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4	Rensselaer	Nassau	Dewey Loeffel

DOCUMENT TYPE (CIRCLE)	PROGRAM (CIRCLE)	SITE NUMBER	DOCUMENT DATE (YYYY-MM-DD)
agreement	.		
application	.		
brief	.		
consent	.		
email	.		
factsheet	.		
image	.		
isr	.		
letter	.		
memo	.		
nov	.		
prap	.		
report	.	HW_442006_0U3_2005-4-1_2004_Supplemental_Surface_Water_and_Suspended_Sediment_Monitoring.pd	
rod	.		
siteplan	.		
spcc	.		
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video	.		
workplan	.		

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Transmitted Via Electronic and First Class Mail

April 1, 2005

James N. Ludlam, P.E.
NYSDEC
Department of Environmental Remediation
625 Broadway
12th Floor
Albany, NY 12233-7016

Re: 2004 Supplemental Surface Water and Suspended Sediment Monitoring
Operable Unit 3, Loeffel Site Environs
Nassau, New York
BBL Project #: 10073.900

Dear Jim:

This letter, provided by Blasland, Bouck & Lee (BBL) on behalf of the General Electric Company (GE), presents the results from the 2004 supplemental surface water (SW) and suspended sediment (SS) monitoring events. This sampling was conducted pursuant to the November 4, 2004 New York State Department of Law (DOL) letter (Attachment A). Specifically, sampling was conducted at the mouth of T11A (Figure 1) during one base-flow sampling event (November 16, 2004) and one high-flow event (December 1, 2004).

This letter presents a discussion of the sampling activities results. Attachments to this letter provide the details of the sampling efforts (i.e., analytical and field data, sampling and analytical methods), as well as supporting documentation such as DOL's letter, laboratory data sheets, and data validation reports. This letter departs from the typical data report format, as several complex issues regarding the sampling activities require detailed discussion.

Summary of Sampling Activities

To evaluate the transport of polychlorinated biphenyls (PCBs) in T11A, whole (i.e., unfiltered) SW and SS samples have been collected, both historically and recently, following the T11A remedial action (RA). In response to the DOL's letter, one base-flow SW sample and five SS samples were collected in November 2004. Four high-flow SW samples and four SS samples were collected in December 2004.

Sampling and Analytical Process

The SW samples were collected directly from T11A as grabs. The SS samples were collected by filtering a volume of whole water (usually 19 liters) through a pre-weighed 0.7 micron glass fiber filter using a

pressurized filter apparatus. Each filter was submitted to the laboratory and subsequently dried, re-weighed, extracted, and analyzed. The concentration of PCBs was calculated based on the detected mass of PCBs in the sample extract divided by the total weighed sample mass. Laboratory scales typically have an accuracy of +/- 0.0001 gram.

While exercising requisite care during filtering, inevitably, a fraction of filter mass is lost during the process, due to water flowing through the filter, unavoidable handling, contact with the filter apparatus, etc. In instances where very little SS is available in the whole water for filtering, this loss of filter mass, although miniscule, becomes critical, as discussed below. The accuracy of the laboratory scale is also a factor.

During analysis of the November 2004 SS samples from T11A, four of the five samples exhibited a negative mass change. Simply put, the filter submitted to the laboratory weighed less after drying than it did before sampling. The remaining SS sample showed a slight weight gain of 0.2 milligram (mg); a mass increase that was very close to the accuracy limits of the scale. The December 2004 SS samples all exhibited mass increases, as would be expected for samples collected during a high-flow event.

The following table presents the SS sample mass loss or gain for the base-flow and high-flow samples.

Table 1
Suspended Sediment Masses
November and December 2004

Sample	Date	Sample Mass (mg)
Base-Flow Samples		
T11A-DS-01 (filter 1767)	11/16/04	-1.5
T11A-DS-01 (filter 1794)	11/16/04	-4.3
T11A-DS-01 (filter 1782)	11/16/04	-0.4
T11A-DS-01 (filter 1783)	11/16/04	0.2
T11A-DS-01 (filter 1781)	11/16/04	-0.8
Rinse Blank (filter 1836)	11/16/04	-5.6
High-Flow Samples		
T11A-D-02-A	12/1/04	35
T11A-D-03-A	12/1/04	140
T11A-D-04-A, B	12/1/04	410
T11A-D-05-A	12/1/04	57

Regardless of the change in filter mass, all SS samples were extracted and analyzed. For those samples showing a negative mass change, the laboratory reported the PCB results as mass-only micrograms [ug]). The other sample results have been reported by the laboratory as concentrations (i.e., mg of PCBs in extract per kilogram [kg] of sample). The high-flow sample results are discussed further in Attachment B. The base-flow samples were deemed invalid, as discussed further, below; those results are provided in Attachment C.

As stated above, the base-flow SS samples showed negative mass gains (four samples) and a positive mass gain very close to the accuracy limits of the scale (one sample). These SS samples were collected

using whole water collected continuously from T11A during the sampling event. This indicates that post-remedial sediment loading in T11A under base-flow conditions is low and is difficult to accurately measure. Since these sample masses were not accurately measurable, the analytical results are not reliable. These sample results will not be retained for PCB transport evaluations. Because of the complications described above regarding very low SS masses, only those filters showing a mass gain of at least 1 gram per 19 liters of filtered water will be analyzed in the future.

Interpretation of Results

To monitor and evaluate PCB transport in the system, it is critical that SS sample results are examined within the context of whole water PCB concentrations; SS sample results (i.e., mass PCB/mass solids) can be misleading when reviewed out of context. A clearer indication of PCB loading in the system is found when the mass of PCBs detected in a SS sample extract is divided by the volume of water filtered. For example, the SS sample T11A-DS-03-A collected in August 2004 produced a calculated PCB concentration of 77 mg/kg. When the mass of PCBs in the sample extract (0.76 ug) is divided by 19 liters, the whole water concentration is found to be 0.040 ug/L. This concentration is commensurate with recent whole water data obtained from T11A, and clearly provides a more realistic indicator of PCB transport in the system. It should also be noted the SS sample mass associated with the 77 mg/kg result (9.9 mg) is of the same magnitude as filter mass loss observed in the November 2004 quality control (QC) rinse blank sample; thus suggesting the likelihood of a substantial overestimation of the 77 mg/kg result. Table 2, below, provides these calculations for the SS data set.

Table 2
Conversion of
Suspended Sediment PCB Concentrations to
Whole Water PCB Concentrations

Sample	Date	Filtered Volume (L)	Sample Mass (mg)	PCB Mass (mg)	[PCB] (mg/kg)	Calculated [PCB] in water (µg/L)
T11A: RI-Related Samples						
T11A/SWN004	3/30/94	120	10000	--	8.7	0.725
T11A/SWN004-1	12/5/94	5.7	210	--	5	0.184
T11A/SWN004-2	12/5/94	8.1	140	--	3.5	0.060
T11A/SWN004-3	12/5/94	11	130	--	5.8	0.069
T11A: Monitoring-Related Samples						
T11A-D-01-A	8/4/04 base flow	19	19*	--	52	0.052
T11A-DS-02-A	8/30/04 high-flow	11.4	2400*	--	0.72	0.071
T11A-DS-02-B		7.6	120*	--	14	
T11A-DS-03-A	8/31/04 high-flow	19	9.9	--	77	0.040
T11A-DS-01 (filter 1767)	11/16/04 base flow	19	-1.5	***	--	0.010
T11A-DS-01 (filter 1794)	11/16/04 base flow	19	-4.3	***	--	0.008
T11A-DS-01 (filter 1782)	11/16/04 base flow	19	-0.4	***	--	0.009
T11A-DS-01 (filter 1783)	11/16/04 base flow	19	0.20	0.00017****	***	0.009

Sample	Date	Filtered Volume (L)	Sample Mass (mg)	PCB Mass (mg)	[PCB] (mg/kg)	Calculated [PCB] in water (pg/L)
T11A-DS-01 (filter 1781)	11/16/04 base flow	19	-0.8	***	--	0.007
T11A-D-02-A	12/1/04 high-flow	19	35	--	11 J	0.020
T11A-D-03-A	12/1/04 high-flow	19	140	--	4.9 J	0.036
T11A-D-04-A	12/1/04 high-flow	11.4	350	--	2.8 J	0.088 J
T11A-D-04-B	12/1/04 high-flow	7.6	60	--	12 J	
T11A-D-05-A	12/1/04 high-flow	19	57	--	9.8 J	0.029 J
Area 28: Monitoring-Related Samples						
A28-U-01-A	8/4/04 base flow	19	65*	--	2.3	0.008
A28-M-01-A	8/4/04 base flow	19	35*	--	4.2	0.008
A28-D-01-A	8/4/04 base flow	19	46*	--	2.9	0.007
A28-US-02-A and –B**	8/31/04 high-flow	19	150*	--	1.8	0.014
A28-MS-02-A	8/31/04 high-flow	19	99*	--	1.8	0.009
A28-DS-02-A	8/31/04 high-flow	19	120*	--	1.8	0.011
A28-US-03-A	8/31/04 high-flow	19	28*	--	5.0	0.007
A28-MS-03-A	8/31/04 high-flow	19	52*	--	2.7	0.007
A28-DS-03-A	8/31/04 high-flow	19	72*	--	2.6	0.010
Valatie Kill Inlet to Nassau Lake: RI-Related Samples						
VK/NL/SWN006	3/30/94	160	6600	--	1.5	0.062
VK/NL/SWN006-1	12/5/94	23	180	--	1.7	0.013
VK/NL/SWN006-2	12/5/94	15	120	--	1.5	0.012
VK/NL/SWN006-3	12/6/94	22	110	--	1.6	0.008
Valatie Kill Inlet to Nassau Lake: Monitoring-Related Samples						
NL/VK-U-01-A	8/4/04 base flow	19	44*	--	2.1	0.005
VK/NL-DS-02-A and –B**	8/31/04 high-flow	19	100*	--	1.3	0.007
VK/NL-DS-03-A and –B**	8/31/04 high-flow	19	110*	--	1.8	0.010

Notes:
1. Duplicate samples are not included in analysis.
J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
* Masses for these samples have been updated to dry weight solid mass. Masses for these samples were reported in the October 19, 2004 Surface Water Monitoring Report as wet weight total filter masses.
** Sample results presented as mass-weighted averages.
*** This group of sample results is invalid, due to mass limitations. Please see Appendix C for the analytical results.
**** This value has been calculated and shown for illustrative purposes.

The data set of SS sample results, expressed as PCB concentrations in water, may be compared to whole water samples collected concurrently. Table 3 presents a comparison of the SS sample data set (expressed as PCBs in whole water) and corresponding whole water sample results. As shown on Table 2, on average SS samples underestimate PCB concentrations in whole water by about 53%. Further, the concentrations in water calculated from SS samples are more realistic values; many of the unmodified SS sample results (i.e., results provided in mg/kg) would be marked outliers in the SS dataset.

Table 3
Comparison of
Calculated PCB Concentrations to
Measured PCB Concentrations

Sample	Date	Calculated [PCB] in water (µg/L)	Measured Whole Water [PCB] (µg/L)
T11A-D-01-A	8/4/04	0.053	0.08
T11A-DS-02-A	8/30/04	0.071	0.29
T11A-DS-02-B			
T11A-DS-03-A	8/31/04	0.040	0.100
T11A-DS-01 (filter 1767)	11/16/04	0.010	0.021*
T11A-DS-02 (filter 1794)	11/16/04	0.008	0.021*
T11A-DS-03 (filter 1782)	11/16/04	0.009	0.021*
T11A-DS-04 (filter 1783)	11/16/04	0.009	0.021*
T11A-DS-05 (filter 1781)	11/16/04	0.007	0.021*
T11A-D-02-A	12/1/04	0.020	0.029 J
T11A-D-03-A	12/1/04	0.036	0.023 J
T11A-D-04-A,B	12/1/04	0.088 J	0.117 J
T11A-D-05-A	12/1/04	0.029 J	0.083 J
A28-U-01-A	8/4/04	0.008	0.01 J
A28-M-01-A	8/4/04	0.008	0.011 J
A28-D-01-A	8/4/04	0.007	0.013 J
A28-US-02-A and –B	8/31/04	0.014	0.01 J
A28-MS-02-A	8/31/04	0.009	0.011 J
A28-DS-02-A	8/31/04	0.011	0.011 J
A28-US-03-A	8/31/04	0.007	0.011 J
A28-MS-03-A	8/31/04	0.007	0.018
A28-DS-03-A	8/31/04	0.010	0.01 J
NL/VK-U-01-A	8/4/04	0.005	0.011 J
VK/NL-DS-02-A and –B	8/31/04	0.007	0.01 J
VK/NL-DS-03-A and –B	8/31/04	0.010	0.008 J
Rounded sum		0.484	1.04

Notes:
1. Duplicate samples are not included in analysis.

J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

* This value is the result from the SW sample collected during this base-flow sampling event.

Discussion Summary

This memo described the limitations inherent in the sampling and analytical procedures for SS samples when a very low mass of suspended sediment is available in the water column. The low SS masses result in misleading and/or unreliable SS sample results. Further, it is evident that SS sample results, even when derived from acceptable sample mass, underestimate PCB transport in the system. In an effort to ensure collection of more reliable SS data, only samples of 1 gram mass or greater obtained from 19 liters of

water will be retained during future monitoring efforts. SW sampling will continue to be the primary means by which PCB transport in the system is evaluated.

Please contact me at (508) 992-3609 if you have any questions or comments.

Sincerely,

BLASLAND, BOUCK & LEE, INC.

Mark P. Brown, Ph.D
Senior Vice President

CRT/crt

cc: Michael Komoroske, P.E., NYSDEC
Alan Belensz, Environmental Protection Bureau
Russell Shaver, NYSDEC
Michael Elder, Esq., General Electric Company
Edward LaPoint, P.E., General Electric Company
J. Paul Doody, P.E., Blasland, Bouck & Lee, Inc.
Christopher Torell, P.G., Blasland, Bouck & Lee, Inc.
Kimberly Powell, Blasland, Bouck & Lee, Inc.
Matthew DeGracia, Blasland, Bouck & Lee, Inc.

Figures

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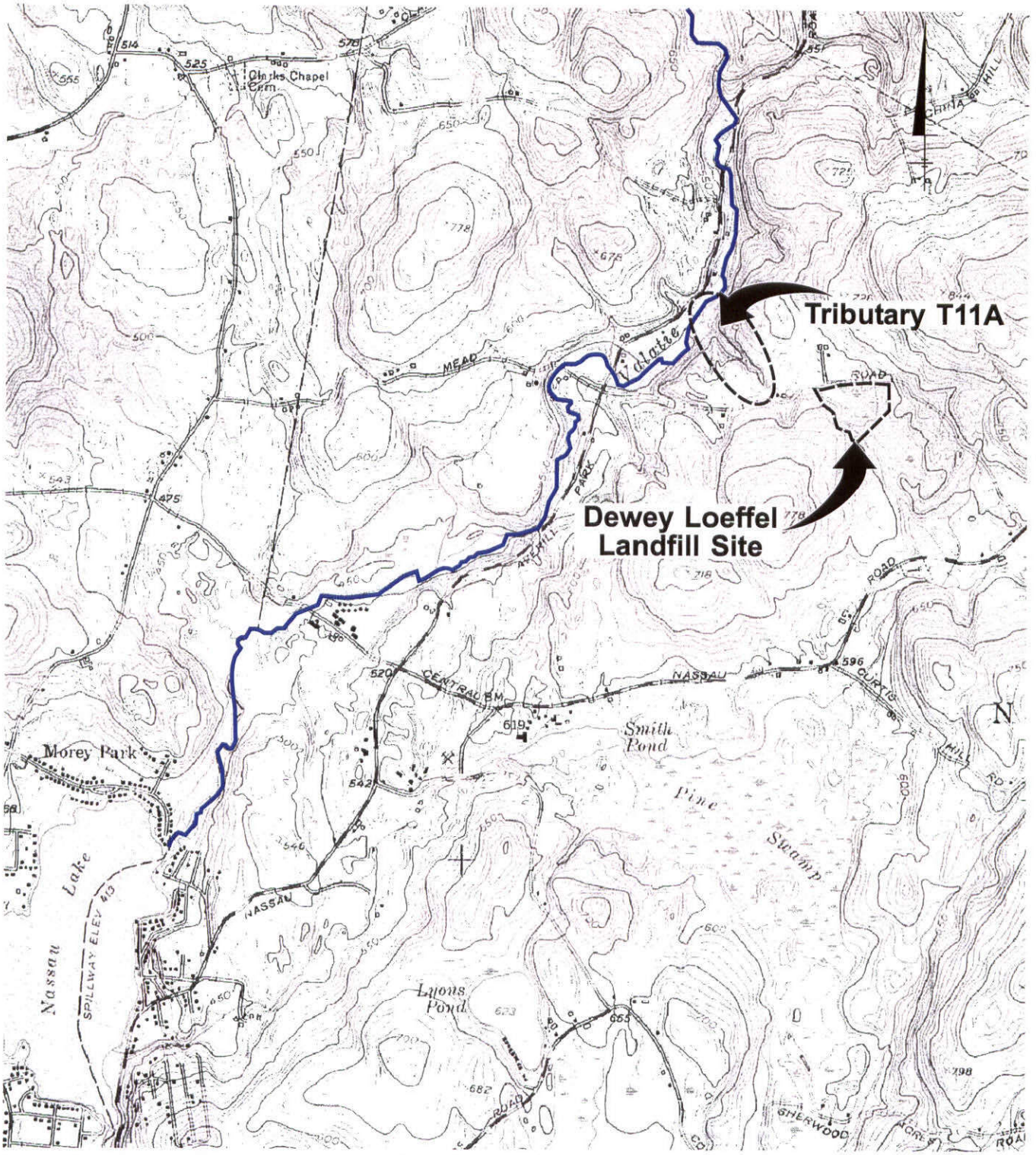

REFERENCE: Base Map Source, USGS 7.5 Min. Topo. Quad., Nassau, New York, 1953.

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2000' 0 2000'

Approximate Scale: 1" = 2000'

03/29/05 SYR-D54-LBR-LAS-KLS
C/10073700/cdr/10073n02.cdr

GENERAL ELECTRIC COMPANY
LOEFFEL SITE ENVIRONS
2004 SUPPLEMENTAL SURFACE WATER AND SUSPENDED SEDIMENT MONITORING

SITE LOCATION MAP

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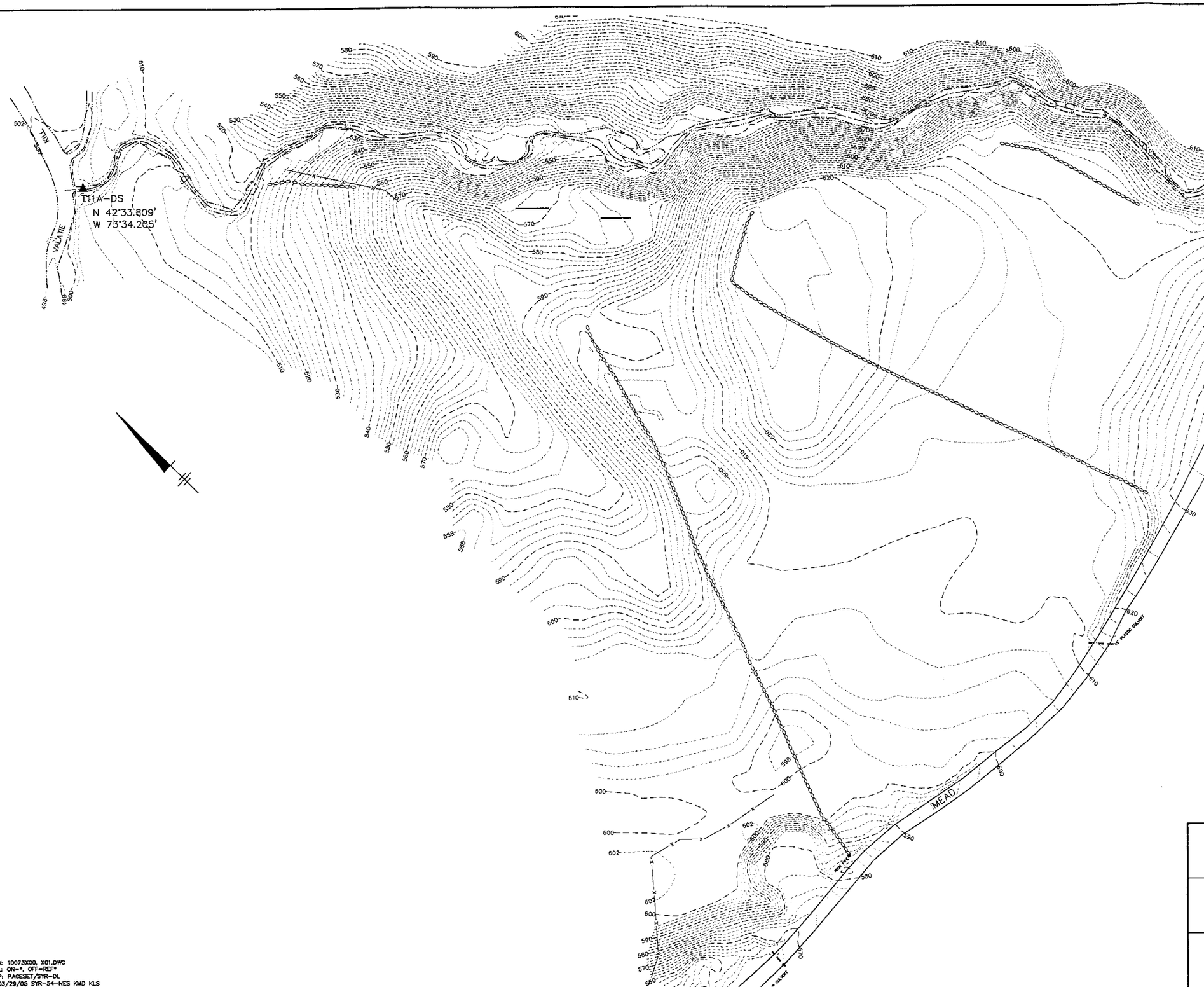
FIGURE 1



NOTES:

1. BASE MAP INFORMATION OBTAINED FROM FIELD SURVEY PERFORMED MARCH 20, 2002 THROUGH APRIL 5, 2002 BY BBL.
2. BASE MAP INFORMATION AT THE EXTREME EAST PORTION OF THE SITE FROM FIGURE BY CLOUGH, HARBOUR & ASSOCIATES LLP. AT A SCALE OF 1"=20', DATED 1/15/2002.
3. ELEVATIONS BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929.
4. HORIZONTAL DATUM BASED ON NEW YORK STATE PLANE COORDINATE SYSTEM OF 1927, EAST ZONE.
5. CONTOUR INTERVAL = 2 FEET.
6. SAMPLE LOCATION IS APPROXIMATE.
7. LATITUDE AND LONGITUDE OBTAINED BY FIELD GPS UNIT WITH AN ACCURACY OF ±9-49 FEET. SAMPLE LOCATIONS ARE DEPICTED BASED ON FIELD OBSERVATIONS.

0 60' 120'
GRAPHIC SCALE

GENERAL ELECTRIC COMPANY
LOEFFEL SITE ENVIRONS
2004 SUPPLEMENTAL SURFACE WATER AND SUSPENDED SEDIMENT MONITORING

TRIBUTARY T11A DOWNSTREAM SAMPLING LOCATION - 2004

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FIGURE
2

X: 10073X00, X01.DWG
L: ON=*, OFF=REF*
P: PAGESET/SYR-DL
03/29/05 SYR-54-NES KWD KLS
C/10073900/10073G01.DWG

Attachment A

BBL®
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November 4, 2004

VIA E-MAIL AND REGULAR MAIL

Michael S. Elder, Esq.
General Electric Co.
320 Great Oaks Blvd., Suite 323
Albany, New York 12203

Re: State of New York et al. v. General Electric Company
(Loeffel site environs long-term monitoring plan)

Dear Mike:

This letter follows up on my October 12 letter to you, and responds to Mark Brown's October 19 letter (with attachments) to Jim Ludlam. As explained below, the State believes that (1) virtually all biota samples collected by DEC in 2004 should be analyzed, and (2) in light of significant concentrations of PCBs found in T11A surface water and suspended sediment during August 2003 and August 2004 sampling events, additional sampling must occur this Fall. If GE declines to fully fund

(1) and/or implement (2), the State will do so, and seek to recover its cost in the litigation.

Fish Monitoring - T11A

GE's October 19 letter opines that 159 of the 217 biota samples collected by DEC earlier this year are "considered to be useful." GE views the remaining 58 samples as having 'little value for meeting the objectives of the [long term monitoring plan] because they are from species that have not been previously sampled and/or samples that were collected from areas that are not part of the LTMP scope (e.g., T11A)." We strongly disagree with this latter assertion. The number of samples collected and the species collected are appropriate and all should be analyzed.

In tributary T11A GE proposes that no biota be collected in 2005. This position is untenable. The OU2 ROD specifically states (pp. 22, 40-41) that the Long Term Monitoring Plan (LTMP) will require annual biota sampling in T11A. Ideally, DEC prefers that fish samples comprise the biota to be sampled to ascertain compliance with the ROD's remedial goals. If, however, fish are not available in sufficient numbers to allow for adequate trend analyses, immature amphibians and invertebrates that will likely exhibit contaminant levels representative of local conditions can be collected instead. Published scientific studies support this approach and have demonstrated that amphibians, invertebrates and fish all reflect conditions of contaminant uptake at comparable levels.

DEC's sampling plan for the Nassau Lake Environs, sent to GE in DEC's March 30, 2004 letter from Jim Ludlam to Ed LaPoint, requires that approximately 20 biota samples be collected per location. Indeed, GE has proposed to analyze this number of samples for the other (e.g., non T11A) sample locations as outlined in your October 19 letter. The post-remediation T11A sample collection conducted in 2004 did not find sufficient fish present in the upper segment of T11A and in the wetland area above Mead Road Pond. Therefore, per the sampling design, immature amphibian and

invertebrate samples were collected to satisfy the sample size requirements. This sample data will compliment historical data previously collected for these areas. Consequently, all the biota samples need to be analyzed.

Fish Monitoring - Other Locations

Location T14 - GE declines (see Table 15 of BBL's report, "Summary of NYSDEC Biota Samples Currently Stored at Hale Creek Field Station") to analyze three 'extra' brook trout from T14 (China Hill Road - reference area) that were smaller in length than the others. We believe these fish should be analyzed as whole fish to boost the sample size for this location to compare against other drainage areas. Since there is no assurance that the same species will be available in subsequent sampling events, and the numbers of samples may be restricted in the Area 28 evaluations, it is important to have all available samples analyzed. This would result in 21 analyses rather than the 15 analyses offered by GE. The State agrees that the extra bullhead from above Camp Schodack can be discarded.

Nassau Lake - GE declines to analyze the six American eel collected in Nassau Lake. The 2004 sampling plan targeted 75 samples for analyses, but only 51 samples were obtained. The population of white perch, a once numerous fish species used by GE and DEC for contaminant trend analyses, has decreased significantly and were not available for collection in 2004. American eel have been important historically for trend analyses and given the uncertainties of future fish populations in Nassau Lake, all eels collected need to be analyzed.

Valatie Kill below Nassau Lake - Since the Valatie Kill below Nassau Lake is about to be perturbed in the form of dam building, as much baseline species diversity as possible is desirable, particularly since future conditions may preclude the return of

some species. Therefore, the three yellow bullhead as standard fillets and the three cutlips minnow samples may have value for future trend analysis. However, considering that a total of 27 samples were collected at this location the State agrees to eliminate the three bullhead and cutlips minnow samples at this time. The State will retain these samples in the event that future chemical analyses are desired.

In sum, of the 217 samples collected in 2004 from the Valatie Kill drainage over 10 locations (reduced from the original 17 sites proposed by DEC) , 210 samples should be analyzed. If GE only wishes to pay for 159 samples, DEC will pay for analysis of the balance, and seek to recover its cost from GE. Please advise us as soon as possible as to GE's position.

Surface water/suspended sediment sampling

The State believes that additional data must be collected *this Fall* to better understand current PCB transport dynamics in tributary T11A. Data contained in the October 19, 2004 GE submittal indicate that significant concentrations of PCBs were present in T11A surface water and suspended sediment during August 2003 and August 2004 sampling events.[1] The lack of complimentary historical data hinders the State's interpretation of this data. Therefore, the State requests that GE perform additional sampling in T11A, including two baseflow sampling events and one high-flow sampling event, if possible, *before January 1, 2005*. The protocols and analyses proposed by GE in the July 2002 Long Term Monitoring Plan submittal and subsequently used for the August 2004 sampling events are acceptable and should be used.

---

[1]August 2004 values ranged from 80 to 290 ppt. Suspended sediment collected also were high, ranging from 6 to 77 ppm PCB. Interestingly, suspended sediment PCB concentrations were inversely correlated with TSS.

The results of the sampling should be submitted to the State by February 15, 2005. The State believes that the data from the additional T11A water and suspended sediment sampling events and the results from the 2004 biota collection will give the State and GE a much better understanding of PCB dynamics in the T11A system.

If GE declines to conduct the additional sampling described above this Fall, the State will
conduct the sampling; DEC will give GE advance notice. The bottom line is that it is imperative that we obtain these samples before moving into next year's LTMP activities.

Sincerely,

DAVID A. MUNRO
Assistant Attorney General
(518) 474-8481
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cc: James Ludlam
Ron Sloan
Alan Belensz

NassauLake\leelder1104.wpd

Attachment B

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Attachment B

Surface Water and Suspended Sediment Sampling
November and December 2004
Tributary T11A
Loeffel Site Environs

Assessment of Flow Conditions

To ensure that sampling occurred during the appropriate stage conditions, flow data were collected from the Valatie Kill at Area 28 and the headwaters of T11A. Base-flow conditions were assessed by observing flow rates at U.S. Geological Survey (USGS) gaging station 01360640 on the Valatie Kill and the stream stage on the gage at the headwaters of T11A (installed June 30, 2004). Conditions between November 11 and December 31 allowed for only one base-flow sampling event.

The flow observed immediately prior to November 16, 2004 at the USGS gage was 5.7 cubic feet per second (cfs), which was below November's mean flow (13 cfs) for the years of 1991 through 2003. Using the USGS stream gage-to-T11A-flow ratio (T11A flow = USGS stream gage flow/9.34)[1], the flow at T11A on November 16, 2004 was estimated to be 0.6 cfs.

The high-flow sampling event was conducted during a period of significant rainfall. The rising, peak, and falling limbs of the storm hydrograph were all observed on December 1, 2004 using a uncalibrated staff gage installed at the mouth of T11A[2], and the stream gage at the headwaters of T11A. According to these gages, the peak flow during this high-flow event was approximately 75% greater than initial conditions that day.

Sampling Methods

The surface water/suspended (SW/SS) sampling methods used were consistent with those employed during previous 2004 sampling efforts:

- SW/SS grab samples were collected at midstream/mid-depth using pre-cleaned laboratory containers;
- A peristaltic pump with Teflon tubing was used to pump water to the containers;
- For each SS sample, five 1-gallon, pre-cleaned amber jugs were filled and subsequently filtered (approximately 19 liters total);
- To obtain SS samples, the water was pumped with pressurized nitrogen through a stainless steel 142-millimeter (mm) pressure filter-holder containing a pre-weighed 0.7-micron pore glass fiber filter (additional filters were used as needed when flow became restricted as filtering progressed);
- During sampling activities, water quality parameters were periodically measured (i.e., pH, turbidity, temperature, dissolved oxygen [DO], conductivity, oxidation-reduction potential, and total dissolved solids); (Table 1); and

[1] The USGS stream gage-to-T11A-flow ratio was first presented in Attachment G of BBL's October 19, 2004 letter to the New York State Department of Environmental Conservation (NYSDEC).
[2] General Electric (GE) is in the process of obtaining USGS data-logger stream-flow information taken from the last quarter of 2004. Once this data is available, specific and detailed flow information from the sampling activities will be provided.

- The filter apparatus was decontaminated and new filters were used for each sample.

Sample Analyses

SW Samples

The base-flow SW sample from the November 16, 2004 sampling event was submitted to Adirondack Environmental Services, Inc. (AES) of Albany, New York for polychlorinated biphenyls (PCB), total organic carbon (TOC), and total suspended solids (TSS) analyses; and to Northeast Analytical, Inc. (NEA) of Schenectady, New York for chlorophyll-*a* analysis.

High-flow SW samples from December 1, 2004 were submitted to SGS Environmental Services (SGS) of Charleston, West Virginia for PCB, TOC, TSS, and chlorophyll-*a* analyses. Data are presented in the following section.

SS Samples

The base-flow SS samples were submitted to AES for PCB analysis and the high-flow SS samples were submitted to SGS for PCB analysis. The data are presented in the following section.

The 2004 analytical data were validated by BBL, and the data validation reports are presented in Attachment C. The chain-of-custody records for each sampling event are presented in Attachment D.

Analytical Results

Base-Flow Event, November 16, 2004

During this base-flow event, the SW sample had a reported PCB concentration of 0.021 micrograms per liter (µg/L; Table 2).

Five SS samples were collected during the base-flow event. Only one SS sample had a measurable mass of 0.2 milligrams (mg). The masses of the four remaining SS samples were negative (-1.5, -4.3, -0.4, -0.8 and -5.6 mg, respectively). The sample results are deemed invalid due to negative or insufficient sample mass. The analytical results are provided in Attachment C. Water quality parameters measured during SS/SW sampling are presented in Table 1.

High-Flow Event December 1, 2004

Four SW and four SS samples (not including quality assurance/quality control [QA/QC] samples) were collected during the high-flow event. The estimated SW sample concentrations were 0.029 µg/L (initial conditions[3]), 0.023 µg/L (rising limb), 0.117 µg/L (peak), and 0.083 µg/L (falling limb; Table 2).

[3] The initial sample was collected just prior to the beginning of the rainfall event.

The estimated concentrations for the SS sampling results were 11.0 mg/kg (initial conditions), 4.9 mg/kg (rising limb), 4.1 mg/kg (peak), and 9.8 mg/kg (falling limb; Table 2).[4] SS sample masses were 0.04, 0.14, 0.41, and 0.6 grams, respectively. Water quality parameters measured during sampling are presented in Table 1.

[4] The sample collected during peak-flow required multiple filters (Sample ID: T11A-D-04) due to the filter becoming clogged. For that sample, a mass-weighting calculation yielded a result of 4.1 (estimated) mg/kg (Table 2).

TABLE 1
2004 Supplemental Surface Water and Suspended Sediment Monitoring

Loeffel Site Environs
Nassau, NY

Tributary T11A, Downstream

Surface Water Sampling and Water Quality Parameters

Date	Time	Sample Location	Sample ID	Surface Water Total PCB (µg/L)	Flow (cfs)	Water Quality Measurements							Comments
						pH	Turbidity (NTU)	Temp (°C)	DO (mg/L)	Specific Conductivity (mS/cm)	ORP (mV)	TDS (g/L)	
11/16/2004	10:12 AM	DS	T11A-DS-01	0.021 [0.020]	*	7.1	2.6	3.9	12	0.11	-34	0.07	Base-Flow
11/16/2004	10:15 AM					7.0	3.5	3.9	12	0.11	-42	0.07	
12/1/2004	3:20 AM	DS	T11A-D-02	0.029 J	*	6.7	28	5.8	11	0.11	-160	0.07	Initial
12/1/2004	3:35 AM					7.1	8.9	5.7	11	0.10	-160	0.07	
12/1/2004	6:20 AM	DS	T11A-D-03	0.023 J	*	7.1	9.0	5.9	12	0.10	-99	0.07	Rising limb
12/1/2004	6:35 AM					7.3	7.9	5.9	12	0.10	-121	0.07	
12/1/2004	12:05 PM	DS	T11A-D-04	0.117 J [0.127]	*	7.4	13	7.0	11	0.09	-113	0.06	Peak Flow
12/1/2004	12.35 PM					7.5	13	7.0	11	0.09	-149	0.06	
12/1/2004	5:20 PM	DS	T11A-D-05	0.083 J	*	7.3	7.6	6.7	11	0.09	-83	0.06	Falling Limb
12/1/2004	5:40 PM					7.5	8.6	6.6	11	0.09	-80	0.06	

Notes:

1. Sample Location: DS = Downstream in T11A at approximately three feet upstream of confluence with Valatie Kill. See Figure 2 for sample location.
2. PCB = polychlorinated biphenyls; Temp = temperature; DO = dissolved oxygen; ORP = oxidation-reduction potential; TDS = total dissolved solids; µg/L = micrograms per liter; mg/L = milligram per Liter; NTU = nephelometric turbidity unit; °C = degrees Celsius; mS/cm = milliSiemens per centimeter; mV = millivolts; g/L = grams per liter; cfs = cubic feet per second.
3. All samples were collected by Blasland, Bouck & Lee, Inc. in Syracuse, NY. Chlorophyll-a samples from 12/04 were analyzed by SGS Environmental Services in Charleston West Virginia. PCB samples from 12/04 were analyzed by SGS Environmental Services in Charleston, West Virginia. Chlorophyll-a samples from 11/04 were analyzed by Northeast Analytical, Inc. in Schenectady, New York. All other samples were analyzed by Adirondack Environmental Services, Inc. in Albany, New York. Analytical data from 2004 were validated by BBL. (Attachment C).
4. J = The compound was positively identified; however, the associated numerical value is an estimated concentration only.
5. Values have been rounded to two significant figures, except in the case of PCB water concentrations, which have been rounded to 3 significant figures.
6. Samples collected in November and December 2004 were obtained pursuant to an agreement between GE and NYSDEC dated November 4, 2004.

* Flow data at sampling time pending; awaiting USGS data from Valatie Kill stream gage.

TABLE 2
2004 Supplemental Surface Water and Suspended Sediment Monitoring

Loeffel Site Environs
Nassau, NY

Tributary T11A, Downstream

Surface Water and Suspended Sediment Sampling

Date	Time	Sample Location	Sample ID	Surface Water Total PCB (ug/L)	Suspended Sediment Total PCB (ug/kg)	TOC (mg/L)	TSS (mg/L)	Chlorophyll-a (ug/L)	Comments
11/16/2004	10:12 AM	DS	T11A-DS-01	0.021 [0.020]	--	1.3 [1.3]	< 1.0 [<1.0]	0.002	Base-Flow
11/16/2004									
12/1/2004	3:20 AM	DS	T11A-D-02	0.029 J	--	2.1	5.0	< 0.006	Initial
12/1/2004									
12/1/2004			T11A-D-02-A	--	11 J	--	--	--	
12/1/2004	6:35 AM	DS	T11A-D-03	0.023 J	--	1.6 J	5.0	< 0.006	Rising limb
12/1/2004									
12/1/2004			T11A-D-03-A	--	4.9 J	--	--	--	
12/1/2004	12:05 PM	DS	T11A-D-04	0.117 J [0.127 J]	--	5.0 [4.9]	8.0 [10]	0.007 [<0.006]	Peak Flow
12/1/2004									
12/1/2004			T11A-D-04-A, B	--	4.7 J [7.2 J]	--	--	--	
12/1/2004	5:20 PM	DS	T11A-D-05	0.083 J	--	3.4	<5.0	0.007	Falling Limb
12/1/2004									
12/1/2004			T11A-D-05-A	--	9.8 J	--	--	--	

Notes:

1. Sample Location: DS = Downstream in T11A at approximately three feet upstream of confluence with Valatie Kill. See Figure 2 for sample location.
2. All samples were collected by Blasland, Bouck & Lee, Inc. in Syracuse, NY. Chlorophyll-a samples from 12/04 were analyzed by SGS Environmental Services in Charleston, West Virginia. PCB, TOC and TSS samples from 12/04 were also analyzed by SGS Environmental Services in Charleston West Virginia. Chlorophyll-a samples from 11/04 were analyzed by Northeast Analytical, Inc. in Schenectady, New York. All other samples were analyzed by Adirondack Environmental Services, Inc. in Albany, New York. Analytical data from 2004 were validated by BBL. (Attachment C).
3. 0.02 [0.02] = The associated value in parenthesis is a blind duplicate.
4. T11A-D-04 A, B is a mass-weighted average concentration. The average PCB concentration based on PCB concentrations from two filters [[([PCB]1 * Mass1) + ([PCB]2 * Mass2)] / Total Mass]
5. J = The compound was positively identified; however, the associated numerical value is an estimated concentration only.
6. Values have been rounded to two significant figures, except in the case of PCB water concentrations, which have been rounded to three significant figures.
7. Samples collected in November and December 2004 were obtained pursuant to an agreement between GE and NYSDEC dated November 4, 2004.
8. November 16, 2004 SS samples have been rejected as invalid. The analytical results are provided in Attachment C.

Attachment C

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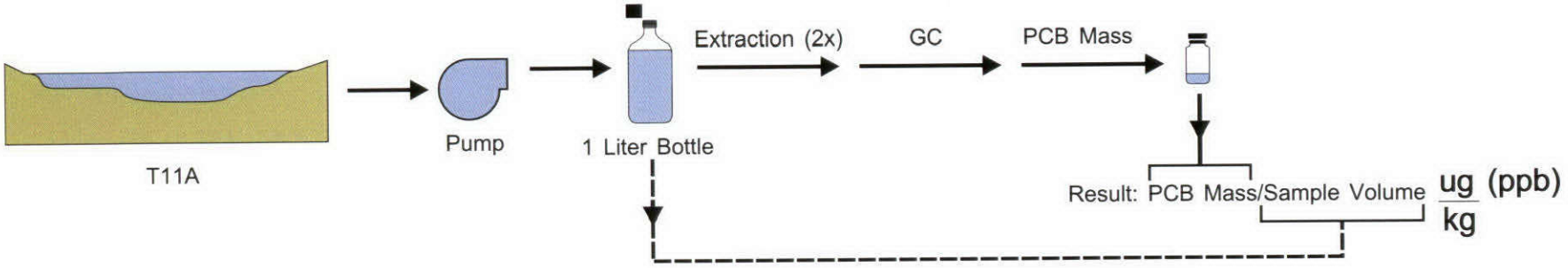
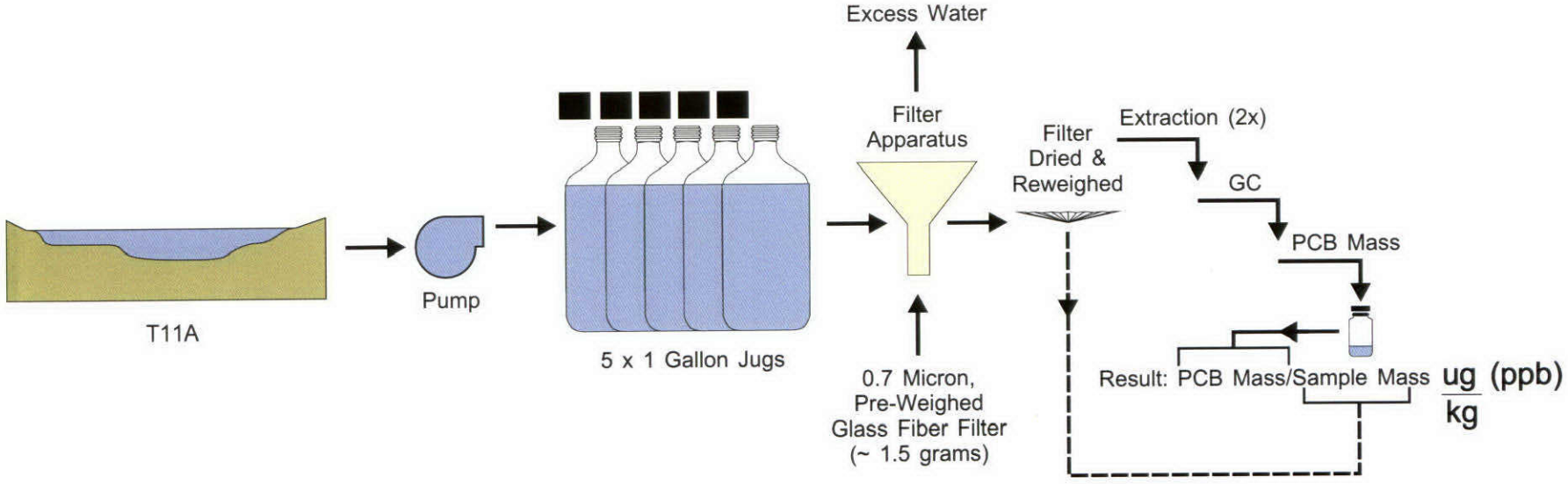
engineers, scientists, economists

Sampling And Analysis Schematic
T11A Surface Water/Suspended Sediment Sampling

DRAFT



SURFACE WATER



SUSPENDED SEDIMENT

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BLASLAND, BOUCK & LEE, INC.
engineers, scientists, economists

DATA VALIDATION REPORT

GENERAL ELECTRIC
LOEFFEL

SDG# T11A-DS-01

WATER SAMPLING

PCB ANALYSES

Analyses performed by:

Adirondack Environmental Services, Inc.
Albany, New York

Review performed by:

BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

Blasland, Bouck & Lee, Inc.
Syracuse, New York

Summary

The following is an assessment of the SDG# T11A-DS-01 for water sampling at the General Electric Loeffel site. Included with this assessment are the data review check sheets used in the review of the package and corrected sample results. Analyses were performed on the following samples:

Sample ID	Sample Delivery Group	Lab ID	Matrix	Sample Date	Analysis			
					VOC	SVOC	PCB	MISC
T11A-DS-01	T11A-DS-01	041116040-001A	Water	11/16/04			x	x[1]
T11A-DS-02	T11A-DS-01	041116040-002A	Filter	11/16/04			x	x[2]
T11A-DS-01/1767	T11A-DS-01	041116040-003A	Filter	11/16/04			x	
T11A-DS-02/1794	T11A-DS-01	041116040-004A	Filter	11/16/04			x	
T11A-DS-03/1782	T11A-DS-01	041116040-005A	Filter	11/16/04			x	
T11A-DS-04/1783	T11A-DS-01	041116040-006A	Filter	11/16/04			x	
T11A-DS-05/1781	T11A-DS-01	041116040-007A	Filter	11/16/04			x	
RB-1/1836	T11A-DS-01	041116040-008A	Filter	11/16/04			x	

1 Miscellaneous parameters include Total Organic Carbon and Total Suspended Solids and Chlorophyll (a)
2 Miscellaneous parameters include Total Organic Carbon and Total Suspended Solids.

Note: Chlorophyll (a) analysis was subcontracted Aquatec Biological Sciences Laboratories of Williston, VT. Since no raw data was included with the sample for Chlorophyll (a) analysis, an accurate assessment of the sample results could not be made.

PCB ANALYSES

Introduction

Analyses were performed according to the USEPA Method 8082.

The data review process is intended to evaluate the data on a technical basis. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA's National Functional Guidelines:

U The compound was analyzed for but not detected. The associated value is the compound reporting limit.

J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

P The difference in the quantitated results for the two columns was greater than 25%. The reported value may be biased.

E The compound was quantitated above the calibration range.

D Concentration is based on a diluted sample analysis.

UJ The compound was not detected above the reported sample reporting limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. Due to significant QC problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. Second, no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Time

The method-specified holding times for PCB analyses of samples are 7 days from sample collection to extraction and 40 days to analysis.

All samples were extracted and analyzed within the specified holding times.

2. Blank Contamination

Quality assurance blanks, i.e., method or rinse blanks, are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

No target compounds were detected in the method or rinse blanks.

3. System Performance

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instruments daily performance is satisfactory.

4.1 Initial Calibration

A maximum RSD of 20% is allowed or, alternately, calibration curves may be constructed.

Multi-point calibrations were performed for Aroclor 1016 and Aroclor 1260 only. One-point calibrations were provided for the remaining Aroclors.

All initial calibrations were acceptable.

4.2 Continuing Calibration

The method allows a maximum %D of 15. The project-specified maximum %D is 25.

All continuing calibration standards were acceptable.

5. Surrogates / System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique.

All surrogate recoveries were within control limits.

6. Compound Identification

The retention times of all quantitated peaks must fall within the calculated retention time windows for both the primary and secondary columns.

All quantitated peaks fell within the appropriate retention time windows.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The MS/MSD data are used to assess the precision and accuracy of the analytical method.

No MS/MSD analyses were included with the samples in this data set.

8. Blank Spike

All blank spike recoveries were within control limits.

9. Field Duplicates

No field duplicates were included with the samples in this data set.

10. General Comments

All filtered PCB sample results, with the exception of sample T11A-DS-04/1783, are reported on a dry weight basis, as ug, due to a negative weight gain. Sample T11A-DS-04/1783 is reported as ug/kg.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines listed in the analytical method.

Corrected Sample Analysis Data Sheets

SUPPLEMENTAL PARAMETERS

Introduction

Analyses were performed according to the following methods:

Total Suspended Solids (TSS)	EPA 160.2
Total Organic Carbon (TOC)	SM 5310C

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with National Functional Guidelines:

U The analyte was analyzed for but not detected. The associated value is the analyte reporting limit.

B The reported value was obtained from a reading less than the reporting limit but greater than or equal to the instrument detection limit (IDL).

J The associated numerical value is an estimated concentration only.

UJ The analyte was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant QC problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Time

The holding times for inorganic analyses are as follows. All holding times are measured from date of collection.

TSS	7 days
TOC	14 days

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance blanks, i.e., method, field, or rinse blanks, are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks (including initial and continuing calibration blanks and preparation blanks) measure laboratory contamination. Field and rinse blanks measure contamination of samples during field operations.

All blanks were found to be acceptable, with no analytes detected above the reporting limits.

3. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument continuing performance is satisfactory.

All required initial and continuing calibration verification standard recoveries were within acceptable limits.

4. Matrix Spike/Laboratory Duplicate

Matrix spike and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 Matrix spike

No matrix spike analyses were included with the samples in this data set.

4.2 Laboratory Duplicate

No laboratory duplicate analyses were included with the samples in this data set.

5. Field Duplicate

No field duplicate was included with the samples in this data set.

6. Laboratory Control Sample (LCS)

All LCS recoveries were within control limits.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Corrected Sample Analysis Data Sheets

1D

PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

T11A-DS-01

Lab Name: AES,INC. Contract:

Lab Code: AES Case No.: BBL0404 SAS No.: SDG No.: T11A-DS-01

Matrix: (soil/water) WATER Lab Sample ID: T11A-DS-01

Sample wt/vol: 960. (g/mL) ML Lab File ID: 041116040-001A

Level: (low/med) LOW Date Received: 11/16/04

% Moisture: not dec. dec._____ Date Extracted: 11/17/04

Extraction: (SepF/Cont/Sonc) SepF Date Analyzed: 11/19/04

GPC Cleanup: (Y/N) N pH: 7 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
12674-11-2	Arochlor-1016	.014	U
11104-28-2	Arochlor-1221	.014	U
11141-16-5	Arochlor-1232	.014	U
53469-21-9	Arochlor-1242	.014	U
12672-29-6	Arochlor-1248	.014	U
11097-69-1	Arochlor-1254	.014	U
11096-82-5	Arochlor-1260	.021	

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PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

T11A-DS-02

Lab Name: AES,INC. Contract:

Lab Code: AES Case No.: BBL0404 SAS No.: SDG No.: T11A-DS-01

Matrix: (soil/water) ~~FILTER~~ Lab Sample ID: T11A-DS-02

Sample wt/vol: 1000. (g/mL) ML Lab File ID: 041116040-002A

Level: (low/med) LOW Date Received: 11/16/04

% Moisture: not dec. dec._____ Date Extracted: 11/17/04

Extraction: (SepF/Cont/Sonc) SepF Date Analyzed: 11/19/04

GPC Cleanup: (Y/N) N pH: 7 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
12674-11-2	Arochlor-1016	.013	U
11104-28-2	Arochlor-1221	.013	U
11141-16-5	Arochlor-1232	.013	U
53469-21-9	Arochlor-1242	.013	U
12672-29-6	Arochlor-1248	.013	U
11097-69-1	Arochlor-1254	.013	U
11096-82-5	Arochlor-1260	.020	

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PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

T11A-DS-01/1767

Lab Name: AES,INC. Contract:

Lab Code: AES Case No.: BBL0404 SAS No.: SDG No.: T11A-DS-01

Matrix: (soil/water) FILTER Lab Sample ID: T11A-DS-01/1767

Sample wt/vol: 1 FILTER (g/mL) Lab File ID: 041116040-003A

Level: (low/med) LOW Date Received: 11/16/04

% Moisture: not dec. dec._____ Date Extracted: 11/18/04

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/19/04

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug	Q
12674-11-2	Arochlor-1016	.100	U
11104-28-2	Arochlor-1221	.100	U
11141-16-5	Arochlor-1232	.100	U
53469-21-9	Arochlor-1242	.100	U
12672-29-6	Arochlor-1248	.100	U
11097-69-1	Arochlor-1254	.100	U
11096-82-5	Arochlor-1260	.193	

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PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

T11A-DS-02/1794

Lab Name: AES,INC. Contract:

Lab Code: AES Case No.: BBL0404 SAS No.: SDG No.: T11A-DS-01

Matrix: (soil/water) FILTER Lab Sample ID: T11A-DS-02/1794

Sample wt/vol: 1 FILTER (g/mL) Lab File ID: 041116040-004A

Level: (low/med) LOW Date Received: 11/16/04

% Moisture: not dec. dec._____ Date Extracted: 11/18/04

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/19/04

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug	Q
12674-11-2	Arochlor-1016	.100	U
11104-28-2	Arochlor-1221	.100	U
11141-16-5	Arochlor-1232	.100	U
53469-21-9	Arochlor-1242	.100	U
12672-29-6	Arochlor-1248	.100	U
11097-69-1	Arochlor-1254	.100	U
11096-82-5	Arochlor-1260	.149	

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PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

T11A-DS-03/1782

Lab Name: AES,INC. Contract:

Lab Code: AES Case No.: BBL0404 SAS No.: SDG No.: T11A-DS-01

Matrix: (soil/water) FILTER Lab Sample ID: T11A-DS-03/1782

Sample wt/vol: 1 FILTER (g/mL) Lab File ID: 041116040-005A

Level: (low/med) LOW Date Received: 11/16/04

% Moisture: not dec. dec._____ Date Extracted: 11/18/04

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/19/04

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug	Q
12674-11-2	Arochlor-1016	.100	U
11104-28-2	Arochlor-1221	.100	U
11141-16-5	Arochlor-1232	.100	U
53469-21-9	Arochlor-1242	.100	U
12672-29-6	Arochlor-1248	.100	U
11097-69-1	Arochlor-1254	.100	U
11096-82-5	Arochlor-1260	.171	

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PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

T11A-DS-04/1783

Lab Name: AES,INC. Contract:

Lab Code: AES Case No.: BBL0404 SAS No.: SDG No.: T11A-DS-01

Matrix: (soil/water) FILTER Lab Sample ID: T11A-DS-04/1783

Sample wt/vol: 0.0002 g (g/mL) Lab File ID: 041116040-006A

Level: (low/med) LOW Date Received: 11/16/04

% Moisture: not dec. dec._____ Date Extracted: 11/18/04

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/19/04

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Arochlor-1016	500000.	U
11104-28-2	Arochlor-1221	500000.	U
11141-16-5	Arochlor-1232	500000.	U
53469-21-9	Arochlor-1242	500000.	U
12672-29-6	Arochlor-1248	500000.	U
11097-69-1	Arochlor-1254	500000.	U
11096-82-5	Arochlor-1260	840000.	

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PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

T11A-DS-05/1781

Lab Name: AES,INC. Contract:

Lab Code: AES Case No.: BBL0404 SAS No.: SDG No.: T11A-DS-01

Matrix: (soil/water) FILTER Lab Sample ID: T11A-DS-05/1781

Sample wt/vol: 1 FILTER (g/mL) Lab File ID: 041116040-007A

Level: (low/med) LOW Date Received: 11/16/04

% Moisture: not dec. dec._____ Date Extracted: 11/18/04

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/19/04

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug	Q
12674-11-2	Arochlor-1016	.100	U
11104-28-2	Arochlor-1221	.100	U
11141-16-5	Arochlor-1232	.100	U
53469-21-9	Arochlor-1242	.100	U
12672-29-6	Arochlor-1248	.100	U
11097-69-1	Arochlor-1254	.100	U
11096-82-5	Arochlor-1260	.140	

1D

PCB ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RB-1/1836

Lab Name: AES,INC. Contract:

Lab Code: AES Case No.: BBL0404 SAS No.: SDG No.: T11A-DS-01

Matrix: (soil/water) FILTER Lab Sample ID: RB-1/1836

Sample wt/vol: 1 FILTER (g/mL) Lab File ID: 041116040-008A

Level: (low/med) LOW Date Received: 11/16/04

% Moisture: not dec. dec._____ Date Extracted: 11/18/04

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/19/04

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug	Q
12674-11-2	Arochlor-1016	.100	U
11104-28-2	Arochlor-1221	.100	U
11141-16-5	Arochlor-1232	.100	U
53469-21-9	Arochlor-1242	.100	U
12672-29-6	Arochlor-1248	.100	U
11097-69-1	Arochlor-1254	.100	U
11096-82-5	Arochlor-1260	.100	U

U.S. EPA - CLP

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CONVENTIONALS ANALYSIS DATA SHEET

T11A-DS-01

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: BBL 0404 SAS No.: SDG No.: T11A-DS-01

Matrix (soil/water): Water Lab Sample ID: 041116040-001

Level (Low/Med): Low Date Received: 11/16/04

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 300.0
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)	1300			SM 5310C
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols				EPA 420.1
Chloride				EPA 300.0
Fluoride				EPA 300.0
pH				EPA 150.1
Specific Conductance				EPA 120.1
Cyanide				EPA 335.3
Sulfide				EPA 376.2
Sulfite				EPA 377.1
Total Suspended Solids	1000	U		EPA 160.2
Total Phosphate as P				EPA 365.2

Comments _____

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FORM I - CONV

U.S. EPA - CLP

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CONVENTIONALS ANALYSIS DATA SHEET

T11A-DS-02

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: BBL 0404 SAS No.: SDG No.: T11A-DS-01

Matrix (soil/water): Water Lab Sample ID: 041116040-002

Level (Low/Med): Low Date Received: 11/16/04

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 300.0
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)	1300			SM 5310C
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols				EPA 420.1
Chloride				EPA 300.0
Fluoride				EPA 300.0
pH				EPA 150.1
Specific Conductance				EPA 120.1
Cyanide				EPA 335.3
Sulfide				EPA 376.2
Sulfite				EPA 377.1
Total Suspended Solids	1000	U		EPA 160.2
Total Phosphate as P				EPA 365.2

Comments _____

_____

_____

FORM I - CONV

Aquatec Biological Sciences

Ecology | Environmental Toxicology | Natural Resource Assessments | Microbiology

Analytical Report

Robert Stoll
Northeast Analytical
2190 Technology Drive
Schenectady, NY 12308

Date : 12/7/04
BTR No. : 08416
Project No. : 04012
No. of Samples : 1
Date Received : 11/19/04

Reference: 10073.900 Loeffel

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4/79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater. All results are in mg/l unless otherwise noted.

Laboratory Number/ Method Number:	Sample Information/ Method Description:	Result
029009	T11A-DS-01 : 11/16/04 @ 10:12:00 AM	
	10200H3-C Chlorophyll a, corrected, ug/L; Analyzed: 11/19/04 @ 10:05:00 AM	0.2
	10200H3-U Chlorophyll a, uncorrected, ug/L; Analyzed: 11/19/04 @ 10:05:00 AM	0.3
	ship cooler Return client's cooler, ; Analyzed: @	

Submitted By: Philip C Analey

273 Commerce Street, Williston, VT 05495 Tel: 802.860.1638 Fax: 802.658.3189

DATA VALIDATION REPORT

GENERAL ELECTRIC
LOEFFEL

SDG# TA4-L0-P081

PCB, TOC
AND TSS ANALYSES

Analyses performed by:

SGS Environmental Services, Inc.
Charleston, West Virginia

Review performed by:

BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

Blasland, Bouck & Lee, Inc.
Syracuse, New York

Summary

The following is an assessment of SDG# TA4-L0-P081 for sampling at the General Electric Loeffel site in Nassau, NY. Included with this assessment are the data review check sheets used in the review of the package and corrected sample results. Analyses were performed on the following samples:

Sample ID	Sample Delivery Group	Lab ID	Matrix	Sample Date	Analysis			
					VOC	SVOC	PCB	MISC
T11A-D-05	TA4-L0-P081	TA4L0P081001	Water	12/01/04			x	x[1]
T11A-D-05-A	TA4-L0-P081	TA4L0P081002	Sediment	12/01/04			x	
DUP-01A	TA4-L0-P081	TA4L0P081003	Sediment	12/01/04			x	
DUP-01B	TA4-L0-P081	TA4L0P081004	Sediment	12/01/04			x	
T11A-D-04-A	TA4-L0-P081	TA4L0P081005	Sediment	12/01/04			x	
T11A-D-04-B	TA4-L0-P081	TA4L0P081006	Sediment	12/01/04			x	
RB-01	TA4-L0-P081	TA4L0P081007	Water	12/01/04			x	

1 Miscellaneous parameters include Total Organic Carbon, Total Suspended Solids and Chlorophyll (a)

Note: Chlorophyll (a) analyses were subcontracted to Martel Laboratories, Inc of Baltimore, Maryland. Since no raw data was included with the sample for Chlorophyll (a) analysis, an accurate assessment of the sample results could not be made.

PCB ANALYSES

Introduction

Analyses were performed according to the USEPA Method 8082.

The data review process is intended to evaluate the data on a technical basis. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA's National Functional Guidelines:

- U The compound was analyzed for but not detected. The associated value is the compound reporting limit.
- J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
- B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
- JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
- P The difference in the quantitated results for the two columns was greater than 25%. The reported value may be biased.
- E The compound was quantitated above the calibration range.
- D Concentration is based on a diluted sample analysis.
- UJ The compound was not detected above the reported sample reporting limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. Due to significant QC problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. Second, no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Time

The method-specified holding times for PCB analyses of samples are 7 days from sample collection to extraction and 40 days to analysis.

All samples were extracted and analyzed within the specified holding times.

2. Blank Contamination

Quality assurance blanks, i.e., method or rinse blanks, are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

No target compounds were detected in the method or rinse blanks.

3. System Performance

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instruments daily performance is satisfactory.

4.1 Initial Calibration

Method 8082 allows a maximum RSD of 20% or, alternately, calibration curves may be constructed.

Multi-point calibrations were performed for Aroclors 1016, 1254 and 1260 only. One-point calibrations were provided for the remaining Aroclors.

All initial calibrations were acceptable.

4.2 Continuing Calibration

The method allows a maximum %D of 15. The project-specified maximum %D is 25.

All continuing calibration standards were acceptable.

5. Surrogates / System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique.

All surrogate recoveries were within control limits.

6. Compound Identification

The retention times of all quantitated peaks must fall within the calculated retention time windows for both the primary and secondary columns.

All quantitated peaks fell within the appropriate retention time windows.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Matrix spike and matrix spike duplicate data are used to assess the precision and accuracy of the analytical method.

No MS/MSD analyses were included with the samples in this data set.

8. Blank Spike

All blank spike recoveries were within control limits.

9. Field Duplicates

Results for duplicate samples are summarized as follows:

Sample ID / Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
T11A-D-04A / DUP-01A	Aroclor 1260	2.8J	9.4J	<CRDL
T11A-D-04B / DUP-01B	Aroclor 1260	12J	5.1J	<CRDL

ND not detected.
NA Analyte not detected in sample and/or duplicate. RPD not applicable.

The duplicate results were acceptable.

10. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines listed in the analytical method.

Corrected Sample Analysis Data Sheets

SUPPLEMENTAL PARAMETERS

Introduction

Analyses were performed according to the following methods:

Total Suspended Solids (TSS)	EPA 160.2
Total Organic Carbon (TOC)	EPA 415.1
Chlorophyll-a	10200H

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with National Functional Guidelines:

U The analyte was analyzed for but not detected. The associated value is the analyte reporting limit.

B The reported value was obtained from a reading less than the reporting limit but greater than or equal to the instrument detection limit (IDL).

J The associated numerical value is an estimated concentration only.

UJ The analyte was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant QC problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Time

The holding times for inorganic analyses are as follows. All holding times are measured from date of collection.

TSS	7 days
TOC	14 days
Chlorophyll-a	21 days

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance blanks, i.e., method, field, or rinse blanks, are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks (including initial and continuing calibration blanks and preparation blanks) measure laboratory contamination. Field and rinse blanks measure contamination of samples during field operations.

All blanks were found to be acceptable, with no analytes detected above the reporting limits.

3. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument continuing performance is satisfactory.

No calibrations were included with the samples in this data set.

4. Matrix Spike/Laboratory Duplicate

Matrix spike and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 Matrix spike

No matrix spike was included with the samples in this data set.

4.2 Laboratory Duplicate

No laboratory duplicates were included with the samples in this data set.

5. Field Duplicate

No field duplicates were analyzed for TOC, TSS or Chlorophyll (a).

6. Laboratory Control Sample (LCS)

All LCS recoveries were within control limits.

7. General Comments

No raw data was provided for Chlorophyll-a analyses. Therefore, an accurate assessment of Chlorophyll-a sample analyses could not be determined.

8. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Corrected Sample Analysis Data Sheets

SGS - Environmental Services
1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4L0P081 **Chain of Custody Number: 1421** **Received by SGS 12/03/04 09:15**
ATTN: Chris Torell **BLASLAND, BOUCK & LEE, INC.** **SYRACUSE NY**

Reference: T11A-D05 Description: LOEFFEL NASSAU NY Matrix: WATER Sampled: 12/01/04 17:20
SGS Lab Number: TA4L0P081001 Percent Solids: N/A Sample Type: F

Prep Code: SW3510Cmod Prepared: 12/08/04 12:30 Preparation Batch: 106749 Analyst: bcl Report Basis: N/A
Run#: 001 Method Code: SW8082 Analyzed: 12/09/04 23:52 Analytical Batch: 106853 Dilution Factor: 1.00 Analytical Run Type: 00

Type.....	Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHi	CAS Number
Analyte....	AROCLOR-1016	ND	0.065	U	ug/L	0.065						12674-11-2
Analyte....	AROCLOR-1221	ND	0.065	U	ug/L	0.065						11104-28-2
Analyte....	AROCLOR-1232	ND	0.065	U	ug/L	0.065						11141-16-5
Analyte....	AROCLOR-1242	ND	0.065	U	ug/L	0.065						53469-21-9
Analyte....	AROCLOR-1248	ND	0.065	U	ug/L	0.065						12672-29-6
Analyte....	AROCLOR-1254	<Hit>	0.036	J	ug/L	0.065						11097-69-1
Analyte....	AROCLOR-1260	<Hit>	0.047	J	ug/L	0.065						11096-82-5
Surrogate..	DECACHLOROBIPHENYL	qc	0.036		ug/L		73	0.05	36 to 144			2051-24-3
Surrogate..	TETRACHLORO-M-XYLENE	qc	0.027		ug/L		53	0.05	30 to 132			877-09-8

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SGS - Environmental Services
1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4L0P081 **Chain of Custody Number: 1421** **Received by SGS 12/03/04 09:15**
ATTN: Chris Torell **BLASLAND, BOUCK & LEE, INC.** **SYRACUSE NY**

Reference: T11A-D05-A Description: LOEFFEL NASSAU NY Matrix: SED Sampled: 12/01/04 17:20
SGS Lab Number: TA4L0P081002 Percent Solids: N/A Sample Type: F

Prep Code: SW3541C Prepared: 12/07/04 16:00 Preparation Batch: 106740 Analyst: des Report Basis: Wet
Run#: 001 Method Code: SW8082 Analyzed: 12/08/04 17:52 Analytical Batch: 106754 Dilution Factor: 1.00 Analytical Run Type: 00

Type.....	Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHi	CAS Number
Analyte....	AROCLOR-1016		ND	18 U	mg/Kg	18						12674-11-2
Analyte....	AROCLOR-1221		ND	18 U	mg/Kg	18						11104-28-2
Analyte....	AROCLOR-1232		ND	18 U	mg/Kg	18						11141-16-5
Analyte....	AROCLOR-1242		ND	18 U	mg/Kg	18						53469-21-9
Analyte....	AROCLOR-1248		ND	18 U	mg/Kg	18						12672-29-6
Analyte....	AROCLOR-1254		ND	18 U	mg/Kg	18						11097-69-1
Analyte....	AROCLOR-1260		<Hit>	9.8 J	mg/Kg	18						11096-82-5
Surrogate..	DECACHLOROBIPHENYL		qc	18	mg/Kg		100	18	50 to 150			2051-24-3
Surrogate..	TETRACHLORO-M-XYLENE		qc	12	mg/Kg		68	18	27 to 132			877-09-8

SGS - Environmental Services
1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4L0P081 **Chain of Custody Number: 1421** **Received by SGS 12/03/04 09:15**
ATTN: Chris Torell **BLASLAND, BOUCK & LEE, INC.** **SYRACUSE NY**

Reference: DUP-01-A Description: LOEFFEL NASSAU NY Matrix: SED Sampled: 12/01/04 00:00
SGS Lab Number: TA4L0P081003 Percent Solids: N/A Sample Type: F

Prep Code: SW3541C Prepared: 12/07/04 16:00 Preparation Batch: 106740 Analyst: des Report Basis: Wet
Run#: 001 Method Code: SW8082 Analyzed: 12/08/04 18:09 Analytical Batch: 106754 Dilution Factor: 1.00 Analytical Run Type: 00

Type.....	Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHi	CAS Number
Analyte....	AROCLOR-1016		ND	11 U	mg/Kg	11						12674-11-2
Analyte....	AROCLOR-1221		ND	11 U	mg/Kg	11						11104-28-2
Analyte....	AROCLOR-1232		ND	11 U	mg/Kg	11						11141-16-5
Analyte....	AROCLOR-1242		ND	11 U	mg/Kg	11						53469-21-9
Analyte....	AROCLOR-1248		ND	11 U	mg/Kg	11						12672-29-6
Analyte....	AROCLOR-1254		ND	11 U	mg/Kg	11						11097-69-1
Analyte....	AROCLOR-1260		<Hit>	9.4 J	mg/Kg	11						11096-82-5
Surrogate..	DECACHLOROBIPHENYL		qc	11	mg/Kg		100	11	50 to 150			2051-24-3
Surrogate..	TETRACHLORO-M-XYLENE		qc	6.7	mg/Kg		63	11	27 to 132			877-09-8

SGS - Environmental Services
1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4L0P081 **Chain of Custody Number: 1421** **Received by SGS 12/03/04 09:15**
ATTN: Chris Torell **BLASLAND, BOUCK & LEE, INC.** **SYRACUSE NY**

Reference: DUP-01-B Description: LOEFFEL NASSAU NY Matrix: SED Sampled: 12/01/04 00:00
SGS Lab Number: TA4L0P081004 Percent Solids: N/A Sample Type: F

Prep Code: SW3541C Prepared: 12/07/04 16:00 Preparation Batch: 106740 Analyst: des Report Basis: Wet
Run#: 001 Method Code: SW8082 Analyzed: 12/08/04 18:26 Analytical Batch: 106754 Dilution Factor: 1.00 Analytical Run Type: 00

Type.....	Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHi	CAS Number
Analyte....	AROCLOR-1016	ND	10	U	mg/Kg	10						12674-11-2
Analyte....	AROCLOR-1221	ND	10	U	mg/Kg	10						11104-28-2
Analyte....	AROCLOR-1232	ND	10	U	mg/Kg	10						11141-16-5
Analyte....	AROCLOR-1242	ND	10	U	mg/Kg	10						53469-21-9
Analyte....	AROCLOR-1248	ND	10	U	mg/Kg	10						12672-29-6
Analyte....	AROCLOR-1254	ND	10	U	mg/Kg	10						11097-69-1
Analyte....	AROCLOR-1260	<Hit>	5.1	J	mg/Kg	10						11096-82-5
Surrogate..	DECACHLOROBIPHENYL	qc	8.8		mg/Kg		87	10	50 to 150			2051-24-3
Surrogate..	TETRACHLORO-M-XYLENE	qc	6.1		mg/Kg		61	10	27 to 132			877-09-8

SGS - Environmental Services
1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4L0P081 **Chain of Custody Number: 1421** **Received by SGS 12/03/04 09:15**
ATTN: Chris Torell **BLASLAND, BOUCK & LEE, INC.** **SYRACUSE NY**

Reference: T11A-D-04-A Description: LOEFFEL NASSAU NY Matrix: SED Sampled: 12/01/04 12:05
SGS Lab Number: TA4L0P081005 Percent Solids: N/A Sample Type: F

Prep Code: SW3541C Prepared: 12/07/04 16:00 Preparation Batch: 106740 Analyst: des Report Basis: Wet
Run#: 001 Method Code: SW8082 Analyzed: 12/08/04 18:43 Analytical Batch: 106754 Dilution Factor: 1.00 Analytical Run Type: 00

Type.....	Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHi	CAS Number
Analyte....	AROCLOR-1016		ND	2.9 U	mg/Kg	2.9						12674-11-2
Analyte....	AROCLOR-1221		ND	2.9 U	mg/Kg	2.9						11104-28-2
Analyte....	AROCLOR-1232		ND	2.9 U	mg/Kg	2.9						11141-16-5
Analyte....	AROCLOR-1242		ND	2.9 U	mg/Kg	2.9						53469-21-9
Analyte....	AROCLOR-1248		ND	2.9 U	mg/Kg	2.9						12672-29-6
Analyte....	AROCLOR-1254		ND	2.9 U	mg/Kg	2.9						11097-69-1
Analyte....	AROCLOR-1260		<Hit>	2.8 J	mg/Kg	2.9						11096-82-5
Surrogate..	DECACHLOROBIPHENYL	qc		3.3	mg/Kg		113	2.9	50 to 150			2051-24-3
Surrogate..	TETRACHLORO-M-XYLENE	qc		2.3	mg/Kg		81	2.9	27 to 132			877-09-8

SGS - Environmental Services
1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4L0P081 **Chain of Custody Number: 1421** **Received by SGS 12/03/04 09:15**
ATTN: Chris Torell **BLASLAND, BOUCK & LEE, INC.** **SYRACUSE NY**

Reference: T11A-D-04-B Description: LOEFFEL NASSAU NY Matrix: SED Sampled: 12/01/04 12:05
SGS Lab Number: TA4L0P081006 Percent Solids: N/A Sample Type: F

Prep Code: SW3541C Prepared: 12/07/04 16:00 Preparation Batch: 106740 Analyst: des Report Basis: Wet
Run#: 001 Method Code: SW8082 Analyzed: 12/08/04 19:00 Analytical Batch: 106754 Dilution Factor: 1.00 Analytical Run Type: 00

Type	Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHi	CAS Number
Analyte	AROCLOR-1016		ND	18 U	mg/Kg	18						12674-11-2
Analyte	AROCLOR-1221		ND	18 U	mg/Kg	18						11104-28-2
Analyte	AROCLOR-1232		ND	18 U	mg/Kg	18						11141-16-5
Analyte	AROCLOR-1242		ND	18 U	mg/Kg	18						53469-21-9
Analyte	AROCLOR-1248		ND	18 U	mg/Kg	18						12672-29-6
Analyte	AROCLOR-1254		ND	18 U	mg/Kg	18						11097-69-1
Analyte	AROCLOR-1260		<Hit>	12 J	mg/Kg	18						11096-82-5
Surrogate	DECACHLOROBIPHENYL		qc	20	mg/Kg		115	18	50 to 150			2051-24-3
Surrogate	TETRACHLORO-M-XYLENE		qc	14	mg/Kg		81	18	27 to 132			877-09-8

SGS - Environmental Services
1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4L0P081 **Chain of Custody Number: 1421** **Received by SGS 12/03/04 09:15**
ATTN: Chris Torell **BLASLAND, BOUCK & LEE, INC.** **SYRACUSE NY**

Reference: RB-01 Description: LOEFFEL NASSAU NY Matrix: WATER Sampled: 12/01/04 18:55
SGS Lab Number: TA4L0P081007 Percent Solids: N/A Sample Type: F

Prep Code: SW3510C Prepared: 12/08/04 17:00 Preparation Batch: 106746 Analyst: bcl Report Basis: N/A
Run#: 001 Method Code: SW8082 Analyzed: 12/09/04 12:30 Analytical Batch: 106796 Dilution Factor: 1.00 Analytical Run Type: 00

Type.....	Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHi	CAS Number
Analyte....	AROCLOR-1016	ND	0.065	U	ug/L	0.065						12674-11-2
Analyte....	AROCLOR-1221	ND	0.065	U	ug/L	0.065						11104-28-2
Analyte....	AROCLOR-1232	ND	0.065	U	ug/L	0.065						11141-16-5
Analyte....	AROCLOR-1242	ND	0.065	U	ug/L	0.065						53469-21-9
Analyte....	AROCLOR-1248	ND	0.065	U	ug/L	0.065						12672-29-6
Analyte....	AROCLOR-1254	ND	0.065	U	ug/L	0.065						11097-69-1
Analyte....	AROCLOR-1260	ND	0.065	U	ug/L	0.065						11096-82-5
Surrogate..	DECACHLOROBIPHENYL	qc	0.16		ug/L		65	0.25	36 to 144			2051-24-3
Surrogate..	TETRACHLORO-M-XYLENE	qc	0.093		ug/L		37	0.25	30 to 132			877-09-8

SGS - Environmental Services
1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4L0P081 **Chain of Custody Number: 1421** **Received by SGS 12/03/04 09:15**
ATTN: Chris Torell **BLASLAND, BOUCK & LEE, INC.** **SYRACUSE NY**

Reference: T11A-D05 Description: LOEFFEL NASSAU NY Matrix: WATER Sampled: 12/01/04 17:20
SGS Lab Number: TA4L0P081001 Percent Solids: N/A Sample Type: F

Prep Code: EPA415.1	Prepared: 12/07/04 19:00	Preparation Batch: 106690	Analyst: TL	Report Basis: N/A
Run#: 001 Method Code: EPA415.1	Analyzed: 12/07/04 19:00	Analytical Batch: 106690	Dilution Factor: 1.00	Analytical Run Type: 00

Type..... Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHi	CAS Number
Analyte.... Total Organic Carbon	<Hit>	3.4		mg/L	1.0						

SGS - Environmental Services
1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4L0P081 **Chain of Custody Number: 1421** **Received by SGS 12/03/04 09:15**
ATTN: Chris Torell **BLASLAND, BOUCK & LEE, INC.** **SYRACUSE NY**

Reference: T11A-D05 Description: LOEFFEL NASSAU NY Matrix: WATER Sampled: 12/01/04 17:20
SGS Lab Number: TA4L0P081001 Percent Solids: N/A Sample Type: F

Prep Code: EPA160.2	Prepared: 12/03/04 14:30	Preparation Batch: 106560	Analyst: NBU	Report Basis: N/A
Run#: 001 Method Code: EPA160.2	Analyzed: 12/03/04 14:30	Analytical Batch: 106560	Dilution Factor: 1.00	Analytical Run Type: 00

Type..... Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHi	CAS Number
Analyte.... Total Suspended Solids		ND	5.0 U	mg/L	5.0						

MARTEL

Sensible Scientific Solutions

Certificate of Analysis

Tuesday, December 14, 2004

Prepared expressly for:

SGS
1258 Greenbrier St.

Charleston, WV 25311
Attention: Barbara Hensley

Report for Lab No: 22095.
Samples received by Martel.
P.O. Number:
Project Identification: Sample Analysis for Chlorophyll A - 12/1/04

MARTEL NO.		CLIENT SAMPLE IDENTIFICATION	Sample Date/Time
22095	000001	TA4--L0-P081-001	12/01/2004 17:20

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Chlorophyll (a)	<6	mg/m^3	SM 10200H2	6	12/13/2004 14:00 CB

All Procedures used are in accordance with the following methods:

"Standard Methods for the Examination of Water and Wastewater", 18th Edition, 1992.

QC _____ Date 12/14/04

Approved _____ Date 12/14/04

SGS - Environmental Services
1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4L0P066 **Chain of Custody Number: 1420** **Received by SGS 12/02/04 09:10**
ATTN: Chris Torell **BLASLAND, BOUCK & LEE, INC.** **SYRACUSE NY**

Reference: T11A-D-02 Description: GRAB 10073.800 LOEFFEL NASSAU,NY Matrix: WATER Sampled: 12/01/04 03:20
SGS Lab Number: TA4L0P066001 Percent Solids: N/A Sample Type: F

Prep Code: EPA160.2	Prepared: 12/03/04 14:30	Preparation Batch: 106560	Analyst: NBU	Report Basis: N/A
Run#: 001 Method Code: EPA160.2	Analyzed: 12/03/04 14:30	Analytical Batch: 106560	Dilution Factor: 1.00	Analytical Run Type: 00

Type..... Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHi	CAS Number
Analyte.... Total Suspended Solids		<Hit>	5.0	mg/L	5.0						

SGS - Environmental Services
1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4L0P066 **Chain of Custody Number: 1420** **Received by SGS 12/02/04 09:10**
ATTN: Chris Torell **BLASLAND, BOUCK & LEE, INC.** **SYRACUSE NY**

Reference: T11A-D-03 Description: GRAB 10073.800 LOEFFEL NASSAU,NY Matrix: WATER Sampled: 12/01/04 06:35
SGS Lab Number: TA4L0P066002 Percent Solids: N/A Sample Type: F

Prep Code: EPA160.2	Prepared: 12/03/04 14:30	Preparation Batch: 106560	Analyst: NBU	Report Basis: N/A
Run#: 001 Method Code: EPA160.2	Analyzed: 12/03/04 14:30	Analytical Batch: 106560	Dilution Factor: 1.00	Analytical Run Type: 00

Type..... Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHi	CAS Number
Analyte.... Total Suspended Solids		<Hit>	5.0	mg/L	5.0						

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SGS - Environmental Services
1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4L0P066 **Chain of Custody Number: 1420** **Received by SGS 12/02/04 09:10**
ATTN: Chris Torell **BLASLAND, BOUCK & LEE, INC.** **SYRACUSE NY**

Reference: DUP-01 Description: GRAB 10073.800 LOEFFEL NASSAU,NY Matrix: WATER Sampled: 12/01/04 00:00
SGS Lab Number: TA4L0P066008 Percent Solids: N/A Sample Type: F

Prep Code: EPA160.2	Prepared: 12/03/04 14:30	Preparation Batch: 106560	Analyst: NBU	Report Basis: N/A
Run#: 001 Method Code: EPA160.2	Analyzed: 12/03/04 14:30	Analytical Batch: 106560	Dilution Factor: 1.00	Analytical Run Type: 00

Type..... Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHi	CAS Number
Analyte.... Total Suspended Solids		<Hit>	10	mg/L	5.0						

SGS - Environmental Services

1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4L0P066 **Chain of Custody Number: 1420** **Received by SGS 12/02/04 09:10**
ATTN: Chris Torell BLASLAND, BOUCK & LEE, INC. SYRACUSE NY

Reference: T11A-D-04 Description: GRAB 10073.800 LOEFFEL NASSAU,NY Matrix: WATER Sampled: 12/01/04 12:05
SGS Lab Number: TA4L0P066010 Percent Solids: N/A Sample Type: F

Prep Code: EPA160.2	Prepared: 12/03/04 14:30	Preparation Batch: 106560	Analyst: NBU	Report Basis: N/A
Run#: 001 Method Code: EPA160.2	Analyzed: 12/03/04 14:30	Analytical Batch: 106560	Dilution Factor: 1.00	Analytical Run Type: 00

Type..... Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHi	CAS Number
Analyte.... Total Suspended Solids		<Hit>	8.0	mg/L	5.0						

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MARTEL

Sensible Scientific Solutions

Certificate of Analysis

Tuesday, December 14, 2004

Prepared expressly for:

SGS
1258 Greenbrier St.

Charleston, WV 25311

Attention: Barbara Hensley

Report for Lab No: 21988.
Samples received by Martel.
P.O. Number:
Project Identification: Sample Analysis for Chlorophyll A - 12/1/04

MARTEL NO.		CLIENT SAMPLE IDENTIFICATION	Sample Date/Time
21988	000001	TA4-LO-PO66-001	12/01/2004 15:20

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Chlorophyll (a)	<6	mg/m^3	SM 10200H2	6	12/13/2004 13:30 CB

MARTEL NO.		CLIENT SAMPLE IDENTIFICATION	Sample Date/Time
21988	000002	TA4-LO-PO66-002	12/01/2004 18:35

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Chlorophyll (a)	<6	mg/m^3	SM 10200H2	6	12/13/2004 13:30 CB

MARTEL NO.		CLIENT SAMPLE IDENTIFICATION	Sample Date/Time
21988	000003	TA4-LO-PO66-008	12/01/2004 00:00

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Chlorophyll (a)	<6	mg/m^3	SM 10200H2	6	12/13/2004 13:30 CB

MARTEL NO.		CLIENT SAMPLE IDENTIFICATION	Sample Date/Time
21988	000004	TA4-LO-PO66-010	12/01/2004 12:05

Compound	Test Value	Test Unit	Method	Detection Limit	Analysis Date/Time/Initial
Chlorophyll (a)	7	mg/m^3	SM 10200H2	6	12/13/2004 13:30 CB

DATA VALIDATION REPORT

GENERAL ELECTRIC
LOEFFEL

SDG# TA4-L0-P066

PCB, TOC
AND TSS ANALYSES

Analyses performed by:

SGS Environmental Services, Inc.
Charleston, West Virginia

Review performed by:

BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

Blasland, Bouck & Lee, Inc.
Syracuse, New York

Summary

The following is an assessment of SDG# TA4-L0-P066 for sampling at the General Electric Loeffel site in Nassau, NY. Included with this assessment are the data review check sheets used in the review of the package and corrected sample results. Analyses were performed on the following samples:

Sample ID	Sample Delivery Group	Lab ID	Matrix	Sample Date	Analysis			
					VOC	SVOC	PCB	MISC[2]
T11A-D-02-A	TA4-L0-P066	TA4L0P066005	Sediment	12/01/04			x	
T11A-D-03-A[1]	TA4-L0-P066	TA4L0P066006	Sediment	12/01/04			x	
T11A-D-02	TA4-L0-P066	TA4L0P066001	Water	12/01/04			x	x
T11A-D-03[1]	TA4-L0-P066	TA4L0P066002	Water	12/01/04			x	x
DUP-01	TA4-L0-P066	TA4L0P066008	Water	12/01/04			x	x
T11A-D-04	TA4-L0-P066	TA4L0P066010	Water	12/01/04			x	x

1 MS/MSD analyses performed on sample.
2 Miscellaneous parameters include Total Organic Carbon, Total Suspended Solids and Chlorophyll (a)

Note: Chlorophyll (a) analyses were subcontracted to Martel Laboratories, Inc of Baltimore, Maryland. Since no raw data was included with the sample for Chlorophyll (a) analysis, an accurate assessment of the sample results could not be made.

PCB ANALYSES

Introduction

Analyses were performed according to the USEPA Method 8082.

The data review process is intended to evaluate the data on a technical basis. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA's National Functional Guidelines:

- U — The compound was analyzed for but not detected. The associated value is the compound reporting limit.
- J — The compound was positively identified; however, the associated numerical value is an estimated concentration only.
- B — The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- N — The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
- JN — The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
- P — The difference in the quantitated results for the two columns was greater than 25%. The reported value may be biased.
- E — The compound was quantitated above the calibration range.
- D — Concentration is based on a diluted sample analysis.
- UJ — The compound was not detected above the reported sample reporting limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
- R — The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. Due to significant QC problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. Second, no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Time

The method-specified holding times for PCB analyses of samples are 7 days from sample collection to extraction and 40 days to analysis.

All samples were extracted and analyzed within the specified holding times.

2. Blank Contamination

Quality assurance blanks, i.e., method or rinse blanks, are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

No target compounds were detected in the method blanks.

3. System Performance

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instruments daily performance is satisfactory.

4.1 Initial Calibration

Method 8082 allows a maximum RSD of 20% or, alternately, calibration curves may be constructed.

Multi-point calibrations were performed for Aroclors 1016, 1254 and 1260 only. One-point calibrations were provided for the remaining Aroclors.

All initial calibrations were acceptable.

4.2 Continuing Calibration

The method allows a maximum %D of 15. The project-specified maximum %D is 25.

All continuing calibration standards were acceptable.

5. Surrogates / System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique.

Recovery for one surrogate was below control limits in samples T11A-D-02, T11A-D-03, T11A-D-03 MS and T11A-D-03 MSD. Since recoveries for the remaining surrogates were within control limits, no data have been qualified based on the deviation. All other surrogate recoveries were within control limits.

6. Compound Identification

The retention times of all quantitated peaks must fall within the calculated retention time windows for both the primary and secondary columns.

All quantitated peaks fell within the appropriate retention time windows.

7. Matrix Spike/Matrix Spike Duplicate

Matrix spike and matrix spike duplicate data are used to assess the precision and accuracy of the analytical method.

All matrix spike and matrix spike duplicate recoveries were within control limits.

8. Blank Spike

All blank spike recoveries were within control limits.

9. Field Duplicates

Results for duplicate samples are summarized as follows:

Sample ID / Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
T11A-D-04 / DUP-01	Aroclor 1254	0.050J	0.048J	<CRDL
	Aroclor 1260	0.067	0.079	16.4%

ND not detected.
NA Analyte not detected in sample and/or duplicate. RPD not applicable.

The duplicate results were acceptable.

10. General Comments

All filtered PCB sample results are reported on a dry weight basis, as ug.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines listed in the analytical method.

Corrected Sample Analysis Data Sheets

SUPPLEMENTAL PARAMETERS

Introduction

Analyses were performed according to the following methods:

Total Suspended Solids (TSS)	EPA 160.2
Total Organic Carbon (TOC)	EPA 415.1
Chlorophyll-a	10200H

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with National Functional Guidelines:

U The analyte was analyzed for but not detected. The associated value is the analyte reporting limit.

B The reported value was obtained from a reading less than the reporting limit but greater than or equal to the instrument detection limit (IDL).

J The associated numerical value is an estimated concentration only.

UJ The analyte was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant QC problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Time

The holding times for inorganic analyses are as follows. All holding times are measured from date of collection.

TSS	7 days
TOC	14 days
Chlorophyll-a	21 days

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance blanks, i.e., method, field, or rinse blanks, are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks (including initial and continuing calibration blanks and preparation blanks) measure laboratory contamination. Field and rinse blanks measure contamination of samples during field operations.

All blanks were found to be acceptable, with no analytes detected above the reporting limits.

3. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument continuing performance is satisfactory.

No calibrations were included with the samples in this data set.

4. Matrix Spike/Laboratory Duplicate

Matrix spike and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 Matrix spike

The matrix spike recovery for TOC was below control limits. Data for TOC have been qualified as estimated in sample T11A-D-03 based on the deviation.

4.2 Laboratory Duplicate

The laboratory duplicate results were within control limits.

5. Field Duplicate

Results for duplicate samples are summarized as follows:

Sample ID / Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
T11A-D-04 / DUP-01	TOC	5.0	4.9	2.0%

Sample ID / Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
T11A-D-04 / DUP-01	TSS	8.0	10.0	22.2%
	Chlorophyll-a	7	ND	NA

ND not detected.
NA Analyte not detected in sample and/or duplicate. RPD not applicable.

The duplicate results were acceptable.

6. Laboratory Control Sample (LCS)

All LCS recoveries were within control limits.

7. General Comments

No raw data was provided for Chlorophyll-a analyses. Therefore, an accurate assessment of Chlorophyll-a sample analyses could not be determined.

8. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Corrected Sample Analysis Data Sheets

SGS - Environmental Services

1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4L0P066 **Chain of Custody Number: 1420** **Received by SGS 12/02/04 09:10**
ATTN: Chris Torell **BLASLAND, BOUCK & LEE, INC.** **SYRACUSE NY**

Reference: T11A-D-02-A Description: GRAB FILTER #1786 10073.800 LOEFFEL NASSAU,NY Matrix: SED Sampled: 12/01/04 06:35
SGS Lab Number: TA4L0P066005 Percent Solids: N/A Sample Type: F

Prep Code: SW3541C Prepared: 12/07/04 16:00 Preparation Batch: 106740 Analyst: bcl Report Basis: Wet
Run#: 001 Method Code: SW8082 Analyzed: 12/08/04 16:44 Analytical Batch: 106754 Dilution Factor: 1.00 Analytical Run Type: 00

Type.....	Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHi	CAS Number
Analyte....	AROCLOR-1016		ND	28 U	mg/Kg	28						12674-11-2
Analyte....	AROCLOR-1221		ND	28 U	mg/Kg	28						11104-28-2
Analyte....	AROCLOR-1232		ND	28 U	mg/Kg	28						11141-16-5
Analyte....	AROCLOR-1242		ND	28 U	mg/Kg	28						53469-21-9
Analyte....	AROCLOR-1248		ND	28 U	mg/Kg	28						12672-29-6
Analyte....	AROCLOR-1254		ND	28 U	mg/Kg	28						11097-69-1
Analyte....	AROCLOR-1260		<Hit>	11 J	mg/Kg	28						11096-82-5
Surrogate..	DECACHLOROBIPHENYL		qc	25	mg/Kg		87	28	50 to 150			2051-24-3
Surrogate..	TETRACHLORO-M-XYLENE		qc	16	mg/Kg		56	28	27 to 132			877-09-8

084

SGS - Environmental Services

1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4L0P066 **Chain of Custody Number: 1420** **Received by SGS 12/02/04 09:10**
ATTN: Chris Torell **BLASLAND, BOUCK & LEE, INC.** **SYRACUSE NY**

Reference: T11A-D-03-A Description: GRAB FILTER #1786 10073.800 LOEFFEL NASSAU,NY Matrix: SED Sampled: 12/01/04 06:35
SGS Lab Number: TA4L0P066006 Percent Solids: N/A Sample Type: F

Prep Code: SW3541C Prepared: 12/07/04 16:00 Preparation Batch: 106740 Analyst: bcl Report Basis: Wet
Run#: 001 Method Code: SW8082 Analyzed: 12/08/04 17:01 Analytical Batch: 106754 Dilution Factor: 1.00 Analytical Run Type: 00

Type.....	Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHi	CAS Number
Analyte....	AROCLOR-1016		ND	7.0 U	mg/Kg	7.0						12674-11-2
Analyte....	AROCLOR-1221		ND	7.0 U	mg/Kg	7.0						11104-28-2
Analyte....	AROCLOR-1232		ND	7.0 U	mg/Kg	7.0						11141-16-5
Analyte....	AROCLOR-1242		ND	7.0 U	mg/Kg	7.0						53469-21-9
Analyte....	AROCLOR-1248		ND	7.0 U	mg/Kg	7.0						12672-29-6
Analyte....	AROCLOR-1254		ND	7.0 U	mg/Kg	7.0						11097-69-1
Analyte....	AROCLOR-1260		<Hit>	4.9 J	mg/Kg	7.0						11096-82-5
Surrogate..	DECACHLOROBIPHENYL	qc		7.6	mg/Kg		108	7	50 to 150			2051-24-3
Surrogate..	TETRACHLORO-M-XYLENE	qc		5.1	mg/Kg		72	7	27 to 132			877-09-8

SGS - Environmental Services
1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4L0P066 **Chain of Custody Number: 1420** **Received by SGS 12/02/04 09:10**
ATTN: Chris Torell **BLASLAND, BOUCK & LEE, INC.** **SYRACUSE NY**

Reference: T11A-D-02 Description: GRAB 10073.800 LOEFFEL NASSAU,NY Matrix: WATER Sampled: 12/01/04 03:20
SGS Lab Number: TA4L0P066001 Percent Solids: N/A Sample Type: F

Prep Code: SW3510Cmod Prepared: 12/08/04 12:30 Preparation Batch: 106749 Analyst: bcl Report Basis: N/A
Run#: 001 Method Code: SW8082 Analyzed: 12/09/04 22:13 Analytical Batch: 106853 Dilution Factor: 1.00 Analytical Run Type: 00

Type.....	Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHi	CAS Number
Analyte....	AROCLOR-1016	ND	0.065	U	ug/L	0.065						12674-11-2
Analyte....	AROCLOR-1221	ND	0.065	U	ug/L	0.065						11104-28-2
Analyte....	AROCLOR-1232	ND	0.065	U	ug/L	0.065						11141-16-5
Analyte....	AROCLOR-1242	ND	0.065	U	ug/L	0.065						53469-21-9
Analyte....	AROCLOR-1248	ND	0.065	U	ug/L	0.065						12672-29-6
Analyte....	AROCLOR-1254	<Hit>	0.014	J	ug/L	0.065						11097-69-1
Analyte....	AROCLOR-1260	<Hit>	0.015	J	ug/L	0.065						11096-82-5
Surrogate..	DECACHLOROBIPHENYL	qc	0.025		ug/L		50	0.05	36 to 144			2051-24-3
Surrogate..	TETRACHLORO-M-XYLENE	qc	0.015	*	ug/L		29	0.05	30 to 132			877-09-8

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SGS - Environmental Services
1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4L0P066 **Chain of Custody Number: 1420** **Received by SGS 12/02/04 09:10**
ATTN: Chris Torell **BLASLAND, BOUCK & LEE, INC.** **SYRACUSE NY**

Reference: T11A-D-03 Description: GRAB 10073.800 LOEFFEL NASSAU,NY Matrix: WATER Sampled: 12/01/04 06:35
SGS Lab Number: TA4L0P066002 Percent Solids: N/A Sample Type: F

Prep Code: SW3510Cmod Prepared: 12/08/04 12:30 Preparation Batch: 106749 Analyst: bcl Report Basis: N/A
Run#: 001 Method Code: SW8082 Analyzed: 12/09/04 22:29 Analytical Batch: 106853 Dilution Factor: 1.00 Analytical Run Type: 00

Type.....	Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHi	CAS Number
Analyte....	AROCLOR-1016	ND	0.065	U	ug/L	0.065						12674-11-2
Analyte....	AROCLOR-1221	ND	0.065	U	ug/L	0.065						11104-28-2
Analyte....	AROCLOR-1232	ND	0.065	U	ug/L	0.065						11141-16-5
Analyte....	AROCLOR-1242	ND	0.065	U	ug/L	0.065						53469-21-9
Analyte....	AROCLOR-1248	ND	0.065	U	ug/L	0.065						12672-29-6
Analyte....	AROCLOR-1254	<Hit>	0.010	J	ug/L	0.065						11097-69-1
Analyte....	AROCLOR-1260	<Hit>	0.013	J	ug/L	0.065						11096-82-5
Surrogate..	DECACHLOROBIPHENYL	qc	0.039		ug/L		78	0.05	36 to 144			2051-24-3
Surrogate..	TETRACHLORO-M-XYLENE	qc	0.013	*	ug/L		25	0.05	30 to 132			877-09-8

SGS - Environmental Services

1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4L0P066 **Chain of Custody Number: 1420** **Received by SGS 12/02/04 09:10**

ATTN: Chris Torell **BLASLAND, BOUCK & LEE, INC.** **SYRACUSE NY**

Reference: DUP-01 Description: GRAB 10073.800 LOEFFEL NASSAU,NY Matrix: WATER Sampled: 12/01/04 00:00

SGS Lab Number: TA4L0P066008 Percent Solids: N/A Sample Type: F

Prep Code: SW3510Cmod Prepared: 12/08/04 12:30 Preparation Batch: 106749 Analyst: bcl Report Basis: N/A

Run#: 001 Method Code: SW8082 Analyzed: 12/09/04 23:19 Analytical Batch: 106853 Dilution Factor: 1.00 Analytical Run Type: 00

Type.....	Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHi	CAS Number
Analyte....	AROCLOR-1016	ND	0.065	U	ug/L	0.065						12674-11-2
Analyte....	AROCLOR-1221	ND	0.065	U	ug/L	0.065						11104-28-2
Analyte....	AROCLOR-1232	ND	0.065	U	ug/L	0.065						11141-16-5
Analyte....	AROCLOR-1242	ND	0.065	U	ug/L	0.065						53469-21-9
Analyte....	AROCLOR-1248	ND	0.065	U	ug/L	0.065						12672-29-6
Analyte....	AROCLOR-1254	<Hit>	0.048	J	ug/L	0.065						11097-69-1
Analyte....	AROCLOR-1260	<Hit>	0.079		ug/L	0.065						11096-82-5
Surrogate..	DECACHLOROBIPHENYL	qc	0.037		ug/L		74	0.05	36 to 144			2051-24-3
Surrogate..	TETRACHLORO-M-XYLENE	qc	0.030		ug/L		59	0.05	30 to 132			877-09-8

SGS - Environmental Services

1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4L0P066 **Chain of Custody Number: 1420** **Received by SGS 12/02/04 09:10**

ATTN: Chris Torell **BLASLAND, BOUCK & LEE, INC.** **SYRACUSE NY**

Reference: T11A-D-04 Description: GRAB 10073.800 LOEFFEL NASSAU,NY Matrix: WATER Sampled: 12/01/04 12:05

SGS Lab Number: TA4L0P066010 Percent Solids: N/A Sample Type: F

Prep Code: SW3510Cmod Prepared: 12/08/04 12:30 Preparation Batch: 106749 Analyst: bcl Report Basis: N/A

Run#: 001 Method Code: SW8082 Analyzed: 12/09/04 23:36 Analytical Batch: 106853 Dilution Factor: 1.00 Analytical Run Type: 00

Type.....	Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHi	CAS Number
Analyte....	AROCLOR-1016		ND	0.065 U	ug/L	0.065						12674-11-2
Analyte....	AROCLOR-1221		ND	0.065 U	ug/L	0.065						11104-28-2
Analyte....	AROCLOR-1232		ND	0.065 U	ug/L	0.065						11141-16-5
Analyte....	AROCLOR-1242		ND	0.065 U	ug/L	0.065						53469-21-9
Analyte....	AROCLOR-1248		ND	0.065 U	ug/L	0.065						12672-29-6
Analyte....	AROCLOR-1254		<Hit>	0.050 J	ug/L	0.065						11097-69-1
Analyte....	AROCLOR-1260		<Hit>	0.067	ug/L	0.065						11096-82-5
Surrogate..	DECACHLOROBIPHENYL	qc		0.031	ug/L		61	0.05	36 to 144			2051-24-3
Surrogate..	TETRACHLORO-M-XYLENE	qc		0.026	ug/L		52	0.05	30 to 132			877-09-8

SUPPLEMENTAL PARAMETERS

Introduction

Analyses were performed according to the following methods:

Total Suspended Solids (TSS)	EPA 160.2
Total Organic Carbon (TOC)	EPA 415.1
Chlorophyll-a	10200H

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with National Functional Guidelines:

U The analyte was analyzed for but not detected. The associated value is the analyte reporting limit.

B The reported value was obtained from a reading less than the reporting limit but greater than or equal to the instrument detection limit (IDL).

J The associated numerical value is an estimated concentration only.

UJ The analyte was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant QC problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Time

The holding times for inorganic analyses are as follows. All holding times are measured from date of collection.

TSS	7 days
TOC	14 days
Chlorophyll-a	21 days

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance blanks, i.e., method, field, or rinse blanks, are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks (including initial and continuing calibration blanks and preparation blanks) measure laboratory contamination. Field and rinse blanks measure contamination of samples during field operations.

All blanks were found to be acceptable, with no analytes detected above the reporting limits.

3. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument continuing performance is satisfactory.

No calibrations were included with the samples in this data set.

4. Matrix Spike/Laboratory Duplicate

Matrix spike and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 Matrix spike

The matrix spike recovery for TOC was below control limits. Data for TOC have been qualified as estimated in sample T11A-D-03 based on the deviation.

4.2 Laboratory Duplicate

The laboratory duplicate results were within control limits.

5. Field Duplicate

Results for duplicate samples are summarized as follows:

Sample ID / Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
T11A-D-04 / DUP-01	TOC	5.0	4.9	2.0%

Sample ID / Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
T11A-D-04 / DUP-01	TSS	8.0	10.0	22.2%
	Chlorophyll-a	7	ND	NA

ND not detected.
NA Analyte not detected in sample and/or duplicate. RPD not applicable.

The duplicate results were acceptable.

6. Laboratory Control Sample (LCS)

All LCS recoveries were within control limits.

7. General Comments

No raw data was provided for Chlorophyll-a analyses. Therefore, an accurate assessment of Chlorophyll-a sample analyses could not be determined.

8. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Corrected Sample Analysis Data Sheets

SGS - Environmental Services

1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4L0P066 **Chain of Custody Number: 1420** **Received by SGS 12/02/04 09:10**

ATTN: Chris Torell **BLASLAND, BOUCK & LEE, INC.** **SYRACUSE NY**

Reference: T11A-D-02 Description: GRAB 10073.800 LOEFFEL NASSAU,NY Matrix: WATER Sampled: 12/01/04 03:20

SGS Lab Number: TA4L0P066001 Percent Solids: N/A Sample Type: F

Prep Code: EPA415.1	Prepared: 12/07/04 19:00	Preparation Batch: 106690	Analyst: TL	Report Basis: N/A
Run#: 001 Method Code: EPA415.1	Analyzed: 12/07/04 19:00	Analytical Batch: 106690	Dilution Factor: 1.00	Analytical Run Type: 00

Type..... Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHi	CAS Number
Analyte.... Total Organic Carbon	<Hit>	2.1		mg/L	1.0						

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1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4L0P066 **Chain of Custody Number: 1420** **Received by SGS 12/02/04 09:10**

ATTN: Chris Torell **BLASLAND, BOUCK & LEE, INC.** **SYRACUSE NY**

Reference: T11A-D-03 Description: GRAB 10073.800 LOEFFEL NASSAU,NY Matrix: WATER Sampled: 12/01/04 06:35

SGS Lab Number: TA4L0P066002 Percent Solids: N/A Sample Type: F

Prep Code: EPA415.1	Prepared: 12/07/04 19:00	Preparation Batch: 106690	Analyst: TL	Report Basis: N/A
Run#: 001 Method Code: EPA415.1	Analyzed: 12/07/04 19:00	Analytical Batch: 106690	Dilution Factor: 1.00	Analytical Run Type: 00

Type..... Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHi	CAS Number
Analyte.... Total Organic Carbon	<Hit>	1.6	J	mg/L	1.0						

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1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4L0P066 **Chain of Custody Number: 1420** **Received by SGS 12/02/04 09:10**
ATTN: Chris Torell **BLASLAND, BOUCK & LEE, INC.** **SYRACUSE NY**

Reference: DUP-01 Description: GRAB 10073.800 LOEFFEL NASSAU,NY Matrix: WATER Sampled: 12/01/04 00:00
SGS Lab Number: TA4L0P066008 Percent Solids: N/A Sample Type: F

Prep Code: EPA415.1	Prepared: 12/07/04 19:00	Preparation Batch: 106690	Analyst: TL	Report Basis: N/A
Run#: 001 Method Code: EPA415.1	Analyzed: 12/07/04 19:00	Analytical Batch: 106690	Dilution Factor: 1.00	Analytical Run Type: 00

Type..... Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHi	CAS Number
Analyte.... Total Organic Carbon		<Hit>	4.9	mg/L	1.0						

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1258 Greenbrier Street Charleston WV 25311

Sample Delivery Group: 4L0P066 **Chain of Custody Number: 1420** **Received by SGS 12/02/04 09:10**
ATTN: Chris Torell **BLASLAND, BOUCK & LEE, INC.** **SYRACUSE NY**

Reference: T11A-D-04 Description: GRAB 10073.800 LOEFFEL NASSAU,NY Matrix: WATER Sampled: 12/01/04 12:05
SGS Lab Number: TA4L0P066010 Percent Solids: N/A Sample Type: F

Prep Code: EPA415.1	Prepared: 12/07/04 19:00	Preparation Batch: 106690	Analyst: TL	Report Basis: N/A
Run#: 001 Method Code: EPA415.1	Analyzed: 12/07/04 19:00	Analytical Batch: 106690	Dilution Factor: 1.00	Analytical Run Type: 00

Type..... Parameter Name	QF	Result	RF	Units	PQL	%REC	Spk Amt	Spk Limits	RPD	PDHi	CAS Number
Analyte.... Total Organic Carbon	<Hit>	5.0		mg/L	1.0						

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Attachment D

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ID#: 1418

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #: [redacted]

Send Results to:

Contact & Company Name: Chris Torell/BBL	Telephone: 315-446-9120
Address: 6723 Townpath Road	Fax: 315-445-9151
City: Syracuse State: NY Zip: 13214	e-mail address:
Proj. Name/Location (City/State): Coeffet Nassau - NY	Project #: 16073.900
Sampler's Printed Name: Jill Pistone, Chris Torell, Christina Costello	Sampler's Signature: Christina Costello

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered	# of Containers	Container Information	PCB	TSS	TVS	PCB/TOC	REMARKS
						ice	ice	ice	ice					
								1	1	1	1			
						2	4	1	4					
T11A-DS-01	11/16/04	1012		X	W					1	1	1		
T11A-DS-02	11/16/04	1130		X	W					1	1	1		DUP of T11A-DS-01
T11A-DS-01	11/16/04	1012		X	SS					Xa			1	filter 1767
T11A-DS-02		1100		X	SS								1	filter 1794
T11A-DS-03		1130		X	SS								1	filter 1792
T11A-DS-04		1200		X	SS								1	filter 1783
T11A-DS-05		1230		X	SS								1	filter 1781
RB1		1448		X	SS								1	filter 1836

Special Instructions/Comments:
Analyze all filters separately / SS = Suspended sediments PCB & TOC from one filter - If limited volume times please run for PCBs first

☑ Special QA/QC Instructions (✓): PCB water MDL 0.013 ug/L

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Adirondack Environmental	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Christina Costello	Printed Name:	Printed Name:	Printed Name: Dina Ace
☒ Cooler packed with ice (✓)		Signature: Christina Costello	Signature:	Signature:	Signature:
Specify Turnaround Requirements: Normal	Sample Receipt Condition/Cooler Temp:	Firm: BBL	Firm/Courier:	Firm/Courier:	Firm: AES
Shipping Tracking #:		Date/Time: 11/16/04 1600	Date/Time:	Date/Time:	Date/Time: 11/16/04 1700

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CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #:

Send Results to:

Contact & Company Name: Chris Darell / BBL	Telephone: 315-446-9120
Address: 6723 Towpath Road	Fax: 315-446-9151
City: Syracuse State: NY Zip: 13214	e-mail address:
Proj. Name/Location (City/State): Nassau, NY (Loeffler)	Project #: 10073.900
Sampler's Printed Name: Jill Piskura, Chris Darell, Christine Costello	Sampler's Signature: Christine Costello

PARAMETER ANALYSIS & METHOD

Preservative	ICE												
Filtered (Y/N)													
# of Containers	1												
Container Information	3												
Sample ID	Collection Date	Collection Time	Type (Comp)	Type (Grab)	Matrix	Chlorophyll-a							
T11A-DS-01	~~DK~~ CC 11/16/04	1012		X	W	1							

Key:
Preservation Key: Container Information Key:
Matrix Key:

REMARKS:

Special Instructions/Comments:

☐ Special QA/QC Instructions (✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: NE Analytical	Cooler Custody Seal (✓)	Printed Name: Christine Costello	Printed Name:	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)	☐ Intact ☐ Not Intact	Signature: Christine Costello	Signature:	Signature:	Signature:
Specify Turnaround Requirements: Normal - 2 wk	Sample Receipt Condition/Cooler Temp:	Firm: BBL	Firm/Courier:	Firm/Courier:	Firm:
Shipping Tracking #:		Date/Time: 11/17/04 1150hrs (From FedEx pickup)	Date/Time:	Date/Time:	Date/Time:

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Contract MSA BBL-MSA-05-426-03

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Page 1 of 1

Lab Work Order #:

Send Results to:

Contact & Company Name: Chris Towell / BBL
Telephone: 315-446-9120
Address: 6723 Townpath Rd
Fax: 315-445-9151
City: Syracuse State: NY Zip: 13214
e-mail address:
Proj. Name/Location (City/State): Cooper Marsden NY
Project #: 10073.800
Sampler's Printed Name: Mark Henchy, Kim Powell, Chris Towell
Sampler's Signature:

Sample ID castello	Collection Date	Collection Time	Type (C)omp (G)rab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	TCL	PCB	TSS	Chlorophyll	PCB/TCL	REMARKS
					H2SO4		1	3						
					ICE		2	1						
					ICE		1	4						
					ICE	✓	1	2						
T11A-D-05 ✓	12/1/04	1720	X	W					1	1	1	1		
T11A-D-05-A	12/1/04	1720	X	SS									1	filter # 1818 1.4432
DUP-01-A	12/1/04		X	SS									1	filter # 1820 1.4069
DUP-01-B	12/1/04		X	SS									1	filter # 1819 1.4026
T11A-D-03-MSD ✓	12/1/04	1635	X	SS									1	filter # 1816 1.4060
T11A-D-04-A	12/1/04	1705	X	SS									1	filter # 1793 1.4535
T11A-D-04-B	12/1/04	1705	X	SS									1	filter # 1821 1.4532
RB-01	12/1/04	1855	X	W						1 (NOTE: only 1 contained)				

Special Instructions/Comments: SS-Suspended sediment

☐ Special QA/QC Instructions (✓)

T11A-D-03-MSD was included on previous chain but put into separate cooler; is contained in this shipment

Laboratory Information and Receipt

Lab Name: STL
☑ Cooler packed with ice (✓)
Specify Turnaround Requirements: Standard
Shipping Tracking #:
Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact
Sample Receipt Condition/Cooler Temp:

Relinquished By	Received By	Relinquished By	Laboratory Received By
Printed Name: Kimberly Powell	Printed Name:	Printed Name:	Printed Name:
Signature: Kimberly Powell	Signature:	Signature:	Signature:
Firm: BBL	Firm/Courier:	Firm/Courier:	Firm:
Date/Time: 12/2/04 10:30AM	Date/Time:	Date/Time:	Date/Time:

20730826 CofC AR Form 05/12/2004

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ID#: 1420

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of ___

Lab Work Order #

Send Results to:

Contact & Company Name: ChristinaCostello BBL	Telephone: 315-446-9120
Address: 6723 Towpath Rd	Fax: 315-445-9151
City: Syracuse State: NY Zip: 13214	e-mail address:
Proj. Name/Location (City/State): Loeffel Nassau, NY	Project #: 10073.800
Sampler's Printed Name: Christine Costello, Mark Henderson, Kim Powell	Sampler's Signature:

Preservative	Ice	Ice	HCl/Ice			
Filtered (✓)						
# of Containers	2	1				
Container Information	2	4				

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type Comp	Type Grab	Matrix	PCB	TSS	TOC	PCB/TOC	Chlorophyll a			REMARKS
TIIA-D-02	12/1/04	320		X	W	1	1	1		1			
TIIA-D-03	12/1/04	635		X	W	1	1	1		1			
TIIA-D-03-MS	12/1/04	635		X	W	1	1	1		*cc			
TIIA-D-03-MSD	12/1/04	635		X	W	1	1	1					
TIIA-D-02-A	12/1/04	635		X	SS				1				Filter # 1786
TIIA-D-03-A	12/1/04	635		X	SS				1				Filter # 1784
TIIA-D-03-MS-A	12/1/04	635		X	SS				1				Filter # 1785
DUP-01	12/1/04	–		X	W	1	1	1		1			
TIIA-D-03-MSD-A	12/1/04	635		X	SS				1	*cc			Filter # 1766 ← samples sent under coc [illegible]
TIIA-D-04 ✓	12/1/04	1205		X	W	1	1	1		1			

Keys: Preservation Key / Container Information Key / Matrix Key [illegible]

Special Instructions/Comments: SS-suspended sediment

☐ Special QA/QC Instructions (✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Kimberly Powell	Printed Name: [illegible]	Printed Name: [illegible]	Printed Name:
☒ Cooler packed with ice (✓)		Signature: Kim Powell	Signature: [illegible]	Signature: [illegible]	Signature:
Specify Turnaround Requirements: 2 weeks Standard	Sample Receipt:	Firm: BBL	Firm/Courier:	Firm/Courier:	Firm:
Shipping Tracking #:	Condition/Cooler Temp:	Date/Time: 12-1-04 1400	Date/Time: 12-1-04 1400	Date/Time: 12-[illegible]-04 [illegible]	Date/Time:

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