915

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.
Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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REPORT OF ANALYSIS

Mr. Ryan Kerins
TerraQuest Environmental Consultant
100 East Ruffin Street
Mebane, NC 27302

October 11, 2010

ESC Sample # : L482431-01

Site ID : SANFORD, NC

Project # : 02296

Date Received : October 06, 2010
Description : Lee County Landfill

Sample ID : MW12

Collected By : Andy Wrenn
Collection Date : 10/05/10 14:26

Parameter	Result	MDL	RDL	Units	Method	Date	Dil.	SWSL
Mercury	U	0.017	0.20	ug/l	7470A	10/08/10	1	.2
Arsenic	7.8	6.5	20.	ug/l	6010B	10/08/10	1	10
Barium	1600	1.0	5.0	ug/l	6010B	10/08/10	1	100
Cadmium	1.5	0.80	5.0	ug/l	6010B	10/08/10	1	1
Chromium	2.1	1.7	10.	ug/l	6010B	10/08/10	1	10
Lead	U	1.8	5.0	ug/l	6010B	10/08/10	1	10
Selenium	U	6.3	20.	ug/l	6010B	10/08/10	1	10
Silver	7.5	3.3	10.	ug/l	6010B	10/08/10	1	10
Volatile Organics								
Acetone	U	16.	50.	ug/l	6200B	10/07/10	1	100
Acrolein	U	7.6	50.	ug/l	6200B	10/07/10	1	53
Acrylonitrile	U	1.9	10.	ug/l	6200B	10/07/10	1	200
Benzene	2.8	0.23	1.0	ug/l	6200B	10/07/10	1	1
Bromobenzene	U	0.23	1.0	ug/l	6200B	10/07/10	1	
Bromodichloromethane	U	0.23	1.0	ug/l	6200B	10/07/10	1	1
Bromoform	U	0.37	1.0	ug/l	6200B	10/07/10	1	3
Bromomethane	U	1.6	5.0	ug/l	6200B	10/07/10	1	10
n-Butylbenzene	U	0.31	1.0	ug/l	6200B	10/07/10	1	
sec-Butylbenzene	U	0.22	1.0	ug/l	6200B	10/07/10	1	
tert-Butylbenzene	U	0.20	1.0	ug/l	6200B	10/07/10	1	
Carbon tetrachloride	U	0.20	1.0	ug/l	6200B	10/07/10	1	1
Chlorobenzene	8.7	0.30	1.0	ug/l	6200B	10/07/10	1	3
Chlorodibromomethane	U	0.24	1.0	ug/l	6200B	10/07/10	1	3
Chloroethane	89.	0.87	5.0	ug/l	6200B	10/07/10	1	10
Chloroform	U	0.27	5.0	ug/l	6200B	10/07/10	1	5
Chloromethane	U	0.76	2.5	ug/l	6200B	10/07/10	1	1
2-Chlorotoluene	U	0.28	1.0	ug/l	6200B	10/07/10	1	
4-Chlorotoluene	U	0.20	1.0	ug/l	6200B	10/07/10	1	
1,2-Dibromo-3-Chloropropane	U	1.3	5.0	ug/l	6200B	10/07/10	1	13
1,2-Dibromoethane	U	0.27	1.0	ug/l	6200B	10/07/10	1	1
Dibromomethane	U	0.35	1.0	ug/l	6200B	10/07/10	1	10
1,2-Dichlorobenzene	U	0.29	1.0	ug/l	6200B	10/07/10	1	5
1,3-Dichlorobenzene	U	0.29	1.0	ug/l	6200B	10/07/10	1	
1,4-Dichlorobenzene	2.9	0.31	1.0	ug/l	6200B	10/07/10	1	1
Dichlorodifluoromethane	U	1.6	5.0	ug/l	6200B	10/07/10	1	5
1,1-Dichloroethane	9.3	0.32	1.0	ug/l	6200B	10/07/10	1	5
1,2-Dichloroethane	0.38	0.25	1.0	ug/l	6200B	10/07/10	1	1
1,1-Dichloroethene	U	0.41	1.0	ug/l	6200B	10/07/10	1	5
cis-1,2-Dichloroethene	U	0.34	1.0	ug/l	6200B	10/07/10	1	5
trans-1,2-Dichloroethene	U	0.26	1.0	ug/l	6200B	10/07/10	1	5

U = ND (Not Detected)
SWSL = Solid Waste Section Limit
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
Note:
The reported analytical results relate only to the sample submitted.
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REPORT OF ANALYSIS

Mr. Ryan Kerins
TerraQuest Environmental Consultant
100 East Ruffin Street
Mebane, NC 27302

October 11, 2010

ESC Sample # : L482431-01

Site ID : SANFORD, NC

Project # : 02296

Date Received : October 06, 2010
Description : Lee County Landfill

Sample ID : MW12

Collected By : Andy Wrenn
Collection Date : 10/05/10 14:26

Parameter	Result	MDL	RDL	Units	Method	Date	Dil.	SWSL
1,2-Dichloropropane	U	0.39	1.0	ug/l	6200B	10/07/10	1	1
1,1-Dichloropropene	U	0.26	1.0	ug/l	6200B	10/07/10	1	5
1,3-Dichloropropane	U	0.28	1.0	ug/l	6200B	10/07/10	1	1
2,2-Dichloropropane	U	0.36	1.0	ug/l	6200B	10/07/10	1	15
Di-isopropyl ether	U	0.26	1.0	ug/l	6200B	10/07/10	1	
Ethylbenzene	U	0.22	1.0	ug/l	6200B	10/07/10	1	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l	6200B	10/07/10	1	10
Isopropylbenzene	0.64	0.20	1.0	ug/l	6200B	10/07/10	1	
p-Isopropyltoluene	U	0.31	1.0	ug/l	6200B	10/07/10	1	
2-Butanone (MEK)	U	3.4	10.	ug/l	6200B	10/07/10	1	100
Methylene Chloride	U	0.91	5.0	ug/l	6200B	10/07/10	1	1
4-Methyl-2-pentanone (MIBK)	U	1.7	10.	ug/l	6200B	10/07/10	1	100
Methyl tert-butyl ether	U	0.63	1.0	ug/l	6200B	10/07/10	1	
Naphthalene	U	0.98	5.0	ug/l	6200B	10/07/10	1	10
n-Propylbenzene	U	0.31	1.0	ug/l	6200B	10/07/10	1	
Styrene	U	0.24	1.0	ug/l	6200B	10/07/10	1	1
1,1,1,2-Tetrachloroethane	U	0.32	1.0	ug/l	6200B	10/07/10	1	5
1,1,2,2-Tetrachloroethane	U	0.25	1.0	ug/l	6200B	10/07/10	1	3
Tetrachloroethene	U	0.32	1.0	ug/l	6200B	10/07/10	1	1
Toluene	0.40	0.32	5.0	ug/l	6200B	10/07/10	1	1
1,2,3-Trichlorobenzene	U	0.32	1.0	ug/l	6200B	10/07/10	1	
1,2,4-Trichlorobenzene	U	0.35	1.0	ug/l	6200B	10/07/10	1	10
1,1,1-Trichloroethane	U	0.31	1.0	ug/l	6200B	10/07/10	1	1
1,1,2-Trichloroethane	U	0.29	1.0	ug/l	6200B	10/07/10	1	1
Trichloroethene	U	0.31	1.0	ug/l	6200B	10/07/10	1	1
Trichlorofluoromethane	U	1.1	5.0	ug/l	6200B	10/07/10	1	1
1,2,3-Trichloropropane	U	0.74	1.0	ug/l	6200B	10/07/10	1	1
1,2,4-Trimethylbenzene	U	0.18	1.0	ug/l	6200B	10/07/10	1	
1,3,5-Trimethylbenzene	U	0.33	1.0	ug/l	6200B	10/07/10	1	
Vinyl chloride	U	0.34	1.0	ug/l	6200B	10/07/10	1	1
o-Xylene	U	0.19	1.0	ug/l	6200B	10/07/10	1	5
m&p-Xylenes	U	0.64	2.0	ug/l	6200B	10/07/10	1	5
Surrogate Recovery								
Toluene-d8	104.			% Rec.	6200B	10/07/10	1	87
Dibromofluoromethane	108.			% Rec.	6200B	10/07/10	1	79
a,a,a-Trifluorotoluene	103.			% Rec.	6200B	10/07/10	1	84
4-Bromofluorobenzene	93.0			% Rec.	6200B	10/07/10	1	75

U = ND (Not Detected)
SWSL = Solid Waste Section Limit
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)
Note:
The reported analytical results relate only to the sample submitted.
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.
Reported: 10/10/10 12:44 Revised: 10/11/10 14:35

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L482431-01	WG502075	SAMP	Arsenic	R1420154	JP1
	WG502075	SAMP	Cadmium	R1420154	JP1
	WG502075	SAMP	Chromium	R1420154	JP1
	WG502075	SAMP	Silver	R1420154	JP1J6
	WG502056	SAMP	1,2-Dichloroethane	R1417148	J
	WG502056	SAMP	Isopropylbenzene	R1417148	J
	WG502056	SAMP	Toluene	R1417148	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
10/11/10 at 14:35:27

TSR Signing Reports: 350
R5 - Desired TAT

No emails. Send 2 MeOH vials for VPH & 8260. Report all air samples in ppb by vol & acetone at 50ppb. Non-trust fund = $30 shipping. Paperless client. Attach VPH/EPH forms to CofCs.

Sample: L482431-01 Account: TURENV Received: 10/06/10 10:00 Due Date: 10/13/10 00:00 RPT Date: 10/10/10 12:44

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Est. 1970

TerraQuest Environmental Consultants PC
Mr. Ryan Kerins
100 East Ruffin Street

Mebane, NC 27302

Quality Assurance Report
Level II

L482431

October 11, 2010

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
1,1,1,2-Tetrachloroethane	< .001	mg/l			WG502056	10/07/10 10:54
1,1,1-Trichloroethane	< .001	mg/l			WG502056	10/07/10 10:54
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG502056	10/07/10 10:54
1,1,2-Trichloroethane	< .001	mg/l			WG502056	10/07/10 10:54
1,1-Dichloroethane	< .001	mg/l			WG502056	10/07/10 10:54
1,1-Dichloroethene	< .001	mg/l			WG502056	10/07/10 10:54
1,1-Dichloropropene	< .001	mg/l			WG502056	10/07/10 10:54
1,2,3-Trichlorobenzene	< .001	mg/l			WG502056	10/07/10 10:54
1,2,3-Trichloropropane	< .001	mg/l			WG502056	10/07/10 10:54
1,2,4-Trichlorobenzene	< .001	mg/l			WG502056	10/07/10 10:54
1,2,4-Trimethylbenzene	< .001	mg/l			WG502056	10/07/10 10:54
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG502056	10/07/10 10:54
1,2-Dibromoethane	< .001	mg/l			WG502056	10/07/10 10:54
1,2-Dichlorobenzene	< .001	mg/l			WG502056	10/07/10 10:54
1,2-Dichloroethane	< .001	mg/l			WG502056	10/07/10 10:54
1,2-Dichloropropane	< .001	mg/l			WG502056	10/07/10 10:54
1,3,5-Trimethylbenzene	< .001	mg/l			WG502056	10/07/10 10:54
1,3-Dichlorobenzene	< .001	mg/l			WG502056	10/07/10 10:54
1,3-Dichloropropane	< .001	mg/l			WG502056	10/07/10 10:54
1,4-Dichlorobenzene	< .001	mg/l			WG502056	10/07/10 10:54
2,2-Dichloropropane	< .001	mg/l			WG502056	10/07/10 10:54
2-Butanone (MEK)	< .01	mg/l			WG502056	10/07/10 10:54
2-Chlorotoluene	< .001	mg/l			WG502056	10/07/10 10:54
4-Chlorotoluene	< .001	mg/l			WG502056	10/07/10 10:54
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG502056	10/07/10 10:54
Acetone	< .05	mg/l			WG502056	10/07/10 10:54
Acrolein	< .05	mg/l			WG502056	10/07/10 10:54
Acrylonitrile	< .01	mg/l			WG502056	10/07/10 10:54
Benzene	< .001	mg/l			WG502056	10/07/10 10:54
Bromobenzene	< .001	mg/l			WG502056	10/07/10 10:54
Bromodichloromethane	< .001	mg/l			WG502056	10/07/10 10:54
Bromoform	< .001	mg/l			WG502056	10/07/10 10:54
Bromomethane	< .005	mg/l			WG502056	10/07/10 10:54
Carbon tetrachloride	< .001	mg/l			WG502056	10/07/10 10:54
Chlorobenzene	< .001	mg/l			WG502056	10/07/10 10:54
Chlorodibromomethane	< .001	mg/l			WG502056	10/07/10 10:54
Chloroethane	< .001	mg/l			WG502056	10/07/10 10:54
Chloroform	< .005	mg/l			WG502056	10/07/10 10:54
Chloromethane	< .001	mg/l			WG502056	10/07/10 10:54
cis-1,2-Dichloroethene	< .001	mg/l			WG502056	10/07/10 10:54
Di-isopropyl ether	< .001	mg/l			WG502056	10/07/10 10:54
Dibromomethane	< .001	mg/l			WG502056	10/07/10 10:54
Dichlorodifluoromethane	< .005	mg/l			WG502056	10/07/10 10:54
Ethylbenzene	< .001	mg/l			WG502056	10/07/10 10:54
Hexachloro-1,3-butadiene	< .001	mg/l			WG502056	10/07/10 10:54
Isopropylbenzene	< .001	mg/l			WG502056	10/07/10 10:54
m&p-Xylenes	< .002	mg/l			WG502056	10/07/10 10:54
Methyl tert-butyl ether	< .001	mg/l			WG502056	10/07/10 10:54
Methylene Chloride	< .005	mg/l			WG502056	10/07/10 10:54
n-Butylbenzene	< .001	mg/l			WG502056	10/07/10 10:54
n-Propylbenzene	< .001	mg/l			WG502056	10/07/10 10:54
Naphthalene	< .005	mg/l			WG502056	10/07/10 10:54
o-Xylene	< .001	mg/l			WG502056	10/07/10 10:54
p-Isopropyltoluene	< .001	mg/l			WG502056	10/07/10 10:54
sec-Butylbenzene	< .001	mg/l			WG502056	10/07/10 10:54
Styrene	< .001	mg/l			WG502056	10/07/10 10:54
tert-Butylbenzene	< .001	mg/l			WG502056	10/07/10 10:54
Tetrachloroethene	< .001	mg/l			WG502056	10/07/10 10:54
Toluene	< .005	mg/l			WG502056	10/07/10 10:54

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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TerraQuest Environmental Consultants PC
Mr. Ryan Kerins
100 East Ruffin Street

Mebane, NC 27302

Quality Assurance Report
Level II

L482431

October 11, 2010

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
trans-1,2-Dichloroethene	< .001	mg/l			WG502056	10/07/10 10:54
Trichloroethene	< .001	mg/l			WG502056	10/07/10 10:54
Trichlorofluoromethane	< .005	mg/l			WG502056	10/07/10 10:54
Vinyl chloride	< .001	mg/l			WG502056	10/07/10 10:54
4-Bromofluorobenzene		% Rec.	89.30	75-128	WG502056	10/07/10 10:54
Dibromofluoromethane		% Rec.	104.1	79-125	WG502056	10/07/10 10:54
Toluene-d8		% Rec.	102.0	87-114	WG502056	10/07/10 10:54
a,a,a-Trifluorotoluene		% Rec.	98.10	84-114	WG502056	10/07/10 10:54
Mercury	< .0002	mg/l			WG502049	10/08/10 11:08
Arsenic	< .02	mg/l			WG502075	10/09/10 11:44
Barium	< .005	mg/l			WG502075	10/09/10 11:44
Cadmium	< .005	mg/l			WG502075	10/09/10 11:44
Chromium	< .01	mg/l			WG502075	10/09/10 11:44
Lead	< .005	mg/l			WG502075	10/09/10 11:44
Selenium	< .02	mg/l			WG502075	10/09/10 11:44
Silver	< .01	mg/l			WG502075	10/09/10 11:44

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Mercury	mg/l	0	0	0	20	L482256-06	WG502049
Arsenic	mg/l	0	0.00780	NA	20	L482431-01	WG502075
Barium	mg/l	1.50	1.60	5.79	20	L482431-01	WG502075
Cadmium	mg/l	0	0.00150	NA	20	L482431-01	WG502075
Chromium	mg/l	0	0.00210	NA	20	L482431-01	WG502075
Lead	mg/l	0	0	0	20	L482431-01	WG502075
Selenium	mg/l	0	0	0	20	L482431-01	WG502075
Silver	mg/l	0	0.00750	NA	20	L482431-01	WG502075

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
1,1,1,2-Tetrachloroethane	mg/l	.025	0.0254	102.	75-134	WG502056
1,1,1-Trichloroethane	mg/l	.025	0.0234	93.6	67-137	WG502056
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0270	108.	72-128	WG502056
1,1,2-Trichloroethane	mg/l	.025	0.0250	99.9	79-123	WG502056
1,1-Dichloroethane	mg/l	.025	0.0230	91.9	67-133	WG502056
1,1-Dichloroethene	mg/l	.025	0.0252	101.	60-130	WG502056
1,1-Dichloropropene	mg/l	.025	0.0216	86.3	68-132	WG502056
1,2,3-Trichlorobenzene	mg/l	.025	0.0254	102.	63-138	WG502056
1,2,3-Trichloropropane	mg/l	.025	0.0253	101.	68-130	WG502056
1,2,4-Trichlorobenzene	mg/l	.025	0.0243	97.3	65-137	WG502056
1,2,4-Trimethylbenzene	mg/l	.025	0.0247	99.0	72-135	WG502056
1,2-Dibromo-3-Chloropropane	mg/l	.025	0.0211	84.6	55-134	WG502056
1,2-Dibromoethane	mg/l	.025	0.0234	93.7	75-126	WG502056
1,2-Dichlorobenzene	mg/l	.025	0.0250	99.9	75-122	WG502056
1,2-Dichloroethane	mg/l	.025	0.0245	97.9	63-137	WG502056
1,2-Dichloropropane	mg/l	.025	0.0249	99.8	74-122	WG502056
1,3,5-Trimethylbenzene	mg/l	.025	0.0238	95.3	73-134	WG502056
1,3-Dichlorobenzene	mg/l	.025	0.0246	98.3	73-131	WG502056
1,3-Dichloropropane	mg/l	.025	0.0233	93.2	77-119	WG502056
1,4-Dichlorobenzene	mg/l	.025	0.0245	98.1	70-121	WG502056
2,2-Dichloropropane	mg/l	.025	0.0223	89.1	46-151	WG502056

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Mt. Juliet, TN 37122
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1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

TerraQuest Environmental Consultants PC
Mr. Ryan Kerins
100 East Ruffin Street

Mebane, NC 27302

Quality Assurance Report
Level II

L482431

October 11, 2010

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
2-Butanone (MEK)	mg/l	.125	0.132	105.	53-132	WG502056
2-Chlorotoluene	mg/l	.025	0.0245	97.9	74-128	WG502056
4-Chlorotoluene	mg/l	.025	0.0236	94.3	74-130	WG502056
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.137	109.	60-142	WG502056
Acetone	mg/l	.125	0.136	108.	48-134	WG502056
Acrolein	mg/l	.125	0.144	115.	6-182	WG502056
Acrylonitrile	mg/l	.125	0.124	99.4	60-140	WG502056
Benzene	mg/l	.025	0.0224	89.8	67-126	WG502056
Bromobenzene	mg/l	.025	0.0242	97.0	76-123	WG502056
Bromodichloromethane	mg/l	.025	0.0264	106.	68-133	WG502056
Bromoform	mg/l	.025	0.0237	94.8	60-139	WG502056
Bromomethane	mg/l	.025	0.0279	112.	45-175	WG502056
Carbon tetrachloride	mg/l	.025	0.0235	93.9	64-141	WG502056
Chlorobenzene	mg/l	.025	0.0234	93.6	77-125	WG502056
Chlorodibromomethane	mg/l	.025	0.0250	100.	73-138	WG502056
Chloroethane	mg/l	.025	0.0313	125.	49-155	WG502056
Chloroform	mg/l	.025	0.0238	95.3	66-126	WG502056
Chloromethane	mg/l	.025	0.0185	74.1	45-152	WG502056
cis-1,2-Dichloroethene	mg/l	.025	0.0230	92.0	72-128	WG502056
Di-isopropyl ether	mg/l	.025	0.0238	95.1	63-139	WG502056
Dibromomethane	mg/l	.025	0.0244	97.5	73-125	WG502056
Dichlorodifluoromethane	mg/l	.025	0.0173	69.0	39-189	WG502056
Ethylbenzene	mg/l	.025	0.0232	93.0	76-129	WG502056
Hexachloro-1,3-butadiene	mg/l	.025	0.0255	102.	67-135	WG502056
Isopropylbenzene	mg/l	.025	0.0221	88.6	73-132	WG502056
m&p-Xylenes	mg/l	.05	0.0456	91.2	74-128	WG502056
Methyl tert-butyl ether	mg/l	.025	0.0220	87.8	51-142	WG502056
Methylene Chloride	mg/l	.025	0.0225	90.1	64-125	WG502056
n-Butylbenzene	mg/l	.025	0.0258	103.	63-142	WG502056
n-Propylbenzene	mg/l	.025	0.0246	98.6	71-132	WG502056
Naphthalene	mg/l	.025	0.0252	101.	56-145	WG502056
o-Xylene	mg/l	.025	0.0225	90.1	78-128	WG502056
p-Isopropyltoluene	mg/l	.025	0.0242	96.9	68-138	WG502056
sec-Butylbenzene	mg/l	.025	0.0245	98.0	70-135	WG502056
Styrene	mg/l	.025	0.0298	119.	78-130	WG502056
tert-Butylbenzene	mg/l	.025	0.0242	96.9	72-134	WG502056
Tetrachloroethene	mg/l	.025	0.0222	88.7	67-135	WG502056
Toluene	mg/l	.025	0.0228	91.2	72-122	WG502056
trans-1,2-Dichloroethene	mg/l	.025	0.0197	78.8	67-129	WG502056
Trichloroethene	mg/l	.025	0.0228	91.2	74-126	WG502056
Trichlorofluoromethane	mg/l	.025	0.0315	126.	54-156	WG502056
Vinyl chloride	mg/l	.025	0.0244	97.6	55-153	WG502056
4-Bromofluorobenzene				96.90	75-128	WG502056
Dibromofluoromethane				107.4	79-125	WG502056
Toluene-d8				103.9	87-114	WG502056
a,a,a-Trifluorotoluene				98.79	84-114	WG502056
Mercury	mg/l	.003	0.00304	101.	85-115	WG502049
Arsenic	mg/l	1	0.904	90.4	85-115	WG502075
Barium	mg/l	1	0.944	94.4	85-115	WG502075
Cadmium	mg/l	1	0.980	98.0	85-115	WG502075
Chromium	mg/l	1	0.987	98.7	85-115	WG502075
Lead	mg/l	1	1.03	103.	85-115	WG502075
Selenium	mg/l	1	1.04	104.	85-115	WG502075
Silver	mg/l	1	0.969	96.9	85-115	WG502075

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Quality Assurance Report
Level II

L482431

October 11, 2010

		Laboratory Control Sample				Duplicate		
Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,1,1,2-Tetrachloroethane	mg/l	0.0254	0.0254	101.	75-134	0.170	20	WG502056
1,1,1-Trichloroethane	mg/l	0.0224	0.0234	90.0	67-137	4.39	20	WG502056
1,1,2,2-Tetrachloroethane	mg/l	0.0263	0.0270	105.	72-128	2.80	20	WG502056
1,1,2-Trichloroethane	mg/l	0.0245	0.0250	98.0	79-123	1.98	20	WG502056
1,1-Dichloroethane	mg/l	0.0216	0.0230	86.0	67-133	5.98	20	WG502056
1,1-Dichloroethene	mg/l	0.0228	0.0252	91.0	60-130	10.1	20	WG502056
1,1-Dichloropropene	mg/l	0.0204	0.0216	82.0	68-132	5.62	20	WG502056
1,2,3-Trichlorobenzene	mg/l	0.0247	0.0254	99.0	63-138	2.68	20	WG502056
1,2,3-Trichloropropane	mg/l	0.0245	0.0253	98.0	68-130	3.00	20	WG502056
1,2,4-Trichlorobenzene	mg/l	0.0238	0.0243	95.0	65-137	2.09	20	WG502056
1,2,4-Trimethylbenzene	mg/l	0.0243	0.0247	97.0	72-135	1.87	20	WG502056
1,2-Dibromo-3-Chloropropane	mg/l	0.0209	0.0211	84.0	55-134	0.970	20	WG502056
1,2-Dibromoethane	mg/l	0.0231	0.0234	92.0	75-126	1.37	20	WG502056
1,2-Dichlorobenzene	mg/l	0.0244	0.0250	97.0	75-122	2.53	20	WG502056
1,2-Dichloroethane	mg/l	0.0236	0.0245	94.0	63-137	3.69	20	WG502056
1,2-Dichloropropane	mg/l	0.0245	0.0249	98.0	74-122	1.79	20	WG502056
1,3,5-Trimethylbenzene	mg/l	0.0233	0.0238	93.0	73-134	2.18	20	WG502056
1,3-Dichlorobenzene	mg/l	0.0238	0.0246	95.0	73-131	3.03	20	WG502056
1,3-Dichloropropane	mg/l	0.0227	0.0233	91.0	77-119	2.79	20	WG502056
1,4-Dichlorobenzene	mg/l	0.0237	0.0245	95.0	70-121	3.22	20	WG502056
2,2-Dichloropropane	mg/l	0.0206	0.0223	82.0	46-151	7.97	20	WG502056
2-Butanone (MEK)	mg/l	0.124	0.132	99.0	53-132	5.90	20	WG502056
2-Chlorotoluene	mg/l	0.0231	0.0245	92.0	74-128	5.53	20	WG502056
4-Chlorotoluene	mg/l	0.0233	0.0236	93.0	74-130	1.00	20	WG502056
4-Methyl-2-pentanone (MIBK)	mg/l	0.130	0.137	104.	60-142	4.83	20	WG502056
Acetone	mg/l	0.125	0.136	100.	48-134	8.49	20	WG502056
Acrolein	mg/l	0.145	0.144	116.	6-182	1.06	39	WG502056
Acrylonitrile	mg/l	0.117	0.124	93.0	60-140	6.30	20	WG502056
Benzene	mg/l	0.0217	0.0224	87.0	67-126	3.32	20	WG502056
Bromobenzene	mg/l	0.0236	0.0242	94.0	76-123	2.62	20	WG502056
Bromodichloromethane	mg/l	0.0256	0.0264	102.	68-133	3.25	20	WG502056
Bromoform	mg/l	0.0232	0.0237	93.0	60-139	1.94	20	WG502056
Bromomethane	mg/l	0.0247	0.0279	99.0	45-175	12.2	20	WG502056
Carbon tetrachloride	mg/l	0.0231	0.0235	92.0	64-141	1.49	20	WG502056
Chlorobenzene	mg/l	0.0231	0.0234	92.0	77-125	1.43	20	WG502056
Chlorodibromomethane	mg/l	0.0245	0.0250	98.0	73-138	2.01	20	WG502056
Chloroethane	mg/l	0.0278	0.0313	111.	49-155	11.8	20	WG502056
Chloroform	mg/l	0.0232	0.0238	93.0	66-126	2.82	20	WG502056
Chloromethane	mg/l	0.0180	0.0185	72.0	45-152	2.63	20	WG502056
cis-1,2-Dichloroethene	mg/l	0.0218	0.0230	87.0	72-128	5.43	20	WG502056
Di-isopropyl ether	mg/l	0.0225	0.0238	90.0	63-139	5.43	20	WG502056
Dibromomethane	mg/l	0.0239	0.0244	96.0	73-125	2.03	20	WG502056
Dichlorodifluoromethane	mg/l	0.0167	0.0173	67.0	39-189	3.07	24	WG502056
Ethylbenzene	mg/l	0.0229	0.0232	92.0	76-129	1.47	20	WG502056
Hexachloro-1,3-butadiene	mg/l	0.0244	0.0255	97.0	67-135	4.72	20	WG502056
Isopropylbenzene	mg/l	0.0214	0.0221	85.0	73-132	3.63	20	WG502056
m&p-Xylenes	mg/l	0.0449	0.0456	90.0	74-128	1.49	20	WG502056
Methyl tert-butyl ether	mg/l	0.0202	0.0220	81.0	51-142	8.37	20	WG502056
Methylene Chloride	mg/l	0.0214	0.0225	86.0	64-125	5.18	20	WG502056
n-Butylbenzene	mg/l	0.0245	0.0258	98.0	63-142	5.16	20	WG502056
n-Propylbenzene	mg/l	0.0238	0.0246	95.0	71-132	3.52	20	WG502056
Naphthalene	mg/l	0.0245	0.0252	98.0	56-145	2.87	20	WG502056
o-Xylene	mg/l	0.0228	0.0225	91.0	78-128	1.08	20	WG502056
p-Isopropyltoluene	mg/l	0.0234	0.0242	94.0	68-138	3.49	20	WG502056
sec-Butylbenzene	mg/l	0.0234	0.0245	94.0	70-135	4.42	20	WG502056
Styrene	mg/l	0.0295	0.0298	118.	78-130	1.02	20	WG502056
tert-Butylbenzene	mg/l	0.0229	0.0242	92.0	72-134	5.48	20	WG502056
Tetrachloroethene	mg/l	0.0217	0.0222	87.0	67-135	2.36	20	WG502056
Toluene	mg/l	0.0221	0.0228	88.0	72-122	3.11	20	WG502056
trans-1,2-Dichloroethene	mg/l	0.0188	0.0197	75.0	67-129	4.59	20	WG502056

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Quality Assurance Report
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October 11, 2010

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
Trichloroethene	mg/l	0.0222	0.0228	89.0	74-126	2.50	20	WG502056
Trichlorofluoromethane	mg/l	0.0297	0.0315	119.	54-156	6.03	20	WG502056
Vinyl chloride	mg/l	0.0232	0.0244	93.0	55-153	4.90	20	WG502056
4-Bromofluorobenzene				98.10	75-128			WG502056
Dibromofluoromethane				107.1	79-125			WG502056
Toluene-d8				105.0	87-114			WG502056
a,a,a-Trifluorotoluene				99.78	84-114			WG502056

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
1,1,1,2-Tetrachloroethane	mg/l	0.0230	0	.025	92.0	45-152	L482447-03	WG502056
1,1,1-Trichloroethane	mg/l	0.0250	0	.025	99.9	31-161	L482447-03	WG502056
1,1,2,2-Tetrachloroethane	mg/l	0.0240	0	.025	96.0	49-149	L482447-03	WG502056
1,1,2-Trichloroethane	mg/l	0.0223	0	.025	89.4	46-145	L482447-03	WG502056
1,1-Dichloroethane	mg/l	0.0239	0	.025	95.4	30-159	L482447-03	WG502056
1,1-Dichloroethene	mg/l	0.0322	0	.025	129.	10-162	L482447-03	WG502056
1,1-Dichloropropene	mg/l	0.0232	0	.025	93.0	14-162	L482447-03	WG502056
1,2,3-Trichlorobenzene	mg/l	0.0229	0	.025	91.7	32-143	L482447-03	WG502056
1,2,3-Trichloropropane	mg/l	0.0227	0	.025	90.8	48-148	L482447-03	WG502056
1,2,4-Trichlorobenzene	mg/l	0.0234	0	.025	93.5	27-142	L482447-03	WG502056
1,2,4-Trimethylbenzene	mg/l	0.0232	0	.025	92.8	29-153	L482447-03	WG502056
1,2-Dibromo-3-Chloropropane	mg/l	0.0191	0	.025	76.5	37-148	L482447-03	WG502056
1,2-Dibromoethane	mg/l	0.0207	0	.025	82.8	41-149	L482447-03	WG502056
1,2-Dichlorobenzene	mg/l	0.0232	0	.025	92.7	40-139	L482447-03	WG502056
1,2-Dichloroethane	mg/l	0.0225	0	.025	90.1	29-167	L482447-03	WG502056
1,2-Dichloropropane	mg/l	0.0232	0	.025	92.7	39-148	L482447-03	WG502056
1,3,5-Trimethylbenzene	mg/l	0.0228	0	.025	91.2	33-149	L482447-03	WG502056
1,3-Dichlorobenzene	mg/l	0.0230	0	.025	92.0	32-148	L482447-03	WG502056
1,3-Dichloropropane	mg/l	0.0211	0	.025	84.5	44-142	L482447-03	WG502056
1,4-Dichlorobenzene	mg/l	0.0235	0	.025	93.9	32-136	L482447-03	WG502056
2,2-Dichloropropane	mg/l	0.0242	0	.025	96.6	14-158	L482447-03	WG502056
2-Butanone (MEK)	mg/l	0.114	0	.125	90.9	32-151	L482447-03	WG502056
2-Chlorotoluene	mg/l	0.0231	0	.025	92.5	35-147	L482447-03	WG502056
4-Chlorotoluene	mg/l	0.0224	0	.025	89.5	33-147	L482447-03	WG502056
4-Methyl-2-pentanone (MIBK)	mg/l	0.121	0	.125	96.6	40-160	L482447-03	WG502056
Acetone	mg/l	0.115	0.00840	.125	85.1	25-157	L482447-03	WG502056
Acrolein	mg/l	0.0940	0	.125	75.2	0-179	L482447-03	WG502056
Acrylonitrile	mg/l	0.119	0	.125	95.3	37-162	L482447-03	WG502056
Benzene	mg/l	0.0226	0	.025	90.4	16-158	L482447-03	WG502056
Bromobenzene	mg/l	0.0217	0	.025	87.0	37-147	L482447-03	WG502056
Bromodichloromethane	mg/l	0.0235	0	.025	94.1	45-147	L482447-03	WG502056
Bromoform	mg/l	0.0219	0	.025	87.5	38-152	L482447-03	WG502056
Bromomethane	mg/l	0.0286	0	.025	114.	0-191	L482447-03	WG502056
Carbon tetrachloride	mg/l	0.0258	0	.025	103.	22-168	L482447-03	WG502056
Chlorobenzene	mg/l	0.0219	0	.025	87.5	33-148	L482447-03	WG502056
Chlorodibromomethane	mg/l	0.0219	0	.025	87.7	48-151	L482447-03	WG502056
Chloroethane	mg/l	0.0337	0	.025	135.	4-176	L482447-03	WG502056
Chloroform	mg/l	0.0239	0	.025	95.8	37-147	L482447-03	WG502056
Chloromethane	mg/l	0.0210	0	.025	84.0	10-174	L482447-03	WG502056
cis-1,2-Dichloroethene	mg/l	0.0223	0	.025	89.3	29-156	L482447-03	WG502056
Di-isopropyl ether	mg/l	0.0232	0	.025	92.9	39-160	L482447-03	WG502056
Dibromomethane	mg/l	0.0226	0	.025	90.2	36-152	L482447-03	WG502056
Dichlorodifluoromethane	mg/l	0.0244	0	.025	97.6	0-200	L482447-03	WG502056
Ethylbenzene	mg/l	0.0226	0	.025	90.2	29-150	L482447-03	WG502056
Hexachloro-1,3-butadiene	mg/l	0.0249	0	.025	99.6	28-144	L482447-03	WG502056
Isopropylbenzene	mg/l	0.0234	0	.025	93.5	35-147	L482447-03	WG502056
m&p-Xylenes	mg/l	0.0448	0	.05	89.6	24-151	L482447-03	WG502056
Methyl tert-butyl ether	mg/l	0.0215	0	.025	86.2	24-167	L482447-03	WG502056

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100 East Ruffin Street

Mebane, NC 27302

Quality Assurance Report
Level II

L482431

October 11, 2010

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Methylene Chloride	mg/l	0.0222	0	.025	88.8	23-151	L482447-03	WG502056
n-Butylbenzene	mg/l	0.0257	0	.025	103.	22-151	L482447-03	WG502056
n-Propylbenzene	mg/l	0.0238	0	.025	95.2	26-150	L482447-03	WG502056
Naphthalene	mg/l	0.0225	0	.025	90.1	24-160	L482447-03	WG502056
o-Xylene	mg/l	0.0216	0	.025	86.4	32-151	L482447-03	WG502056
p-Isopropyltoluene	mg/l	0.0235	0	.025	93.9	28-151	L482447-03	WG502056
sec-Butylbenzene	mg/l	0.0240	0	.025	96.1	32-149	L482447-03	WG502056
Styrene	mg/l	0.0224	0	.025	89.4	38-149	L482447-03	WG502056
tert-Butylbenzene	mg/l	0.0236	0	.025	94.4	36-149	L482447-03	WG502056
Tetrachloroethene	mg/l	0.0222	0	.025	88.7	13-157	L482447-03	WG502056
Toluene	mg/l	0.0229	0	.025	91.8	22-152	L482447-03	WG502056
trans-1,2-Dichloroethene	mg/l	0.0213	0	.025	85.3	11-160	L482447-03	WG502056
Trichloroethene	mg/l	0.0223	0	.025	89.0	18-163	L482447-03	WG502056
Trichlorofluoromethane	mg/l	0.0351	0	.025	140.	10-177	L482447-03	WG502056
Vinyl chloride	mg/l	0.0291	0	.025	116.	0-179	L482447-03	WG502056
4-Bromofluorobenzene					95.59	75-128		WG502056
Dibromofluoromethane					106.8	79-125		WG502056
Toluene-d8					105.2	87-114		WG502056
a,a,a-Trifluorotoluene					99.69	84-114		WG502056
Mercury	mg/l	0.00314	0	.003	105.	70-130	L482256-06	WG502049
Arsenic	mg/l	0.872	0.00780	1	86.4	75-125	L482431-01	WG502075
Barium	mg/l	2.40	1.60	1	80.0	75-125	L482431-01	WG502075
Cadmium	mg/l	0.936	0.00150	1	93.4	75-125	L482431-01	WG502075
Chromium	mg/l	0.888	0.00210	1	88.6	75-125	L482431-01	WG502075
Lead	mg/l	0.930	0	1	93.0	75-125	L482431-01	WG502075
Selenium	mg/l	0.910	0	1	91.0	75-125	L482431-01	WG502075
Silver	mg/l	0.447	0.00750	1	44.0*	75-125	L482431-01	WG502075

Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
1,1,1,2-Tetrachloroethane	mg/l	0.0237	0.0230	94.9	45-152	3.05	21	L482447-03	WG502056
1,1,1-Trichloroethane	mg/l	0.0252	0.0250	101.	31-161	0.830	23	L482447-03	WG502056
1,1,2,2-Tetrachloroethane	mg/l	0.0253	0.0240	101.	49-149	5.51	22	L482447-03	WG502056
1,1,2-Trichloroethane	mg/l	0.0232	0.0223	92.8	46-145	3.76	20	L482447-03	WG502056
1,1-Dichloroethane	mg/l	0.0236	0.0239	94.5	30-159	0.970	21	L482447-03	WG502056
1,1-Dichloroethene	mg/l	0.0305	0.0322	122.	10-162	5.30	23	L482447-03	WG502056
1,1-Dichloropropene	mg/l	0.0227	0.0232	90.9	14-162	2.22	23	L482447-03	WG502056
1,2,3-Trichlorobenzene	mg/l	0.0241	0.0229	96.2	32-143	4.81	33	L482447-03	WG502056
1,2,3-Trichloropropane	mg/l	0.0242	0.0227	96.9	48-148	6.47	23	L482447-03	WG502056
1,2,4-Trichlorobenzene	mg/l	0.0242	0.0234	96.9	27-142	3.54	30	L482447-03	WG502056
1,2,4-Trimethylbenzene	mg/l	0.0228	0.0232	91.2	29-153	1.72	27	L482447-03	WG502056
1,2-Dibromo-3-Chloropropane	mg/l	0.0200	0.0191	80.0	37-148	4.51	27	L482447-03	WG502056
1,2-Dibromoethane	mg/l	0.0221	0.0207	88.6	41-149	6.79	21	L482447-03	WG502056
1,2-Dichlorobenzene	mg/l	0.0233	0.0232	93.3	40-139	0.680	23	L482447-03	WG502056
1,2-Dichloroethane	mg/l	0.0231	0.0225	92.4	29-167	2.58	21	L482447-03	WG502056
1,2-Dichloropropane	mg/l	0.0240	0.0232	96.0	39-148	3.51	20	L482447-03	WG502056
1,3,5-Trimethylbenzene	mg/l	0.0229	0.0228	91.8	33-149	0.630	26	L482447-03	WG502056
1,3-Dichlorobenzene	mg/l	0.0224	0.0230	89.6	32-148	2.63	24	L482447-03	WG502056
1,3-Dichloropropane	mg/l	0.0221	0.0211	88.4	44-142	4.61	20	L482447-03	WG502056
1,4-Dichlorobenzene	mg/l	0.0234	0.0235	93.6	32-136	0.300	23	L482447-03	WG502056
2,2-Dichloropropane	mg/l	0.0248	0.0242	99.1	14-158	2.54	23	L482447-03	WG502056
2-Butanone (MEK)	mg/l	0.124	0.114	99.3	32-151	8.84	26	L482447-03	WG502056
2-Chlorotoluene	mg/l	0.0226	0.0231	90.3	35-147	2.36	24	L482447-03	WG502056
4-Chlorotoluene	mg/l	0.0225	0.0224	90.0	33-147	0.510	25	L482447-03	WG502056

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L482431

October 11, 2010

Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
4-Methyl-2-pentanone (MIBK)	mg/l	0.130	0.121	104.	40-160	7.34	28	L482447-03	WG502056
Acetone	mg/l	0.120	0.115	89.0	25-157	4.17	26	L482447-03	WG502056
Acrolein	mg/l	0.0989	0.0940	79.1	0-179	5.07	39	L482447-03	WG502056
Acrylonitrile	mg/l	0.127	0.119	102.	37-162	6.53	24	L482447-03	WG502056
Benzene	mg/l	0.0227	0.0226	90.7	16-158	0.320	21	L482447-03	WG502056
Bromobenzene	mg/l	0.0224	0.0217	89.5	37-147	2.90	23	L482447-03	WG502056
Bromodichloromethane	mg/l	0.0240	0.0235	96.0	45-147	1.97	20	L482447-03	WG502056
Bromoform	mg/l	0.0220	0.0219	88.2	38-152	0.820	20	L482447-03	WG502056
Bromomethane	mg/l	0.0272	0.0286	109.	0-191	5.15	35	L482447-03	WG502056
Carbon tetrachloride	mg/l	0.0264	0.0258	105.	22-168	2.33	24	L482447-03	WG502056
Chlorobenzene	mg/l	0.0225	0.0219	90.0	33-148	2.81	22	L482447-03	WG502056
Chlorodibromomethane	mg/l	0.0229	0.0219	91.7	48-151	4.46	21	L482447-03	WG502056
Chloroethane	mg/l	0.0308	0.0337	123.	4-176	8.86	27	L482447-03	WG502056
Chloroform	mg/l	0.0241	0.0239	96.4	37-147	0.660	21	L482447-03	WG502056
Chloromethane	mg/l	0.0204	0.0210	81.5	10-174	3.01	28	L482447-03	WG502056
cis-1,2-Dichloroethene	mg/l	0.0224	0.0223	89.7	29-156	0.490	22	L482447-03	WG502056
Di-isopropyl ether	mg/l	0.0235	0.0232	94.0	39-160	1.15	21	L482447-03	WG502056
Dibromomethane	mg/l	0.0230	0.0226	91.9	36-152	1.84	20	L482447-03	WG502056
Dichlorodifluoromethane	mg/l	0.0230	0.0244	91.8	0-200	6.13	26	L482447-03	WG502056
Ethylbenzene	mg/l	0.0227	0.0226	90.9	29-150	0.750	24	L482447-03	WG502056
Hexachloro-1,3-butadiene	mg/l	0.0245	0.0249	98.0	28-144	1.60	33	L482447-03	WG502056
Isopropylbenzene	mg/l	0.0230	0.0234	92.1	35-147	1.51	25	L482447-03	WG502056
m&p-Xylenes	mg/l	0.0454	0.0448	90.7	24-151	1.22	23	L482447-03	WG502056
Methyl tert-butyl ether	mg/l	0.0228	0.0215	91.1	24-167	5.56	22	L482447-03	WG502056
Methylene Chloride	mg/l	0.0216	0.0222	86.3	23-151	2.84	21	L482447-03	WG502056
n-Butylbenzene	mg/l	0.0254	0.0257	102.	22-151	1.39	29	L482447-03	WG502056
n-Propylbenzene	mg/l	0.0240	0.0238	96.0	26-150	0.910	25	L482447-03	WG502056
Naphthalene	mg/l	0.0240	0.0225	96.0	24-160	6.41	37	L482447-03	WG502056
o-Xylene	mg/l	0.0218	0.0216	87.3	32-151	1.12	23	L482447-03	WG502056
p-Isopropyltoluene	mg/l	0.0231	0.0235	92.3	28-151	1.73	27	L482447-03	WG502056
sec-Butylbenzene	mg/l	0.0234	0.0240	93.6	32-149	2.56	26	L482447-03	WG502056
Styrene	mg/l	0.0220	0.0224	88.1	38-149	1.56	23	L482447-03	WG502056
tert-Butylbenzene	mg/l	0.0233	0.0236	93.4	36-149	1.08	26	L482447-03	WG502056
Tetrachloroethene	mg/l	0.0223	0.0222	89.0	13-157	0.370	24	L482447-03	WG502056
Toluene	mg/l	0.0236	0.0229	94.6	22-152	3.00	22	L482447-03	WG502056
trans-1,2-Dichloroethene	mg/l	0.0206	0.0213	82.5	11-160	3.36	23	L482447-03	WG502056
Trichloroethene	mg/l	0.0225	0.0223	89.8	18-163	0.920	21	L482447-03	WG502056
Trichlorofluoromethane	mg/l	0.0340	0.0351	136.	10-177	3.05	24	L482447-03	WG502056
Vinyl chloride	mg/l	0.0269	0.0291	107.	0-179	8.04	26	L482447-03	WG502056
4-Bromofluorobenzene				93.34	75-128				WG502056
Dibromofluoromethane				105.4	79-125				WG502056
Toluene-d8				104.4	87-114				WG502056
a,a,a-Trifluorotoluene				102.0	84-114				WG502056
Mercury	mg/l	0.00310	0.00314	103.	70-130	1.28	20	L482256-06	WG502049
Arsenic	mg/l	0.881	0.872	87.3	75-125	1.03	20	L482431-01	WG502075
Barium	mg/l	2.39	2.40	79.0	75-125	0.418	20	L482431-01	WG502075
Cadmium	mg/l	0.928	0.936	92.6	75-125	0.858	20	L482431-01	WG502075
Chromium	mg/l	0.900	0.888	89.8	75-125	1.34	20	L482431-01	WG502075
Lead	mg/l	0.943	0.930	94.3	75-125	1.39	20	L482431-01	WG502075
Selenium	mg/l	0.922	0.910	92.2	75-125	1.31	20	L482431-01	WG502075
Silver	mg/l	0.440	0.447	43.2*	75-125	1.58	20	L482431-01	WG502075

Batch number /Run number / Sample number cross reference

* Performance of this Analyte is outside of established criteria.
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Level II

L482431

October 11, 2010

WG502056: R1417148: L482431-01
WG502049: R1418870: L482431-01
WG502075: R1420154: L482431-01

* * Calculations are performed prior to rounding of reported values .
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The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address:
TerraQuest Environmental Consultants PC
100 East Ruffin Street
Mebane,NC 27302

Billing Information:
Mr. Michael Brown
100 East Ruffin Street
Mebane,NC 27302

Report to: Ryan Kerins
Email to:
Project Description: Lee County Landfill
City/Sate Collected: Sanford, NC
Phone: (919) 563-9091
FAX: (919) 563-9095
Client Project #: 02296
ESC Key:
Collected by: (print) Andy Wrenn
Site/Facility ID#:
P.O.#:
Collected by (signature): Andy Wrenn
Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day.....200%
___ Next Day.....100%
___ Two Day.....50%
___ Three Day.....25%

Date Results Needed:
Email? __No__Yes
FAX? __No__Yes

Chain of Custody
Page 1 of 1

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12065 Lebanon Road
Mt. Juliet, TN 37122
Phone: (800) 767-5859
Phone: (615) 758-5858
Fax: (615) 758-5859
A015

CoCode TURENV (lab use only)
Template/Prelogin
Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	(3) 6200B/40mL amber vial/HCl	[redacted]	(1) 8RCRA metals/500mL plastic/nitric acid					Remarks/Contaminant	Sample # (lab only)
MW12	Grab	GW	—	10/5	1426	4	X		X						L482431-01

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

pH _____ Temp _____
Flow _____ Other _____

Remarks: SWSL Reporting Required

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Andy Wrenn	10/5/10	1555	Dave Knoll
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)
			Blake Hoop

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☑ SWA

Temp:	Bottles Received:	Condition: (lab use only)	
3.4°C	4	OK	
Date:	Time:	CoC Seals Intact ___Y ___N ___NA	
10/6/10	1000	pH Checked:	NCF:
		L2	

TECHNICAL METHODS/STANDARD PROCEDURES

Groundwater Sampling

Groundwater samples are collected from temporary or permanent monitoring wells according to established sampling protocol. When permanent monitoring wells are sampled the well is purged of a minimum of three well-bore volumes prior to sample collection in order to assure that sampled water is representative of aquifer conditions. In temporary wells, the first water which migrates into the open borehole is sampled. Samples from both temporary and permanent monitoring wells are collected using individually wrapped disposable teflon bailers by a field personnel wearing disposable latex gloves. Only one well is sampled with a given bailer in order to prevent sample cross-contamination. Also, field personnel change gloves between different samples to reduce the chance of cross-contamination. Water samples are transferred from the bailer to laboratory-prepared sampling containers using slow emptying devices to reduce the chance of contamination loss through volatilization. Preservatives, such as acids, are added to samples directly after they are collected if preservation is necessary. The samples are labeled with the sample location, sample identification, date of collection, time of collection, the analytical method, the preservative, and the sampler's initials. The samples are cooled on ice to four degrees centigrade, sent to a certified laboratory, and analyzed before the expiration of an analytical method's prescribed holding time. Chain-of-custody documentation is maintained for each sample collected in the field.

Surface Water Sampling

Surface water samples, specifically samples from creeks or streams, are collected from a moving/flowing portion of the creek or stream to ensure that stagnant water is not collected. Field personnel are careful to collect samples from flowing areas that are not so turbulent as to cause a loss of volatile contaminants which might have been contained in the creek's/stream's water. Samples are collected by field personnel wearing disposable latex gloves. Field personnel change gloves between different locations to reduce the chance of cross-contamination. Samples are collected directly from the appropriate creek or stream location and placed into the appropriate laboratory-prepared containers. Preservatives, such as acids, are added to samples directly after they are collected if preservation is necessary. The samples are labeled with the sample location, sample identification, date of collection, time of collection, the analytical method, the preservative, and the sampler's initials. The samples are cooled on ice to approximately four degrees centigrade, sent to a certified laboratory, and analyzed before the expiration of an analytical method's prescribed holding time. Chain-of-custody documentation is maintained for each sample collected in the field.

Field Measurements

Field measurements taken to determine the pH, conductivity, temperature, and dissolved oxygen concentration of a particular groundwater sample are taken directly after a particular monitoring well has been adequately purged. Once purging of the monitoring

well is complete, a new, disposable teflon bailer is slowly lowered into the appropriate monitoring well and a representative groundwater sample is retrieved. A slow pouring device is fitted onto the end of the disposable bailer and the sample is slowly poured into a new, disposable plastic cup.

For pH, conductivity, and temperature, a Hanna Instruments Model 991300 portable meter is utilized. This unit is periodically calibrated and maintained in accordance with the unit's operations manual by field personnel. The procedure used for sample measurement involves lowering the meter's probe into the new, disposable cup containing the groundwater sample to be measured and slowly stirring the probe to force groundwater across the probe's membrane. The measurements displayed by the meter are then recorded.

For dissolved oxygen concentration measurements, a YSI Model 55 Handheld Dissolved Oxygen System is utilized. This unit is periodically calibrated and maintained in accordance with the unit's operations manual by field personnel. The procedure used for sample measurement involves adjusting the unit for the correct altitude where the sampling will take place and adjusting the reported units desired. Once this is done, the unit's probe is inserted into the new, disposable cup containing the groundwater sample to be measured and the probe is slowly stirred to force the groundwater across the probe's membrane. The measurements displayed by the unit are then recorded.