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

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).

RECEIVED JUL 31 2008 SOLID WASTE SECTION

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, preexisting 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 off 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):

Applied Resource Management P.C.

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

Name: Joseph L. Zuncich Phone: 910-270-2919

E-mail: armswaterworks@bellsouth.net

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Allegheny County Landfill	Hwy 18, Sparta, NC	03-03-T	.0500	July 2, 2008

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.

James L. Cornette, Agent — 910 270 2919

Facility Representative Name (Print) — Title — (Area Code) Telephone Number

J Cornette — 7/28/08

Signature — Date

Affix NC Licensed/ Professional Geologist/Engineer Seal here:

NORTH CAROLINA LICENSED SEAL 1214 GEOLOGIST JAMES L CORNETTE 7/28/08

Revised 01/2007

ASSESSMENT MONITORING REPORT

FOR THE

ALLEGHANY COUNTY MUNICIPAL SOLID WASTE LANDFILL (CLOSED)

SPARTA, NORTH CAROLINA
JULY 28, 2008

Permit #	03-03-T
Land Use:	Municipal Solid Waste Landfill.
Prop. Owner:	Alleghany County 348 South Main Street Sparta, North Carolina 28675 (336) 372-4179
Site Operator:	Alleghany County 348 South Main Street Sparta, North Carolina 28675 (336) 372-4179
Date:	July 28, 2008
Nat. of Release:	Suspected hydrocarbon leachate discharge from landfill disposal
Coordinates:	Latitude(North): 36° 29' 26" N Longitude(West): 81° 08' 58" W
Prepared By:	Applied Resource Management, PC 257 Transfer Station Road P. O. Box 882 Hampstead, North Carolina 28443 (910) 270-2919 Fax (910) 270-2988

RECEIVED JUL 31 2008 SOLID WASTE SECTION

NORTH CAROLINA LICENSED SEAL 1214 GEOLOGIST JAMES H. CORVETTE

ASSESSMENT MONITORING REPORT

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Applied Resource Management, P.C.

July 28, 2008

RECEIVED JUL 31 2008 SOLID WASTE SECTION

NC DENR
Division of Waste Management - Solid Waste Section
ATTN: Ms. Jacklynne Drummond
1646 Mail Service Center
Raleigh, North Carolina 2769-1646

RE: Semi-Annual Monitoring
Alleghany County Closed MSW Landfill
Sparta, North Carolina

Dear Ms. Drummond,

Attached please find the following monitoring data for the above referenced facility:

1. Environmental Monitoring Reporting Form
2. Assessment Monitoring Report

Review of historical results indicate low level hydrocarbon concentrations of benzene and vinyl chloride exceeding NCAC 02L Groundwater Standards at monitoring well MW-1. MW-3 previously revealed vinyl chloride above the State action limit during three of the previous sampling events, although most recent results show compliant concentrations for this well. Benzene concentrations at MW-1 have ranged from 1.34 to 5.02 ppb. The newly installed delineation well, MW-5, located between MW-1 and Vile Creek, has revealed all target compounds to be below quantitation limits. All other monitoring wells and stream samples collected during this event and previous events were found to be compliant for Appendix I Volatiles. In addition, five domestic water supply wells identified by Alleghany County personnel within 500' of the former landfill. Each well was sampled by County personnel. The samples were analyzed at the State laboratory for VOCs. No evidence of a hydrocarbon impact was found in any of the domestic wells.

Methane monitoring at the site revealed the monitoring wells to contain methane readings ranging from 20 to 140 ppm. LEL readings were consistent at 0%. The methane well located in the central portion of the landfill revealed 6,500 ppm methane with an LEL of 11%.

If you have any questions or require additional information, do not hesitate to call.

Sincerely,

Karen Caldwell for Joseph Zuncich

Joseph L. Zuncich
Project Manager

James L. Comette, PG
Project Manager

cc. Alleghany County
ATTN: Mr. Don Adams, County Manager
P.O. Box 366
Sparta, North Carolina 28675

P.O. Box 882
Hampstead, NC 28443
910.270.2919
FAX 270.2988

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ASSESSMENT MONITORING REPORT
FOR THE
ALLEGHANY COUNTY MUNICIPAL SOLID WASTE LANDFILL (CLOSED)
SPARTA, NORTH CAROLINA
PERMIT # 03-03-T

PREPARED FOR:

ALLEGHANY COUNTY
SPARTA, NORTH CAROLINA

JULY 28, 2008

1.0 SUMMARY OF SAMPLING RESULTS

1.1 Summary of Analytical Results and Free Product Thicknesses
(Refer to Tables 1, 2, and Appendix A)

As summarized on the referenced tables, several sampling events have been conducted at the site on a semi-annual schedule. This event included the sampling of the four original monitoring wells (MW-1, MW-2, MW-3, MW-4), two stream samples ST-1 and ST-2, the newly installed well, MW-5 and five surrounding domestic water supply wells. Figure 1 is a Site Map With Monitoring Well And Stream Sample Locations. A Semi-Annual Monitoring Well And Stream Sampling Data Summary and Historical Groundwater Sampling Results Summary are provided in Tables 1 and 2 respectively. Review of historical results indicate low level hydrocarbon concentrations of benzene and vinyl chloride exceeding NCAC 02L Groundwater Standards at monitoring well MW-1. Also, MW-3 has revealed vinyl chloride above the State action limit during some of the previous sampling events, although most recent results show compliant concentrations for this well. Benzene concentrations at MW-1 have ranged from 1.34 to 5.02 ppb. Vinyl chloride has ranged form estimated concentrations 0.410 to 1.27 ppb. The newly installed delineation well, MW-5, located between MW-1 and Vile Creek has revealed all target compounds to be below quantitation limits. All other monitoring wells and stream samples collected during this event and previous events were found to be compliant for Appendix I Volatiles. Also, five surrounding domestic water supply well samples were found to be compliant. Several Appendix I metals including beryllium, cadmium, cobalt, and lead have appeared within well and stream samples, although there is no consistency with the concentrations.

Methane monitoring at the site revealed the monitoring wells to contain low level methane readings ranging from 20 to 140 ppm. LEL readings were consistent at 0%. The methane well located in the central portion of the landfill revealed 6,500 ppm methane with an LEL of 11%.

Results of Well Gauging

A semi-annual monitoring well and stream sampling data summary is presented in Table 1. Depth to the groundwater table, as measured on 7/2/08, ranges from 4.65 to 34.30 feet. Well construction permit and information for the newly installed well, MW-5 is provided in Appendix B and C.

Sampling Methods and Results
(Refer to Table 2 and Appendix A)

As part of this monitoring event, five monitoring wells MW-1 thru MW-5, two stream samples, ST-1 and ST-2, and five surrounding domestic water supply wells were sampled. All of the monitoring well groundwater samples were analyzed for Appendix I Volatiles and Appendix I Metals. The surrounding supply wells, were identified and sampled by Alleghany County personnel. Their samples were analyzed for VOCs. Review of historical results indicate low level hydrocarbon concentrations of benzene and vinyl chloride exceeding NCAC 02L Groundwater Standards at monitoring well MW-1. MW-3 previously revealed vinyl chloride concentrations above the State action limit during three of the previous sampling events, although most recent results show compliant concentrations for this well. Benzene concentrations at MW-1 have ranged from 1.34 to 5.02 ppb, slightly exceeding the State action limit 1 ppb. The newly installed delineation well, MW-5, located between MW-1 and Vile Creek, has revealed all target compounds to be below quantitation limits. All other monitoring wells and stream samples collected during this event and previous events were found to be compliant for Appendix I Volatiles. Also, five surrounding domestic water supply well samples were found to be compliant for VOCs. Several Appendix I metals including beryllium, cadmium, cobalt, and lead have appeared within monitoring well and stream samples, although there is no consistency with the concentrations. Laboratory results are enclosed as Appendix A. Monitoring well sampling records are included in Table 3.

Methane monitoring was conducted at the site utilizing a Gas Tech GT 200 and PHD Plus atmospheric monitors. Both instruments revealed the monitoring wells to contain low level methane readings ranging from 20 to 140 ppm. LEL readings were consistent at 0%. The methane well, located in the central portion of the landfill, revealed 6,500 ppm methane with an LEL of 11%.

1.2 Proximity of the Plume to the Nearest Receptor
(Refer to Figure 2)

Sensitive receptors of contamination, as defined by the NCDENR, include groundwater supply wells and subsurface building structures, as well as any potential for adverse impact to humans, plants, or animals. Five surrounding water supply wells were identified by Alleghany County personnel within a 500 foot buffer of the former landfill. Figure 2 is a Site Map With Domestic Well Locations. A summary of surrounding water wells are as follows:

1	Alleghany County P.O. Box 366 Sparta, NC 28675	Drinking & Irrigation	NO	NO	<200'
2	Marry Perry 501 Osborne Road Sparta, NC 28675	Drinking & Irrigation	NO	NO	490'
3	Mary & Rick Perry 464 Osborne Road Sparta, NC 28675	Drinking & Irrigation	NO	NO	420'
4	Billy Dale Alley 264 Osborne Road Sparta, NC 28675	Drinking & Irrigation	NO	NO	420'
5	Edwin & Laura Bloodworth 231 Osborne Road Sparta, NC 28675	Drinking & Irrigation	NO	NO	400'

1.3 Description of Current Plume Size

Review of historical results indicate low level hydrocarbon concentrations of benzene and vinyl chloride exceeding NCAC 02L Groundwater Standards at monitoring well MW-1. Also, MW-3 has revealed vinyl chloride above the State action limit during some of the previous sampling events, although most recent results show compliant concentrations for this well. The newly installed delineation well, MW-5, located between MW-1 and Vile Creek has revealed all target compounds to be below quantitation limits. All other monitoring wells and stream samples collected during this event and previous events were found to be compliant for Appendix I Volatiles. Due to the low concentration of benzene at 1.62 ppb, and vinyl chloride estimated at 0.54 ppb at MW-1, coupled with the fact that all other monitoring and streams samples were compliant, no plume maps were prepared.

1.4 Groundwater Flow Direction

(Refer to Figure 3)

As presented on Figure 3, groundwater flow appears to be toward the southeast under the site.

1.5 Predictive Rate of Contaminant Transport

As shown on Figure 3, an overall groundwater flow toward the southeast was identified within the area of investigation. A hydraulic gradient (dh/dl) of 0.063% was calculated between MW-2 and MW-3. No slug testing or other hydrogeological testing has been conducted as of this date. In the event concentrations significantly increase or begin to appear within downgradient wells, additional hydrogeological analyses could become necessary.

2.0 CONCLUSIONS AND RECOMMENDATIONS

Review of historical results indicate low level hydrocarbon concentrations of benzene and vinyl chloride exceeding NCAC 02L Groundwater Standards at monitoring well MW-1. MW-3 previously revealed vinyl chloride above the State action limit during three of the previous sampling events, although most recent results show compliant concentrations for this well. Benzene concentrations at MW-1 have ranged from 1.34 to 5.02 ppb. The newly installed delineation well, MW-5, located between MW-1 and Vile Creek has revealed all target compounds to be below quantitation limits. All other monitoring wells and stream samples collected during this event and previous events were found to be compliant for Appendix I Volatiles. In addition, five surrounding domestic water supply wells revealed compliant hydrocarbon concentrations.

Methane monitoring at the site revealed the monitoring wells to contain low level methane readings ranging from 20 to 140 ppm. LEL readings were consistent at 0%. The methane well located in the central portion of the landfill revealed 6,500 ppm methane with an LEL of 11%.

It is recommended that the groundwater and methane monitoring program continue on a semiannual basis.

3.0 REFERENCES

North Carolina Department of Environment and Natural Resources, NC Solid Waste Program. Requirements For Municipal Solid Waste Landfill Facilities (MSWLFs).

North Carolina Department of Environmental and Natural Resources, March 2007. Ground Water Section Guidelines for the Investigation and Remediation of Soil and Ground Water.

TABLE 1

SEMI-ANNUAL MONITORING WELL AND STREAM SAMPLING DATA SUMMARY

ALLEGHANY COUNTY CLOSED MSWLF

JULY 2, 2008

SAMPLE	WELL DEPTH IN FEET	TOP OF CASING ELEVATION	DEPTH TO WATER IN FEET	GROUND WATER TABLE ELEVATION	BAILS REQ'D	QUANTITY PURGED IN GALLONS (Three Volumes)	pH	TEMP. IN F°	SPEC. CONDUCT IN umhos	METHANE GAS LEL/ PPM
MW-1	36	3,023.25	10.76	3,012.49	51	12.11	5.24	52.2	95.8	0/140
MW-2	29	3,023.77	4.65	3,019.12	49	11.68	6.29	50.9	23.4	0/20
MW-3	51	3,086.00*	34.30	3,051.70	34	8.01	4.67	49.7	64.8	0/40
MW-4	42	3,063.06	20.33	3,042.73	44	10.40	5.20	48.5	42.8	0/40
MW-5	19	3,012.92	8.32	3,004.60	22	5.13	7.25	60.5	33.2	0/40
METHANE WELL	Approx 160	NA	NA	NA	NA	NA	NA	NA	NA	11/6,500
ST-1	NA	NA	NA	NA	NA	NA	7.69	47.8	31.0	NA
ST-2	NA	NA	NA	NA	NA	NA	7.48	44.6	18.3	NA

NOTES:

MW = Monitoring Well Sample
ST = Stream Sample
NA = Not Applicable
Methane Monitoring Conducted With Gas Tech And PHD Plus Atmospheric Monitor
* = Assumed Benchmark Elevation At MW-3 Adjusted From GPS

TABLE 2

HISTORICAL GROUNDWATER SAMPLE RESULTS SUMMARY

ALLEGHANY COUNTY LANDFILL
SPARTA, NORTH CAROLINA

ANALYTE	NCAC 02L STD.	GWP STD.	SWSQL	MW-1					MW-2				MW-3						MW-4			
DATE SAMPLED				12/20/06	6/14/07	7/27/07	12/22/07	7/2/08	12/20/06	6/14/07	12/22/07	7/2/08	12/20/06	2/27/07	6/14/07	7/27/07	12/22/07	7/2/08	12/20/06	6/14/07	12/22/07	7/2/08
Appendix I Volatiles & Appendix I Metals (Concentrations in ug/L)																						
ACETONE	700	NE	100	12.8	3.45 J	BQL	5.58 J	BQL	BQL	BQL	BQL	BQL	BQL	NA	4.19 J	NA	5.93 J	BQL	BQL	BQL	1.51 J	BQL
BENZENE	1	NE	3	BQL					BQL	BQL	BQL	BQL	0.370	NA	0.330 J	NA	0.360 J	0.440 J	BQL	BQL	BQL	BQL
2-BUTANONE	4,200	NE	100	BQL	BQL	BQL	1.68 J	BQL	BQL	BQL	1.70 J	BQL	BQL	BQL	BQL	NA	2.65 J	BQL	BQL	BQL	BQL	BQL
CARBON DISULFIDE	700	700	100	BQL	1.38 J	BQL	0.440 J	BQL	BQL	3.96 J	1.42 J	BQL	BQL	NA	15.9 J	NA	0.850 J	BQL	BQL	6.03 J	0.070 J	BQL
CHLOROBENZENE	50	NE	3	BQL	BQL	BQL	0.130 J	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL
CHLOROETHANE	2,800	2,800	10	BQL	1.77 J	BQL	4.73	2.04 J	BQL	BQL	BQL	BQL	1.76	NA	1.36 J	NA	0.850 J	1.56 J	BQL	BQL	BQL	BQL
CHLOROMETHANE	2.6	2.6	5.5	BQL	BQL	BQL	0.310 J	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL
1,2-DICHLOROBENZENE	24	NE	5	BQL	BQL	BQL	0.490 J	0.180 J	BQL	BQL	BQL	BQL	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL
1,4-DICHLOROBENZENE	1.4	NE	3	BQL	BQL	BQL		1.21 J	BQL	BQL	BQL	BQL	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL
1,1-DICHLOROETHANE	70	NE	5	BQL	0.600 J	BQL	2.79 J	1.08 J	0.640	1.32 J	1.44 J	2.51 J	0.750	NA	0.640 J	NA	0.660 J	0.750 J	BQL	BQL	BQL	BQL
1,1-DICHLOROETHENE	7	NE	5	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.290 J	0.340 J	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL
CIS-1,2-DICHLOROETHENE	70	NE	5	BQL	2.46 J	8.77	7.19	3.04 J	BQL	BQL	BQL	BQL	2.86	NA	2.29 J	NA	2.77 J	3.39 J	BQL	BQL	BQL	BQL
1,2-DICHLOROPROPANE	0.51	NE	3	BQL	BQL	BQL	0.150 J	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL
ETHYLBENZENE	550	NE	5	BQL	BQL	BQL	0.300 J	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL
METHYLENE CHLORIDE	4.6	NE	5.5	BQL	BQL	BQL	1.85 J	1.47	0.660	1.22 J	1.64 J	2.38	0.240	NA	BQL	NA	0.320 J	0.610 J	BQL	BQL	BQL	BQL
TETRACHLOROETHENE	0.7	NE	3	BQL	BQL	BQL	0.540 J	0.240 J	BQL	BQL	BQL	0.160 J	0.530	NA	0.500 J	NA	0.460 J	0.490 J	BQL	BQL	BQL	BQL
1,1,1-TRICHLOROETHANE	200	NE	5	BQL	BQL	BQL	BQL	BQL	0.950	1.38 J	1.27	1.69	BQL	NA	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL
TRICHLOROFLOUROMETHANE	2,100	NE	5	BQL	BQL	BQL	BQL	BQL	2.60	2.99 J	2.36 J	3.88	BQL	NA	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL
TOLUENE	1,000	NE	5	BQL	BQL	BQL	0.860 J	0.170 J	BQL	BQL	BQL	BQL	0.200	NA	BQL	NA	BQL	0.200 J	BQL	BQL	BQL	BQL
TRICHLOROETHENE	2.8	NE	3	BQL	0.370 J	BQL	1.33 J	0.630 J	BQL	BQL	0.220 J	0.250 J	0.490	NA	0.430 J	NA	0.420 J	0.560 J	BQL	BQL	BQL	BQL
VINYL CHLORIDE	0.015	NE	5.5	BQL		BQL			BQL	BQL	BQL	BQL		BQL		BQL		BQL	BQL	BQL	BQL	BQL
TOTAL XYLENE	530	NE	4	BQL	BQL	BQL	1.58 J	0.160 J	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
ALL OTHER COMPOUNDS	Varies	Varies	Varies	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	NA	BQL	NA	BQL	BQL	BQL	BQL	BQL	BQL

Shaded areas represent concentrations exceeding the NCAC 02L Groundwater Standards or Solid Waste Groundwater Protection Standard.
BQL = Below Quantitation Limits
ug/L = parts per billion
NE = not established
GWP = Groundwater Protection Standard
SWSQL = Solid Waste Section Quantitation Limit
NA = Not Analyzed
J = Estimated Concentration

TABLE 2 (Continued)

HISTORICAL GROUNDWATER SAMPLE RESULTS SUMMARY

ALLEGHANY COUNTY LANDFILL
SPARTA, NORTH CAROLINA

ANALYTE	NCAC 02L STD.	GWP STD.	SWSQL	MW-5	ST-1				ST-2				Well #1	Well #2	Well #3	Well #4	Well #5
			DATE SAMPLED	7/2/08	12/20/06	6/14/07	12/22/07	7/2/08	12/20/06	6/14/07	12/22/07	7/2/08	5/6/08	5/6/08	5/6/08	5/6/08	5/6/08
Appendix I Volatiles & Appendix I Metals (Concentrations in ug/L)																	
ACETONE	700	NE	100	BQL	BQL	BQL	1.43 J	BQL	BQL	BQL	3.05 J	BQL	U	U	U	U	U
BENZENE	1	NE	3	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	U	U	U	U	U
2-BUTANONE	4,200	NE	100	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	U	U	U	U	U
CARBON DISULFIDE	700	700	100	BQL	BQL	0.810 J	0.420 J	BQL	BQL	7.71	0.150 J	BQL	U	U	U	U	U
CHLOROBENZENE	50	NE	3	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	U	U	U	U	U
CHLOROETHANE	2,800	2,800	10	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	U	U	U	U	U
CHLOROMETHANE	2.6	2.6	5.5	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	U	U	U	U	U
1,2-DICHLOROBENZENE	24	NE	5	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	U	U	U	U	U
1,4-DICHLOROBENZENE	1.4	NE	3	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	U	U	U	U	U
1,1-DICHLOROETHANE	70	NE	5	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	U	U	U	U	U
1,1-DICHLOROETHENE	7	NE	5	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	U	U	U	U	U
CIS-1,2-DICHLOROETHENE	70	NE	5	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	U	U	U	U	U
1,2-DICHLOROPROPANE	0.51	NE	3	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	U	U	U	U	U
ETHYLBENZENE	550	NE	5	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	U	U	U	U	U
METHYLENE CHLORIDE	4.6	NE	5.5	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	U	U	U	U	U
TETRACHLOROETHENE	0.7	NE	3	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	U	U	U	U	U
1,1,1-TRICHLOROETHANE	200	NE	5	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	U	U	U	U	U
TRICHLOROFLOUROMETHANE	2,100	NE	5	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	U	U	U	U	U
TOLUENE	1,000	NE	5	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	U	U	U	U	U
TRICHLOROETHENE	2.8	NE	3	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	U	U	U	U	U
VINYL CHLORIDE	0.015	NE	5.5	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	U	U	U	U	U
TOTAL XYLENE	530	NE	4	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	U	U	U	U	U
ALL OTHER COMPOUNDS	Varies	Varies	Varies	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	U	U	U	U	U

Shaded areas represent concentrations exceeding the NCAC 02L Groundwater Standards or Solid Waste Groundwater Protection Standard.
BQL = Below Quantitation Limits
ug/L = parts per billion
NE = not established
GWP = Groundwater Protection Standard
SWSQL = Solid Waste Section Quantitation Limit
NA = Not Analyzed
J = Estimated Concentration
U = Undetected

TABLE 2 (Continued)

HISTORICAL GROUNDWATER SAMPLE RESULTS SUMMARY

ALLEGHANY COUNTY LANDFILL
SPARTA, NORTH CAROLINA

ANALYTE	NCAC 02L STD.	GWP STD.	SWSQL	MW-1						MW-2					MW-3						MW-4				
		DATE SAMPLED		12/20/06	2/27/07	6/14/07	7/27/07	12/22/07	7/2/08	12/20/06	2/27/07	6/14/07	12/22/07	7/2/08	12/20/06	2/27/07	6/14/07	7/27/07	12/22/07	7/2/08	12/20/06	2/27/07	6/14/07	12/22/07	7/2/08
APPENDIX I METALS Concentrations in mg/l (ppm)																									
ARSENIC	0.050	NE	0.010	BQL	BQL	BQL	BQL	BQL	0.00886JB	BQL	BQL	BQL	BQL	0.00438JB	BQL	BQL	BQL	BQL	BQL	0.00559JB	BQL	BQL	BQL	BQL	0.00350JB
BARIUM	2.0	NE	0.10	0.0463	NA	0.0459	NA	0.0270 JB	0.0786JB	0.0428	NA	0.0235	0.0274 JB	0.0342JB	0.192	NA	0.259	NA	0.295 B	0.307B	0.117	NA	0.102	0.108 B	0.126B
BERYLLIUM	NE	0.002	0.001	BQL	NA		BQL	BQL		BQL	NA	BQL	BQL		0.000400	NA	0.00157	NA	BQL		BQL	NA	0.00191	BQL	0.00483B
CADMIUM	0.00175	NE	0.001	0.00041	NA		BQL	0.00018 J	0.000370J	0.000530	NA	BQL	0.00014 J	BQL	BQL	NA	BQL	NA	0.00022 J	BQL	BQL	NA	BQL	0.00020 J	BQL
CHROMIUM	0.050	NE	0.010	0.00707	NA	0.00476	NA	0.00364 JB	0.00870JB	0.00570	NA	0.00392	0.00363 JB	0.00589JB	0.00560	NA	0.00381	NA	0.00353 JB	0.00607JB	0.00522	NA	0.00329	0.00294 JB	0.00589JB
COBALT	NE	0.002	0.010		BQL		BQL	BQL			BQL	BQL	BQL	BQL		BQL		BQL	BQL			BQL	BQL	BQL	BQL
COPPER	1.0	NE	0.010	0.0118	NA	0.00404	NA	0.00443 JB	0.00803J	0.00908	NA	0.00371	0.00244 JB	0.00448J	0.00905	NA	0.00359	NA	0.00239 JB	0.00509J	0.00891	NA	0.00270	0.00249 JB	0.00480J
LEAD	0.015	NE	0.010	BQL	NA	BQL	NA	0.0051JB	0.00812JB	0.00310	NA	BQL	0.00597 JB	0.00912JB	0.00372	NA	BQL	NA	0.00546 JB	BQL	0.00124	NA	BQL	0.00770 JB	BQL
NICKEL	0.10	NE	0.050	0.00589	NA	BQL	NA	BQL	BQL	0.00459	NA	BQL	BQL	BQL	0.00784	NA	BQL	NA	BQL	BQL	0.00422	NA	BQL	BQL	BQL
SELENIUM	0.050	NE	0.010	BQL	NA	BQL	NA	BQL	BQL	0.0107	NA	BQL	BQL	BQL	BQL	NA	BQL	NA	BQL	BQL	0.00917	NA	BQL	BQL	BQL
SILVER	0.0175	NE	0.010	0.00546	NA	BQL	NA	BQL	0.00422JB	0.00595	NA	BQL	BQL	0.00325JB	0.00605	NA	BQL	NA	BQL	0.00324JB	0.00611	NA	BQL	BQL	0.00317JB
THALLIUM	NE	2.0	0.0055	BQL	NA	BQL	NA	BQL	0.0102	BQL	NA	BQL	BQL	BQL	BQL	NA	BQL	NA	BQL	BQL	BQL	NA	BQL	BQL	0.00627
VANADIUM	NE	0.025	0.025	0.00803	NA	BQL	NA	BQL	BQL	0.00485	NA	BQL	BQL	BQL	0.00511	NA	BQL	NA	BQL	BQL	0.00455	NA	BQL	BQL	BQL
ZINC	1.050	NE	0.010	0.0130	NA	0.0221	NA	0.00399	0.0155B	0.00859	NA	0.00831	0.00413 J	0.00605JB	0.0137	NA	0.0185	NA	0.0190	0.0160B	0.00706	NA	0.00720	BQL	0.00601JB

Shaded areas represent non compliant concentrations.
BQL = Below Quantitation Limits
ppm = parts per million
NE = Not Established
NA = Not Analyzed
J = Estimated Concentration, Below Calibration Range and Above Method Detection Limit
B = Compound Also Detected In Batch Blank, Amount in Prep Blank > MDL

TABLE 2 (Continued)

HISTORICAL GROUNDWATER SAMPLE RESULTS SUMMARY

ALLEGHANY COUNTY LANDFILL
SPARTA, NORTH CAROLINA

ANALYTE	NCAC 02L STD.	GWP STD.	SWSQL	MW-5	ST-1						ST-2				
			DATE SAMPLED	7/2/08	12/20/06	2/27/07	6/14/07	7/27/07	12/22/07	7/2/08	12/20/06	2/27/07	6/14/07	12/22/07	7/2/08
APPENDIX I METALS Concentrations in mg/l (ppm)															
ARSENIC	0.050	NE	0.010	0.00761JB	BQL	BQL	BQL	BQL	BQL	0.00559JB	BQL	BQL	BQL	BQL	0.00503JB
BARIUM	2.0	NE	0.10	0.195B	0.0570	NA	0.0339	NA	0.0434 JB	0.0336JB	0.0378	NA	0.0222	0.0230 JB	0.0346JB
BERYLLIUM	NE	0.002	0.001	[illegible]	BQL	NA	[illegible]	BQL	BQL	[illegible]	BQL	NA	0.00627	BQL	[illegible]
CADMIUM	0.00175	NE	0.001	0.00041J	BQL	NA	BQL	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL
CHROMIUM	0.050	NE	0.010	0.0168B	0.00619	NA	0.00424	NA	0.00264 JB	0.00514JB	0.00353	NA	0.00403	0.00304 JB	0.00692JB
COBALT	NE	0.002	0.010	[illegible]	[illegible]	BQL	[illegible]	BQL	BQL	[illegible]	[illegible]	BQL	BQL	BQL	[illegible]
COPPER	1.0	NE	0.010	0.0139	0.00939	NA	0.00549	NA	BQL	0.00537J	0.00908	NA	0.00380	0.00242 JB	0.00598J
LEAD	0.015	NE	0.010	[illegible]	0.00197	NA	BQL	NA	0.00689 JB	0.00558JB	0.00172	NA	BQL	0.00567	0.00988JB
NICKEL	0.10	NE	0.050	0.0274J	0.00649	NA	BQL	NA	BQL	0.00558J	0.00592	NA	BQL	BQL	BQL
SELENIUM	0.050	NE	0.010	BQL	0.0127	NA	BQL	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL
SILVER	0.0175	NE	0.010	0.00265JB	0.00573	NA	BQL	NA	BQL	0.00333JB	0.00585	NA	BQL	BQL	0.00322JB
THALLIUM	NE	2.0	0.0055	BQL	BQL	NA	BQL	NA	BQL	BQL	BQL	NA	BQL	BQL	BQL
VANADIUM	NE	0.025	0.025	0.0189J	0.00650	NA	0.00523	NA	BQL	BQL	0.00307	NA	BQL	BQL	BQL
ZINC	1.050	NE	0.010	0.0703B	0.0141	NA	0.0248	NA	BQL	0.00740JB	0.0101	NA	0.0117	BQL	0.00632JB

Shaded areas represent non compliant concentrations.
BQL = Below Quantitation Limits
ppm = parts per million
NE = Not Established
NA = Not Analyzed
J = Estimated Concentration, Below Calibration Range and Above Method Detection Limit
B = Compound Also Detected In Batch Blank

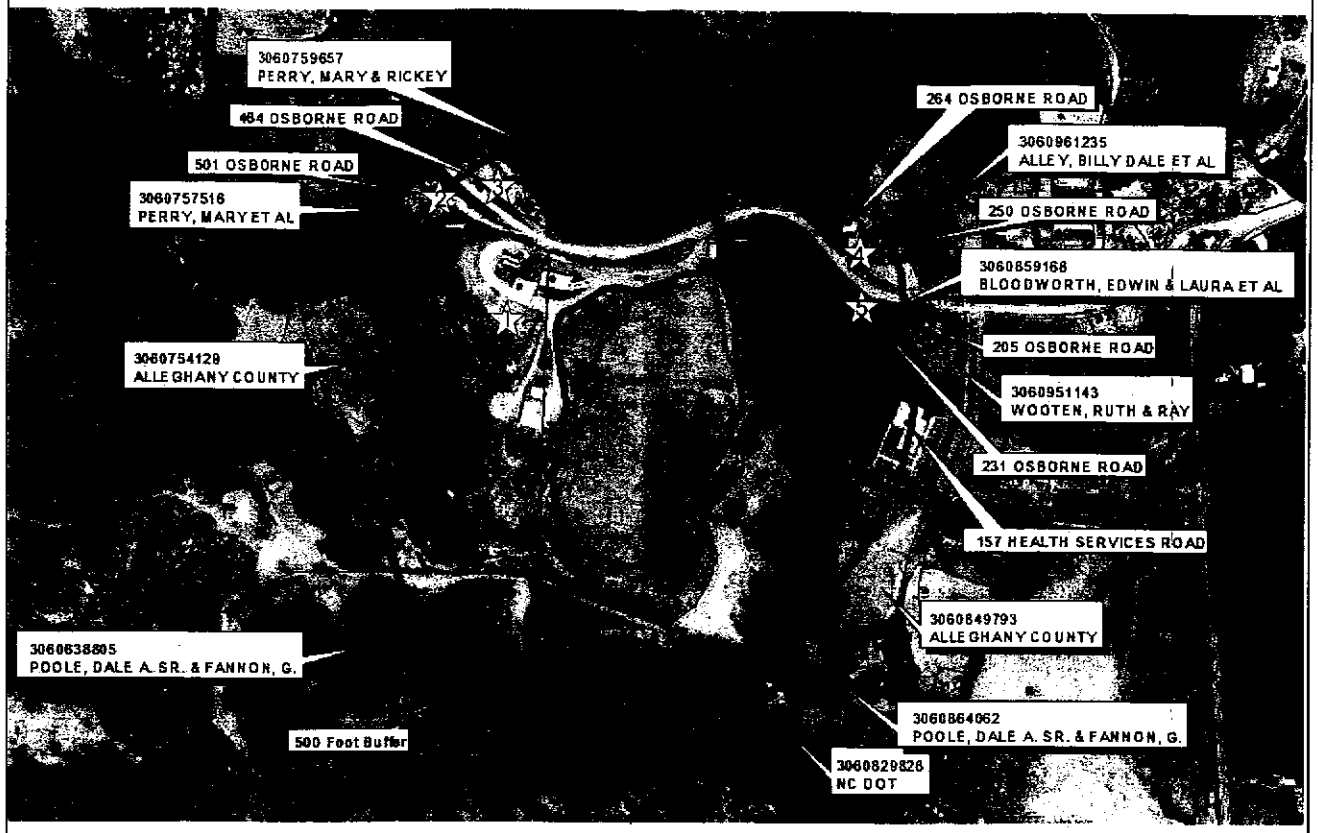
Legend
- Monitoring Well
- Methane Well
- Stream Sampling locations

N

Adapted from The Alleghany County GIS On-Line Department

Applied Resource Management PC
P.O. Box 882, Hampstead, NC 28443
(910) 270-2919 FAX 270-2988

TITLE:	SITE MAP WITH MONITORING WELL AND STREAM SAMPLE LOCATIONS			FIGURE:
JOB: 9625	SCALE: Approx: 1" = 120'	DATE: 7/16/08	DRAWN BY: KLC	1



April 16, 2008

500 Foot Buffer

Alleghany County, NC

1:1182

Legend

☆ Surrounding Domestic Wells

Adapted from Map provided by Alleghany County Manager's Office

Applied Resource Management PC
P.O. Box 882, Hampstead, NC 28443
(910) 270-2919 FAX 270-2988

TITLE:	JOB:	SCALE:	DATE:	DRAWN BY:	FIGURE:
SITE MAP WITH DOMESTIC WELL LOCATIONS	9625	As Shown	6/2/08	KLC	2

Legend

(3,051.70) Monitoring Well
Groundwater Elevation In Feet AMSL, Adjusted From GPS

Contour Interval = 10'

Hydraulic Flow Direction

Adapted from The Alleghany County GIS On-Line Department

N

Applied Resource Management PC
P.O. Box 882, Hampstead, NC 28443
(910) 270-2919 FAX 270-2988

TITLE:	GROUNDWATER TABLE CONTOURS AS OF 7/2/08			FIGURE:
JOB: 9625	SCALE: Approx: 1" = 120'	DATE: 7/16/08	DRAWN BY: KLC/JLZ	3

SGS

SGS ENVIRONMENTAL SERVICES, INC.

Mr. Joe Zuncich
Applied Resource Management
P.O. Box 882
Hampstead NC 28443

Report Number: G197-165

Client Project: Alleghany County Landfill

Dear Mr. Zuncich:

Enclosed are the results of the analytical services performed under the referenced project. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call SGS at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS Environmental Services for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,
SGS Environmental Services, Inc.

Lori L 7/15/08

Project Manager Date
Lori Lockamy

List of Reporting Abbreviations and Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantitation Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL/CL = Reporting Limit / Control Limit

RPD = Relative Percent Difference

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

1) Metals and mercury samples are digested with a hot block, see the standard operating procedure document for details.

2) Uncertainty for all reported data is less than or equal to 30 percent.

SGS ENVIRONMENTAL SERVICES, INC.

Results for Volatiles
by GCMS 8260 Appendix I

Client Sample ID: MW-1
Client Project ID: Alleghany County Landfill
Lab Sample ID: G197-165-1A
Lab Project ID: G197-165

Analyzed By: MJC
Date Collected: 7/2/2008 10:35
Date Received: 7/3/2008
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	SWSL Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	100	1.09	1	7/9/2008	
Acetonitrile	BQL	55.0	8.69	1	7/9/2008	
Acrylonitrile	BQL	200	6.02	1	7/9/2008	
Benzene	**1.62**	1.00	0.0650	1	7/9/2008	
Bromochloromethane	BQL	3.00	0.101	1	7/9/2008	
Bromodichloromethane	BQL	1.00	0.0760	1	7/9/2008	
Bromoform	BQL	3.00	0.120	1	7/9/2008	
Bromomethane	BQL	10.0	0.133	1	7/9/2008	
2-butanone	BQL	100	0.544	1	7/9/2008	
Carbon disulfide	BQL	100	0.0690	1	7/9/2008	
Carbon tetrachloride	BQL	1.00	0.0870	1	7/9/2008	
Chlorobenzene	BQL	3.00	0.0820	1	7/9/2008	
Chloroethane	**2.04**	10.0	0.106	1	7/9/2008	J
Chloroform	BQL	5.00	0.0790	1	7/9/2008	
Chloromethane	BQL	1.00	0.146	1	7/9/2008	
Dibromochloromethane	BQL	3.00	0.0900	1	7/9/2008	
1,2-Dibromo-3-chloropropane	BQL	13.0	1.21	1	7/9/2008	
Dibromomethane	BQL	10.0	0.113	1	7/9/2008	
1,2-Dibromoethane	BQL	1.00	0.124	1	7/9/2008	
1,2-Dichlorobenzene	**0.180**	5.00	0.127	1	7/9/2008	J
1,3-Dichlorobenzene	BQL	5.00	0.0810	1	7/9/2008	
1,4-Dichlorobenzene	**1.21**	5.00	0.0790	1	7/9/2008	J
t-1,4-Dichloro-2-butene	BQL	50.5	0.630	1	7/9/2008	
1,1-Dichloroethane	**1.08**	5.00	0.0740	1	7/9/2008	J
1,1-Dichloroethene	BQL	5.00	0.0890	1	7/9/2008	
1,2-Dichloroethane	BQL	1.00	0.0790	1	7/9/2008	
cis-1,2-Dichloroethene	**3.04**	5.00	0.0650	1	7/9/2008	J
t-1,2-dichloroethene	BQL	5.00	0.0890	1	7/9/2008	
1,2-Dichloropropane	BQL	1.00	0.0940	1	7/9/2008	
1,1-Dichloropropene	BQL	5.00	0.0720	1	7/9/2008	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	7/9/2008	
t-1,3-Dichloropropene	BQL	1.00	0.0760	1	7/9/2008	
Ethylbenzene	BQL	1.00	0.0770	1	7/9/2008	
2-hexanone	BQL	50.0	0.720	1	7/9/2008	
Iodomethane	BQL	10.0	0.0420	1	7/9/2008	
Methylene chloride	**1.47**	1.00	0.0980	1	7/9/2008	
4-methyl-2-pentanone	BQL	100	0.550	1	7/9/2008	
Styrene	BQL	1.00	0.0850	1	7/9/2008	
1,1,1,2-Tetrachloroethane	BQL	5.00	0.0900	1	7/9/2008	
1,1,2,2-Tetrachloroethane	BQL	3.00	0.115	1	7/9/2008	
Tetrachloroethene	**0.240**	1.00	0.0690	1	7/9/2008	J
Toluene	**0.170**	1.00	0.0760	1	7/9/2008	J
Trichloroethene	**0.630**	1.00	0.0540	1	7/9/2008	J
1,1,1-Trichloroethane	BQL	1.00	0.0540	1	7/9/2008	
1,1,2-Trichloroethane	BQL	1.00	0.182	1	7/9/2008	

SGS ENVIRONMENTAL SERVICES, INC.

Results for Volatiles
by GCMS 8260 Appendix I

Client Sample ID: MW-1
Client Project ID: Alleghany County Landfill
Lab Sample ID: G197-165-1A
Lab Project ID: G197-165

Analyzed By: MJC
Date Collected: 7/2/2008 10:35
Date Received: 7/3/2008
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	SWSL Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Trichlorofluoromethane	BQL	1.00	0.111	1	7/9/2008	
1,2,3-Trichloropropane	BQL	1.00	0.120	1	7/9/2008	
Vinyl acetate	BQL	50.0	0.100	1	7/9/2008	
Vinyl chloride	**0.540**	1.00	0.149	1	7/9/2008	J
Total Xylene	**0.160**	5.00	0.0650	1	7/9/2008	J

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	9.95	99
Toluene-d8	10	10.7	106
4-Bromofluorobenzene	10	10	100

Comments:

Flags:
BQL = Below Quantitation Limits.

Analyst: _____

Reviewed By: _____

N.C. CERTIFICATION #481

GCMS
NCAP1

SGS ENVIRONMENTAL SERVICES, INC.

Results for Volatiles
by GCMS 8260 Appendix I

Client Sample ID: MW-2
Client Project ID: Alleghany County Landfill
Lab Sample ID: G197-165-2A
Lab Project ID: G197-165

Analyzed By: MJC
Date Collected: 7/2/2008 11:45
Date Received: 7/3/2008
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	SWSL Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	100	1.09	1	7/9/2008	
Acetonitrile	BQL	55.0	8.69	1	7/9/2008	
Acrylonitrile	BQL	200	6.02	1	7/9/2008	
Benzene	BQL	1.00	0.0650	1	7/9/2008	
Bromochloromethane	BQL	3.00	0.101	1	7/9/2008	
Bromodichloromethane	BQL	1.00	0.0760	1	7/9/2008	
Bromoform	BQL	3.00	0.120	1	7/9/2008	
Bromomethane	BQL	10.0	0.133	1	7/9/2008	
2-butanone	BQL	100	0.544	1	7/9/2008	
Carbon disulfide	BQL	100	0.0690	1	7/9/2008	
Carbon tetrachloride	BQL	1.00	0.0870	1	7/9/2008	
Chlorobenzene	BQL	3.00	0.0820	1	7/9/2008	
Chloroethane	BQL	10.0	0.106	1	7/9/2008	
Chloroform	BQL	5.00	0.0790	1	7/9/2008	
Chloromethane	BQL	1.00	0.146	1	7/9/2008	
Dibromochloromethane	BQL	3.00	0.0900	1	7/9/2008	
1,2-Dibromo-3-chloropropane	BQL	13.0	1.21	1	7/9/2008	
Dibromomethane	BQL	10.0	0.113	1	7/9/2008	
1,2-Dibromoethane	BQL	1.00	0.124	1	7/9/2008	
1,2-Dichlorobenzene	BQL	5.00	0.127	1	7/9/2008	
1,3-Dichlorobenzene	BQL	5.00	0.0810	1	7/9/2008	
1,4-Dichlorobenzene	BQL	5.00	0.0790	1	7/9/2008	
t-1,4-Dichloro-2-butene	BQL	50.5	0.630	1	7/9/2008	
1,1-Dichloroethane	**2.51**	5.00	0.0740	1	7/9/2008	J
1,1-Dichloroethene	**0.340**	5.00	0.0890	1	7/9/2008	J
1,2-Dichloroethane	BQL	1.00	0.0790	1	7/9/2008	
cis-1,2-Dichloroethene	BQL	5.00	0.0650	1	7/9/2008	
t-1,2-dichloroethene	BQL	5.00	0.0890	1	7/9/2008	
1,2-Dichloropropane	BQL	1.00	0.0940	1	7/9/2008	
1,1-Dichloropropene	BQL	5.00	0.0720	1	7/9/2008	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	7/9/2008	
t-1,3-Dichloropropene	BQL	1.00	0.0760	1	7/9/2008	
Ethylbenzene	BQL	1.00	0.0770	1	7/9/2008	
2-hexanone	BQL	50.0	0.720	1	7/9/2008	
Iodomethane	BQL	10.0	0.0420	1	7/9/2008	
Methylene chloride	**2.38**	1.00	0.0980	1	7/9/2008	
4-methyl-2-pentanone	BQL	100	0.550	1	7/9/2008	
Styrene	BQL	1.00	0.0850	1	7/9/2008	
1,1,1,2-Tetrachloroethane	BQL	5.00	0.0900	1	7/9/2008	
1,1,2,2-Tetrachloroethane	BQL	3.00	0.115	1	7/9/2008	
Tetrachloroethene	**0.160**	1.00	0.0690	1	7/9/2008	J
Toluene	BQL	1.00	0.0760	1	7/9/2008	
Trichloroethene	**0.250**	1.00	0.0540	1	7/9/2008	J
1,1,1-Trichloroethane	**1.69**	1.00	0.0540	1	7/9/2008	
1,1,2-Trichloroethane	BQL	1.00	0.182	1	7/9/2008	

SGS ENVIRONMENTAL SERVICES, INC.

Results for Volatiles
by GCMS 8260 Appendix I

Client Sample ID: MW-2
Client Project ID: Alleghany County Landfill
Lab Sample ID: G197-165-2A
Lab Project ID: G197-165

Analyzed By: MJC
Date Collected: 7/2/2008 11:45
Date Received: 7/3/2008
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	SWSL Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Trichlorofluoromethane	**3.88**	1.00	0.111	1	7/9/2008	
1,2,3-Trichloropropane	BQL	1.00	0.120	1	7/9/2008	
Vinyl acetate	BQL	50.0	0.100	1	7/9/2008	
Vinyl chloride	BQL	1.00	0.149	1	7/9/2008	
Total Xylene	BQL	5.00	0.0650	1	7/9/2008	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	9.48	95
Toluene-d8	10	10	100
4-Bromofluorobenzene	10	10	100

Comments:

Flags:
BQL = Below Quantitation Limits.

Analyst: _____

Reviewed By: _____

SGS ENVIRONMENTAL SERVICES, INC.

Results for Volatiles
by GCMS 8260 Appendix I

Client Sample ID: MW-3
Client Project ID: Alleghany County Landfill
Lab Sample ID: G197-165-3A
Lab Project ID: G197-165

Analyzed By: MJC
Date Collected: 7/2/2008 14:00
Date Received: 7/3/2008
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	SWSL Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	100	1.09	1	7/9/2008	
Acetonitrile	BQL	55.0	8.69	1	7/9/2008	
Acrylonitrile	BQL	200	6.02	1	7/9/2008	
Benzene	**0.440**	1.00	0.0650	1	7/9/2008	J
Bromochloromethane	BQL	3.00	0.101	1	7/9/2008	
Bromodichloromethane	BQL	1.00	0.0760	1	7/9/2008	
Bromoform	BQL	3.00	0.120	1	7/9/2008	
Bromomethane	BQL	10.0	0.133	1	7/9/2008	
2-butanone	BQL	100	0.544	1	7/9/2008	
Carbon disulfide	BQL	100	0.0690	1	7/9/2008	
Carbon tetrachloride	BQL	1.00	0.0870	1	7/9/2008	
Chlorobenzene	BQL	3.00	0.0820	1	7/9/2008	
Chloroethane	**1.56**	10.0	0.106	1	7/9/2008	J
Chloroform	BQL	5.00	0.0790	1	7/9/2008	
Chloromethane	BQL	1.00	0.146	1	7/9/2008	
Dibromochloromethane	BQL	3.00	0.0900	1	7/9/2008	
1,2-Dibromo-3-chloropropane	BQL	13.0	1.21	1	7/9/2008	
Dibromomethane	BQL	10.0	0.113	1	7/9/2008	
1,2-Dibromoethane	BQL	1.00	0.124	1	7/9/2008	
1,2-Dichlorobenzene	BQL	5.00	0.127	1	7/9/2008	
1,3-Dichlorobenzene	BQL	5.00	0.0810	1	7/9/2008	
1,4-Dichlorobenzene	BQL	5.00	0.0790	1	7/9/2008	
t-1,4-Dichloro-2-butene	BQL	50.5	0.630	1	7/9/2008	
1,1-Dichloroethane	**0.750**	5.00	0.0740	1	7/9/2008	J
1,1-Dichloroethene	BQL	5.00	0.0890	1	7/9/2008	
1,2-Dichloroethane	BQL	1.00	0.0790	1	7/9/2008	
cis-1,2-Dichloroethene	**3.39**	5.00	0.0650	1	7/9/2008	J
t-1,2-dichloroethene	BQL	5.00	0.0890	1	7/9/2008	
1,2-Dichloropropane	BQL	1.00	0.0940	1	7/9/2008	
1,1-Dichloropropene	BQL	5.00	0.0720	1	7/9/2008	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	7/9/2008	
t-1,3-Dichloropropene	BQL	1.00	0.0760	1	7/9/2008	
Ethylbenzene	BQL	1.00	0.0770	1	7/9/2008	
2-hexanone	BQL	50.0	0.720	1	7/9/2008	
Iodomethane	BQL	10.0	0.0420	1	7/9/2008	
Methylene chloride	**0.610**	1.00	0.0980	1	7/9/2008	J
4-methyl-2-pentanone	BQL	100	0.550	1	7/9/2008	
Styrene	BQL	1.00	0.0850	1	7/9/2008	
1,1,1,2-Tetrachloroethane	BQL	5.00	0.0900	1	7/9/2008	
1,1,2,2-Tetrachloroethane	BQL	3.00	0.115	1	7/9/2008	
Tetrachloroethene	**0.490**	1.00	0.0690	1	7/9/2008	J
Toluene	**0.200**	1.00	0.0760	1	7/9/2008	J
Trichloroethene	**0.560**	1.00	0.0540	1	7/9/2008	J
1,1,1-Trichloroethane	BQL	1.00	0.0540	1	7/9/2008	
1,1,2-Trichloroethane	BQL	1.00	0.182	1	7/9/2008	

SGS ENVIRONMENTAL SERVICES, INC.

Results for Volatiles
by GCMS 8260 Appendix I

Client Sample ID: MW-3
Client Project ID: Alleghany County Landfill
Lab Sample ID: G197-165-3A
Lab Project ID: G197-165

Analyzed By: MJC
Date Collected: 7/2/2008 14:00
Date Received: 7/3/2008
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	SWSL Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Trichlorofluoromethane	BQL	1.00	0.111	1	7/9/2008	
1,2,3-Trichloropropane	BQL	1.00	0.120	1	7/9/2008	
Vinyl acetate	BQL	50.0	0.100	1	7/9/2008	
Vinyl chloride	BQL	1.00	0.149	1	7/9/2008	
Total Xylene	BQL	5.00	0.0650	1	7/9/2008	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	10.1	101
Toluene-d8	10	10.8	108
4-Bromofluorobenzene	10	10	100

Comments:

Flags:
BQL = Below Quantitation Limits.

Analyst: _____

Reviewed By: _____

N.C. CERTIFICATION #481

SGS ENVIRONMENTAL SERVICES, INC.

Results for Volatiles
by GCMS 8260 Appendix I

Client Sample ID: MW-4
Client Project ID: Alleghany County Landfill
Lab Sample ID: G197-165-4A
Lab Project ID: G197-165

Analyzed By: MJC
Date Collected: 7/2/2008 12:10
Date Received: 7/3/2008
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	SWSL Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	100	1.09	1	7/9/2008	
Acetonitrile	BQL	55.0	8.69	1	7/9/2008	
Acrylonitrile	BQL	200	6.02	1	7/9/2008	
Benzene	BQL	1.00	0.0650	1	7/9/2008	
Bromochloromethane	BQL	3.00	0.101	1	7/9/2008	
Bromodichloromethane	BQL	1.00	0.0760	1	7/9/2008	
Bromoform	BQL	3.00	0.120	1	7/9/2008	
Bromomethane	BQL	10.0	0.133	1	7/9/2008	
2-butanone	BQL	100	0.544	1	7/9/2008	
Carbon disulfide	BQL	100	0.0690	1	7/9/2008	
Carbon tetrachloride	BQL	1.00	0.0870	1	7/9/2008	
Chlorobenzene	BQL	3.00	0.0820	1	7/9/2008	
Chloroethane	BQL	10.0	0.106	1	7/9/2008	
Chloroform	BQL	5.00	0.0790	1	7/9/2008	
Chloromethane	BQL	1.00	0.146	1	7/9/2008	
Dibromochloromethane	BQL	3.00	0.0900	1	7/9/2008	
1,2-Dibromo-3-chloropropane	BQL	13.0	1.21	1	7/9/2008	
Dibromomethane	BQL	10.0	0.113	1	7/9/2008	
1,2-Dibromoethane	BQL	1.00	0.124	1	7/9/2008	
1,2-Dichlorobenzene	BQL	5.00	0.127	1	7/9/2008	
1,3-Dichlorobenzene	BQL	5.00	0.0810	1	7/9/2008	
1,4-Dichlorobenzene	BQL	5.00	0.0790	1	7/9/2008	
t-1,4-Dichloro-2-butene	BQL	50.5	0.630	1	7/9/2008	
1,1-Dichloroethane	BQL	5.00	0.0740	1	7/9/2008	
1,1-Dichloroethene	BQL	5.00	0.0890	1	7/9/2008	
1,2-Dichloroethane	BQL	1.00	0.0790	1	7/9/2008	
cis-1,2-Dichloroethene	BQL	5.00	0.0650	1	7/9/2008	
t-1,2-dichloroethene	BQL	5.00	0.0890	1	7/9/2008	
1,2-Dichloropropane	BQL	1.00	0.0940	1	7/9/2008	
1,1-Dichloropropene	BQL	5.00	0.0720	1	7/9/2008	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	7/9/2008	
t-1,3-Dichloropropene	BQL	1.00	0.0760	1	7/9/2008	
Ethylbenzene	BQL	1.00	0.0770	1	7/9/2008	
2-hexanone	BQL	50.0	0.720	1	7/9/2008	
Iodomethane	BQL	10.0	0.0420	1	7/9/2008	
Methylene chloride	BQL	1.00	0.0980	1	7/9/2008	
4-methyl-2-pentanone	BQL	100	0.550	1	7/9/2008	
Styrene	BQL	1.00	0.0850	1	7/9/2008	
1,1,1,2-Tetrachloroethane	BQL	5.00	0.0900	1	7/9/2008	
1,1,2,2-Tetrachloroethane	BQL	3.00	0.115	1	7/9/2008	
Tetrachloroethene	BQL	1.00	0.0690	1	7/9/2008	
Toluene	BQL	1.00	0.0760	1	7/9/2008	
Trichloroethene	BQL	1.00	0.0540	1	7/9/2008	
1,1,1-Trichloroethane	BQL	1.00	0.0540	1	7/9/2008	
1,1,2-Trichloroethane	BQL	1.00	0.182	1	7/9/2008	

SGS ENVIRONMENTAL SERVICES, INC.

Results for Volatiles
by GCMS 8260 Appendix I

Client Sample ID: MW-4
Client Project ID: Alleghany County Landfill
Lab Sample ID: G197-165-4A
Lab Project ID: G197-165

Analyzed By: MJC
Date Collected: 7/2/2008 12:10
Date Received: 7/3/2008
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	SWSL Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Trichlorofluoromethane	BQL	1.00	0.111	1	7/9/2008	
1,2,3-Trichloropropane	BQL	1.00	0.120	1	7/9/2008	
Vinyl acetate	BQL	50.0	0.100	1	7/9/2008	
Vinyl chloride	BQL	1.00	0.149	1	7/9/2008	
Total Xylene	BQL	5.00	0.0650	1	7/9/2008	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	10.6	106
Toluene-d8	10	10.8	108
4-Bromofluorobenzene	10	9.94	99

Comments:

Flags:
BQL = Below Quantitation Limits.

Analyst: _____

Reviewed By: _____

SGS ENVIRONMENTAL SERVICES, INC.

Results for Volatiles
by GCMS 8260 Appendix I

Client Sample ID: MW-5
Client Project ID: Alleghany County Landfill
Lab Sample ID: G197-165-5A
Lab Project ID: G197-165

Analyzed By: MJC
Date Collected: 7/2/2008 8:50
Date Received: 7/3/2008
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	SWSL Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	100	1.09	1	7/9/2008	
Acetonitrile	BQL	55.0	8.69	1	7/9/2008	
Acrylonitrile	BQL	200	6.02	1	7/9/2008	
Benzene	BQL	1.00	0.0650	1	7/9/2008	
Bromochloromethane	BQL	3.00	0.101	1	7/9/2008	
Bromodichloromethane	BQL	1.00	0.0760	1	7/9/2008	
Bromoform	BQL	3.00	0.120	1	7/9/2008	
Bromomethane	BQL	10.0	0.133	1	7/9/2008	
2-butanone	BQL	100	0.544	1	7/9/2008	
Carbon disulfide	BQL	100	0.0690	1	7/9/2008	
Carbon tetrachloride	BQL	1.00	0.0870	1	7/9/2008	
Chlorobenzene	BQL	3.00	0.0820	1	7/9/2008	
Chloroethane	BQL	10.0	0.106	1	7/9/2008	
Chloroform	BQL	5.00	0.0790	1	7/9/2008	
Chloromethane	BQL	1.00	0.146	1	7/9/2008	
Dibromochloromethane	BQL	3.00	0.0900	1	7/9/2008	
1,2-Dibromo-3-chloropropane	BQL	13.0	1.21	1	7/9/2008	
Dibromomethane	BQL	10.0	0.113	1	7/9/2008	
1,2-Dibromoethane	BQL	1.00	0.124	1	7/9/2008	
1,2-Dichlorobenzene	BQL	5.00	0.127	1	7/9/2008	
1,3-Dichlorobenzene	BQL	5.00	0.0810	1	7/9/2008	
1,4-Dichlorobenzene	BQL	5.00	0.0790	1	7/9/2008	
t-1,4-Dichloro-2-butene	BQL	50.5	0.630	1	7/9/2008	
1,1-Dichloroethane	BQL	5.00	0.0740	1	7/9/2008	
1,1-Dichloroethene	BQL	5.00	0.0890	1	7/9/2008	
1,2-Dichloroethane	BQL	1.00	0.0790	1	7/9/2008	
cis-1,2-Dichloroethene	BQL	5.00	0.0650	1	7/9/2008	
t-1,2-dichloroethene	BQL	5.00	0.0890	1	7/9/2008	
1,2-Dichloropropane	BQL	1.00	0.0940	1	7/9/2008	
1,1-Dichloropropene	BQL	5.00	0.0720	1	7/9/2008	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	7/9/2008	
t-1,3-Dichloropropene	BQL	1.00	0.0760	1	7/9/2008	
Ethylbenzene	BQL	1.00	0.0770	1	7/9/2008	
2-hexanone	BQL	50.0	0.720	1	7/9/2008	
Iodomethane	BQL	10.0	0.0420	1	7/9/2008	
Methylene chloride	BQL	1.00	0.0980	1	7/9/2008	
4-methyl-2-pentanone	BQL	100	0.550	1	7/9/2008	
Styrene	BQL	1.00	0.0850	1	7/9/2008	
1,1,1,2-Tetrachloroethane	BQL	5.00	0.0900	1	7/9/2008	
1,1,2,2-Tetrachloroethane	BQL	3.00	0.115	1	7/9/2008	
Tetrachloroethene	BQL	1.00	0.0690	1	7/9/2008	
Toluene	BQL	1.00	0.0760	1	7/9/2008	
Trichloroethene	BQL	1.00	0.0540	1	7/9/2008	
1,1,1-Trichloroethane	BQL	1.00	0.0540	1	7/9/2008	
1,1,2-Trichloroethane	BQL	1.00	0.182	1	7/9/2008	

SGS ENVIRONMENTAL SERVICES, INC.

Results for Volatiles
by GCMS 8260 Appendix I

Client Sample ID: MW-5
Client Project ID: Alleghany County Landfill
Lab Sample ID: G197-165-5A
Lab Project ID: G197-165

Analyzed By: MJC
Date Collected: 7/2/2008 8:50
Date Received: 7/3/2008
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	SWSL Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Trichlorofluoromethane	BQL	1.00	0.111	1	7/9/2008	
1,2,3-Trichloropropane	BQL	1.00	0.120	1	7/9/2008	
Vinyl acetate	BQL	50.0	0.100	1	7/9/2008	
Vinyl chloride	BQL	1.00	0.149	1	7/9/2008	
Total Xylene	BQL	5.00	0.0650	1	7/9/2008	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	10.1	101
Toluene-d8	10	10.1	101
4-Bromofluorobenzene	10	9.94	99

Comments:

Flags:
BQL = Below Quantitation Limits.

Analyst: _____

Reviewed By: _____

SGS ENVIRONMENTAL SERVICES, INC.

Results for Volatiles
by GCMS 8260 Appendix I

Client Sample ID: ST-1
Client Project ID: Alleghany County Landfill
Lab Sample ID: G197-165-6A
Lab Project ID: G197-165

Analyzed By: DVG
Date Collected: 7/2/2008 11:00
Date Received: 7/3/2008
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	SWSL Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	100	1.09	1	7/9/2008	
Acetonitrile	BQL	55.0	8.69	1	7/9/2008	
Acrylonitrile	BQL	200	6.02	1	7/9/2008	
Benzene	BQL	1.00	0.0650	1	7/9/2008	
Bromochloromethane	BQL	3.00	0.101	1	7/9/2008	
Bromodichloromethane	BQL	1.00	0.0760	1	7/9/2008	
Bromoform	BQL	3.00	0.120	1	7/9/2008	
Bromomethane	BQL	10.0	0.133	1	7/9/2008	
2-butanone	BQL	100	0.544	1	7/9/2008	
Carbon disulfide	BQL	100	0.0690	1	7/9/2008	
Carbon tetrachloride	BQL	1.00	0.0870	1	7/9/2008	
Chlorobenzene	BQL	3.00	0.0820	1	7/9/2008	
Chloroethane	BQL	10.0	0.106	1	7/9/2008	
Chloroform	BQL	5.00	0.0790	1	7/9/2008	
Chloromethane	BQL	1.00	0.146	1	7/9/2008	
Dibromochloromethane	BQL	3.00	0.0900	1	7/9/2008	
1,2-Dibromo-3-chloropropane	BQL	13.0	1.21	1	7/9/2008	
Dibromomethane	BQL	10.0	0.113	1	7/9/2008	
1,2-Dibromoethane	BQL	1.00	0.124	1	7/9/2008	
1,2-Dichlorobenzene	BQL	5.00	0.127	1	7/9/2008	
1,3-Dichlorobenzene	BQL	5.00	0.0810	1	7/9/2008	
1,4-Dichlorobenzene	BQL	5.00	0.0790	1	7/9/2008	
t-1,4-Dichloro-2-butene	BQL	50.5	0.630	1	7/9/2008	
1,1-Dichloroethane	BQL	5.00	0.0740	1	7/9/2008	
1,1-Dichloroethene	BQL	5.00	0.0890	1	7/9/2008	
1,2-Dichloroethane	BQL	1.00	0.0790	1	7/9/2008	
cis-1,2-Dichloroethene	BQL	5.00	0.0650	1	7/9/2008	
t-1,2-dichloroethene	BQL	5.00	0.0890	1	7/9/2008	
1,2-Dichloropropane	BQL	1.00	0.0940	1	7/9/2008	
1,1-Dichloropropene	BQL	5.00	0.0720	1	7/9/2008	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	7/9/2008	
t-1,3-Dichloropropene	BQL	1.00	0.0760	1	7/9/2008	
Ethylbenzene	BQL	1.00	0.0770	1	7/9/2008	
2-hexanone	BQL	50.0	0.720	1	7/9/2008	
Iodomethane	BQL	10.0	0.0420	1	7/9/2008	
Methylene chloride	BQL	1.00	0.0980	1	7/9/2008	
4-methyl-2-pentanone	BQL	100	0.550	1	7/9/2008	
Styrene	BQL	1.00	0.0850	1	7/9/2008	
1,1,1,2-Tetrachloroethane	BQL	5.00	0.0900	1	7/9/2008	
1,1,2,2-Tetrachloroethane	BQL	3.00	0.115	1	7/9/2008	
Tetrachloroethene	BQL	1.00	0.0690	1	7/9/2008	
Toluene	BQL	1.00	0.0760	1	7/9/2008	
Trichloroethene	BQL	1.00	0.0540	1	7/9/2008	
1,1,1-Trichloroethane	BQL	1.00	0.0540	1	7/9/2008	
1,1,2-Trichloroethane	BQL	1.00	0.182	1	7/9/2008	

SGS ENVIRONMENTAL SERVICES, INC.

Results for Volatiles
by GCMS 8260 Appendix I

Client Sample ID: ST-1
Client Project ID: Alleghany County Landfill
Lab Sample ID: G197-165-6A
Lab Project ID: G197-165

Analyzed By: DVG
Date Collected: 7/2/2008 11:00
Date Received: 7/3/2008
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	SWSL Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Trichlorofluoromethane	BQL	1.00	0.111	1	7/9/2008	
1,2,3-Trichloropropane	BQL	1.00	0.120	1	7/9/2008	
Vinyl acetate	BQL	50.0	0.100	1	7/9/2008	
Vinyl chloride	BQL	1.00	0.149	1	7/9/2008	
Total Xylene	BQL	5.00	0.0650	1	7/9/2008	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	10	100
Toluene-d8	10	9.95	99
4-Bromofluorobenzene	10	10	100

Comments:

Flags:
BQL = Below Quantitation Limits.

Analyst: _____

Reviewed By: _____

N.C. CERTIFICATION #481

GCMS
NCAP1

SGS ENVIRONMENTAL SERVICES, INC.

Results for Volatiles
by GCMS 8260 Appendix I

Client Sample ID: ST-2
Client Project ID: Alleghany County Landfill
Lab Sample ID: G197-165-7A
Lab Project ID: G197-165

Analyzed By: DVG
Date Collected: 7/2/2008 9:20
Date Received: 7/3/2008
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	SWSL Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	100	1.09	1	7/9/2008	
Acetonitrile	BQL	55.0	8.69	1	7/9/2008	
Acrylonitrile	BQL	200	6.02	1	7/9/2008	
Benzene	BQL	1.00	0.0650	1	7/9/2008	
Bromochloromethane	BQL	3.00	0.101	1	7/9/2008	
Bromodichloromethane	BQL	1.00	0.0760	1	7/9/2008	
Bromoform	BQL	3.00	0.120	1	7/9/2008	
Bromomethane	BQL	10.0	0.133	1	7/9/2008	
2-butanone	BQL	100	0.544	1	7/9/2008	
Carbon disulfide	BQL	100	0.0690	1	7/9/2008	
Carbon tetrachloride	BQL	1.00	0.0870	1	7/9/2008	
Chlorobenzene	BQL	3.00	0.0820	1	7/9/2008	
Chloroethane	BQL	10.0	0.106	1	7/9/2008	
Chloroform	BQL	5.00	0.0790	1	7/9/2008	
Chloromethane	BQL	1.00	0.146	1	7/9/2008	
Dibromochloromethane	BQL	3.00	0.0900	1	7/9/2008	
1,2-Dibromo-3-chloropropane	BQL	13.0	1.21	1	7/9/2008	
Dibromomethane	BQL	10.0	0.113	1	7/9/2008	
1,2-Dibromoethane	BQL	1.00	0.124	1	7/9/2008	
1,2-Dichlorobenzene	BQL	5.00	0.127	1	7/9/2008	
1,3-Dichlorobenzene	BQL	5.00	0.0810	1	7/9/2008	
1,4-Dichlorobenzene	BQL	5.00	0.0790	1	7/9/2008	
t-1,4-Dichloro-2-butene	BQL	50.5	0.630	1	7/9/2008	
1,1-Dichloroethane	BQL	5.00	0.0740	1	7/9/2008	
1,1-Dichloroethene	BQL	5.00	0.0890	1	7/9/2008	
1,2-Dichloroethane	BQL	1.00	0.0790	1	7/9/2008	
cis-1,2-Dichloroethene	BQL	5.00	0.0650	1	7/9/2008	
t-1,2-dichloroethene	BQL	5.00	0.0890	1	7/9/2008	
1,2-Dichloropropane	BQL	1.00	0.0940	1	7/9/2008	
1,1-Dichloropropene	BQL	5.00	0.0720	1	7/9/2008	
cis-1,3-Dichloropropene	BQL	1.00	0.0760	1	7/9/2008	
t-1,3-Dichloropropene	BQL	1.00	0.0760	1	7/9/2008	
Ethylbenzene	BQL	1.00	0.0770	1	7/9/2008	
2-hexanone	BQL	50.0	0.720	1	7/9/2008	
Iodomethane	BQL	10.0	0.0420	1	7/9/2008	
Methylene chloride	BQL	1.00	0.0980	1	7/9/2008	
4-methyl-2-pentanone	BQL	100	0.550	1	7/9/2008	
Styrene	BQL	1.00	0.0850	1	7/9/2008	
1,1,1,2-Tetrachloroethane	BQL	5.00	0.0900	1	7/9/2008	
1,1,2,2-Tetrachloroethane	BQL	3.00	0.115	1	7/9/2008	
Tetrachloroethene	BQL	1.00	0.0690	1	7/9/2008	
Toluene	BQL	1.00	0.0760	1	7/9/2008	
Trichloroethene	BQL	1.00	0.0540	1	7/9/2008	
1,1,1-Trichloroethane	BQL	1.00	0.0540	1	7/9/2008	
1,1,2-Trichloroethane	BQL	1.00	0.182	1	7/9/2008	

SGS ENVIRONMENTAL SERVICES, INC.

Results for Volatiles
by GCMS 8260 Appendix I

Client Sample ID: ST-2
Client Project ID: Alleghany County Landfill
Lab Sample ID: G197-165-7A
Lab Project ID: G197-165

Analyzed By: DVG
Date Collected: 7/2/2008 9:20
Date Received: 7/3/2008
Matrix: Water
Sample Amount: 5 mL

Compound	Result UG/L	SWSL Limit UG/L	MDL UG/L	Dilution Factor	Date Analyzed	Flag
Trichlorofluoromethane	BQL	1.00	0.111	1	7/9/2008	
1,2,3-Trichloropropane	BQL	1.00	0.120	1	7/9/2008	
Vinyl acetate	BQL	50.0	0.100	1	7/9/2008	
Vinyl chloride	BQL	1.00	0.149	1	7/9/2008	
Total Xylene	BQL	5.00	0.0650	1	7/9/2008	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	10	9.99	100
Toluene-d8	10	9.99	100
4-Bromofluorobenzene	10	10.2	102

Comments:

Flags:
BQL = Below Quantitation Limits.

Analyst: _____

Reviewed By: _____

SGS ENVIRONMENTAL SERVICES, INC.

Results for Metals

Client Sample ID:	MW-1	Analyzed By:	PSW
Client Project ID:	Alleghany County Landfill	Date Collected:	7/2/2008 10:35
Lab Sample ID:	G197-165-1	Date Received:	7/3/2008
Lab Project ID:	G197-165	Matrix:	WATER
Batch ID:	11813		

Metals	Result	SWSL	MDL	DF	Units	Method	Date Analyzed	Flags
Antimony	BQL	0.00600	0.00562	1	MG/L	6010B	7/10/2008	
Arsenic	**0.00886**	0.0100	0.00185	1	MG/L	6010B	7/10/2008	JB
Barium	**0.0786**	0.100	0.00512	1	MG/L	6010B	7/10/2008	JB
Beryllium	**0.00594**	0.00100	0.000247	1	MG/L	6010B	7/10/2008	B
Cadmium	**0.000370**	0.00100	0.000134	10	MG/L	6020	7/9/2008	J
Chromium	**0.00870**	0.0100	0.00115	1	MG/L	6010B	7/10/2008	JB
Cobalt	**0.00626**	0.0100	0.00315	1	MG/L	6010B	7/10/2008	J
Copper	**0.00803**	0.0100	0.00167	1	MG/L	6010B	7/10/2008	J
Lead	**0.00812**	0.0100	0.00358	1	MG/L	6010B	7/10/2008	JB
Nickel	BQL	0.0500	0.00474	1	MG/L	6010B	7/10/2008	
Selenium	BQL	0.0100	0.00730	1	MG/L	6010B	7/10/2008	
Silver	**0.00422**	0.0100	0.000812	1	MG/L	6010B	7/10/2008	JB
Thallium	**0.0102**	0.00550	0.00521	1	MG/L	6010B	7/10/2008	
Vanadium	BQL	0.0250	0.000467	10	MG/L	6020	7/9/2008	
Zinc	**0.0155**	0.0100	0.00399	1	MG/L	6010B	7/10/2008	B

Comments
BQL = Below Quantitation Limits
DF = Dilution Factor
J = Between MDL and RL
B= Amount in Prep Blank > MDL

Reviewed By:
METALS.XLS

SGS ENVIRONMENTAL SERVICES, INC.

Results for Metals

Client Sample ID:	MW-2	Analyzed By:	PSW
Client Project ID:	Alleghany County Landfill	Date Collected:	7/2/2008 11:45
Lab Sample ID:	G197-165-2	Date Received:	7/3/2008
Lab Project ID:	G197-165	Matrix:	WATER
Batch ID:	11813		

Metals	Result	SWSL	MDL	DF	Units	Method	Date Analyzed	Flags
Antimony	BQL	0.00600	0.00562	1	MG/L	6010B	7/10/2008	
Arsenic	**0.00438**	0.0100	0.00185	1	MG/L	6010B	7/10/2008	JB
Barium	**0.0342**	0.100	0.00512	1	MG/L	6010B	7/10/2008	JB
Beryllium	**0.00635**	0.00100	0.000247	1	MG/L	6010B	7/10/2008	B
Cadmium	BQL	0.00100	0.000134	10	MG/L	6020	7/9/2008	
Chromium	**0.00589**	0.0100	0.00115	1	MG/L	6010B	7/10/2008	JB
Cobalt	BQL	0.0100	0.00315	1	MG/L	6010B	7/10/2008	
Copper	**0.00448**	0.0100	0.00167	1	MG/L	6010B	7/10/2008	J
Lead	**0.00912**	0.0100	0.00358	1	MG/L	6010B	7/10/2008	JB
Nickel	BQL	0.0500	0.00474	1	MG/L	6010B	7/10/2008	
Selenium	BQL	0.0100	0.00730	1	MG/L	6010B	7/10/2008	
Silver	**0.00325**	0.0100	0.000812	1	MG/L	6010B	7/10/2008	JB
Thallium	BQL	0.00550	0.00521	1	MG/L	6010B	7/10/2008	
Vanadium	BQL	0.0250	0.000467	10	MG/L	6020	7/9/2008	
Zinc	**0.00605**	0.0100	0.00399	1	MG/L	6010B	7/10/2008	JB

Comments
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DF = Dilution Factor
J = Between MDL and RL
B= Amount in Prep Blank > MDL

Reviewed By: METALS.XLS

SGS ENVIRONMENTAL SERVICES, INC.

Results for Metals

Client Sample ID:	MW-3	Analyzed By:	PSW
Client Project ID:	Alleghany County Landfill	Date Collected:	7/2/2008 14:00
Lab Sample ID:	G197-165-3	Date Received:	7/3/2008
Lab Project ID:	G197-165	Matrix:	WATER
Batch ID:	11813		

Metals	Result	SWSL	MDL	DF	Units	Method	Date Analyzed	Flags
Antimony	BQL	0.00600	0.00562	1	MG/L	6010B	7/10/2008	
Arsenic	**0.00559**	0.0100	0.00185	1	MG/L	6010B	7/10/2008	JB
Barium	**0.307**	0.100	0.00512	1	MG/L	6010B	7/10/2008	B
Beryllium	**0.00290**	0.00100	0.000247	1	MG/L	6010B	7/10/2008	B
Cadmium	BQL	0.00100	0.000134	10	MG/L	6020	7/9/2008	
Chromium	**0.00607**	0.0100	0.00115	1	MG/L	6010B	7/10/2008	JB
Cobalt	**0.00551**	0.0100	0.00315	1	MG/L	6010B	7/10/2008	J
Copper	**0.00509**	0.0100	0.00167	1	MG/L	6010B	7/10/2008	J
Lead	BQL	0.0100	0.00358	1	MG/L	6010B	7/10/2008	B
Nickel	BQL	0.0500	0.00474	1	MG/L	6010B	7/10/2008	
Selenium	BQL	0.0100	0.00730	1	MG/L	6010B	7/10/2008	
Silver	**0.00324**	0.0100	0.000812	1	MG/L	6010B	7/10/2008	JB
Thallium	BQL	0.00550	0.00521	1	MG/L	6010B	7/10/2008	
Vanadium	BQL	0.0250	0.000467	10	MG/L	6020	7/9/2008	
Zinc	**0.0160**	0.0100	0.00399	1	MG/L	6010B	7/10/2008	B

Comments
BQL = Below Quantitation Limits
DF = Dilution Factor
J = Between MDL and RL
B= Amount in Prep Blank > MDL

Reviewed By:
METALS.XLS

SGS ENVIRONMENTAL SERVICES, INC.

Results for Metals

Client Sample ID:	MW-4	Analyzed By:	PSW
Client Project ID:	Alleghany County Landfill	Date Collected:	7/2/2008 12:10
Lab Sample ID:	G197-165-4	Date Received:	7/3/2008
Lab Project ID:	G197-165	Matrix:	WATER
Batch ID:	11813		

Metals	Result	SWSL	MDL	DF	Units	Method	Date Analyzed	Flags
Antimony	BQL	0.00600	0.00562	1	MG/L	6010B	7/10/2008	
Arsenic	**0.00350**	0.0100	0.00185	1	MG/L	6010B	7/10/2008	JB
Barium	**0.126**	0.100	0.00512	1	MG/L	6010B	7/10/2008	B
Beryllium	**0.00483**	0.00100	0.000247	1	MG/L	6010B	7/10/2008	B
Cadmium	BQL	0.00100	0.000134	10	MG/L	6020	7/9/2008	
Chromium	**0.00589**	0.0100	0.00115	1	MG/L	6010B	7/10/2008	JB
Cobalt	BQL	0.0100	0.00315	1	MG/L	6010B	7/10/2008	
Copper	**0.00480**	0.0100	0.00167	1	MG/L	6010B	7/10/2008	J
Lead	BQL	0.0100	0.00358	1	MG/L	6010B	7/10/2008	B
Nickel	BQL	0.0500	0.00474	1	MG/L	6010B	7/10/2008	
Selenium	BQL	0.0100	0.00730	1	MG/L	6010B	7/10/2008	
Silver	**0.00317**	0.0100	0.000812	1	MG/L	6010B	7/10/2008	JB
Thallium	**0.00627**	0.00550	0.00521	1	MG/L	6010B	7/10/2008	
Vanadium	BQL	0.0250	0.000467	10	MG/L	6020	7/9/2008	
Zinc	**0.00601**	0.0100	0.00399	1	MG/L	6010B	7/10/2008	JB

Comments

BQL = Below Quantitation Limits
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B= Amount in Prep Blank > MDL

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SGS ENVIRONMENTAL SERVICES, INC.

Results for Metals

Client Sample ID:	MW-5	Analyzed By:	PSW
Client Project ID:	Alleghany County Landfill	Date Collected:	7/2/2008 08:50
Lab Sample ID:	G197-165-5	Date Received:	7/3/2008
Lab Project ID:	G197-165	Matrix:	WATER
Batch ID:	11813		

Metals	Result	SWSL	MDL	DF	Units	Method	Date Analyzed	Flags
Antimony	BQL	0.00600	0.00562	1	MG/L	6010B	7/10/2008	
Arsenic	**0.00761**	0.0100	0.00185	1	MG/L	6010B	7/10/2008	JB
Barium	**0.195**	0.100	0.00512	1	MG/L	6010B	7/10/2008	B
Beryllium	**0.00786**	0.00100	0.000247	1	MG/L	6010B	7/10/2008	B
Cadmium	**0.000410**	0.00100	0.000134	10	MG/L	6020	7/9/2008	J
Chromium	**0.0168**	0.0100	0.00115	1	MG/L	6010B	7/10/2008	B
Cobalt	**0.0186**	0.0100	0.00315	1	MG/L	6010B	7/10/2008	
Copper	**0.0139**	0.0100	0.00167	1	MG/L	6010B	7/10/2008	
Lead	**0.0156**	0.0100	0.00358	1	MG/L	6010B	7/10/2008	B
Nickel	**0.0274**	0.0500	0.00474	1	MG/L	6010B	7/10/2008	J
Selenium	BQL	0.0100	0.00730	1	MG/L	6010B	7/10/2008	
Silver	**0.00265**	0.0100	0.000812	1	MG/L	6010B	7/10/2008	JB
Thallium	BQL	0.00550	0.00521	1	MG/L	6010B	7/10/2008	
Vanadium	**0.0189**	0.0250	0.000467	10	MG/L	6020	7/9/2008	J
Zinc	**0.0703**	0.0100	0.00399	1	MG/L	6010B	7/10/2008	B

Comments
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B= Amount in Prep Blank > MDL

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Results for Metals

Client Sample ID:	ST-1	Analyzed By:	PSW
Client Project ID:	Alleghany County Landfill	Date Collected:	7/2/2008 11:00
Lab Sample ID:	G197-165-6	Date Received:	7/3/2008
Lab Project ID:	G197-165	Matrix:	WATER
Batch ID:	11813		

Metals	Result	SWSL	MDL	DF	Units	Method	Date Analyzed	Flags
Antimony	BQL	0.00600	0.00562	1	MG/L	6010B	7/10/2008	
Arsenic	**0.00559**	0.0100	0.00185	1	MG/L	6010B	7/10/2008	JB
Barium	**0.0336**	0.100	0.00512	1	MG/L	6010B	7/10/2008	JB
Beryllium	**0.00676**	0.00100	0.000247	1	MG/L	6010B	7/10/2008	B
Cadmium	BQL	0.00100	0.000134	10	MG/L	6020	7/9/2008	
Chromium	**0.00514**	0.0100	0.00115	1	MG/L	6010B	7/10/2008	JB
Cobalt	**0.00315**	0.0100	0.00315	1	MG/L	6010B	7/10/2008	
Copper	**0.00537**	0.0100	0.00167	1	MG/L	6010B	7/10/2008	J
Lead	**0.00561**	0.0100	0.00358	1	MG/L	6010B	7/10/2008	JB
Nickel	**0.00558**	0.0500	0.00474	1	MG/L	6010B	7/10/2008	J
Selenium	BQL	0.0100	0.00730	1	MG/L	6010B	7/10/2008	
Silver	**0.00333**	0.0100	0.000812	1	MG/L	6010B	7/10/2008	JB
Thallium	BQL	0.00550	0.00521	1	MG/L	6010B	7/10/2008	
Vanadium	BQL	0.0250	0.000467	10	MG/L	6020	7/9/2008	
Zinc	**0.00740**	0.0100	0.00399	1	MG/L	6010B	7/10/2008	JB

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Results for Metals

Client Sample ID:	ST-2	Analyzed By:	PSW
Client Project ID:	Alleghany County Landfill	Date Collected:	7/2/2008 09:20
Lab Sample ID:	G197-165-7	Date Received:	7/3/2008
Lab Project ID:	G197-165	Matrix:	WATER
Batch ID:	11813		

Metals	Result	SWSL	MDL	DF	Units	Method	Date Analyzed	Flags
Antimony	BQL	0.00600	0.00562	1	MG/L	6010B	7/10/2008	
Arsenic	**0.00503**	0.0100	0.00185	1	MG/L	6010B	7/10/2008	JB
Barium	**0.0346**	0.100	0.00512	1	MG/L	6010B	7/10/2008	JB
Beryllium	**0.00442**	0.00100	0.000247	1	MG/L	6010B	7/10/2008	B
Cadmium	BQL	0.00100	0.000134	10	MG/L	6020	7/9/2008	
Chromium	**0.00692**	0.0100	0.00115	1	MG/L	6010B	7/10/2008	JB
Cobalt	**0.00362**	0.0100	0.00315	1	MG/L	6010B	7/10/2008	J
Copper	**0.00598**	0.0100	0.00167	1	MG/L	6010B	7/10/2008	J
Lead	**0.00988**	0.0100	0.00358	1	MG/L	6010B	7/10/2008	JB
Nickel	BQL	0.0500	0.00474	1	MG/L	6010B	7/10/2008	
Selenium	BQL	0.0100	0.00730	1	MG/L	6010B	7/10/2008	
Silver	**0.00322**	0.0100	0.000812	1	MG/L	6010B	7/10/2008	JB
Thallium	BQL	0.00550	0.00521	1	MG/L	6010B	7/10/2008	
Vanadium	BQL	0.0250	0.000467	10	MG/L	6020	7/9/2008	
Zinc	**0.00632**	0.0100	0.00399	1	MG/L	6010B	7/10/2008	JB

Comments
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Reviewed By:
METALS.XLS

SGS

CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

Locations Nationwide
- Alaska
- Ohio
- New Jersey
- West Virginia
- Hawaii
- Maryland
- North Carolina

www.us.sgs.com

0891

SGS

(1)

CLIENT: ARM

CONTACT: Joe Zuncica PHONE NO:( ) 270-2919

PROJECT: Alleghany County Landfill SITE/PWSID#:

REPORTS TO: ARM E-MAIL:

FAX NO.:( ) 270-2588

INVOICE TO: ARM QUOTE #

P.O. NUMBER

SGS Reference: G197-165

PAGE 1 OF

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE C= COMP G= GRAB	(3) Preservatives Used: HCL / Analysis Required: APPENDIX I VOCs	APPENDIX I Metals								REMARKS
	MW-1	7-2-08	1035	H_2O	4	G	X	X								
	MW-2		1145		4	G	X	X								
	MW-3		1400		4	G	X	X								
	MW-4		1210		4	G	X	X								
	MW-5		0850		4	G	X	X								
	ST-1		1100		4	G	X	X								
	ST-2		0920		4	G	X	X								

(5)

Collected/Relinquished By:(1)	Date	Time	Received By:	Date	Time
Joe Zuncica	7-3-08	1330	[signature]	7/3/08	1330
Relinquished By: (2)	Date	Time	Received By:	Date	Time
Relinquished By: (3)	Date	Time	Received By:	Date	Time
Relinquished By: (4)	Date	Time	Received By:	Date	Time

(4)

Shipping Carrier:

Shipping Ticket No:

Samples Received Cold? (Circle) YES NO

Temperature °C: 2.3°C T

Special Deliverable Requirements:

Chain of Custody Seal: (Circle)

INTACT BROKEN ABSENT

Special Instructions: NC LANDfill Parameters

Requested Turnaround Time:

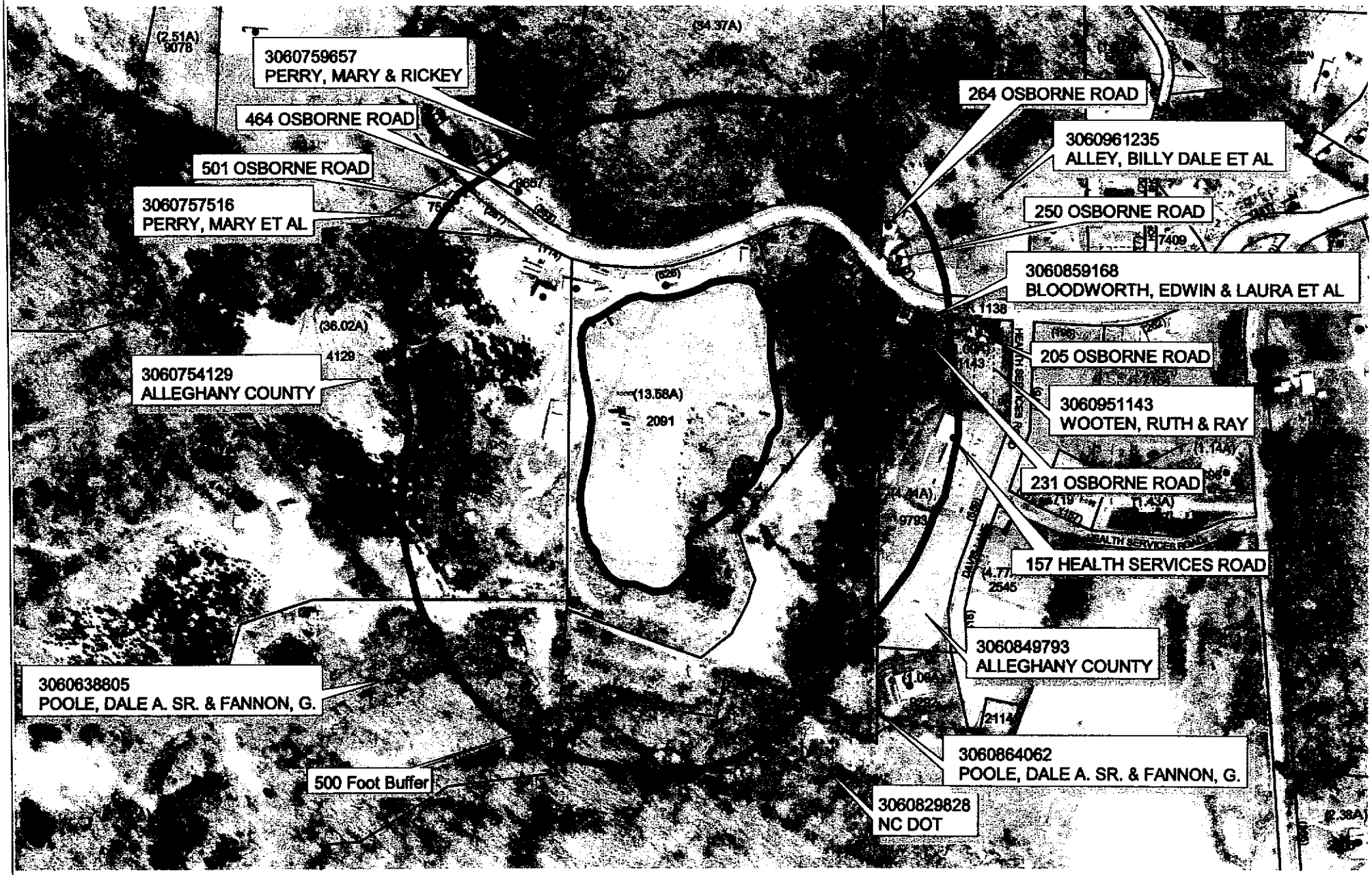
☐ RUSH _____ Date Needed ☒ STD

☐ 200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301
☐ 5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557
☐ 1270 Greenbrier Street Charleston, WV 25311 Tel: (304) 346-0725 Fax: (304) 346-0761

White - Retained by Lab
Yellow - Returned with Report
Pink - Retained by Sampler

SGS ENVIRONMENTAL SERVICES, INC.

N.C. CERTIFICATION #481



DISCLAIMER
Alleghany County assumes no legal responsibility for the information represented here.
DISCLAIMER

April 16, 2008

500 Foot Buffer

Alleghany County, NC

Old Lot Lines & ROWS
Parcel Hooks & Leaders
Address Points
Text Annotation
Parcels

1:1182

Wells Located within 500 Foot Buffer

	Name	Parcel Address	Mailing Address		
2	Mary Perry, Et Al	501 Osborne Road	464 Osborne Road, Sparta, North Carolina 28675	no phone service, unsure if someone lives there	
3	Mary & Ricky Perry	464 Osborne Road	682 Pads Road, Wilkesboro, North Carolina 28697		
1	Alleghany County	Osborne Road	Post Office Box 366, Sparta, North Carolina 28675		
	Billy Dale Alley, Et Al	264 Osborne Road	250 Osborne Road, Sparta, North Carolina 28675	no phone service, unsure if someone lives there	Shared
4	Billy Dale Alley, Et Al	250 Osborne Road	250 Osborne Road, Sparta, North Carolina 28675	no phone service, unsure if someone lives there	
5	Edwin & Laura Bloodworth	231 Osborne Road	Post Office Box 2621, Surf City, North Carolina 28445	no phone service, unsure if someone lives there	

VIALS CONTAIN 1:1 HCL
DO NOT RINSE

PLEASE READ INSTRUCTION SHEET

VOC

N.C. Department of Health and Human Services
Division of Public Health
State Laboratory of Public Health
P.O. Box 28047, 306 N. Wilmington St., Raleigh, NC 27611-8047

Environmental Sciences Analysis Report

Name of Owner, Patient Or Supply: Robert Bumgardner

Address: 501 Osborne Rd

Sparta Zip: 28675

Telephone # ( )

County: Alleghany

Report to: Andrew Blythen

Telephone # (336) 372-8823

Address: APPALACHIAN DISTRICT HEALTH DEPT. PO BOX 309 SPARTA, NC 28675

Collected By: A. Blythen

Telephone # ( )

Date Collected: 5/6/08

Analysis Desired: VOC
See attached

Laboratory Number	Sample #	Sample Description or Remarks ✓	Results In
080853		2-40 ml vials 6.0°C	
		SEE ATTACHED SHEET(S)	
		NO VOLATILE COMPOUNDS IDENTIFIED	
080854		TRIP BLANK (DATE: 3-3-08) SEE ATTACHED SHEET(S)	

Date Received: MAY 0 7 2008 KMN

Date Extracted:

Date Reported: MAY 1 2 2008

Date Analyzed: 5-7-08

Reported By: Nancy J. Jones

DHHS Form 2364
Laboratory (Rev.06/99)
F_anlrpt

AA48667
AA48668

DIVISION OF HEALTH AND HUMAN SERVICES
STATE LABORATORY OF PUBLIC HEALTH
PO BOX 28047 - 306 N. WILMINGTON ST., RALEIGH, NC 27611

Purgeable Organic Compounds by Gas Chromatography/Mass Spectrometry

LABORATORY# 080853

COMPOUND	MDL	µg/L	COMPOUND	MDL	µg/L
Chloromethane	0.5 µg/L	U	1,2-Dichloropropane	0.5 µg/L	U
Vinyl Chloride	0.5 µg/L		Dibromomethane	0.5 µg/L	
Bromomethane	0.5 µg/L		Bromodichloromethane T	0.5 µg/L	
Chloroethane	0.5 µg/L		cis-1,3-Dichloropropene	0.5 µg/L	
Trichlorofluoromethane	0.5 µg/L		4-Methyl-2-Pentanone	0.5 µg/L	
1,1-Dichloroethene	0.5 µg/L		Toluene	0.5 µg/L	
Acetone	2.0 µg/L		trans-1,3-Dichloropropene	0.5 µg/L	
Iodomethane	0.5 µg/L		1,1,2-Trichloroethane	0.5 µg/L	
Carbon Disulfide	0.5 µg/L		Tetrachloroethene	0.5 µg/L	
Methylene Chloride	0.5 µg/L		2-Hexanone	0.5 µg/L	
Acrylonitrile	0.5 µg/L		Dibromochloromethane T	0.5 µg/L	
trans-1,2-Dichloroethene	0.5 µg/L		Ethylene Dibromide	0.5 µg/L	
Methyl-t-Butyl-Ether	0.5 µg/L		Chlorobenzene	0.5 µg/L	
1,1-Dichloroethane	0.5 µg/L		1,1,1,2-Tetrachloroethane	0.5 µg/L	
Isopropyl Ether	0.5 µg/L		Ethyl Benzene	0.5 µg/L	
cis-1,2-Dichloroethene	0.5 µg/L		Xylenes	0.5 µg/L	
2-Butanone	2.0 µg/L		Styrene	0.5 µg/L	
Tetrahydrofuran	2.0 µg/L		Bromoform T	0.5 µg/L	
Chloroform T	0.5 µg/L		1,1,2,2-Tetrachloroethane	0.5 µg/L	
1,1,1-Trichloroethane	0.5 µg/L		1,2,3-Trichloropropane	0.5 µg/L	
Carbon Tetrachloride	0.5 µg/L		1,4-Dichlorobenzene	0.5 µg/L	
Benzene	0.5 µg/L		1,2-Dichlorobenzene	0.5 µg/L	
1,2-Dichloroethane	0.5 µg/L		1,2-Dibromo-3-Chloropropane	2.0 µg/L	
Trichloroethene	0.5 µg/L				

ace – detected, but less than MDL MDL=Minimum Detection Limit T = trihalomethane
- Possible lab contamination or background
J - Estimated Value
K - Actual value is known to be less than value given.
- Actual value is known to be greater than value given.
- Material was analyzed for but not detected. The number is the Minimum Detection Limit.
- Tentative identification.
D -Sample diluted. MDLs do not apply.

NO VOLATILE COMPOUNDS IDENTIFIED

DIVISION OF HEALTH AND HUMAN SERVICES
STATE LABORATORY OF PUBLIC HEALTH
PO BOX 28047 - 306 N. WILMINGTON ST., RALEIGH, NC 27611

Purgeable Organic Compounds by Gas Chromatography/Mass Spectrometry

LABORATORY # 080854
TRIP BLANK

COMPOUND	MDL	µg/L	COMPOUND	MDL	µg/L
Chloromethane	0.5 µg/L	TRACE C	1,2-Dichloropropane	0.5 µg/L	U
Vinyl Chloride	0.5 µg/L	U	Dibromomethane	0.5 µg/L	
Bromomethane	0.5 µg/L		Bromodichloromethane T	0.5 µg/L	
Chloroethane	0.5 µg/L		cis-1,3-Dichloropropene	0.5 µg/L	
Trichlorofluoromethane	0.5 µg/L		4-Methyl-2-Pentanone	0.5 µg/L	
1,1-Dichloroethene	0.5 µg/L		Toluene	0.5 µg/L	
Acetone	2.0 µg/L		trans-1,3-Dichloropropene	0.5 µg/L	
Iodomethane	0.5 µg/L		1,1,2-Trichloroethane	0.5 µg/L	
Carbon Disulfide	0.5 µg/L		Tetrachloroethene	0.5 µg/L	
Methylene Chloride	0.5 µg/L		2-Hexanone	0.5 µg/L	
Acrylonitrile	0.5 µg/L		Dibromochloromethane T	0.5 µg/L	
trans-1,2-Dichloroethene	0.5 µg/L		Ethylene Dibromide	0.5 µg/L	
Methyl-t-Butyl-Ether	0.5 µg/L		Chlorobenzene	0.5 µg/L	
1,1-Dichloroethane	0.5 µg/L		1,1,1,2-Tetrachloroethane	0.5 µg/L	
Isopropyl Ether	0.5 µg/L		Ethyl Benzene	0.5 µg/L	
cis-1,2-Dichloroethene	0.5 µg/L		Xylenes	0.5 µg/L	
2-Butanone	2.0 µg/L		Styrene	0.5 µg/L	
Tetrahydrofuran	2.0 µg/L	2.8	Bromoform T	0.5 µg/L	TRACE
Chloroform T	0.5 µg/L	U	1,1,2,2-Tetrachloroethane	0.5 µg/L	U
1,1,1-Trichloroethane	0.5 µg/L		1,2,3-Trichloropropane	0.5 µg/L	
Carbon Tetrachloride	0.5 µg/L		1,4-Dichlorobenzene	0.5 µg/L	
Benzene	0.5 µg/L		1,2-Dichlorobenzene	0.5 µg/L	
1,2-Dichloroethane	0.5 µg/L		1,2-Dibromo-3-Chloropropane	2.0 µg/L	
Trichloroethene	0.5 µg/L				

ce – detected, but less than MDL MDL=Minimum Detection Limit
C - Possible lab contamination or background
J - Estimated Value
K - Actual value is known to be less than value given.
L - Actual value is known to be greater than value given.
U - Material was analyzed for but not detected. The number is the Minimum Detection Limit.
b - Tentative identification.
D - Sample diluted. MDLs do not apply.

T = trihalomethane

TRIP BLANK (DATE: 3-3-08)

VOC

PLEASE READ INSTRUCTION SHEET

VIALS CONTAIN 1:1 HCL
DO NOT RINSE

N.C. Department of Health and Human Services
Division of Public Health
State Laboratory of Public Health
P.O. Box 28047, 306 N. Wilmington St., Raleigh, NC 27611-8047

Environmental Sciences Analysis Report

Name of Owner, Patient Or Supply: Marry Perry
Address: 464 Osborne Rd
Sparta Zip: 28675
Telephone # ( )
County: Alleghany

Report to: Andrew Bluthen
Telephone # (336) 372-8813
Address:
APPALACHIAN DISTRICT
HEALTH DEPT.
PO BOX 309
SPARTA, NC 28675

Collected By: Andrew Bluthen
Telephone # ( )
Date Collected: 5/6/08
Analysis Desired: VOC
See attached

Laboratory Number	Sample #	Sample Description or Remarks	Results In
080862		2-40 ml Vials 6.0°C	
		SEE ATTACHED SHEET(S)	
		NO VOLATILE COMPOUNDS IDENTIFIED	
080863		TRIP BLANK (DATE: 3-3-08) SEE ATTACHED SHEET(S)	

Date Received: MAY 07 2008
Date Extracted:
Date Reported: MAY 12 2008
Date Analyzed: 5-7-08
Reported By: Nancy J. Jones

AA48676
AA48677

DHHS Form 2364
Laboratory (Rev.06/99)
Tanlrpt

DIVISION OF HEALTH AND HUMAN SERVICES
STATE LABORATORY OF PUBLIC HEALTH
PO BOX 28047 - 306 N. WILMINGTON ST., RALEIGH, NC 27611

Purgeable Organic Compounds by Gas Chromatography/Mass Spectrometry

LABORATORY # 080862

COMPOUND	MDL	µg/L	COMPOUND	MDL	µg/L
Chloromethane	0.5 µg/L	U	1,2-Dichloropropane	0.5 µg/L	U
Vinyl Chloride	0.5 µg/L		Dibromomethane	0.5 µg/L	
Bromomethane	0.5 µg/L		Bromodichloromethane T	0.5 µg/L	
Chloroethane	0.5 µg/L		cis-1,3-Dichloropropene	0.5 µg/L	
Trichlorofluoromethane	0.5 µg/L		4-Methyl-2-Pentanone	0.5 µg/L	
1,1-Dichloroethene	0.5 µg/L		Toluene	0.5 µg/L	
Acetone	2.0 µg/L		trans-1,3-Dichloropropene	0.5 µg/L	
Iodomethane	0.5 µg/L		1,1,2-Trichloroethane	0.5 µg/L	
Carbon Disulfide	0.5 µg/L		Tetrachloroethene	0.5 µg/L	
Methylene Chloride	0.5 µg/L		2-Hexanone	0.5 µg/L	
Acrylonitrile	0.5 µg/L		Dibromochloromethane T	0.5 µg/L	
trans-1,2-Dichloroethene	0.5 µg/L		Ethylene Dibromide	0.5 µg/L	
Methyl-t-Butyl-Ether	0.5 µg/L		Chlorobenzene	0.5 µg/L	
1,1-Dichloroethane	0.5 µg/L		1,1,1,2-Tetrachloroethane	0.5 µg/L	
Isopropyl Ether	0.5 µg/L		Ethyl Benzene	0.5 µg/L	
cis-1,2-Dichloroethene	0.5 µg/L		Xylenes	0.5 µg/L	
2-Butanone	2.0 µg/L		Styrene	0.5 µg/L	
Tetrahydrofuran	2.0 µg/L		Bromoform T	0.5 µg/L	
Chloroform T	0.5 µg/L		1,1,2,2-Tetrachloroethane	0.5 µg/L	
1,1,1-Trichloroethane	0.5 µg/L		1,2,3-Trichloropropane	0.5 µg/L	
Carbon Tetrachloride	0.5 µg/L		1,4-Dichlorobenzene	0.5 µg/L	
Benzene	0.5 µg/L		1,2-Dichlorobenzene	0.5 µg/L	
1,2-Dichloroethane	0.5 µg/L		1,2-Dibromo-3-Chloropropane	2.0 µg/L	
Trichloroethene	0.5 µg/L				

1 ce -- detected, but less than MDL MDL=Minimum Detection Limit T = trihalomethane
C - Possible lab contamination or background
J - Estimated Value
K - Actual value is known to be less than value given.
L - Actual value is known to be greater than value given.
U - Material was analyzed for but not detected. The number is the Minimum Detection Limit.
b - Tentative identification.
D -Sample diluted. MDLs do not apply.

NO VOLATILE COMPOUNDS IDENTIFIED

DIVISION OF HEALTH AND HUMAN SERVICES
STATE LABORATORY OF PUBLIC HEALTH
PO BOX 28047 - 306 N. WILMINGTON ST., RALEIGH, NC 27611

Purgeable Organic Compounds by Gas Chromatography/Mass Spectrometry

LABORATORY # 080863
TRIP BLANK

COMPOUND	MDL	µg/L	COMPOUND	MDL	µg/L
Chloromethane	0.5 µg/L	U	1,2-Dichloropropane	0.5 µg/L	U
Vinyl Chloride	0.5 µg/L		Dibromomethane	0.5 µg/L	
Bromomethane	0.5 µg/L		Bromodichloromethane T	0.5 µg/L	
Chloroethane	0.5 µg/L		cis-1,3-Dichloropropene	0.5 µg/L	
Trichlorofluoromethane	0.5 µg/L		4-Methyl-2-Pentanone	0.5 µg/L	
1,1-Dichloroethene	0.5 µg/L		Toluene	0.5 µg/L	
Acetone	2.0 µg/L		trans-1,3-Dichloropropene	0.5 µg/L	
Iodomethane	0.5 µg/L		1,1,2-Trichloroethane	0.5 µg/L	
Carbon Disulfide	0.5 µg/L		Tetrachloroethene	0.5 µg/L	
Methylene Chloride	0.5 µg/L		2-Hexanone	0.5 µg/L	
Acrylonitrile	0.5 µg/L		Dibromochloromethane T	0.5 µg/L	
trans-1,2-Dichloroethene	0.5 µg/L		Ethylene Dibromide	0.5 µg/L	
Methyl-t-Butyl-Ether	0.5 µg/L		Chlorobenzene	0.5 µg/L	
1,1-Dichloroethane	0.5 µg/L		1,1,1,2-Tetrachloroethane	0.5 µg/L	
Isopropyl Ether	0.5 µg/L		Ethyl Benzene	0.5 µg/L	
cis-1,2-Dichloroethene	0.5 µg/L		Xylenes	0.5 µg/L	
2-Butanone	2.0 µg/L		Styrene	0.5 µg/L	
Tetrahydrofuran	2.0 µg/L	2.4	Bromoform T	0.5 µg/L	
Chloroform T	0.5 µg/L	U	1,1,2,2-Tetrachloroethane	0.5 µg/L	
1,1,1-Trichloroethane	0.5 µg/L		1,2,3-Trichloropropane	0.5 µg/L	
Carbon Tetrachloride	0.5 µg/L		1,4-Dichlorobenzene	0.5 µg/L	
Benzene	0.5 µg/L		1,2-Dichlorobenzene	0.5 µg/L	
1,2-Dichloroethane	0.5 µg/L		1,2-Dibromo-3-Chloropropane	2.0 µg/L	
Trichloroethene	0.5 µg/L				

ce – detected, but less than MDL MDL=Minimum Detection Limit T = trihalomethane
- Possible lab contamination or background
J - Estimated Value
K - Actual value is known to be less than value given.
- Actual value is known to be greater than value given.
- Material was analyzed for but not detected. The number is the Minimum Detection Limit.
J - Tentative identification.
D -Sample diluted. MDLs do not apply.

TRIP BLANK (DATE: 3-3-08)

VOA VIALS CONTAIN 1:1 HCL
DO NOT RINSE

PLEASE READ INSTRUCTION SHEET

VOC

N.C. Department of Health and Human Services
Division of Public Health
State Laboratory of Public Health
P.O. Box 28047, 306 N. Wilmington St., Raleigh, NC 27611-8047

Environmental Sciences Analysis Report

Name of Owner, Patient Or Supply: Billy Dale Alley, ETAL

Address: 250 Osborne Rd

Sparta Zip: 28675

Telephone # ( )

County:

APPALACHIAN DISTRICT
HEALTH DEPT.
PO BOX 309
SPARTA, NC 28675

Report to:

Telephone # ( )

Address:

Collected By: Andrew Buthen

Telephone # ( ) 336-372-8813

Date Collected: 5/6/08

Analysis Desired: VOC
See attached for list

Laboratory Number	Sample #	Sample Description or Remarks	Results In
080860		2-40ml vials 7.5°C	
		ANALYTICAL METHOD REQUIRES SAMPLE TEMP < 6°C	
		SEE ATTACHED SHEET(S)	
		NO VOLATILE COMPOUNDS IDENTIFIED	
080861		TRIP BLANK (DATE: 3-3-08)	
		SEE ATTACHED SHEET(S)	

Date Received: MAY 0 7 2008 Kmn

Date Reported: MAY 1 2 2008

Date Extracted:

Date Analyzed: 5-7-08

AA48674
AA48675

Reported By: Nancy J. Jones

DHHS Form 2364
Laboratory (Rev.06/99)
Lanlrpt

DIVISION OF HEALTH AND HUMAN SERVICES
STATE LABORATORY OF PUBLIC HEALTH
PO BOX 28047 - 306 N. WILMINGTON ST., RALEIGH, NC 27611

Purgeable Organic Compounds by Gas Chromatography/Mass Spectrometry

LABORATORY # 080860

COMPOUND	MDL	µg/L	COMPOUND	MDL	µg/L
Chloromethane	0.5 µg/L	U	1,2-Dichloropropane	0.5 µg/L	U
Vinyl Chloride	0.5 µg/L		Dibromomethane	0.5 µg/L	
Bromomethane	0.5 µg/L		Bromodichloromethane T	0.5 µg/L	
Chloroethane	0.5 µg/L		cis-1,3-Dichloropropene	0.5 µg/L	
Trichlorofluoromethane	0.5 µg/L		4-Methyl-2-Pentanone	0.5 µg/L	
1,1-Dichloroethene	0.5 µg/L		Toluene	0.5 µg/L	
Acetone	2.0 µg/L		trans-1,3-Dichloropropene	0.5 µg/L	
Iodomethane	0.5 µg/L		1,1,2-Trichloroethane	0.5 µg/L	
Carbon Disulfide	0.5 µg/L		Tetrachloroethene	0.5 µg/L	
Methylene Chloride	0.5 µg/L		2-Hexanone	0.5 µg/L	
Acrylonitrile	0.5 µg/L		Dibromochloromethane T	0.5 µg/L	
trans-1,2-Dichloroethene	0.5 µg/L		Ethylene Dibromide	0.5 µg/L	
Methyl-t-Butyl-Ether	0.5 µg/L		Chlorobenzene	0.5 µg/L	
1,1-Dichloroethane	0.5 µg/L		1,1,1,2-Tetrachloroethane	0.5 µg/L	
Isopropyl Ether	0.5 µg/L		Ethyl Benzene	0.5 µg/L	
cis-1,2-Dichloroethene	0.5 µg/L		Xylenes	0.5 µg/L	
2-Butanone	2.0 µg/L		Styrene	0.5 µg/L	
Tetrahydrofuran	2.0 µg/L		Bromoform T	0.5 µg/L	
Chloroform T	0.5 µg/L		1,1,2,2-Tetrachloroethane	0.5 µg/L	
1,1,1-Trichloroethane	0.5 µg/L		1,2,3-Trichloropropane	0.5 µg/L	
Carbon Tetrachloride	0.5 µg/L		1,4-Dichlorobenzene	0.5 µg/L	
Benzene	0.5 µg/L		1,2-Dichlorobenzene	0.5 µg/L	
1,2-Dichloroethane	0.5 µg/L		1,2-Dibromo-3-Chloropropane	2.0 µg/L	
Trichloroethene	0.5 µg/L				

ace – detected, but less than MDL MDL=Minimum Detection Limit T = trihalomethane
- Possible lab contamination or background
J - Estimated Value
K - Actual value is known to be less than value given.
- Actual value is known to be greater than value given.
- Material was analyzed for but not detected. The number is the Minimum Detection Limit.
- Tentative identification.
D -Sample diluted. MDLs do not apply.

NO VOLATILE COMPOUNDS IDENTIFIED

DIVISION OF HEALTH AND HUMAN SERVICES
STATE LABORATORY OF PUBLIC HEALTH
PO BOX 28047 - 306 N. WILMINGTON ST., RALEIGH, NC 27611

Purgeable Organic Compounds by Gas Chromatography/Mass Spectrometry

LABORATORY # 080861
TRIP BLANK

COMPOUND	MDL	µg/L	COMPOUND	MDL	µg/L
Chloromethane	0.5 µg/L	TRACE	1,2-Dichloropropane	0.5 µg/L	U
Vinyl Chloride	0.5 µg/L	U	Dibromomethane	0.5 µg/L	
Bromomethane	0.5 µg/L		Bromodichloromethane T	0.5 µg/L	
Chloroethane	0.5 µg/L		cis-1,3-Dichloropropene	0.5 µg/L	
Trichlorofluoromethane	0.5 µg/L		4-Methyl-2-Pentanone	0.5 µg/L	
1,1-Dichloroethene	0.5 µg/L		Toluene	0.5 µg/L	
Acetone	2.0 µg/L		trans-1,3-Dichloropropene	0.5 µg/L	
Iodomethane	0.5 µg/L		1,1,2-Trichloroethane	0.5 µg/L	
Carbon Disulfide	0.5 µg/L		Tetrachloroethene	0.5 µg/L	
Methylene Chloride	0.5 µg/L		2-Hexanone	0.5 µg/L	
Acrylonitrile	0.5 µg/L		Dibromochloromethane T	0.5 µg/L	
trans-1,2-Dichloroethene	0.5 µg/L		Ethylene Dibromide	0.5 µg/L	
Methyl-t-Butyl-Ether	0.5 µg/L		Chlorobenzene	0.5 µg/L	
1,1-Dichloroethane	0.5 µg/L		1,1,1,2-Tetrachloroethane	0.5 µg/L	
Isopropyl Ether	0.5 µg/L		Ethyl Benzene	0.5 µg/L	
cis-1,2-Dichloroethene	0.5 µg/L		Xylenes	0.5 µg/L	
2-Butanone	2.0 µg/L		Styrene	0.5 µg/L	
Tetrahydrofuran	2.0 µg/L	2.8	Bromoform T	0.5 µg/L	
Chloroform T	0.5 µg/L	U	1,1,2,2-Tetrachloroethane	0.5 µg/L	
1,1,1-Trichloroethane	0.5 µg/L		1,2,3-Trichloropropane	0.5 µg/L	
Carbon Tetrachloride	0.5 µg/L		1,4-Dichlorobenzene	0.5 µg/L	
Benzene	0.5 µg/L		1,2-Dichlorobenzene	0.5 µg/L	
1,2-Dichloroethane	0.5 µg/L		1,2-Dibromo-3-Chloropropane	2.0 µg/L	
Trichloroethene	0.5 µg/L				

ice – detected, but less than MDL MDL=Minimum Detection Limit T = trihalomethane
- Possible lab contamination or background
J - Estimated Value
K - Actual value is known to be less than value given.
- Actual value is known to be greater than value given.
- Material was analyzed for but not detected. The number is the Minimum Detection Limit.
- Tentative identification.
D -Sample diluted. MDLs do not apply.

TRIP BLANK (DATE: 3-3-08)

LA VIALS CONTAIN 1:1 HCL
DO NOT RINSE

PLEASE READ INSTRUCTION SHEET

VO

N.C. Department of Health and Human Services
Division of Public Health
State Laboratory of Public Health
P.O. Box 28047, 306 N. Wilmington St., Raleigh, NC 27611-8047

Environmental Sciences Analysis Report

Name of Owner, Patient Or Supply: Edwin Bladworth
Address: 231 Osborne St
Sparta NC Zip: 28675
Telephone # (336) 372-8813
County: Alleghany

Report to: Appalachian District Health Dept
Telephone # ( ) 372-8813
Address: 157 Health Service Dr
Sparta NC 28675
Collected By: Roger
Telephone # ( ) 372 8813
Date Collected: 5/6/08
Analysis Desired: See Attached (VOC)

Laboratory Number	Sample #	Sample Description or Remarks	Results In
080858		2-40ml vials 7.0°C	
		ANALYTICAL METHOD REQUIRES SAMPLE TEMP < 6°C	
		SEE ATTACHED SHEET(S)	
080859		TRIP BLANK (DATE: 3-03-08) SEE ATTACHED SHEET(S)	

Date Received: MAY 0 7 2008
Date Extracted:
Date Reported: MAY 1 2 2008
Date Analyzed: 5-7-08
Reported By: Nancy J. Jones

AA48672
AA48673

DHS Form 2364
Laboratory (Rev.06/99)
F anlrpt

DIVISION OF HEALTH AND HUMAN SERVICES
STATE LABORATORY OF PUBLIC HEALTH
PO BOX 28047 - 306 N. WILMINGTON ST., RALEIGH, NC 27611

Purgeable Organic Compounds by Gas Chromatography/Mass Spectrometry

LABORATORY # 080858

COMPOUND	MDL	µg/L	COMPOUND	MDL	µg/L
Chloromethane	0.5 µg/L	TRACE	1,2-Dichloropropane	0.5 µg/L	U
Vinyl Chloride	0.5 µg/L	U	Dibromomethane	0.5 µg/L	
Bromomethane	0.5 µg/L		Bromodichloromethane T	0.5 µg/L	
Chloroethane	0.5 µg/L		cis-1,3-Dichloropropene	0.5 µg/L	
Trichlorofluoromethane	0.5 µg/L		4-Methyl-2-Pentanone	0.5 µg/L	
1,1-Dichloroethene	0.5 µg/L		Toluene	0.5 µg/L	
Acetone	2.0 µg/L		trans-1,3-Dichloropropene	0.5 µg/L	
Iodomethane	0.5 µg/L		1,1,2-Trichloroethane	0.5 µg/L	
Carbon Disulfide	0.5 µg/L		Tetrachloroethene	0.5 µg/L	
Methylene Chloride	0.5 µg/L		2-Hexanone	0.5 µg/L	
Acrylonitrile	0.5 µg/L		Dibromochloromethane T	0.5 µg/L	
trans-1,2-Dichloroethene	0.5 µg/L		Ethylene Dibromide	0.5 µg/L	
Methyl-t-Butyl-Ether	0.5 µg/L		Chlorobenzene	0.5 µg/L	
1,1-Dichloroethane	0.5 µg/L		1,1,1,2-Tetrachloroethane	0.5 µg/L	
Isopropyl Ether	0.5 µg/L		Ethyl Benzene	0.5 µg/L	
cis-1,2-Dichloroethene	0.5 µg/L		Xylenes	0.5 µg/L	
2-Butanone	2.0 µg/L		Styrene	0.5 µg/L	
Tetrahydrofuran	2.0 µg/L		Bromoform T	0.5 µg/L	
Chloroform T	0.5 µg/L		1,1,2,2-Tetrachloroethane	0.5 µg/L	
1,1,1-Trichloroethane	0.5 µg/L		1,2,3-Trichloropropane	0.5 µg/L	
Carbon Tetrachloride	0.5 µg/L		1,4-Dichlorobenzene	0.5 µg/L	
Benzene	0.5 µg/L		1,2-Dichlorobenzene	0.5 µg/L	
1,2-Dichloroethane	0.5 µg/L		1,2-Dibromo-3-Chloropropane	2.0 µg/L	
Trichloroethene	0.5 µg/L				

ace – detected, but less than MDL MDL=Minimum Detection Limit T = trihalomethane
- Possible lab contamination or background → SEE TRIP BLANK RESULTS (# 080859) ATTACHED
J - Estimated Value
K - Actual value is known to be less than value given.
- Actual value is known to be greater than value given.
- Material was analyzed for but not detected. The number is the Minimum Detection Limit.
- Tentative identification.
D -Sample diluted. MDLs do not apply.

DIVISION OF HEALTH AND HUMAN SERVICES
STATE LABORATORY OF PUBLIC HEALTH
PO BOX 28047 - 306 N. WILMINGTON ST., RALEIGH, NC 27611

Purgeable Organic Compounds by Gas Chromatography/Mass Spectrometry

LABORATORY # 080859
TRIP BLANK

COMPOUND	MDL	µg/L	COMPOUND	MDL	µg/L
Chloromethane	0.5 µg/L	TRACE	1,2-Dichloropropane	0.5 µg/L	U
Vinyl Chloride	0.5 µg/L	U	Dibromomethane	0.5 µg/L	
Bromomethane	0.5 µg/L		Bromodichloromethane T	0.5 µg/L	
Chloroethane	0.5 µg/L		cis-1,3-Dichloropropene	0.5 µg/L	
Trichlorofluoromethane	0.5 µg/L		4-Methyl-2-Pentanone	0.5 µg/L	
1,1-Dichloroethene	0.5 µg/L		Toluene	0.5 µg/L	
Acetone	2.0 µg/L		trans-1,3-Dichloropropene	0.5 µg/L	
Iodomethane	0.5 µg/L		1,1,2-Trichloroethane	0.5 µg/L	
Carbon Disulfide	0.5 µg/L		Tetrachloroethene	0.5 µg/L	
Methylene Chloride	0.5 µg/L		2-Hexanone	0.5 µg/L	
Acrylonitrile	0.5 µg/L		Dibromochloromethane T	0.5 µg/L	
trans-1,2-Dichloroethene	0.5 µg/L		Ethylene Dibromide	0.5 µg/L	
Methyl-t-Butyl-Ether	0.5 µg/L		Chlorobenzene	0.5 µg/L	
1,1-Dichloroethane	0.5 µg/L		1,1,1,2-Tetrachloroethane	0.5 µg/L	
Isopropyl Ether	0.5 µg/L		Ethyl Benzene	0.5 µg/L	
cis-1,2-Dichloroethene	0.5 µg/L		Xylenes	0.5 µg/L	
2-Butanone	2.0 µg/L		Styrene	0.5 µg/L	TRACE
Tetrahydrofuran	2.0 µg/L	2.7	Bromoform T	0.5 µg/L	U
Chloroform T	0.5 µg/L	U	1,1,2,2-Tetrachloroethane	0.5 µg/L	
1,1,1-Trichloroethane	0.5 µg/L		1,2,3-Trichloropropane	0.5 µg/L	
Carbon Tetrachloride	0.5 µg/L		1,4-Dichlorobenzene	0.5 µg/L	
Benzene	0.5 µg/L		1,2-Dichlorobenzene	0.5 µg/L	
1,2-Dichloroethane	0.5 µg/L		1,2-Dibromo-3-Chloropropane	2.0 µg/L	
Trichloroethene	0.5 µg/L				

ce – detected, but less than MDL MDL=Minimum Detection Limit T = trihalomethane
– Possible lab contamination or background
J - Estimated Value
K - Actual value is known to be less than value given.
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– Tentative identification.
D -Sample diluted. MDLs do not apply.

TRIP BLANK (DATE: 3-3-08)

DO NOT RINSE

VOC

Division of Public Health
State Laboratory of Public Health
P.O. Box 28047, 306 N. Wilmington St., Raleigh, NC 27611-8047

Environmental Sciences Analysis Report

Name of Owner, Patient Or Supply: Alleghany Co. Landfill

Telephone # (___)

Address:

County: Alleghany

Sparta Zip: 28675

Report to:

Telephone # (___)

Address: APPALACHIAN DISTRICT HEALTH DEPT. PO BOX 309 SPARTA, NC 28675

Collected By: Andrew Blether

Telephone # (___) 336-372-8813

Date Collected: 5/6/08

Analysis Desired: VOC

See attached

Laboratory Number	Sample #	Sample Description or Remarks	Results In
080864		2-40ml vials 5.0°C	
		SEE ATTACHED SHEET(S)	
		NO VOLATILE COMPOUNDS IDENTIFIED	
080865		TRIP BLANK (DATE: 3-3-08) SEE ATTACHED SHEET(S)	

Date Received: MAY 07 2008 Knm

Date Reported: MAY 12 2008

Date Extracted:

Date Analyzed: 5-7-08

Reported By: Nancy D. Jones

AA48678
AA48679

HHS Form 2364
Laboratory (Rev.06/99)
anlrpt

... samples do not apply.

DIVISION OF HEALTH AND HUMAN SERVICES
STATE LABORATORY OF PUBLIC HEALTH
PO BOX 28047 - 306 N. WILMINGTON ST., RALEIGH, NC 27611

Purgeable Organic Compounds by Gas Chromatography/Mass Spectrometry

LABORATORY # 080865 TRIP BLANK

COMPOUND	MDL	µg/L	COMPOUND	MDL	µg/L
Chloromethane	0.5 µg/L	U	1,2-Dichloropropane	0.5 µg/L	U
Vinyl Chloride	0.5 µg/L		Dibromomethane	0.5 µg/L	
Bromomethane	0.5 µg/L		Bromodichloromethane T	0.5 µg/L	
Chloroethane	0.5 µg/L		cis-1,3-Dichloropropene	0.5 µg/L	
Trichlorofluoromethane	0.5 µg/L		4-Methyl-2-Pentanone	0.5 µg/L	
1,1-Dichloroethene	0.5 µg/L		Toluene	0.5 µg/L	
Acetone	2.0 µg/L		trans-1,3-Dichloropropene	0.5 µg/L	
Iodomethane	0.5 µg/L		1,1,2-Trichloroethane	0.5 µg/L	
Carbon Disulfide	0.5 µg/L		Tetrachloroethene	0.5 µg/L	
Methylene Chloride	0.5 µg/L		2-Hexanone	0.5 µg/L	
Acrylonitrile	0.5 µg/L		Dibromochloromethane T	0.5 µg/L	
trans-1,2-Dichloroethene	0.5 µg/L		Ethylene Dibromide	0.5 µg/L	
Methyl-t-Butyl-Ether	0.5 µg/L		Chlorobenzene	0.5 µg/L	
1,1-Dichloroethane	0.5 µg/L		1,1,1,2-Tetrachloroethane	0.5 µg/L	
Isopropyl Ether	0.5 µg/L		Ethyl Benzene	0.5 µg/L	
cis-1,2-Dichloroethene	0.5 µg/L		Xylenes	0.5 µg/L	
2-Butanone	2.0 µg/L		Styrene	0.5 µg/L	
Tetrahydrofuran	2.0 µg/L	2.6	Bromoform T	0.5 µg/L	
Chloroform T	0.5 µg/L	U	1,1,2,2-Tetrachloroethane	0.5 µg/L	
1,1,1-Trichloroethane	0.5 µg/L		1,2,3-Trichloropropane	0.5 µg/L	
Carbon Tetrachloride	0.5 µg/L		1,4-Dichlorobenzene	0.5 µg/L	
Benzene	0.5 µg/L		1,2-Dichlorobenzene	0.5 µg/L	
1,2-Dichloroethane	0.5 µg/L		1,2-Dibromo-3-Chloropropane	2.0 µg/L	
Trichloroethene	0.5 µg/L				

ce – detected, but less than MDL MDL=Minimum Detection Limit T = trihalomethane
U – Possible lab contamination or background
J - Estimated Value
K - Actual value is known to be less than value given.
L - Actual value is known to be greater than value given.
U - Material was analyzed for but not detected. The number is the Minimum Detection Limit.
Y - Tentative identification.
D -Sample diluted. MDLs do not apply.

TRIP BLANK (DATE: 3-3-08)

Michael F. Easley, Governor
William G. Ross Jr., Secretary
Department of Environment and Natural Resources

Coleen H. Sullins, Director
Division of Water Quality

RECEIVED
JUN 23 2008

June 18, 2008

TO: Diana Helias
Applied Resource Management, P.C.
Po Box 882
Hampstead, North Carolina 28443

SUBJECT: MONITOR WELL CONSTRUCTION
PERMIT NO. WM0400461
COUNTY: Alleghany
FILE NAME: Alleghany MSW Landfill

Dear Ms. Helias

In accordance with your application received, we are forwarding herewith Monitor Well Construction Permit No. WM0400461 for the construction of one (1) monitor well on the Poole Estate at Osborne Road, Sparta, North Carolina.

Henceforth, correspondence and data relating to these wells shall be designated as specified in the subject heading above.

This Permit will be effective from the date of its issuance and shall be subject to the conditions and limitations as specified therein.

Sincerely,

Sherri V. Knight

Sherri V. Knight
Regional Supervisor

cc: Alleghany County, ATTN: Don Adams
PO Box 366
Sparta, North Carolina 28675
Aquifer Protection Section - Central Office
Alleghany County Health Department
WSRO Files

NORTH CAROLINA

ENVIRONMENTAL MANAGEMENT COMMISSION

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

PERMIT FOR THE CONSTRUCTION OF

A MONITOR WELL OR WELL SYSTEM

In accordance with the provisions of Article 7, Chapter 87, North Carolina General Statutes, and other applicable Laws, Rules, and Regulations.

PERMISSION IS HEREBY GRANTED TO

Applied Resource Management, P.C. for Alleghany County

FOR THE CONSTRUCTION OF ONE (1) MONITOR WELL located on Osborne Road (Poole Estate), Sparta, North Carolina in Alleghany County in accordance with the application dated June 6, 2008, and in conformity with the specifications and supporting data, all of which are filed with the Department of Environment and Natural Resources and are considered a part of this Permit.

This Permit is for well construction only, and does not waive any provisions or requirements or any other applicable laws or regulations. Construction of a well under this Permit shall be in compliance with the North Carolina Well Construction Regulations and Standards, and any other laws and regulations pertaining to well construction.

This Permit will be effective from the date of its issuance until the site assessment has been completed, and shall be subject to other specified conditions, limitations or exceptions as follows:

1. Written permission must be obtained from the property owner prior to construction of the well.

2. A permanent identification plate with the date of construction, depth of well, screen interval, depth of grout, drilling contractor, and his registration number shall be attached to the well head or the outer protective steel casing.

3. The well construction completion forms are to be submitted to the Central Office of the Aquifer Protection Section, 1636 Mail Service Center, Raleigh, North Carolina 27699-1636 within 30 days of well construction.

4. The well shall be afforded a means of protection against vandalism, damage, or unauthorized use.

5. When any monitor well is no longer useful for its intended purpose, it shall be abandoned in compliance with North Carolina Administrative Code 15A. 2C.0113 and a well abandonment form sent to the North Carolina Department of Environment and Natural Resources, Aquifer Protection Section, 1636 Mail Service Center, Raleigh, North Carolina 27699-1636.

6. The monitor well shall be constructed in accordance with the Aquifer Protection Section's recommended construction details.

7. The county health department may require a county monitor well construction permit. Please check with Alleghany County in which the well is located.

Permit issued this the 18th day of June 2008.

FOR THE NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

Sherri V. Knight

Sherri V. Knight, Aquifer Protection Supervisor
Division of Water Quality

By Authority of the Environmental Management Commission

Permit No. WM0400461

NON RESIDENTIAL WELL CONSTRUCTION RECORD

North Carolina Department of Environment and Natural Resources- Division of Water Quality

WELL CONTRACTOR CERTIFICATION # 3318

1. WELL CONTRACTOR:

Robert D. Hutchinson
Well Contractor (Individual) Name

Applied Resource Management, PC
Well Contractor Company Name

STREET ADDRESS 257 Transfer Station Rd., PO Box 882
Hampstead NC 28443
City or Town State Zip Code

(910) 270-2919
Area code- Phone number

2. WELL INFORMATION:

SITE WELL ID #(if applicable) MW -5
STATE WELL PERMIT # (if applicable)
DWQ or OTHER PERMIT # (if applicable) WM0400461

WELL USE (Check Applicable Box) Monitoring ☒ Municipal/Public ☐ Industrial/Commercial ☐ Agricultural ☐ Recovery ☐ Injection ☐ Irrigation ☐ Other ☐ (list use)

DATE DRILLED 7/1/08

TIME COMPLETED 5:45 AM ☐ PM ☒

3. WELL LOCATION:

CITY: Sparta COUNTY Alleghany
Osborne Road, SR 1138, 28675
(Street Name, Numbers, Community, Subdivision, Lot No., Parcel, Zip Code)
TOPOGRAPHIC / LAND SETTING:

☐ Slope ☒ Valley ☐ Flat ☐ Ridge ☐ Other
(check appropriate box)

LATITUDE 36 29'26" N

LONGITUTDE 81 08' 58" W

May be in degrees, minutes, seconds or in a decimal format

Latitude/longitude source: ☒ GPS ☐ Topographic map
(location of well must be shown on a USGS topo map and attached to this form if not using GPS)

4. FACILITY- is the name of the business where the well is located.
FACILITY ID #(if applicable)

NAME OF FACILITY Alleghany County Landfill

STREET ADDRESS Osborne Road, SR1138
Sparta NC 28675
City or Town State Zip Code

CONTACT PERSON Don Adams
MAILING ADDRESS P.O. Box 366
Sparta NC 28675
City or Town State Zip Code

(336)- 372-4179
Area code - Phone number

5. WELL DETAILS:

a. **TOTAL DEPTH:** 22'

b. **DOES WELL REPLACE EXISTING WELL?** YES ☐ NO ☒

c. **WATER LEVEL** Below Top of Casing: 8.32' FT.
(Use "+" if Above Top of Casing)

d. **TOP OF CASING IS** 3 FT. Above Land Surface*
*Top of casing terminated at/or below land surface may require a variance in accordance with 15A NCAC 2C .0118.

e. **YIELD (gpm):** _____ **METHOD OF TEST** _____

f. **DISINFECTION: Type** _____ **Amount** _____

g. **WATER ZONES** (depth):

From	To	From	To
From	To	From	To
From	To	From	To

6. CASING:

	Depth		Diameter	Thickness/ Weight	Material
From 0	To 7	Ft.	2"	SCH40	PVC
From	To	Ft.			
From	To	Ft.			

7. GROUT:

	Depth		Material	Method
From 0.2	To 0.5	Ft.	Grout	Tremmie
From 0.5	To 3	Ft.	Bentonite	Tremmie
From	To	Ft.		

8. SCREEN:

	Depth		Diameter		Slot Size		Material
From 7	To 22	Ft.	2	in.	0.010	in.	PVC
From	To	Ft.		in.		in.	
From	To	Ft.		in.		in.	

9. SAND/GRAVEL PACK:

	Depth		Size	Material
From 3	To 22	Ft.	Coarse	Sand
From	To	Ft.		
From	To	Ft.		

10. DRILLING LOG

From	To	Formation Description
		See attached

11. REMARKS:

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

Original Signed

SIGNATURE OF CERTIFIED WELL CONTRACTOR DATE

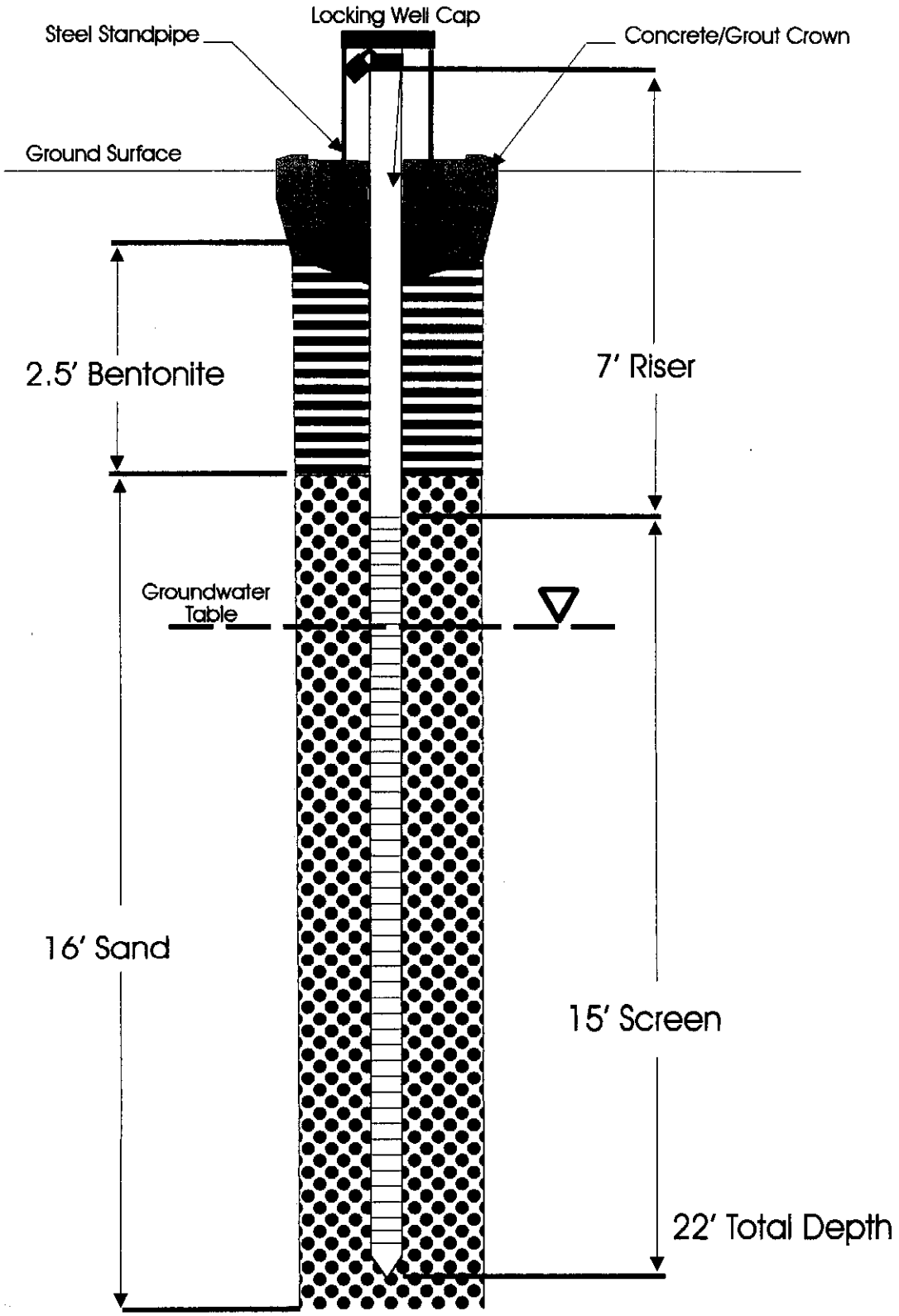
Robert D. Hutchinson
PRINTED NAME OF PERSON CONSTRUCTING THE WELL

Submit the original to the Division of Water Quality within 30 days. Attn: Information Mgt., 1617 Mail Service Center – Raleigh, NC 27699-1617 Phone No. (919) 733-7015 ext 568.

Form GW-1b
Rev. 7/05

Alleghany County Landfill

MW-5



BORING LOG

ALLEGHANY COUNTY LANDFILL
SPARTA, NC

MW - 5

Drilled by: Applied Resource Management
Logged by: J. Zuncich
Date: 07/01/08

Depth (ft.)	Description	Water Content	Blow Count
2 - 4	Orange brown, silty to fine grained clayey sand with granitic rock fragments. No hydrocarbon odor.	Low	Grab
5 - 7	Gray to gold, silty to fine grained clayey sand, saprolitic, highly micaceous, pyritic. No hydrocarbon odor.	Moderate	HP
10 - 12	Brown to gold, silty to fine grained clayey sand, saprolitic, micaceous, pyritic. No hydrocarbon odor.	High	HP
15 - 17	Brown to gold, silty to fine grained clayey sand, saprolitic, micaceous, pyritic. No hydrocarbon odor.	High	HP
17 - 19	Brown to gold, silty to fine grained clayey sand, with granitic rock fragments, micaceous, pyritic. No hydrocarbon odor.	High	HP

HP - Hydraulic Push