KILLCOHOOK CONFINED DISPOSAL FACILITY WATER QUALITY ANALYSIS

Prepared for

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Water quality monitoring at Delaware River confined disposal facilities (CDFs) was initiated as a result of the August 1997 water quality certification and acknowledgement between the New Jersey Department of Environmental Protection and U.S. Army Corps of Engineers, Philadelphia District for Delaware River dredging operations. The previous water quality certification did not include a monitoring requirement. Since 1997, the Pedricktown, Killcohook and Oldmans CDFs have been used for Delaware River maintenance dredging operations, and water quality monitoring data have been collected for these sites. The National Park, Artificial Island, Penns Neck and Reedy Point CDFs have not been used for Delaware River maintenance dredging since 1997, so no data have been collected. Reedy Point South was used and monitored for deepening of the Salem River navigation channel in 1995. Copies of the Pedricktown, Killcohook and Salem River monitoring reports are enclosed. The Oldmans report has not been completed.

The Corps acquires water quality certifications for all confined disposal facilities (CDFs) used for maintenance of navigation channels in the Delaware River and tributary streams prior to their use. The requirement to monitor CDF discharges is made as a condition of the water quality certification. Not all certifications require monitoring. When monitoring is required, the Corps develops a scope of work that satisfies the monitoring requirement and contracts the monitoring to an environmental consultant.

As part of the Preconstruction, Engineering and Design phase of study, the Corps collected sediment samples from the private berthing areas and analyzed them for PCBs, metals and organic contaminants. This data was presented in the Supplemental Environmental Impact Statement, and provides an adequate characterization of these private areas. The data show that the material can be dredged and placed in a confined disposal facility without adverse environmental impacts. These areas are periodically dredged currently to maintain existing depths, and proper permits and State approvals have been secured for this work in the past. Water quality certification normally comes from the State of New Jersey because material is normally placed in a privately owned confined disposal facility that is located in New Jersey. Comparing berthing area data to New Jersey guidelines suggests that the material would most likely be considered clean fill, and it could be reused for beneficial uses. Federal and State permits would be required for berth deepening. Additional data would be required as part of the permit process, and approvals would be appropriately conditioned to protect the environment. We are not familiar with the referenced draft report by Rick Greene dated February 1999.

SSFATE is an integrated system combining a Geographic Information System (GIS) with a computational model that predicts the transport, dispersion and settling of suspended dredged material released to the water column as a result of dredging operations. The model requires the user to initially specify the sediment source strength and vertical distribution. As such, it does not predict how much suspended sediment will be placed in the water column as a result of dredging, but predicts the distribution of the suspended sediment based on the input data. In addition, the model does not consider sediment contaminants or predict contaminant concentrations in the water column. SSFATE is a tool that can be used to visualize the movement of suspended sediment generated by a

dredge, but it is not directly applicable to evaluating the ability to meet water quality standards at the point of dredging. Do we need to acknowledge DNREC's request?

EXECUTIVE SUMMARY

Samples were collected for chemical analysis from October through early December 1999 from the Killcohook Confined Disposal Facility (CDF) influent, weir discharge, discharge plume in the Delaware River, and a background area, located at Penns Beach, New Jersey. Inlet slurry samples, a mixture of dredged sediment and water from the Delaware River that is pumped through pipes into the CDF, and water samples from the weir, discharge plume, and background locations were analyzed for inorganics (metals), Volatile Organic Compounds (VOCs), Semi-volatile Organic Compounds (SVOCs), pesticides, and high-resolution PCBs. Water samples were compared to DRBC water quality criteria for the protection of aquatic life for marine waters. Chemical concentrations were multiplied by flow, both dredged material slurry flowing into the CDF and water discharging out of the weir, to evaluate chemical loadings to the CDF and chemical loadings and potential impacts or alterations to ambient water quality conditions in the Delaware River.

The results of the weir discharge indicate that several inorganic contaminants were present at concentrations above background level in weir samples, including copper, mercury, silver, and zinc. These inorganics rarely exceeded DRBC water quality criteria by more than a factor of two and were found in concentrations similar to background samples. Discharge plume sampling located approximately 20 yards from the end of the weir pipes indicated that concentrations of contaminants decrease rapidly upon introduction to the river. Analysis of potential changes in ambient river concentration based on predicted contaminant loadings indicated that the weir discharge rarely changed the ambient river concentrations by 1% or more. DRBC criteria were never violated as a result of the introduction of the loadings from the weir discharge into the river.

Estimation of the contaminants introduced to the CDF relative to the weir discharge indicated that the Killcohook CDF was over 95% efficient at sequestering contaminants from the dredged sediment. Mass balance calculations suggest that the CDF retained the vast majority of contaminants because of its role of trapping sediments. Groundwater data was not available at the time this study was conducted; therefore, there is a component of drainage to the groundwater that is not accounted for in this study. Many contaminants are strongly chemically bound to sediment, including the primary organic contaminants that are present in the Delaware River, such as PCBs and PAHs. The result of the studies at the Killcohook CDF were very similar to the results of a former study conducted at the Pedricktown CDF where a high contaminant retention rate was also observed.

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1.0 INTRODUCTION

1.1 BACKGROUND

The U.S. Army Corps of Engineers (USACE), Philadelphia District is responsible for maintaining safe navigation in the Delaware River. The majority of the dredging conducted along the Delaware River is maintenance dredging, designed to periodically renew the navigational depth of the channel to address the regular siltation within the channel. Dredging is typically conducted using hydraulic dredging techniques, which is associated with environmental concerns, including the potential that chemical contaminants trapped within river sediments will be released and mobilized to the water column (and hence to biota) at the cutter head and through the discharge water of Confined Disposal Facilities (CDFs). A typical dredging operation hydraulically pumps dredged material into a CDF with a sediment to water ratio of about 1 to 3, to facilitate efficient pumping of sediment and rock through the dredge pipeline. Upland CDFs are designed to increase the water's residence time to allow suspended sediments associated with the dredged slurry time to settle out.

In October and November 1999, the USACE, Philadelphia District conducted maintenance dredging of the New Castle range of the Delaware River and pumped dredged material into the Killcohook CDF, located on the New Jersey shore of the Delaware River, 3 miles south of the Delaware Memorial Bridge. During this dredging event, the USACE conducted sampling to quantify the contaminants associated with the discharge water of the Killcohook weir and to describe the role of the CDF in sequestering contaminants associated with dredged sediment. Maintenance dredging in the New Castle range resulted in the dredging of approximately 994,045 cubic yards of material, which was then placed in Area 2, a 410-acre cell within the Killcohook CDF (Figure 1-1).

1.2 OBJECTIVES AND STUDY APPROACH

The objectives of this study were to:

- evaluate the contaminant concentration in the weir discharge relative to regulatory criteria,
- estimate what percentage of contaminants in the dredged slurry were retained by the CDF,
- estimate the total loadings of metals, organics, and PCBs that were released back into the river by the CDF discharge, and
- calculate the changes in chemical concentration in the Delaware River caused by contaminant loading in the CDF discharge.

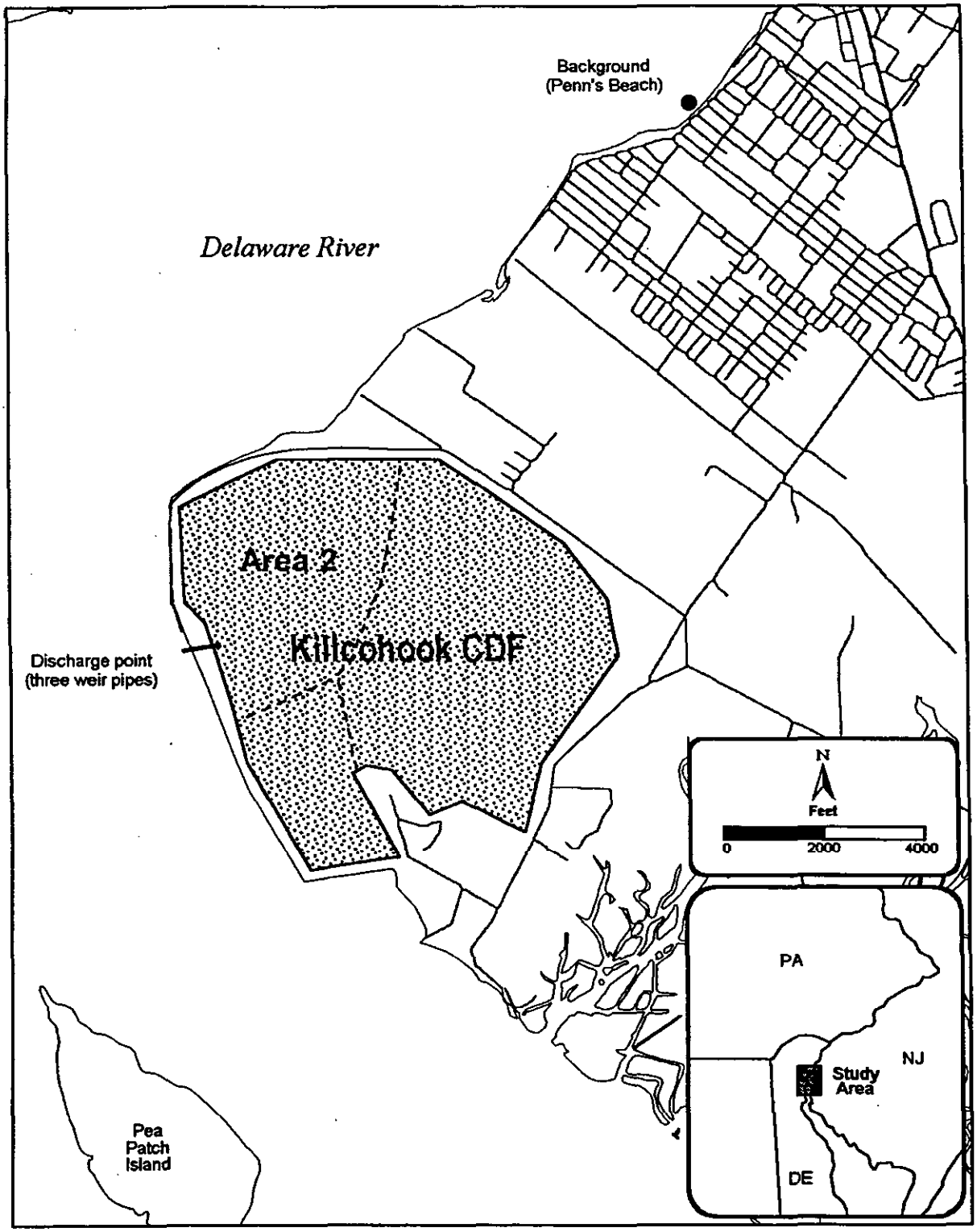

Figure 1-1. Map of Killcohook confined disposal facility location.

Historical studies conducted during material placement in CDFs have been used primarily to determine if water quality criteria were met during dredging operations, but in 1999, Versar conducted a study for the USACE that evaluated the role of the Pedricktown North CDF in sequestering contaminants associated with dredged sediments. This study, modeled after the Pedricktown study, required simultaneous sampling of dredged material at the influent pipe and the weir discharge. We estimated the kilograms of contaminants retained by the CDF relative to the kilograms that were released through the weir. The difference between the two and the percentage of contaminants retained by the CDF described the ability of the CDF to sequester contaminants. Groundwater was not available at the time this study was conducted; therefore, there is a component of drainage to the groundwater that is not accounted for in this study.

The loadings analytical approach allowed for consideration of daily impacts on river water quality resulting from the CDF discharge. The metals concentrations and volume of water being discharged were multiplied to assess the total metals loading to the river. This was added to the total ambient river loading, and the relative change on river water contaminant concentrations was estimated and compared to DRBC water quality criteria.

2.0 STUDY DESIGN AND METHODS

The maintenance dredging operation that took place at the New Castle range in October and November 1999 was designed to last for approximately four to six weeks. In order to assess the range of chemical constituents that were introduced to the CDF, the dredged material influent was sampled periodically during the dredging operation. Based on the design of the dredging project, four influent samples were collected each week of dredging. Communications with the dredge operator and USACE, Philadelphia District Operations staff confirmed the hours of operation and amount of sediment dredged per day, such that all allocated influent samples could be collected during the period of active dredging.

The Killcohook CDF began to discharge water roughly one week after dredging began. The amount of time it takes for a weir to discharge is subject to several factors, including the size of the site; soil qualities, including type of substrate and dryness; and engineering controls, such as the division of the CDF into cells to direct water throughout the site and the management of the weir. In addition, the presence of vegetation throughout a site can alter the time to discharge by slowing water and suspended material flow and through uptake of water. A large, vegetated, divided CDF loses water to evaporation, uptake by vegetation, and through filtration into the soil. In total, 2.94×10^9 liters of material were placed in the site, roughly 75% of which was water. A total of 1.29×10^9 liters were discharged, which is 58.5% of the influent water volume. The dredge operation began on October 12, but the weir did not discharge water until approximately October 21. Similarly, dredging was completed November 12, but the weir discharged through December 13. The dredging log is included as Appendix E. As with the influent data collection, weir samples were collected throughout the period of water discharge from the CDF in order to monitor the water quality. In addition to characterizing the chemical composition of the weir effluent, a flow meter installed in one of the three discharge pipes enabled the entire outflow from the Killcohook CDF to be measured throughout the drainage period.

To evaluate contaminant concentrations in the river in the vicinity of the weir, discharge plume samples were collected downstream of the weir discharge pipes. Due to the river contours at this location and the existence of a large sandbar roughly 30 feet out from the point of weir discharge, the location of the discharge plume sample was set at the nearshore edge of the bar. The discharge was assumed to flow toward the river and then, with the influence of the bar on the local flow, turn upriver or downriver depending on the tide and wind. Therefore, collecting the sample just inside of the bar allowed for capture of discharge water regardless of river conditions at any particular sample time. A background location of similar physical characteristics was sampled in order to estimate ambient river conditions throughout the study. This background site was located along the eastern shore of the river, the same side as Killcohook at Penn's Beach, approximately 2 miles north of the CDF (Figure 1-1). This site was selected because of its close proximity to the CDF yet upriver of the influence of the weir discharge, as well as similar physical conditions, and its relative distance from any known contaminant source. Samples were collected at a similar distance from shore and depth as the discharge plume samples in order to approximate the conditions and quality of the water.

2.1 FIELD METHODS

2.1.1 Water Quality Samples

All samples were analyzed for total suspended solids (TSS) and a full suite of chemical constituents, including volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, inorganic compounds, and high-resolution polychlorinated biphenyl compounds (PCBs). All samples other than influent samples were analyzed for both total and dissolved inorganic compounds. Samples collected from the Killcohook weir, discharge plume, and background were compared to the DRBC marine water quality criteria.

2.1.1.1 Weir

The weir discharge was sampled using an ISCO® automatic sampler to obtain composite samples throughout the discharge period as well as daily TSS samples. The sampler consists of a peristaltic pump, controlled by a computer, which allows for collecting fixed amounts of water into sample containers over a period of time. The sample was collected through Teflon tubing that was suspended into the weir. The sample routine for this project was designed to collect water at 6-hour intervals. One-liter sample jars were used for all analytes, except VOCs. Metals and PCBs were filled over the course of three or four days (depending on the day of the week), and one TSS container was filled each day. Samples were not collected in this manner for the VOCs and the SVOCs since the samples must be sealed immediately following collection. A six-hour composite weir sample was collected when the field crew arrived at the site, by manually starting the sampler pump and filling the sample container once per hour over a 6-hour period. After all other fieldwork was completed, the field crew would return to the weir, remove the VOC and SVOC sample, and reset the sampler for the original sampling routine.

2.1.1.2 Discharge Plume

Discharge plume samples were collected at slack tide, either high or low, depending on the tide cycle. Since the discharge pipe was between the high and low tide line, different methods of sampling had to be employed to sample the discharge plume at any tidal stage. A fixed-point station was erected inside the sandbar located near the the weir discharge pipe. A pulley was affixed to the station, with a rope connecting back to a point above the high tide line on shore. A peristaltic pump, equivalent to the one used at the weir, was used to collect a mid-water sample (roughly 2-feet below the surface) by tying the suction head of the sampler to the line and pulling it out to the fixed station. A volume of water greater than twice the volume of the Teflon tubing required to reach the fixed station was pumped through the sampler prior to collecting the samples.

2.1.1.3 Background

Background samples were collected following the methods established for collection of the discharge plume sample. The background sample location off Penn's Beach was determined to be similar to the discharge plume site in physical regime and free from direct chemical influence from a known source of pollutants. Background samples were collected as close to slack tide as possible, given that the discharge plume sampling occurred at slack tide.

2.1.1.4 Influent

Given the high-pressure flow out of the influent pipe, a grab sample was taken using a swing-arm sampler with a glass beaker fixed onto one end. The sampler was lowered into the influent flow at the point where the dredged material was falling into the accumulated dredged material in the CDF. This was a highly mixed area, which allowed the influent sample to be taken as close to the point of discharge as possible. The material was collected in sample containers and sealed immediately.

2.1.2 Flow Measurements

Inflow from the dredge and dredging logs were supplied by the USACE, Philadelphia District, Operations staff. The progress of the dredging operation was monitored throughout dredging activities and recorded daily, by number of hours and amount of material dredged.

Outflow from the weir was determined using a transducer-type flow meter that was fixed inside one of the three discharge pipes. The flow meter was connected to a data-logging device that stored the discharge flow rate in 15-minute intervals. The data was downloaded onto a computer and stored twice each week during the sampling period to be certain the flow meter was operating correctly. After mid-November, flow from the weir varied somewhat between the pipes. While the flows were unequal, the pipe with the flow meter had a flow that was approximately between the flows of the other two pipes, and is, therefore, assumed to be an acceptable estimate of the mean flow from all three pipes. This assumption is based on two visits during which the water depth in the pipes was measured, and on both occasions, the pipe where the flow was being measured did have approximately the mean of the three pipes. Given that, the flow in the one pipe was taken as the mean flow and multiplied by three in order to get the total flow.

2.2 LABORATORY METHODS

Sample containers were promptly shipped following collection to the contract laboratories performing chemical analysis. All chemical analyses, except high-resolution PCBs, were performed by Blue Marsh Laboratories in PA. Blue Marsh used USEPA method 8260 for VOCs, 8270 for SVOCs, 8081 for pesticides, 6010 for inorganics (and 9010 for cyanide), and 160.2 for TSS, as specified in the Scope of Work (Appendix A; Table 2-1).

Table 2-1. Analyte lists, methods, and detection limits for chemical analyses (not including PCBs) used for the Killcohook CDF study.

Analyte	Detection Limit Aqueous (µg/L)	Detection Limit Solid (µg/kg)
Volatile Organic Compounds		
Chloromethane	10	10
Bromomethane	10	10
Vinyl Chloride	10	10
Chloroethane	10	10
Methylene Chloride	10	10
Acetone	10	10
Carbon disulfide	10	10
1,1-Dichloroethene	10	10
1,1-Dichloroethane	10	10
1,2-Dichloroethene (Total)	10	10
Chloroform	10	10
1,2-Dichloroethane	10	10
2-Butanone	10	10
1,1,1-Trichloroethane	10	10
Carbon Tetrachloride	10	10
Bromodichloromethane	10	10
1,2-Dichloropropane	10	10
cis-1,3-Dichlorpropene	10	10
Trichloroethene	10	10
Dibromochlormethane	10	10
1,1,2-Trichloroethane	10	10
Benzene	10	10
Trans-1,3-Dichloropropene	10	10
Bromoform	10	10
4-Methyl-2-pentanone	10	10
2-Hexanone	10	10
Tetrachloroethene	10	10
1,1,2,2-Tetrachloroethane	10	10
Toluene	10	10
Chlorobenzene	10	10
Ethyl benzene	10	10
Styrene	10	10
Xylenes, total	10	10

Table 2-1. (Continued)

Analyte	Detection Limit Aqueous (µg/L)	Detection Limit Solid (µg/kg)
Semivolatile Organic Compounds		
Phenol	10	660
Bis(2-chloroethyl) ether	10	660
2-Chlorophenol	10	660
1,3-Dichlorobenzene	10	660
1,4-Dichlorobenzene	10	660
1,2-Dichlorobenzene	10	660
2-Methylphenol	10	660
Bis(2-Chloroisopropyl)ether	10	660
4-Methylphenol	10	660
N-Nitroso-di-n-propylamine	10	660
Hexachloroethane	10	660
Nitrobenzene	10	660
Isophorone	10	660
2-Nitrophenol	10	660
2,4-Dimethylphenol	10	660
Bis(2-Chloroethoxy)methane	10	660
2,4-Dichlorophenol	10	660
1,2,2-Trichlorobenzene	10	660
Napthalene	10	660
4-Chloroaniline	20	1300
Hexachlorobutadiene	10	660
4-Chloro-3-methylphenol	20	1300
2-Methylnaphthlene	10	660
Hexachlorocyclopentadiene	10	660
2,4,6-Trichlorophenol	10	660
2,4,5-Trichlorophenol	10	660
2-Chloronaphthalene	10	660
2-Nitroaniline	50	3300
Dimethylphthalate	10	660
Acenaphthylene	10	660
2,6-Dinitrotoluene	10	660
3-Nitroaniline	50	3300
Acenaphthene	10	660
2,4-Dinitrophenol	50	3300
4-Nitrophenol	50	3300
Dibenzofuran	10	660
2,4-Dinitrotoluene	10	660
Diethylphthalate	10	660
4-Chlorophenyl-phenyl ether	10	660

Table 2-1. (Continued)

Analyte	Detection Limit Aqueous (µg/L)	Detection Limit Solid (µg/kg)
Semivolatile Organic Compounds (Continued)		
Fluorene	10	660
4-Nitroaniline	20	830
4,6-Dinitro-2-methylphenol	50	3300
N-nitrosodiphenylamine	10	660
4-Bromophenyl-phenylether	10	660
Hexachlorobenzene	10	660
Pentachlorophenol	10	50
Phenanthrene	10	660
Anthracene	10	660
Carbazole	10	330
Di-N-butylphthalate	10	330
Fluoranthene	10	660
Pyrene	10	660
Butylbenzylphthalate	10	660
3,3'-Dichlorobenzidine	20	1300
Benzo(a)anthracene	10	660
Chrysene	10	660
bis(2-ethylhexyl)phthalate	10	660
Di-N-octylphthalate	10	660
Benzo(b)fluoranthene	10	660
Benzo(k)fluoranthene	10	660
Benzo(a)pyrene	10	660
Indeno(1,2,3-cd)pyrene	10	660
Dibenzo(a,h)Anthracene	10	660
Benzo(g,h,I)perylene	10	660
Pesticides		
Alpha-BHC	0.05	1.9
beta-BHC	0.05	3.3
Delta-BHC	0.05	1.7
Gamma-BHC (Lindane)	0.05	2
Heptachlor	0.05	2.1
Aldrin	0.05	2
Heptachlor epoxide	0.05	2.1
Endosulfan I	0.05	2.1
Dieldrin	0.1	3.3
4,4'-DDE	0.1	4.2
Endrin	0.1	3.6
Endosulfan II	0.1	3.3
4,4'-DDD	0.1	4.2

Table 2-1. (Continued)

Analyte	Detection Limit Aqueous (µg/L)	Detection Limit Solid (µg/kg)
Semivolatile Organic Compounds (Continued)		
Pesticides (Continued)		
Endosulfan sulfate	0.1	3.6
4,4'-DDT	0.1	3.6
Methoxychlor	0.5	17
Endrin ketone	0.1	3.3
Endrin aldehyde	0.1	3.3
Alpha-chlordane	0.05	1.7
Gamma-chlordane	0.05	1.7
Toxaphene	5	170
Inorganics	mg/L	mg/kg
Aluminum	0.2	0.007
Antimony	0.06	0.019
Arsenic	0.01	0.01
Barium	0.2	0.001
Beryllium	0.005	0.001
Cadmium	0.005	0.002
Calcium	5	0.001
Chromium	0.01	0.002
Cobalt	0.05	0.006
Copper	0.025	0.002
Cyanide	0.01	0.5
Iron	0.1	0.005
Lead	0.003	0.001
Magnesium	5	0.001
Manganese	0.015	0.001
Mercury	0.0002	0.0002
Nickel	0.04	0.002
Potassium	5	0.051
Selenium	0.005	0.001
Silver	0.01	0.002
Sodium	5	0.1
Thallium	0.01	0.001
Vanadium	0.05	0.003
Zinc	0.02	0.002
Total Suspended Solids	5	NA

High-resolution PCB analysis, draft method 1668, was conducted by Midwest Research Institute, Kansas City, Missouri. The PCB analysis allowed for the identification of 77 mono-ortho and di-ortho PCB congeners through the use of high resolution gas chromatography (HRGC)/ high resolution mass spectrometry (HRMS). The HRGC/HRMS method allows for detection limits of 50 pg/L for all congeners (Table 2-2).

Table 2-2. Analyte lists, methods, and detection limits for high-resolution PCB analyses for the Killcohook CDF study.

Non-ortho coplanar congeners	
77-Tetra	126-Penta
81-Tetra	169-Hexa
Other PCB congeners	
8-Di	141-Hexa
18-Tri	146-Hexa
28-Tri	149-Hexa
37-Tri	151-Hexa
42-Tetra	153-Hexa
44-Tetra	156-Hexa
47-Tetra	157-Hexa
49-Tetra	158-Hexa
52-Tetra	166-Hexa
60-Tetra	167-Hexa
64-Tetra	168-Hexa
66-Tetra	170-Hepta
70-Tetra	171-Hepta
74-Tetra	174-Hepta
80-Tetra	177-Hepta
82-Penta	179-Hepta
84-Penta	180-Hepta
86-Penta	183-Hepta
87-Penta	185-Hepta
91-Penta	187-Hepta
92-Penta	189-Hepta
95-Penta	190-Hepta
97-Penta	191-Hepta
99-Penta	194-Octa
101-Penta	195-Octa
105-Penta	196-Octa
110-Penta	198-Octa
114-Penta	200-Octa
118-Penta	201-Octa
119-Penta	203-Octa
120-Penta	205-Octa
123-Penta	206-Nona
127-Penta	207-Nona
128-Hexa	208-Nona
137-Hexa	209-Deca
138-Hexa	

Influent samples, which were in slurry form, were handled differently from the other samples due to the high volume of suspended material. In order to obtain chemical data for these samples, it was necessary for the laboratories to partition the influent samples into their liquid and solid portions for analysis. This allowed for the analysis of chemicals in the water fraction of the sample separately from the sediment associated chemicals. After performing laboratory analysis, the concentrations of liquid- and solid-phase chemicals were summed based on the volume of the original sample that was in liquid or solid form, and a total chemical concentration for the slurry sample was obtained. Analysis of all chemicals was performed on the total slurry in order to obtain the total mass of chemical constituents in the CDF influent.

2.3 DATA ANALYSIS

2.3.1 Water Quality Criteria Comparison

Weir, discharge plume, and background concentrations were compared to relevant DRBC water quality criteria (DRBC 1996). Given the location of Killcohook within the Delaware Estuary and DRBC guidance, marine criteria were used for comparison of contaminants in Killcohook samples. Both chronic and acute criteria were compared to samples. This method of comparison allows for highly conservative chronic criteria to screen chemicals for their potential to pose risks to ecological receptors, while the acute criteria presents an assessment of potential adverse effects resulting from short-term exposure to chemicals released periodically from the Killcohook CDF.

2.3.2 Killcohook Confined Disposal Facility Contaminant Loadings

Total contaminant inputs into the Killcohook CDF were compared to contaminant discharges at the weir to estimate the mass contaminant loadings of the Killcohook CDF during the dredging operation. By combining the chemical analytical data with the total influent flow we estimated the total amount of contaminants that were removed from the river channel and placed in the CDF.

The total weir discharge was obtained by multiplying contaminant concentration data by the discharge flow, with non-detects assumed to be zero. The difference between the contaminants added to and released from the CDF was estimated to be the total contaminants loadings retained in the CDF. The ratio of discharge loading to the loading placed in the CDF presented the retention rate of the CDF. The retention rate of the CDF was used to determine how efficiently the CDF sequesters contaminants.

2.3.3 River Loading Analysis

The river loading analysis was conducted to determine if the CDF discharge changed the ambient water quality of the Delaware River. In contrast to comparing instantaneous or composite chemical results to screening criteria, an evaluation of the chemical loadings to the Delaware River provides a framework in which to evaluate the cumulative effect of dredging on water quality. This analysis allows for the comparison of the CDF discharge to the ambient Delaware River water quality within the reach of the Delaware where the Killcohook discharge is located, while accounting for the variable flow from the CDF. Only PCBs and total metals concentrations were used in this analysis as too few organics were detected in the discharge to warrant further analysis. The daily load of contaminants in the weir discharge was determined using the procedures outlined in Section 2.3.2.

Ambient metals data were obtained from the USEPA and the DRBC Toxics Management Program (Fikslin 1999) and the background samples from this study. The DRBC data set was believed to be the most accurate estimate of ambient river concentrations, but only contained data for four chemicals. The USEPA data set contains samples from this portion of the Delaware from the 1950s through 1998. A subset of these data were used to allow for the analysis of the most relevant samples. The most recent samples collected between October and December were preferable for comparison to the CDF data because dredging is limited to late fall and winter months. The collection dates of the samples used for comparison were all autumn sampling events from 1985 and later, some analytes used data from 1990 and later. Mean concentrations of total and dissolved metals were used to represent ambient river concentrations. For those analytes which did not have suitable ambient river concentration estimates from the DRBC or USEPA estimates, background data collected at Penn's Beach for this study were used. The mean concentration of the analytes were used to represent river concentrations. Assumed river concentrations were multiplied by a conservative estimate of river flow, 118.47 m^3/sec, taken from DRBC (1998) Table 12, which is the low flow that was used for DRBC Zone 5 Chronic Water Quality Criteria within that study. For comparison, the normal average flow in November of the Delaware River at Trenton, taken from the DRBC web site Monthly Flow Summary is 9,825 CFS (278.24 m^3/sec). Therefore, the low flow estimate from the DRBC study is more conservative to use in this assessment. Similar to estimating river flow, estimates of ambient river PCB loadings were obtained from DRBC (1998). Table 13 shows loadings for Zone 5 to be approximately 7.03 g/day during dry conditions and 40.88 g/day during wet conditions. For the purposes of this study, we conservatively based PCB loadings analysis on dry conditions, although the period of dredging operations (autumn) typically has substantial precipitation. The ambient concentration of PCBs in Zone 5 was assumed to be equal to the loading in Zone 5 divided by the flow in Zone 5, thus resulting in an ambient concentration of PCB congeners of 6.94×10^{-10} µg/L.

3.0 RESULTS

3.1 WATER QUALITY ANALYSIS

Results from the equipment blank collected in the field using de-ionized, ultra-filtered water are used to estimate the levels of contamination that are introduced by field and laboratory activities. The results of the field blank chemical analysis indicate that there are low levels of metals, and certain VOCs that can be found in samples (Table 3-1). These contaminants are not necessarily present in all samples, but they indicate that there is some potential for contamination of samples that is not related to dredging activities or the Killcohook CDF. Therefore, all additional water quality analyses should be reviewed in the context of the equipment blank results. Field blank data can be used in accordance with standard data quality guidelines to disregard potentially false positive results. However, this study will not exclude results based on a comparison to field blanks in order to conservatively assess potential risks.

Table 3-1. Chemical analytes detected in the field blank from the Killcohook testing

Analyte	Units	Result
Dissolved Inorganics		
Copper, dissolved	mg/L	0.003
Zinc, dissolved	mg/L	0.029
Total Inorganics		
Aluminum	mg/L	0.01
Antimony	mg/L	0.01
Arsenic	mg/L	0.01
Calcium	mg/L	0.07
Iron	mg/L	0.003
Magnesium	mg/L	0.004
Manganese	mg/L	0.005
Sodium	mg/L	0.24
Zinc	mg/L	0.001
Volatile Organics		
Chloroform	µg/L	26
Methylene chloride	µg/L	6

3.1.1 Influent Samples

Influent sample contaminant concentrations are given for comparison purposes. They were used in determining loadings for the Killcohook CDF. These samples were analyzed as a slurry; both the water and sediment fractions of the samples were analyzed and the total concentration presented is the sum of the solid and aqueous fractions of the sample. They are not

compared to water quality criteria because they are slurry samples with contaminant concentrations representing sediment and water concentrations.

Table 3-2. Contaminant concentrations observed in the inlet slurry samples at the Killcohook CDF (inorganics in mg/L, organics in µg/L)

Analyte	15-Oct	21-Oct	28-Oct	04-Nov
Inorganics (mg/L)				
Cyanide	< 0.04	< 0.03	< 0.03	< 0.08
Aluminum	NA	801.49	267.53	668.35
Antimony	NA	< 0.41	< 0.13	< 0.29
Arsenic	NA	S 0.83	< 0.13	< 0.29
Barium	NA	3.36	1.34	5.46
Beryllium	NA	< 0.10	< 0.03	< 0.07
Cadmium	0.62	< 0.10	S 0.05	S 0.17
Calcium	NA	266.42	118.15	304.26
Chromium	17.96	3.25	0.87	2.51
Cobalt	NA	< 0.41	< 0.13	0.52
Copper	8.94	1.85	0.33	1.69
Iron	NA	1,857.98	519.30	1,476.26
Lead	10.02	2.23	0.75	2.38
Magnesium	NA	600.44	224.25	376.85
Manganese	NA	95.94	31.32	87.44
Nickel	9.96	1.64	0.56	1.55
Potassium	NA	240.78	108.85	159.31
Selenium	NA	L 0.44	L 0.15	L 0.31
Silver	< 0.62	L 0.10	L 0.04	L 0.07
Sodium	NA	1,046.07	618.05	509.66
Thallium	NA	L 0.43	L 0.14	L 0.31
Vanadium	NA	3.43	0.99	S 2.44
Zinc	65.39	11.69	3.68	12.09
Mercury	NA	0.01	S 0.01	S 0.01
Organics (µg/L)				
Anthracene	<129.15	< 28.13	S 9.73	< 15.97
Benzoic acid	<129.15	< 28.13	S 24.85	< 15.97
Benzo(a)anthracene	<129.15	< 28.13	S 24.41	< 15.97
Benzo(a)pyrene	<129.15	< 28.13	S 20.77	< 15.97
Benzo(b)fluoranthene	<129.15	< 28.13	S 10.45	< 15.97
Benzo(ghi)perylene	<129.15	< 28.13	S 22.76	< 15.97
bis(2-Ethylhexyl)phthalate	L 132.12	< 28.13	L 8.35	L 16.82
Chrysene	<129.15	< 28.13	S 25.07	< 15.97
Dibenzo(a,h)anthracene	<129.15	< 28.13	S 7.58	< 15.97
Fluoranthene	<129.15	< 28.13	S 48.81	< 15.97
Indeno(1,2,3-cd)pyrene	<129.15	< 28.13	S 11.38	< 15.97
Phenanthrene	<129.15	< 28.13	S 33.02	< 15.97
Pyrene	<129.15	< 28.13	S 41.47	< 15.97

NA - Not Analyzed
< - Not detected in solid or aqueous fraction
S - Detected only in soil fraction
L - Detected only in aqueous fraction

Contaminants detected in at least one of the inlet samples are shown in Table 3-2; those that were not detected in individual samples have detection limits listed. Detection limits vary by sample due to the sediment fraction of the samples, since sediment detection limits are a function of moisture content of the sediment. Due to a communication error, the first inlet sample was not analyzed for the full suite of inorganic analytes. For those inorganics not analyzed in the first sample (indicated by NA for the 15 October sample), the loadings analysis used the average concentration of the subsequent three samples as a surrogate. Contaminants that are listed with either an "S" or an "L" indicate that the contaminant was detected in only the solid or liquid portion of the sample. All other contaminants listed without a flag were detected in both the solid and liquid fractions, and were added together according to the proportion of each sample that was sediment or water in order to calculate the concentration of each contaminant in the total slurry.

Of the organic contaminants detected in inlet samples, one compound, bis(2-ethylhexyl)phthalate, was detected in the liquid fraction of three samples. This contaminant is a common laboratory and field contaminant as it is a plasticizer, commonly found in ziplock bags which are used for sample storage. All other organic contaminants detected in inlet samples were detected in the sample collected on October 28. Except benzoic acid, these contaminants are polynuclear aromatic hydrocarbons (PAHs), which are contaminants associated with petroleum products.

3.1.2 Weir Water Quality Data

The only organic contaminant present in weir samples that exceeded water quality criteria was bis(2-ethylhexyl)phthalate (Table 3-3). This contaminant is a common field and laboratory contaminant, as it is a plasticizer, found in many types of field and lab equipment, including ziplock bags. This may not reflect site-related contamination.

Four dissolved metals, copper, nickel, silver, and zinc, exceeded DRBC water quality criteria in at least one sample (Table 3-4). In nearly all weir samples (11 of 12), nickel exceeded the DRBC chronic water quality criterion. However, nickel concentrations did not exceed the acute criteria. Silver exceeded its acute criteria in one sample (it lacks a chronic criteria), on November 1. In three samples zinc exceeded both its chronic and acute water quality criteria, and in seven samples copper exceeded both its chronic and acute water quality criteria.

Similar results were found in the analysis of total metals concentrations, with the addition of cyanide, lead, mercury, and selenium also exceeding their respective DRBC criteria. Cyanide was detected in two samples, but the detection limit for cyanide (0.005 mg/L) is also above the DRBC criteria. Lead and mercury exceeded their respective chronic marine criteria in nine and six samples each, but neither exceeded acute water quality criteria in any samples. In addition, the detection limit for mercury is above the chronic criteria. Selenium exceeded its chronic marine criteria in two samples and silver exceeded its acute marine criteria (it lacks a chronic criteria) in one sample. Nickel exceeded its chronic marine criteria in nine samples and its acute

Table 3-3. Results of organic analyses of weir samples from Killcohook CDF (in µg/L).

Analyte	DRBC Criteria	21-Oct	25-Oct	28-Nov	01-Nov	04-Nov	08-Nov	11-Nov	15-Nov	18-Nov	22-Nov	29-Nov	06-Dec
Semi-Volatile Organic Compounds													
4-Nitrophenol	NA	<2	<2	4	<2	<2	<2	<2	<2	<2	<2	<2	<2
Benzoic acid	NA	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
bis(2-Ethylhexyl)phthalate	1.04 a	[redacted]		<2	<2	[redacted]				<2	<2	<2	<2
Fluorene	268 b	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	2	<2
Pentachlorophenol	7.9 c	<2	<2	4	<2	<2	<2	<2	<2	<2	<2	<2	<2
Phenanthrene	NA	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	4	<2

a - DRBC Stream Quality Objective for carcinogens for the Delaware River Estuary, Marine Objective for fish ingestion only.

b - DRBC Stream Quality Objective for systemic toxicants for the Delaware River Estuary, Marine Objective for fish ingestion only.

c - DRBC Stream Quality Objective for toxic pollutants for the protection of aquatic life in the Delaware River Estuary, Chronic Marine Objective.

NA – No criteria available

< - not detected

Table 3-4. Results of inorganic analyses of weir samples from the Killcohook CDF (in mg/L).

Analyte	DRBC Marine Criteria Chronic	DRBC Marine Criteria Acute	21-Oct	25-Oct	28-Oct	01-Nov	04-Nov	08-Nov	11-Nov	15-Nov	18-Nov	22-Nov	29-Nov	06-Dec
Dissolved Inorganics														
Cadmium	0.0093	0.043	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Chromium	0.05	1.1	0.001	<0.001	<0.001	0.002	<0.001	<0.001	0.001	<0.001	0.002	0.003	0.003	0.001
Copper	0.0034	0.0053	0.025	<0.001	0.001	0.019	0.002	0.022	0.007	0.018	<0.001	**0.004**	**0.005**	0.019
Lead	0.0085	0.22	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Nickel	0.0083	0.075	**0.03**	**0.018**	**0.016**	**0.018**	**0.009**	**0.02**	**0.018**	**0.016**	0.002	**0.016**	**0.01**	**0.019**
Silver	-	0.0023	0.002	0.002	0.002	0.003	<0.001	0.001	0.001	0.001	<0.001	0.002	0.002	<0.001
Zinc	0.086	0.095	0.078	0.092	0.061	0.039	0.035	0.076	0.125	0.057	0.075	0.058	0.076	0.073
Total Inorganics														
Cyanide	-	0.001	<0.005	0.008	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Aluminum	-	-	2.686	0.21	0.831	0.112	0.98	0.07	0.42	0.094	<0.004	0.008	0.020	0.54
Antimony	NL	NL	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.02	<0.004	<0.004	<0.004	<0.004	0.01
Arsenic	0.036	0.069	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.02	<0.004	<0.004	<0.004	<0.004	<0.004
Barium	NL	NL	0.103	0.087	0.098	0.108	0.111	0.097	0.648	0.122	0.1	0.098	0.093	0.112
Beryllium	NL	NL	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001
Cadmium	0.0093	0.043	0.003	0.001	0.001	<0.001	0.001	0.001	0.007	<0.001	<0.001	<0.001	<0.001	<0.001
Calcium	NL	NL	72.1	79.9	77.5	84	125	90	396	81.1	83.7	124	77.9	79.40
Chromium	0.05	1.1	0.012	<0.001	0.001	0.003	0.003	<0.001	<0.005	<0.001	0.002	0.001	0.001	0.004
Cobalt	NL	NL	0.007	0.005	<0.004	<0.004	<0.004	0.004	0.03	0.005	<0.001	<0.001	<0.004	0.002
Copper	0.0034	0.0053	0.031	0.003	0.024	0.02	0.009	0.015	0.101	0.015	0.003	0.001	0.002	0.016
Iron	NL	NL	9.25	0.897	2.667	1.633	3.979	0.760	6.308	1.139	1.093	0.284	1.083	4.182
Lead	0.0085	0.22	**0.015**	0.007	**0.018**	**0.015**	**0.013**	**0.01**	**0.05**	**0.009**	**0.009**	**0.011**	0.008	<0.002
Magnesium	NL	NL	145.57	166.33	149.58	160.89	181	135.5	607.1	103.2	105.0	124	93.67	98.540
Manganese	NL	NL	8.08	6.330	5.584	7.774	6.23	8.097	48.4	8.2	8.443	7.289	7.109	8.144
Mercury	0.000025	0.0021	**0.0005**	**0.0002**	<0.0002	0.0005	<0.0002	**0.0005**	<0.0002	<0.0002	<0.0002	**0.0005**	**0.0003**	<0.0002
Nickel	0.0083	0.075	**0.038**	**0.019**	**0.016**	**0.017**	**0.014**	**0.022**	0.101	**0.018**	0.003	0.008	**0.019**	**0.021**
Potassium	NL	NL	50.1	57	50.7	55.9	53	47.2	175	32.6	29.3	27	26.7	31.96
Selenium	0.071	0.3	0.037	0.042	0.043	**0.074**	0.048	0.042	**0.18**	0.027	<0.004	0.029	0.03	0.004
Silver	-	0.0023	0.002	0.002	0.001	0.002	0.001	0.002	0.008	0.002	<0.001	0.001	0.001	<0.001
Sodium	NL	NL	679	1301	1088	1643	1116	80	3046	521.2	678	605	621	651
Thallium	NL	NL	0.044	0.024	0.015	0.049	0.038	0.028	0.18	0.020	0.041	0.026	<0.004	<0.004
Vanadium	NL	NL	0.014	<0.004	0.006	0.004	0.006	<0.004	<0.02	<0.001	0.008	0.003	<0.004	0.006
Zinc	0.086	0.095	0.093	0.1	0.068	0.05	0.092	**0.091**	0.353	0.081	0.076	0.04	0.085	0.078

< - not detected
NL – No DRBC Marine Criterion is listed.
Bold type indicates sample exceeds DRBC Chronic Marine Criteria.
Shaded cells indicate sample exceeds DRBC Acute Marine Criteria.

marine criteria in one additional sample. Copper exceeded its acute water quality criteria in eight samples, and zinc exceeded its acute water quality criteria in six samples.

3.1.3 Total Suspended Solids

The TSS measured from the weir was not found to present water quality hazards to the Delaware River. Weir TSS ranged from 6 to 355 mg/L throughout the study, although field difficulties led to unnaturally high readings on several occasions when sediment accumulating in the weir was sucked into the sampler. These data were affected by sampling error and are not representative of the actual weir effluent on these dates. These dates are recorded in field log books, and are noted as such (Table 3-5). These amounts are below any of the regulatory guidelines presented by the DRBC for effluents. A visual comparison of TSS levels detected in weir, discharge plume, and background samples is shown in Figure 3-1.

Table 3-5. Results of Total Suspended Solids analyses of weir samples from Killcohook (in mg/L).

19-Oct-99	355[a]	13-Nov-99	77
20-Oct-99	48	14-Nov-99	57
21-Oct-99	76	15-Nov-99	80
22-Oct-99	55	16-Nov-99	22
23-Oct-99	54	17-Nov-99	37
24-Oct-99	195[b]	18-Nov-99	45
25-Oct-99	55	19-Nov-99	70
26-Oct-99	189[b]	20-Nov-99	73
27-Oct-99	195[b]	21-Nov-99	68
28-Oct-99	162[b]	22-Nov-99	49
29-Oct-99	139[b]	23-Nov-99	48
30-Oct-99	24	24-Nov-99	48
31-Oct-99	31	25-Nov-99	68
01-Nov-99	33	26-Nov-99	54
02-Nov-99	44	27-Nov-99	74
03-Nov-99	298[b]	28-Nov-99	30
04-Nov-99	43	29-Nov-99	24
05-Nov-99	75	30-Nov-99	47
06-Nov-99	32	01-Dec-99	45
07-Nov-99	35	02-Dec-99	65
08-Nov-99	50	03-Dec-99	67
09-Nov-99	37	04-Dec-99	50
10-Nov-99	45	05-Dec-99	44
11-Nov-99	6	06-Dec-99	42
12-Nov-99	95		

a - This sample was collected while the weir was filling, but before discharge began flowing from the weir.

b - Field logs indicate that these samples were collected when the suction head of the ISCO became submerged in sediment accumulating within the weir.

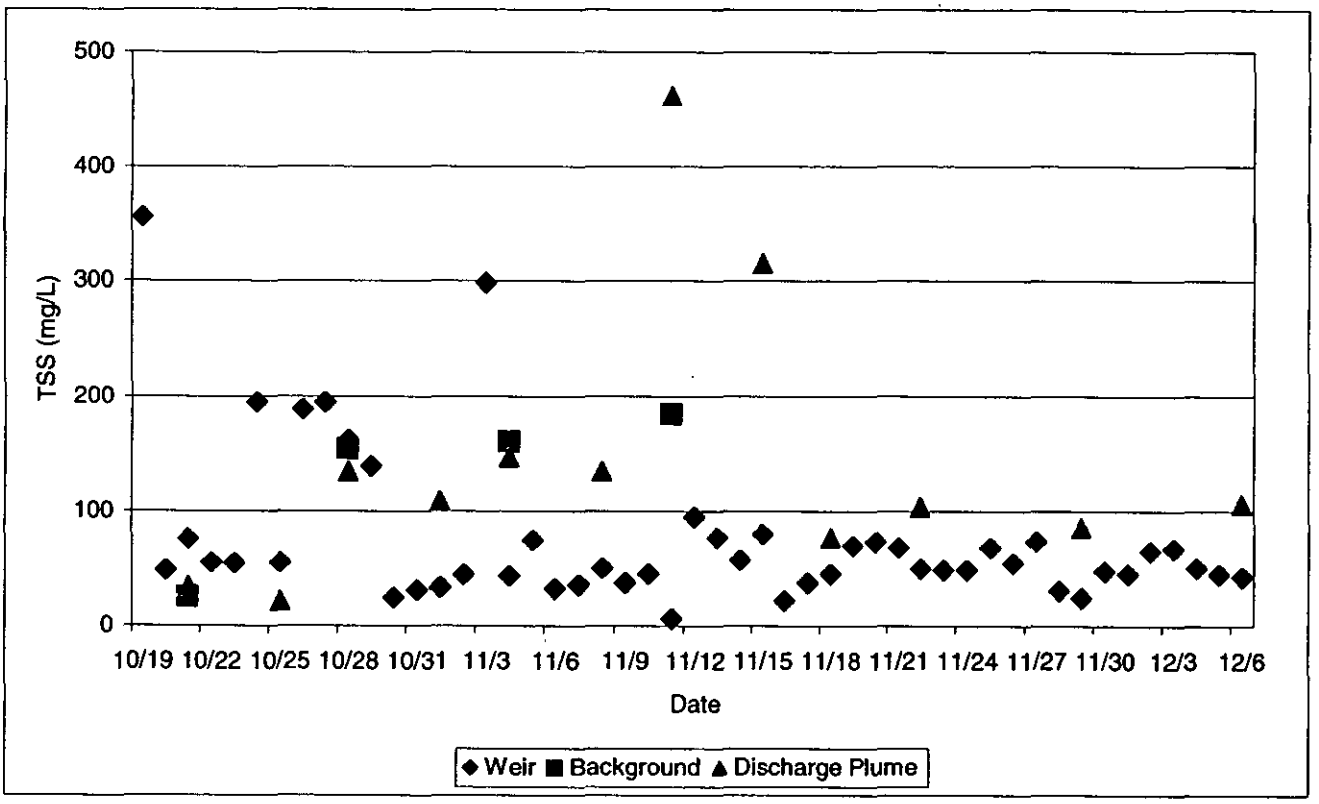

Figure 3-1. TSS comparison of weir, background, and discharge plume samples.

3.1.4 Discharge Plume Data

Only three organic contaminants (also detected in weir samples) were detected in discharge plume samples (Table 3-6). As with weir samples, bis(2-ethylhexyl)phthalate was the only compound detected in concentrations greater then the relevant DRBC criteria. However, this common field and lab contaminant is not expected to present risks to the environment or human health whether it is truly present in the Killcohook samples or is a remnant of field or lab contamination. The discharge plume samples also show levels of inorganics exceeding water quality criteria similar to and less than those in weir samples (Table 3-7). Copper, which exceeded the chronic criterion in seven samples and acute in another five, was the only dissolved inorganic to exceed water quality criteria. In regard to total metals, cyanide, which was detected above the acute criteria in one sample, and mercury, which was detected above the chronic criteria in nine samples, both had detection limits that exceeded DRBC criteria. Total chromium was detected above its chronic criteria in one sample, as was total nickel in two samples. Lead also exceeded its chronic criteria in six samples. Finally, total copper exceeded its chronic criteria in all but two samples and its acute criteria in eight additional samples, and zinc exceeded its acute and chronic criteria in two samples.

Table 3-6. Results of inorganic analyses of discharge plume samples from the Killcohook CDF (in µg/L).

Analyte	DRBC Criteria	21-Oct	25-Oct	28-Oct	01-Nov	04-Nov	08-Nov	11-Nov	15-Nov	18-Nov	22-Nov	29-Nov	06-Dec
Semi-Volatile Organic Compounds													
Benzoic acid	NA	<2	<2	<2	5	<2	<2	<2	<2	<2	<2	<2	<2
bis(2-Ethylhexyl)phthalate	1.04 a	<2	<2	[redacted]		<2	[redacted]	<2	<2	<2	<2	[redacted]	<2
Phenanthrene	NA	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	3	<2

a - DRBC Stream Quality Objective for carcinogens for the Delaware River Estuary, Marine Objective for fish ingestion only.
NA – No criteria available
< - not detected

Table 3-7. Results of inorganic analyses of discharge plume samples from the Killcohook CDF (mg/L).

Analyte	DRBC Marine Criteria Chronic	Acute	21-Oct	25-Oct	28-Oct	01-Nov	04-Nov	08-Nov	11-Nov	15-Nov	18-Nov	22-Nov	29-Nov	06-Dec
Total Suspended Solids			34	21	135	109	147	135	462	315	77	104	86	106
Dissolved Inorganics														
Cadmium	0.0093	0.043	< 0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Chromium	0.05	1.1	< 0.001	<0.001	0.002	0.001	<0.001	<0.001	0.002	0.001	0.001	0.002	0.003	0.001
Copper	0.0034	0.0053	< 0.001	<0.001	**0.005**	0.011	**0.005**	0.008	0.009	<0.001	<0.001	0.002	0.001	0.003
Lead	0.0085	0.22	< 0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002
Nickel	0.0083	0.075	0.003	0.003	0.006	0.005	0.002	0.003	<0.001	<0.001	<0.001	<0.001	0.002	<0.001
Silver	-	0.0023	< 0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	0.001	<0.001
Zinc	0.086	0.095	0.030	0.014	0.040	0.031	0.016	0.057	0.029	0.026	0.013	0.030	0.042	0.041
Total Inorganics														
Cyanide	-	0.001	< 0.005	**0.005**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Aluminum	-	-	1.807	2.306	1.872	0.573	2.394	0.250	7.43	2.483	0.098	0.088	0.147	0.09
Antimony	NL	NL	< 0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.02	<0.004	<0.004	<0.004	<0.004	0.01
Arsenic	0.036	0.069	< 0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.02	<0.004	<0.004	<0.004	<0.004	<0.004
Barium	NL	NL	0.028	0.027	0.047	0.031	0.030	0.018	0.112	0.024	0.018	0.004	0.041	0.021
Beryllium	NL	NL	< 0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	0.001	<0.001
Cadmium	0.0093	0.043	< 0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001
Calcium	NL	NL	31.2	29.4	50.2	42.8	67	25	142	30.3	53.9	80.912	44.2	50.3
Chromium	0.05	1.1	0.006	0.008	0.007	0.002	0.007	<0.001	0.02	**0.06**	0.004	0.003	0.001	<0.001
Cobalt	NL	NL	< 0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.02	<0.001	<0.001	<0.001	<0.004	<0.001
Copper	0.0034	0.0053	**0.004**	**0.005**	0.005	0.009	0.008	0.009	0.047	0.016	<0.001	<0.001	0.001	0.003
Iron	NL	NL	3.821	4.744	4.149	1.204	4.688	0.379	10.427	3.982	0.188	0.248	0.755	0.18
Lead	0.0085	0.22	0.008	**0.009**	**0.013**	**0.009**	**0.011**	0.004	**0.03**	0.007	0.007	**0.01**	0.005	<0.002
Magnesium	NL	NL	47.58	40.27	83.26	79.04	61.3	43.3	217.4	32.7	111.1	143.53	59.81	92.3
Manganese	NL	NL	0.271	0.279	1.896	1.230	0.232	0.136	0.336	0.174	0.482	0.021	2.353	0.113
Mercury	0.000025	0.0021	**0.0003**	**0.0005**	<0.0002	**0.0005**	<0.0002	**0.0006**	**0.0004**	**0.0003**	**0.0002**	**0.0004**	**0.0002**	<0.0002
Nickel	0.0083	0.075	0.007	0.005	**0.009**	0.006	0.007	0.003	**0.014**	0.005	<0.001	<0.001	0.007	0.003
Potassium	NL	NL	18.6	15	28.8	31.3	23	15.2	76	12.4	37.8	44	18.9	35.58
Selenium	0.071	0.3	< 0.004	<0.004	0.025	0.025	<0.004	<0.004	<0.02	0.005	0.039	0.045	<0.004	<0.004
Silver	-	0.0023	< 0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.005	<0.001	<0.001	0.001	<0.001	<0.001
Sodium	NL	NL	378	326	585	654.2	442	282.7	1662	197.4	1036	1233	531	970.8
Thallium	NL	NL	0.01	<0.004	0.012	0.018	0.011	0.008	<0.02	0.009	<0.004	<0.004	<0.004	<0.004
Vanadium	NL	NL	0.011	0.013	0.01	0.006	0.013	0.004	0.04	0.011	0.01	0.007	0.004	0.004
Zinc	0.086	0.095	0.041	0.047	0.07	0.033	0.048	0.034	0.147	0.046	0.025	0.022	0.122	0.023

< - not detected

NL – No DRBC Marine Criterion is listed.

Bold type indicates sample exceeds DRBC Chronic Marine Criteria.

Shaded cells indicate sample exceeds DRBC Acute Marine Criteria.

3.1.5 Background Data

Background samples indicate overall good water quality and limited, low levels of metals contamination. Two VOCs were detected in a background sample, but both are common laboratory contaminants and, after a review by the laboratory, were determined to result from laboratory error (Table 3-8). Copper was the only dissolved inorganic contaminant detected above water quality criteria (both acute and chronic) in one sample (Table 3-9). Both lead, in two samples, and mercury, in one sample, were detected in total concentrations exceeding their respective DRBC chronic marine criteria. Total copper was detected above acute and chronic criteria in three of the four background samples.

Table 3-8. Results of organic analyses of background samples taken from the Penns Beach reference site (in µg/L).

Analyte	DRBC Criteria	21-Oct	28-Oct	04-Nov	11-Nov
Volatile Organic Compounds					
Benzene	12.5[a]	6c	<10	<1	<1
Toluene	35,400[b]	11c	<10	<1	<1

a - DRBC Stream Quality Objective for carcinogens for the Delaware River Estuary, Marine Objective for fish ingestion only.
b - DRBC Stream Quality Objective for systemic toxicants for the Delaware River Estuary, Marine Objective for fish ingestion only.
c - These data have been qualified by the analytical laboratory as having been potentially contaminated by prior samples; therefore, the detections likely result from lab error.
NA - No Criteria Available
< - not detected

3.1.6 Comparison of Inorganic Concentrations

One way of considering the relative potential impact of contaminants is by comparing the concentrations found in background, weir, and discharge plume samples. The mean concentrations of inorganic contaminants for weir, discharge plume, and background plume samples were plotted on graphs, for the most common inorganics that exceeded DRBC criteria (Figures 3-2, 3-3, and 3-4). Non-detects were assumed to be half the detection limit for the mean calculation. The DRBC Acute Marine Criteria is also given for comparative purposes. *Dissolved inorganics that were detected above DRBC criteria include copper, silver, and zinc.* For all three of these metals, the mean background concentration was less than the mean weir concentration, and the mean discharge plume concentration was less than the weir but greater than the background. This shows the normal pattern of dilution for these contaminants. The mean concentrations of copper exceeded the DRBC criterion in all three sample areas (weir, discharge, and plume background; Figure 3-2), and mean concentrations of silver and zinc did not exceed DRBC criteria in any of the three sample locations. Mean total cyanide concentrations exceed the DRBC criterion for both weir and discharge plume samples; however the

Table 3-9. Results of inorganic analyses of background samples taken from the Penns Beach reference site (in mg/L).

Analyte	DRBC Marine Criteria Chronic	DRBC Marine Criteria Acute	21-Oct	28-Oct	04-Nov	11-Nov
Total Suspended Solids			25	155	161	185
Dissolved Inorganics						
Cadmium	0.0093	0.043	< 0.001	< 0.001	< 0.001	< 0.001
Chromium	0.05	1.1	< 0.001	0.002	< 0.001	0.001
Copper	0.0034	0.0053	0.001	< 0.001	0.003	0.015
Lead	0.0085	0.22	< 0.002	< 0.002	< 0.002	< 0.002
Nickel	0.0083	0.075	0.003	0.002	0.002	0.001
Silver	-	0.0023	< 0.001	< 0.001	< 0.001	< 0.001
Zinc	0.086	0.095	0.014	0.022	0.012	0.015
Total Inorganics						
Cyanide	-	0.001	< 0.005	< 0.005	< 0.005	< 0.005
Aluminum	-	-	1.135	1.839	2.659	1.73
Antimony	NL	NL	< 0.004	< 0.004	< 0.004	< 0.02
Arsenic	0.036	0.069	< 0.004	< 0.004	< 0.004	< 0.02
Barium	NL	NL	0.023	0.026	0.030	0.080
Beryllium	NL	NL	< 0.001	< 0.001	< 0.001	< 0.005
Cadmium	0.0093	0.043	< 0.001	< 0.001	< 0.001	< 0.005
Calcium	NL	NL	23.2	29.9	60	151
Chromium	0.05	1.1	0.004	0.003	0.008	< 0.005
Cobalt	NL	NL	< 0.004	< 0.004	< 0.004	< 0.02
Copper	0.0034	0.0053	0.003	0.018	0.007	0.039
Iron	NL	NL	2.169	3.273	4.900	2.151
Lead	0.0085	0.22	0.005	**0.013**	**0.010**	< 0.02
Magnesium	NL	NL	19.52	33.99	32.4	132.2
Manganese	NL	NL	0.091	0.134	0.230	0.039
Mercury	0.000025	0.0021	< 0.0002	< 0.0002	< 0.0002	**0.0003**
Nickel	0.0083	0.075	0.005	0.006	0.007	0.007
Potassium	NL	NL	8.3	12.9	15	50
Selenium	0.071	0.3	< 0.004	< 0.004	< 0.004	< 0.02
Silver	-	0.0023	0.001	< 0.001	< 0.001	< 0.005
Sodium	NL	NL	131	243.6	207	774
Thallium	NL	NL	0.009	< 0.004	0.014	0.04
Vanadium	NL	NL	0.007	0.010	0.012	0.02
Zinc	0.086	0.095	0.026	0.043	0.049	0.077

< - not detected
NL - No DRBC Marine Criterion is listed.
Bold type indicates sample exceeds DRBC Chronic Marine Criteria.
Shaded cells indicate sample exceeds DRBC Acute Marine Criteria.

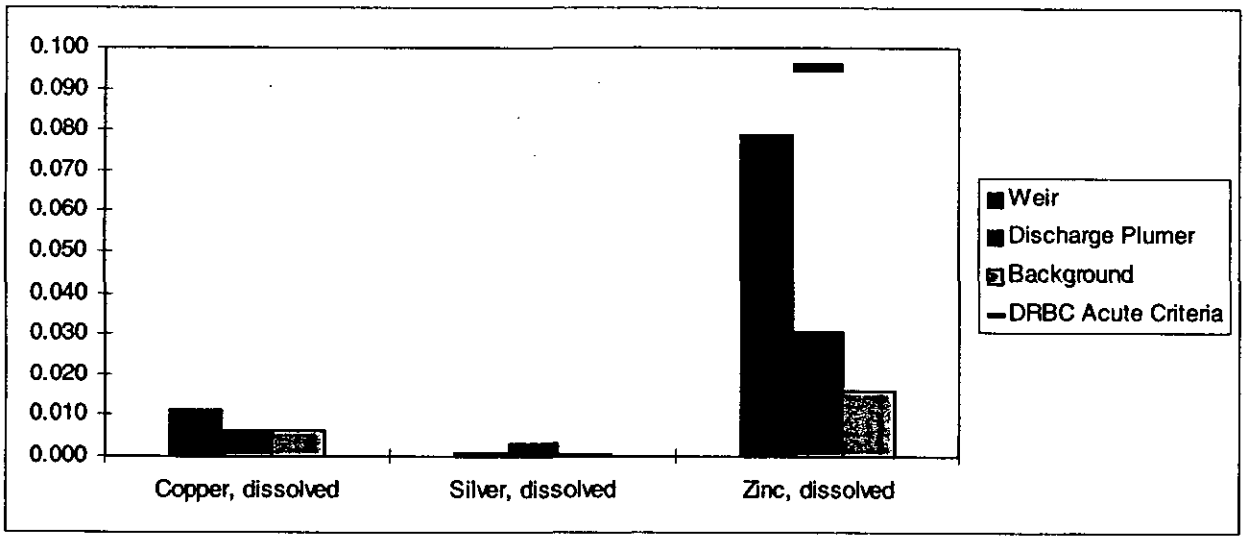

Figure 3-2. Comparison of dissolved inorganics that exceeded DRBC criteria in at least one sample (units are in mg/L).

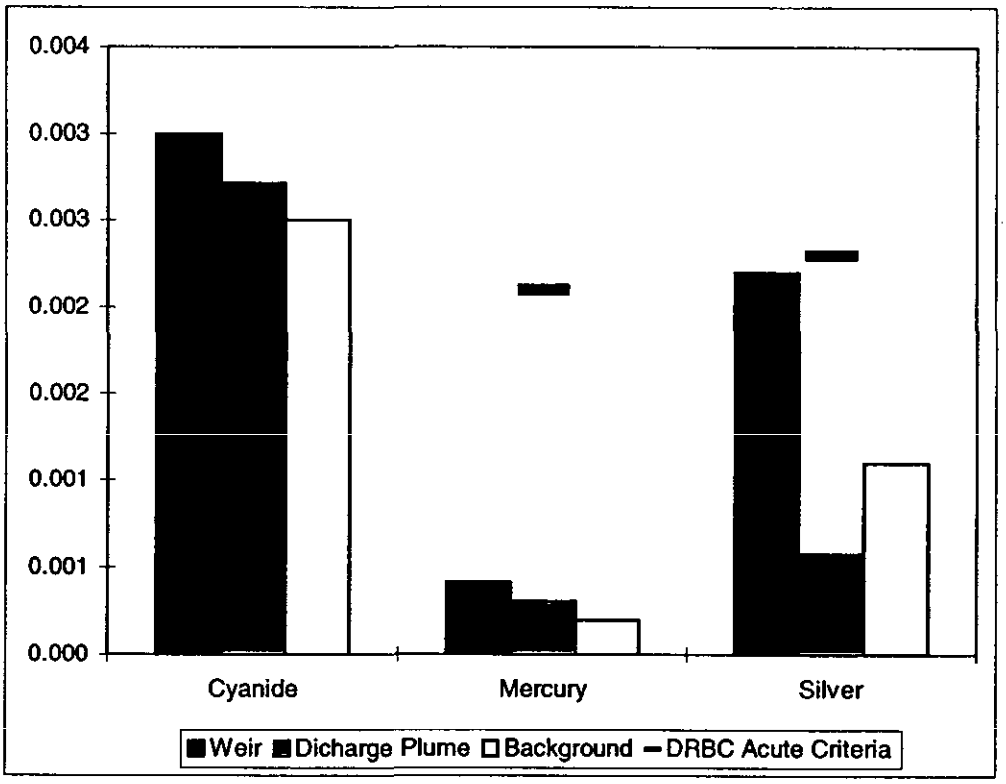

Figure 3-3. Comparison of mean concentrations of total cyanide, mercury, and silver (units are in mg/L).

detection limit for cyanide was also above the DRBC criterion (Figure 3-3). Again, the pattern of higher weir concentrations, lower discharge plume concentration, and lowest background concentration was observed. This pattern is also clearly exhibited in the last group of inorganic comparisons. As with dissolved copper concentrations, total copper concentrations exceed the DRBC criterion in all three sample groupings (Figure 3-4). The only other mean concentration that exceeds DRBC criteria is total zinc in weir samples. However, discharge plume weir samples show that zinc concentrations return to those of the background samples outside of the weir. Other than selenium, each of the inorganics shown in Figure 3-4 have similar mean concentrations between the background and discharge plume samples.

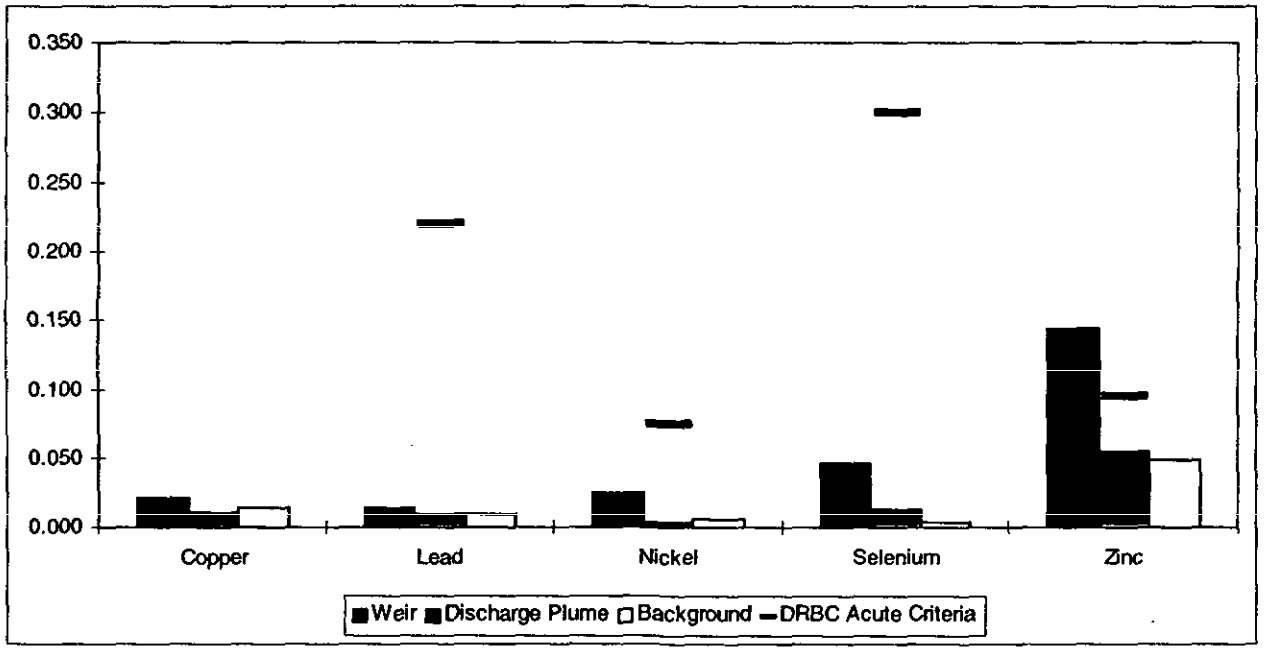

Figure 3-4. Comparison of mean total copper, lead, nickel, selenium, and zinc concentrations (units in mg/L).

3.1.7 Polychlorinated Biphenyls

Inlet slurry samples contained many PCB congeners, and had total PCB concentrations between 2.3 and 7.3 µg/L of slurry ($2.3x10^6$ to $7.3x10^6$ pg/L) (Table 3-10). These concentrations include PCBs detected in both liquid and solid fractions. Of the congeners detected, one non-ortho coplanar congener (77) was detected in all four samples, and two were detected in one sample each, while the fourth (169 Hexa) was not detected in any inlet samples (the non-ortho coplanar congeners are shaded in Table 3-10).

Non-ortho coplanar PCBs were not detected in any of the other PCB samples (Table 3-11). The second method blank did contain several PCB congeners such that the total sum of congeners was 18,544 pg/L, which was only exceeded by one weir sample (23,277 pg/L on October 21). This weir sample was also associated with a high TSS level because the suction head became stuck in the sediment at the bottom of the weir. Another relatively high concentration was observed in the charge plume sample on November 4 when the total sum of congeners was 44,311 pg/L. Other than those samples, total PCB levels generally were between 3,000 and 8,000 pg/L; the mean of the samples (not including the method blanks) was 7,924 pg/L and the median was 4,677 pg/L). The chronic DRBC guidance value for PCBs in marine waters is 0.03 µg/L (30,000 pg/L) for the protection of aquatic life, and the acute guidance value is 5 µg/L (5,000,000 pg/L).

Table 3-10. Concentrations of PCB congeners in inlet samples collected from the Killcohook CDF (in pg/L).

PCB Congeners	15-Oct	21-Oct	28-Oct	04-Nov
8 Di	32,753	25,376	8,611	17,955
18 Tri	53,127	44,308	8,170	38,319
28 Tri	163,251	128,292	45,430	U
37 Tri	88,202	57,198	21,473	U
52 Tetra	136,171	104,856	42,170	110,788
49 Tetra	115,539	96,471	31,458	101,027
47 Tetra	63,443	48,940	19,596	59,993
44 Tetra	88,976	69,080	27,372	69,099
42 Tetra	45,133	35,044	11,813	32,205
64 Tetra	49,775	39,474	14,622	41,183
74 Tetra	53,901	41,086	18,890	37,478
70 Tetra	55,191	42,093	50,414	101,540
80 Tetra	75,307	60,219	U	U
66 Tetra	136,945	105,131	43,006	83,933
60 Tetra	68,086	50,954	22,665	44,888
79 Tetra	U	U	U	U
78 Tetra	U	U	U	U
81 Tetra	U	U	867	U
77 Tetra	48,390	48,800	10,985	25,945
95 Penta	199,751	159,850	72,664	155,838
91 Penta	54,675	45,718	17,774	33,630
92 Penta	52,354	41,086	18,161	41,313
84/101 Penta	183,883	146,821	63,774	136,758
99 Penta	184,141	151,251	61,490	115,784

Table 3-10. (Continued

PCB Congeners	15-Oct	21-Oct	28-Oct	04-Nov
97 Penta	66,280	54,982	22,875	46,446
86 Penta	U	U	1,110	U
87 Penta	76,338	56,593	29,034	61,688
120 Penta	28,885	22,758	9,826	21,518
110 Penta	250,620	198,168	85,432	180,660
82 Penta	20,941	15,286	7,618	17,813
123 Penta	9,439	7,452	3,318	6,284
118 Penta	178,983	130,104	51,780	116,708
114 Penta	U	U	U	U
105/127 Penta	19,678	14,118	7,010	14,093
126 Penta	U	U	U	U
151 Hexa	70,665	50,350	25,061	57,000
149 Hexa	270,936	211,629	90,786	187,373
146 Hexa	73,244	56,593	22,577	46,016
153 Hexa	343,147	264,006	111,239	221,610
168 Hexa	66,280	50,551	25,392	54,623
141 Hexa	45,133	34,238	16,339	37,505
137 Hexa	10,290	7,834	3,478	7,595
138 Hexa	304,499	237,847	102,973	214,681
158 Hexa	23,495	17,179	8,335	19,380
166 Hexa	U	U	U	U
128/167 Hexa	7,634	7,029	2,490	4,446
156 Hexa	26,306	20,120	9,494	19,095
157 Hexa	7,118	5,398	2,374	4,589
169 Hexa	U	U	U	U
179 Hepta	64,733	48,537	22,798	46,170
187 Hepta	165,830	129,903	54,740	108,205
183 Hepta	63,959	49,544	22,025	43,320
185 Hepta	10,600	8,056	4,118	8,308
174 Hepta	111,413	85,192	41,842	82,786
177 Hepta	76,081	57,600	26,882	51,585
171 Hepta	28,885	21,550	10,985	21,233
180 Hepta	235,205	177,188	91,312	168,582
191 Hepta	3,404	2,578	1,391	2,722
170 Hepta	85,365	63,441	33,396	60,406
190 Hepta	15,783	11,862	6,900	11,543
189 Hepta	U	2,840	1,408	2,579
200 Octa	39,717	30,613	10,543	17,100
198 Octa	12,740	9,023	3,582	6,512
201 Octa	254,157	186,444	78,051	140,999
196/203 Octa	88,718	65,858	27,986	50,445
195 Octa	23,417	17,119	8,004	14,820
194 Octa	74,791	56,392	25,999	48,538
205 Octa	3,817	2,920	1,336	2,537
208 Nona	361,060	257,931	96,828	184,112
207 Nona	47,454	35,044	12,475	21,945
206 Nona	549,458	433,267	148,866	308,482
209 Deca	1,160,874	834,501	303,370	676,810

3.2 KILLCOHOOK CONFINED DISPOSAL FACILITY CONTAMINANT LOADINGS

Total contaminant loadings to the Killcohook CDF were determined by subtracting the total amount of metals and PCBs that were discharged from the Killcohook weir from the total amount placed in the Killcohook CDF. Total influent was determined by multiplying the concentration of the dredged slurry influent samples by the amount of dredged slurry placed in the site. The cubic yards of dredged material was multiplied by four to account for the sediment to water ratio. The inorganic analytes that were not evaluated in the first influent sample were estimated using the mean detection of the other three samples as a surrogate value for the first sample. The four influent samples were considered to be representative of the material placed in the site for a period of time before and after the sample was collected (i.e., each the duration of dredging was divided into four periods, each of which was represented by one influent sample). Calculations used to estimate influent loadings are given in Appendix D, tables D-6 and D-7. Total discharge amounts were based on the concentrations of the discharge samples multiplied by the discharge flow for the surrounding three or four days.

Average daily influent flow varied from roughly two times greater than daily discharge to nearly seven times greater. The variation in flow, as well as the number of days of active dredging (29) compared to the number of days of weir discharge (53), accounted for a significantly greater amount of material entering the site than leaving, which is clearly the objective of the CDF. In total, 2.9×10^9 L of slurry were pumped into the CDF and 1.9×10^9 L of water were discharged through the weir. In addition, the concentrations of most contaminants in the influent were significantly greater than weir concentrations, primarily because they account for contaminants present in the liquid fraction as well as sediment-bound contaminants. By managing the weir such that the suspended material is minimized, contaminant concentrations are minimized, as well. A comparison of the amount of contaminants in the influent and discharge of the weir shows the contaminant loadings to the CDF (Table 3-12). The patterns that exist are predictable given the sediment-clinging nature of PCBs and inorganic contaminants. Since the majority of these contaminants are sediment-sorbed, and the weir had very low concentrations of suspended material, we expected to see a much greater amount of contaminants enter the CDF than discharged through the weir.

In total, 14.56 kg of PCBs were introduced into the Killcohook CDF throughout the maintenance dredging project, compared with only 10 grams released, resulting in a retention rate of 99.9%. Other than the essential nutrients (calcium, magnesium, potassium, and sodium), the retention rates of the inorganics were all greater than 90%. Selenium and manganese had the next lowest retention rates, 94.4% and 94.6%, respectively. Thallium had a retention rate of 95.7%, and all other inorganic contaminants had retention rates above 98%.

Table 3-12. Influent and discharge chemical loads associated with the Killcohook CDF during maintenance dredging operations, using zero for non-detected analytes. The percent of each chemical sequestered in the CDF is shown in the far right column. Units are in kg.

Inorganics	Total Inlet Loading	Total Outflow	Total Retained	Percent Retained
Aluminum	1,751,333.36	460.16	1,750,873.20	100.0%
Antimony	ND	3.46	ND in inlet	---
Arsenic	769.31	ND	ALL (ND in weir)	100.0%
Barium	11,010.59	155.19	10,855.40	98.6%
Cadmium	614.94	0.75	614.19	99.9%
Calcium	713,443.59	127,579.34	585,864.24	82.1%
Chromium	16,607.62	2.78	16,604.84	100.0%
Cobalt	792.97	3.64	789.34	99.5%
Copper	8,834.51	20.11	8,814.40	99.8%
Iron	3,883,242.47	3,214.50	3,880,027.97	99.9%
Lead	10,753.92	12.19	10,741.73	99.9%
Magnesium	1,168,151.21	182,433.22	985,717.99	84.4%
Manganese	218,856.23	11,801.53	207,054.69	94.6%
Mercury	39.78	0.22	39.56	99.4%
Nickel	9,334.12	27.03	9,307.09	99.7%
Potassium	494,320.22	56,140.62	438,179.60	88.6%
Selenium	888.59	41.72	846.88	95.3%
Silver	165.03	1.59	163.44	99.0%
Sodium	2,023,389.06	1,157,604.32	865,784.75	42.8%
Thallium	871.11	31.46	839.65	96.4%
Vanadium	6,818.07	4.77	6,813.30	99.9%
Zinc	63,948.61	150.03	63,798.58	99.8%
PCBs	14.56	0.01	14.55	99.9%

3.3 CONTAMINANT LOADINGS TO THE DELAWARE RIVER

The effects of the Killcohook discharge on the Delaware River, in terms of loadings, were evaluated using methods similar to total loadings of the CDF. Daily impacts to water quality in the river were evaluated because this is a conservative assessment of potential risks to the environment. If we had considered contaminant discharge to the river over the entire month-long period, the low flow of the discharge (1.9×10^9 L over the period of discharge) relative to the river flow (118.47 m^3/sec or 1.02×10^{10} L over the same 27 day period) might have masked potential contamination and daily high loads would be smoothed over the entire dredge period. The data discussed in this section are provided in Appendix D of this report.

This method is based on a loadings analysis as would be conducted for a Total Maximum Daily Load (TMDL) and is used to account for the different orders of magnitude between river flow and the discharge; the magnitude of the river flow can easily mask any potential impacts. This method offers an appropriate level of detail and the ability to understand potential impacts to the water quality of the river. If the entire data set were to be evaluated in one comparison it would produce results out of context (for instance, the entire mass of each contaminant discharged over a six week period). Because the weir discharged over a six week period and the river had a constant flow throughout the entire discharge period, evaluating daily discharge concentrations and flows allows us to fully evaluate the relative impacts on the river.

Daily cumulative impacts of the Killcohook discharge were evaluated by multiplying the daily contaminant concentrations of weir samples (each weir sample date was considered representative of the surrounding three- or four-day time period) by the daily discharge as measured with the flow meter. The discharge flow was measured in the most intact and undisrupted discharge pipe of the three at the Killcohook CDF; this pipe was assumed to represent mean flow per pipe. The sampled flow was multiplied by three to account for the total flow from the discharge pipes.

The ambient river inorganic contaminant concentrations were determined using multiple data resources. The DRBC Toxics Management Program provided data on the total and dissolved concentrations of copper, lead, and zinc, and the total mercury concentration (Fikslin 1999). For other metals, data was taken from the USEPA STORET database and from background data from this study; for a conservative estimate, the lower of the two was used, when both were available. When a sufficient amount of applicable data was available to draw reasonable conclusions regarding appropriate ambient concentrations, the USEPA data were used. The USEPA data were collected from autumn sampling events later than 1985 (1990 for some analytes). All other inorganic data used to approximate ambient river concentrations came from the background data collected for this study. The mean concentration of the four background samples was used.

Once the data were identified, the first part of this analysis required multiplying the ambient river concentrations by the assumed river flow to obtain the daily river loading in mg. River flow was determined from DRBC (1998), using a conservative, low flow rate of 118.47 m^3/sec for the section of river where Killcohook is located (Zone 5, DRBC 1998). Similarly, daily discharge loads were determined following the same methods used to determine daily discharge for Section 3.2. Daily weir concentrations are provided, in comparison to ambient river concentrations and loadings in Appendix Table D-1. Daily loading estimates of the Killcohook discharge are provided in Appendix Table D-2. Once both river and discharge contaminants were converted to daily loadings, they were summed to determine the cumulative loading of each contaminant in the river following discharge from the CDF (Appendix Table D-3). The cumulative loading was divided by the cumulative flow, the sum of the ambient river flow and daily discharge flow, to obtain cumulative river concentrations downstream of the Killcohook weir (Appendix Table D-4). Finally, the percent change in river concentration, after the addition of the Killcohook discharge to the total concentration in the river, is shown in

Appendix Table D-5. Manganese was consistently the contaminant that caused the greatest change in concentration; however, manganese concentrations never exceeded DRBC water quality criteria in any samples. Mercury also increased river concentrations over the course of discharge from the Killcohook weir ranging from 0 to 22%. However, mercury concentrations barley above detection limits in the weir discharge samples and the extremely low estimated ambient river concentrations apparently caused this increase. Nearly every other contaminant, including PCBs, had less than a 1% change in river concentrations throughout the course of the Killcohook discharge. Only one sample, the November 11 sample, that was used to estimate discharge from November 9 through November 11, increased river concentrations by more than 1% for several inorganics.

These results are indicative of the relatively high flows of the river, the low weir discharge flow, and the similarity between the ambient river and discharge plume sample results. The river flow was on the order of 10 billion L/day. The discharge flow varied but stayed below 30 million L/day except on one occasion. Given the order of magnitude difference between flows, discharge concentrations would have to be greater than river concentrations by several orders of magnitude to have noticeable cumulative impacts on river concentrations of contaminants.

4.0 SUMMARY

The results of the various methods of analysis indicate that the discharge from the Killcohook CDF weir did not substantially alter water quality in the Delaware River. Certain contaminants rarely exceeded acute criteria during the study, suggesting that potential risks are low. Analytes that exceeded DRBC water quality criteria were primarily inorganic contaminants that are present in background samples at levels similar to those in the weir discharge and discharge plume. In addition, samples rarely exceed criteria by more than a factor of two. As in ecological risk assessment, given the conservative assumptions that factor into all aspects of contaminant analysis, these methods are designed to be cautiously protective of the environment. Comparisons to criteria often overstate, not understate, the potential for risks to occur. Typically, exceedances that result in Environmental Effects Quotients, or the amount by which site samples exceed water quality criteria, of less than 10 are not considered to be likely to cause significant impacts to the environment.

Another source of uncertainty in interpreting the results of the comparison to water quality criteria is that many of the inorganic criteria are hardness based. This study used the recommended hardness assumption of 74 mg/L to calculate chronic criteria. This assumption is based on a long-term data set from throughout the Delaware River that has been restricted to data not influenced by confounding factors, such as salinity. Hardness measured throughout this study, in the background, weir, and discharge plume samples, was between 300 and 600 mg/L. The variance between the assumed hardness and measured hardness results from several environmental factors. The site is within a tidal portion of the river that is seasonally influenced by salinity. Dredging occurs during autumn and winter, when biologically sensitive factors are limited. However, these are also the dry seasons, when the salinity influence is greater. In addition, this particular year was unusually dry, resulting in a greater influence. The USEPA data set supports these results; using only hardness measurements from October through December from 1990 through 1998 the mean hardness of this portion of the river was 246.3 mg/L. Therefore, the DRBC assumption of 74 mg/L is highly conservative for use during a dredging operation in this reach of the river. A higher hardness estimate would eliminate a significant portion of the samples that exceed chronic criteria.

The evaluation of PCBs within this study is of particular importance as there are several ongoing studies of PCB contamination, toxicity, and loadings to the Delaware River. In this regard, particular attention should be given to the interpretation of the results. Given the method error that exists at these low detection limits, the potential PCB impacts are likely overstated.

The conditions that were assumed for the loadings analysis were highly conservative in many ways. Flow used for ambient river conditions were the lowest available estimates, which could potentially overstate the impacts of the CDF discharge. Since no impacts were determined under these conditions, it is unlikely that impacts would result under less conservative conditions. In addition, under the Philadelphia to the Sea high resolution PCB sediment analysis (Versar 1997), the sediment in the portion of the Delaware River where the dredging took place was high relative to areas in the lower Delaware Bay. Since the current channel maintenance

operation dredged this portion of the channel and did not produce significant impacts to the environment, it is unlikely that less-contaminated sediments would produce impacts. This evidence further supports the hypothesis that contaminants, particularly metals and PCBs, in dredged material weir discharges are unlikely to cause environmental impacts to the river.

Finally, it is important to consider, as is mentioned in DNREC (1999), that these results, while conservative in a number of ways, are applicable only to this CDF. Properties of the CDF, such as size, vegetation, and cell structure, play an important role in determining flow through the CDF. It is possible that, given a higher flow or lower residence time, another CDF might have greater contaminant concentrations in the discharge, even if less contaminated sediment was placed in the site. It is also possible that the size, structure, and retention capabilities of the Killcohook CDF were beyond what would have been necessary to sequester contaminants from the dredged material. The Killcohook and the Pedricktown (Farrar and Burton 1999) CDFs have clearly been demonstrated to be highly effective in sequestering contaminants, and may provide a model for management of other CDFs.

These questions can be answered by further investigating the relationship between bulk sediment, influent, CDF properties, and discharge. As we gain data and knowledge describing this relationship, we can highlight key properties of CDFs that may define the ability of a CDF to sequester contaminants from the environment. This study of the Killcohook CDF shows that, if managed properly, bottom sediments can be dredged with no resulting harmful impacts to the environment.

5.0 REFERENCES

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DNREC. 1999. Metals Contamination of Sediment in the Delaware River Navigation Channel: Pre-Dredge Sediment Quality and Evaluation of Potential Water Quality Criteria Excursions During the Main Channel Deepening Project. Draft. February 1999.

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APPENDIX A

SCOPE OF WORK

Delaware River
Philadelphia to the Sea
FY-99 Water Quality Study

I. Scope of Work

The work under this contract includes an evaluation of the chemical quality of dredged material and water flowing into and out of the Killcohook dredged material disposal area. Samples will be collected concurrent with maintenance dredging operations for the New Castle range of the Delaware River Philadelphia to the Sea Federal navigation channel. Maintenance dredging will last approximately four to six weeks. Sampling will include material flowing into the disposal area (influent), water and associated suspended sediment discharging from the site (effluent), water samples collected in the Delaware River in the vicinity of the discharge point (representing the mixing zone), and water samples collected in the Delaware River at a location that can provide background water quality data. Samples will be collected and appropriately preserved in the field, and delivered to a laboratory for various chemical and geotechnical analyses. In addition, instrumentation will be installed at the discharge pipe to collect daily readings of the volume of water being discharged from the disposal site and the concentration of suspended sediment associated with the discharge.

II. Sample Collection

Influent: Four influent samples shall be collected over the course of the dredging operation, which is estimated to last four to six weeks. Sample collection shall be evenly spaced over the dredging period. Storage and preservation procedures for these sediment samples are provided as Appendix A. These procedures are from The Management and Regulation of Dredging Activities and Dredged Material in New Jersey's Tidal Waters (New Jersey Department of Environmental Protection, 1997). The specified holding times must be adhered to. Samples to be analyzed for metals should not come in contact with metal sampling equipment, and samples to be analyzed for organic compounds should not come into contact with plastics. All sample containers should be appropriately cleaned: acid-rinsed (10% nitric acid) for metal analysis, and solvent-rinsed (acetone is preferred; however, other approved solvents such as methanol and hexane can be used as well) for organic analysis. When equipment will be used to take samples for both metal and organic compound analysis, the acid rinse must be conducted first, and the solvent rinse second. Samples should completely fill the storage container, leaving no head space, except for expansion volume needed for potential freezing. Samples should be refrigerated or frozen with dry ice immediately after sample collection.

Effluent: A total of eight effluent samples will be collected over the discharge period. Composite effluent samples will be collected using an automatic sampler. The sampler will be programmed to collect water at six-hour intervals, over the course of four days. These composite samples will be used for analysis of metals, pesticides and PCBs.

Effluent samples for analysis of volatile organic compounds and semi-volatile organic compounds will be collected in a single day. For these samples, water will be collected hourly, and composited over a six-hour period. Effluent samples will be collected from water that has overflowed the disposal area into the sluice box. Storage and preservation procedures for these water samples are provided as Appendix A. These procedures are from The Management and Regulation of Dredging Activities and Dredged Material in New Jersey's Tidal Waters (New Jersey Department of Environmental Protection, 1997). The specified holding times by analyte group for water samples must be adhered to. Water samples should be collected with either a non-contaminating pump (peristaltic or magnetically coupled impeller design pump) or a discrete water sampler. The pump system should be flushed with 10 times the volume of the collection tubing using site water. The discrete water sampler should be of stainless steel or acrylic plastic and be of the closed/opened/closed type. Seals should be teflon-coated. All water sampling devices should be acid-rinsed (10% nitric acid) for metal analysis, and solvent-rinsed (acetone is preferred; however, other approved solvents such as methanol and hexane can be used as well) for organic analysis. When equipment will be used to take samples for both metal and organic compound analysis, the acid rinse must be conducted first, and the solvent rinse second.

Delaware River (mixing zone): A total of eight water samples will be collected from the Delaware River in the vicinity of the discharge point, at a location considered representative of the mixing zone. These samples will be collected at slack tide, either high or low, depending on the tide cycle. Sample location will be based on Delaware River Basin Commission guidelines for mixing zones to the Delaware estuary: (1) five times the local water depth at the point of discharge; or (2) 50 times the discharge length scale of the discharge outlet. All samples shall be collected at a depth equal to 0.6 of the water depth at the collection site. Storage and preservation procedures for these water samples are the same as those described for the effluent samples.

Delaware River (background): A total of four water samples will be collected from the Delaware River at a location that can provide background water quality data. Sample collection shall be evenly spaced over the discharge period. Samples will be collected at slack tide, either high or low, depending on the tide cycle. Samples will be collected from a location determined to be similar to the discharge site in physical regime, and free from direct influence of any known source of contaminants. All samples shall be collected at a depth equal to 0.6 of the water depth at the collection site. Storage and preservation procedures for these water samples are the same as those described for the effluent samples.

Weir Discharge: The volume of water discharged from the dredged material disposal site and the concentration of total suspended solids associated with the discharge shall be measured on a daily basis for a total of 42 days following commencement of discharge from the site. The total daily volume of water discharged from the site must be recorded. An automatic sampler will be used to collect daily composite samples for determining total suspended solids concentrations. The sampler will be programmed to collect water at six-hour intervals, over a 24-hour period.

III. Sample Analysis

Appendix B provides analytical procedures and associated quality assurance/quality control measures for sample analysis. These requirements are from The Management and Regulation of Dredging Activities and Dredged Material in New Jersey's Tidal Waters (New Jersey Department of Environmental Protection, 1997). All samples will be analyzed for the analytes listed in Attachment 1 of Appendix B. Attachment 1 also provides the required detection limits for sediment and water samples. In addition, for the water samples (effluent, mixing zone and background), because water quality criteria for seven metals are expressed as dissolved metal, dissolved inorganic analytes will be analyzed in addition to total inorganic analytes using test methods that can achieve detection limits of at least 2 ug/L.

In addition to the analytes listed in Attachment 1, all samples will be analyzed using high resolution gas chromatograpy (HRGC) / high resolution mass spectrometry (HRMS) for 77 mono-ortho and di-ortho PCB congeners and four non-ortho coplanar PCB congeners using draft USEPA method 1668. A list of the PCB congeners is provided as Appendix C. The HRGC/HRMS method shall provide detection limits of 1.25 ng/L for the mono- and di-ortho congeners and 25 pg/l for the non-ortho congeners in aqueous samples, and detection limits of 0.125 ng/g for mono- and di-ortho congeners and 12.5 pg/g for non-ortho congeners in sediment samples. Samples will not be analyzed for polychlorinated dibenzo-p-dioxin or dibenzofurans.

Dredged material is estimated to be composed of approximately 25 percent sediment and 75 percent water. In order to obtain chemical data for the influent samples, it will be necessary to partition the samples into the liquid and solid fractions. This will allow for the analysis of contaminants in the water fraction of the sample separately from the sediment-bound contaminants. After laboratory analysis, the concentrations of liquid- and solid-phase contaminants will be summed based on the volume of the original sample that was in liquid or solid form, and a total concentration for the influent sample will be obtained.

The four influent samples will be analyzed for grain size and total organic carbon. As discussed in Appendix B, the grain size analyses will follow the methods described by Folk (1980), and the total organic carbon analyses will follow the procedure provided as Attachment 4 to Appendix B. The effluent, Delaware River (mixing zone) and Delaware River (background) water samples (24 samples) will be analyzed for total suspended sediment.

IV. Data Analysis

The data will be analyzed to evaluate the efficiency of the dredged material disposal site to contain contaminants associated with the dredged material placed in the site. Influent samples will provide an estimate of contaminant concentrations associated with the dredged material. Effluent samples collected at the point of discharge will provide an estimation of the approximate removal efficiency of the site. Data collected in the

Delaware River in the vicinity of the discharge site will be compared with Delaware River Basin Commission surface water quality standards to determine if the disposal operation meets applicable criteria after some initial mixing. Background receiving water samples will provide an evaluation of ambient conditions. The effects of the Killcohook discharge on ambient contaminant concentrations in the Delaware River will be analyzed using a Total Maximum Daily Load (TMDL) approach.

V. Report Format and Content

Draft and final copies of the report of investigation will reflect and report the analysis outlined in this scope of work. Draft and final reports must contain the following features:

a. If the report has been written by someone other than the contract principal investigator, the cover and title page of the publishable report must bear the inscription Prepared Under the Supervision of (name), Principal Investigator. The principal investigator is required to sign the original copy of the report. In addition, the principal investigator must at least prepare a forward describing the overall research context of the report, the significance of the work, and any other related background circumstances relating to the manner in which the work was undertaken.

b. The TITLE PAGE will include the date (month and year) the report was submitted, the project name, the author, Prepared for the U.S. Army Corps of Engineers, Philadelphia District, and the contract number.

c. An EXECUTIVE SUMMARY that provides a brief description of the study's purpose, finding, conclusions and recommendations.

d. A TABLE OF CONTENTS that includes a list of all tables, figures and appendices presented in the report.

e. An INTRODUCTION section stating the purpose of the study with background information on the Delaware River, Philadelphia to the Sea Federal navigation project.

f. A METHODOLOGY section that describes the sampling and analysis equipment and methodologies.

g. A RESULTS section that presents collected data in tabular and graphic form, and details of applicable statistical analyses used to evaluate the data.

h. A DISCUSSION section that collates statistical data with published literature and draws inferences regarding water quality problems associated with the dredged material disposal operation.

i. A CONCLUSIONS section that emphasizes the main points articulated in the body of the report, and provides pertinent recommendations.

j. A LIST OF REFERENCES that includes literature cited and agencies/individuals consulted.

k. Include APPENDICES for data sheets, records, and other pertinent information.

l. PAGE SIZE AND FORMAT. Each report will be produced on 8 ½ " x 11" paper, single spaced, with double spacing between paragraphs. Figures should not exceed 11" in height nor 12 " in length in most circumstances. Larger figures may be produced, but an 8 ½" x 11" version must be included in the report. All text pages (including appendices) must be consecutively numbered. Text print quality must be at least letter quality.

VI. Period of Performance

Three copies of a draft report will be submitted to the Corps by 15 January 2000. The draft report must be a polished product and an accurate representation of the content of the final report. The draft must be clean-typed, complete with all figures, tables and sections of the report. All graphics will appear in the same format, and general location in the report as they will be in the final report.

Subsequent to a four-week review period the Corps will provide the Contractor with comments on the draft report. The Contractor will then have an additional four weeks to revise and submit the final report. The Contractor shall submit one unbound, reproducible original and five bound copies of the final report. The final report will be due on 13 March 2000. When the Corps accepts the final report the contract will be complete.

VII. Inspection

The work will be conducted under the general discretion of the Contracting Officer and shall be subject to inspection by his appointed inspectors to insure strict compliance with the terms of the contract, but the presence of the inspector shall not relieve the contractor of responsibility for the proper execution of the work in accordance with the specifications.

APPENDIX A
SUMMARY OF RECOMMENDED PROCEDURES FOR SAMPLE COLLECTION, PRESERVATION AND STORAGE

Attachment 1

SUMMARY OF RECOMMENDED PROCEDURES FOR SAMPLE COLLECTION, PRESERVATION, AND STORAGE

Analyses	Collection Method[a]	Sample Volume[b]	Container[c]	Preservation Technique	Storage Conditions	Holding Times[d]
Sediment						
Chemical/Physical Analyses						
Metals	Grab/corer	100 g	Precleaned polyethylene jar[e]	Dry ice[e] or freezer storage for extended storages; otherwise refrigerate	≤ 4°C	Hg - 28 days Others - 6 months[f]
Organic compounds (e.g., PCBs, pesticides, polycyclic aromatic hydrocarbons)	Grab/corer	250 g	Solvent-rinsed glass jar with Teflon® lid[e]	Dry ice[e] or freezer storage for extended storage; otherwise refrigerate	≤ 4°C[e]/dark[f]	14 days[g]
Particle size	Grab/corer	100 g	Whirl-pac bag[e]	Refrigerate	< 4°C	Undetermined
Total organic carbon	Grab/corer	50 g	Heat treated glass vial with Teflon®-lined lid[e]	Dry ice[e] or freezer storage for extended storages; otherwise refrigerate	≤ 4°C[e]	14 days
Total solids/specific gravity	Grab/corer	50 g	Whirl-pac bag	Refrigerate	< 4°C	Undetermined
Miscellaneous	Grab/corer	≥ 50 g	Whirl-pac bag	Refrigerate	< 4°C	Undetermined
Sediment from which elutriate is prepared	Grab/corer	Depends on tests being performed	Glass with Teflon®-lined lid	Completely fill and refrigerate	4°C/dark/airtight	14 days
Biological Tests						
Dredged material	Grab/corer	12–15 L per sample	Plastic bag or container[h]	Completely fill and refrigerate; sieve	4°C/dark/airtight	14 days[f]
Reference sediment	Grab/corer	45–50 L per test	Plastic bag or container[h]	Completely fill and refrigerate; sieve	4°C/dark/airtight	14 days[f]
Control sediment	Grab/corer	21–25 L per test	Plastic bag or container[h]	Completely fill and refrigerate; sieve	4°C/dark/airtight	14 days[f]

Analyses	Collection Method[a]	Sample Volume[b]	Container[c]	Preservation Technique	Storage Conditions	Holding Times[d]
Water and Elutriate						
Chemical/Physical Analyses						
Particulate analysis	Discrete sampler or pump	500–2,000 mL	Plastic or glass	Lugols solution and refrigerate	4°C	Undetermined
Metals	Discrete sampler or pump	1 L	Acid-rinsed polyethylene or glass jar[j]	pH < 2 with HNO_3; refrigerate[j]	4°C 2°C[j]	Hg - 14 days Others - 6 months[k]
Total Kjeldahl nitrogen	Discrete sampler or pump	100–200 mL	Plastic or glass[k]	H_2SO_4 to pH < 2; refrigerate	4°C[k]	24 h[k]
Chemical oxygen demand	Discrete sampler or pump	200 mL	Plastic or glass[k]	H_2SO_4 to pH < 2; refrigerate	4°C[k]	7 days[k]
Total organic carbon	Discrete sampler or pump	100 mL	Plastic or glass[k]	H_2SO_4 to pH < 2; refrigerate	4°C[k]	<48 hours[k]
Total inorganic carbon	Discrete sampler or pump	100 mL	Plastic or glass[k]	Airtight seal; refrigerate[k]	4°C[k]	6 months[k]
Phenolic compounds	Discrete sampler or pump	1 L	Glass[k]	0.1–1.0 g $CuSO_4$; H_2SO_4 to pH < 2; refrigerate	4°C[k]	24 hours[k]
Soluble reactive phosphates	Discrete sampler or pump	--	Plastic or glass[k]	Filter; refrigerate[k]	4°C[k]	24 hours[k]
Extractable organic compounds (e.g., semivolatile compounds)	Discrete sampler or pump	4 L	Amber glass bottle[j]	pH < 2, 6N HCl; airtight seal; refrigerate	4°C[j]	7 days for extraction; 40 days for sample extract analyses[j]
Volatile organic compounds	Discrete sampler or pump	80 mL	Glass vial[j]	pH < 2 with 1:1 HCL; refrigerate in airtight, completely filled container[j]	4°C[j]	14 days for sample analysis, if preserved[j]
Total phosphorus	Discrete sampler or pump	--	Plastic or glass[k]	H_2SO_4 to pH < 2; refrigerate	4°C[k]	7 days[k]

Analyses	Collection Method[a]	Sample Volume[b]	Container[c]	Preservation Technique	Storage Conditions	Holding Times[d]
Total solids	Discrete sampler or pump	200 mL	Plastic or glass[k]	Refrigerate	4°C[k]	7 days[k]
Volatile solids	Discrete sampler or pump	200 mL	Plastic or glass[k]	Refrigerate	4°C[k]	7 days[k]
Sulfides	Discrete sampler or pump	--	Plastic or glass[k]	pH > 9 NaOH (ZnAc); refrigerate[k]	4°C[k]	24 hours[k]
Biological Tests						
Site water	Grab	Depends on tests being performed	Plastic carboy	Refrigerate	< 4°C	14 days
Dilution water	Grab or makeup	Depends on tests being performed	Plastic carboy	Refrigerate	< 4°C	14 days
Tissue						
Metals	Trawl/Teflon®-coated grab	5–10 g	Double Ziploc®[e]	Handle with non-metallic forceps; plastic gloves; dry ice[e]	≤ –20°C[e] or freezer storage	Hg - 28 days Others - 6 months[m]
PCBs and chlorinated pesticides	Trawl/Teflon®-coated grab	10–25 g	Hexane-rinsed double aluminum foil and double Ziploc®[e]	Handle with hexane-rinsed stainless steel forceps; dry ice[e]	≤ –20°C[e] or freezer storage	14 days[g]
Volatile organic compounds	Trawl/Teflon®-coated grab	10–25 g	Heat-cleaned aluminum foil and watertight plastic bag[l]	Covered ice chest[l]	≤ –20°C[m] or freezer storage	14 days[m]
Semivolatile organic compounds	Trawl/Teflon®-coated grab	10–25 g	Hexane-rinsed double aluminum foil and double Ziploc®[e]	Handle with hexane-rinsed stainless steel forceps; dry ice[e]	≤ –20°C[e] or freezer storage	14 days[g]
Lipids	Trawl/Teflon®-coated grab	Part of organic analyses	Hexane-rinsed aluminum foil	Handle with hexane-rinsed stainless steel forceps; quick freeze	≤ –20°C or freezer storage	14 days[g]

Note: This table contains only a summary of collection, preservation, and storage procedures for samples. The cited references should be consulted for a more detailed description of these procedures.

PCB - polychlorinated biphenyl

[a] Collection method should include appropriate liners.

[b] Amount of sample required by the laboratory to perform the analysis (wet weight or volume provided, as appropriate). Miscellaneous sample size for sediment should be increased if auxiliary analytes that cannot be included as part of the organic or metal analyses are added to the list. The amounts shown are not intended as firm values; more or less tissue may be required depending on the analytes, matrices, detection limits, and particular analytical laboratory.

[c] All containers should be certified as clean according to U.S. EPA (1990c).

[d] These holding times are for sediment, water, and tissue based on guidance that is sometimes administrative rather than technical in nature. There are no promulgated, scientifically based holding time criteria for sediments, tissues, or elutriates. References should be consulted if holding times for sample extracts are desired. Holding times are from the time of sample collection.

[e] NOAA (1989).

[f] Tetra Tech (1986a).

[g] Sample may be held for up to 1 year if ≤ -20°C.

[h] Polypropylene should be used if phthalate bioaccumulation is of concern.

[i] Two weeks is recommended; sediments must not be held for longer than 8 weeks prior to biological testing.

[j] U.S. EPA (1987a); 40 CFR Part 136, Table III.

[k] Plumb (1981).

[l] If samples are not preserved to pH < 2, then aromatic compounds must be analyzed within 7 days.

[m] Tetra Tech (1986b).

Excerpted from pp. 54-57 of the USEPA "QA/QC Guidance for Sampling and Analysis of Sediments, Water, and Tissues for Dredged Material Evaluations", Office of Water (EPA 823-B-95-0001, April 1995).

APPENDIX B
ANALYTICAL PROCEDURES AND ASSOCIATED QUALITY ASSURANCE/QUALITY CONTROL MEASURES

APPENDIX B - ANALYTICAL PROCEDURES AND ASSOCIATED QUALITY ASSURANCE/QUALITY CONTROL MEASURES

I. Required Target Analyte Lists and Methodologies:

(a) Target analytes:

Required bulk sediment chemistry, modified elutriate, and leaching tests must include analysis for all target analytes listed in Attachment 1, excepting the volatile organic compounds list, which will be required on a case by case basis. Typically, volatile organic compound testing will be instituted where known or suspected discharges of such compounds have occurred. Dioxin/furan analysis is required for all projects in Region 1.

The list of target analytes in Attachment 1 represents the constituents common to both the USEPA Contract Laboratory Program (CLP) analytes and the much larger list of compounds evaluated under the USEPA SW-846 testing program (SW-846). This latter program specifically employs the Test Methods for Evaluating Solid Waste Physical/Chemical Methods, Publication SW-846. While the SW-846 methods are distinct from the CLP methods, they are considered to be equivalent. Attachment 1 also details the required quantitation limit for each target analyte. The estimated quantitation limit (EQL) specified is the higher of the quantitation limits associated with the CLP and SW-846 programs. There is no requirement to use either the CLP or SW-846 analytical methodologies; however, the method employed must achieve the required EQL and must be from a standard method from a recognized agency. Alternatively, a method with prior approval by the Department may be employed. The analysis must be done by a Department certified laboratory.

(b) Polychlorinated Biphenyls:

Polychlorinated biphenyls (PCBs) are required by the USEPA to be reported on an individual congener basis as well as a total PCB value. However, the Department anticipates that upland disposal of dredged material will be the primary type of proposal evaluated. This will increase the potential need to assess human health impacts due to PCBs.

The Department evaluates potential human health impacts of upland management and disposal activities using a Total Aroclor criterion. Therefore, it is acceptable to provide data to the Department using Aroclor based analysis methods (SW-846 Method 8081 or its equivalent) where aquatic species impacts are not anticipated. Where aquatic species impacts are a concern, the Department will require congener specific based analysis for PCBs using the Sloan method, NOAA Technical Memorandum NOS ORCA-71 or its equivalent. This is the same methodology that the USEPA employs. In order to be further consistent with the USEPA and to avoid duplicative analytical costs, the Department will also accept congener specific results if required by the USEPA or if already available. These congener specific results will be converted to a total PCB value by multiplying the sum of the 22 individual congeners by a factor of 2 as per the T. O'Connor, National Ocean Service, National Oceanic and Atmospheric Administration, July 20, 1994 memorandum to S. Ausubel, USEPA Region II (O'Connor 1994) and as per Contaminant Levels in Muscle and Hepatic Tissue of Lobster from the New York Bight Apex (National Marine Fisheries Service 1996). That computed result will then be compared against the

Total Aroclor based human health criteria. The recommended MDLs for all individual PCB congeners are 1 ug/kg dry weight (sediment) and 0.0005 ug/l (water).

(c) Polychlorinated Dibenzo-p-Dioxin and Dibenzofurans

When required, analysis will be conducted for all seventeen (17) 2,3,7,8 substituted polychlorinated dibenzo-p-dioxin and polychlorinated dibenzofurans using EPA Method 1613 Revision B. While not preferred, SW-846 Method 8290 is also acceptable. The required congeners and related isotopes used for analysis are shown in Attachment 2. The analytical sensitivity should be within 5 times that which is cited in the method for each matrix type. Testing for these analytes will be required by the Department on a case by case basis in Region 1 waters.

All polychlorinated dibenzo-p-dioxin and polychlorinated dibenzofuran congener results, in both sediment and water matrices, must be reported in both individual congener concentrations and summarized as 2,3,7,8-tetrachlorodibenzo(p)dioxin toxic equivalents using the Toxic Equivalent Factors, International 1988 Method in Attachment 3. For those values reported as Estimated Maximum Possible Concentrations (EMPCs), the full EMPC value should be used.

(d) Grain size analysis:

The grain size analysis must be conducted according to the methods described by Folk 1980.

Results must be reported as percentages within the general size classes:

Sand: equal to or greater than 0.0625 mm diameter

Silt: less than 0.0625 mm diameter and equal to or greater than 0.0039 mm diameter

Clay: less than 0.0039 mm diameter

(e) Total Organic Carbon

Total organic carbon analysis must be conducted according to the USEPA 1986 method, excerpted from the December 1992 regional manual for USEPA Region II and the New York District Corps of Engineers, entitled, "Guidance for Performing Tests on Dredged Material Proposed for Ocean Disposal" (Attachment 4).

(f) Multiple Extraction Procedure

Testing of sediments which have been modified prior to final placement may be required to undergo testing to evaluate their potential for contaminant leaching. One procedure used to accomplish this task is the Multiple Leaching Procedure (EPA Method 1320).

II. Quality Assurance/Quality Control Guidance and Reporting Requirements

The guidance described below has been drawn from the December 1992 regional manual for USEPA Region II and the New York District Corps of Engineers, entitled, "Guidance for Performing Tests on Dredged Material Proposed for Ocean Disposal"; the EPA and the USACE "QA/QC Guidance for Sampling and Analysis of Sediments, Water, and Tissues for Dredged Material Evaluations," (EPA 823-B-95-001, April 1995); and the "Field Sampling Procedures Manual," New Jersey Department of Environmental Protection and Energy, May 1992.

The following quality control samples or procedures will be required for chemical analysis of both sediment and water matrices:

1. Field blanks: One with every batch of 1-20 samples
2. Method blanks: One with every batch of 1-20 samples or every 12 hours, whichever is less
3. Matrix spike and matrix spike duplicate: One set with every batch of 1-20 samples
4. Surrogate spike recovery: Each sample, organic compounds only
5. Minimum detection limit verification within last 2 years for marine sediments and salt water matrices to be submitted to the Department upon request (procedure or citation at 40 CFR 136 [1994] Appendix B, Revision 1.11).
6. Duplicate analyses to be conducted as per method requirements

All bulk sediment chemistry results must be reported on a dry weight basis. All raw data should be presented along with the appropriate criterion. Exceedances of the criterion must be highlighted in an acceptable fashion.

The need to supply either full or reduced data deliverables will be determined by the Department on a case by case basis. The need for the applicant to obtain the services of a data validation contractor will concurrently be determined by the Department at the pre-application stage.

The data reports submitted to the Department for testing and analysis of material proposed for dredging must include a description of all methods and procedures used in the field and in the laboratory, referencing established protocols or guidance, for the following:

1. Sample collection
2. Sample preparation (including homogenizing and compositing)
3. Sample preservation methods and holding times (before and after extraction)
4. Chain of custody tracking documents
5. Sample transport, storage, and disposal
6. Sample analysis
7. Data entry and data reduction
8. Deviations from standard methods or prescribed procedures
9. QA/QC summary and data
10. Narrative of analytical problems, corrective action taken, effects on data interpretation

III. References for APPENDICES A AND B

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Attachment 1

TARGET ANALYTE LIST		
Analyte	Limits of Detection	
Volatiles	Water (ug/L)	Soil (ug/Kg)
Chloromethane	10	10
Bromomethane	10	10
Vinyl Chloride	10	10
Chloroethane	10	10
Methylene Chloride	10	10
Acetone	10	10
Carbon Disulfide	10	10
1,1-Dichloroethene	10	10
1,1-Dichloroethane	10	10
1,2-Dichloroethene (total)	10	10
Chloroform	10	10
1,2-Dichloroethane	10	10
2-Butanone(MEK)	10	10
1,1,1-Trichloroethane	10	10
Carbon Tetrachloride	10	10
Bromodichloromethane	10	10
1,2-Dichloropropane	10	10
cis-1,3-Dichloropropene	10	10
trichloroethene	10	10
Dibromochloromethane	10	10
1,1,2-Trichloroethane	10	10
Benzene	10	10
trans-1,3-Dichloropropene	10	10
Bromoform	10	10
4-Methyl-2-pentanone(MIBK)	10	10
2-Hexanone	10	10
Tetrachloroethene	10	10
1,1,2,2-Tetrachloroethane	10	10
Toluene	10	10
Chlorobenzene	10	10
Ethylbenzene	10	10
Styrene	10	10
Xylenes(total)	10	10
Semivolatiles		
Phenol	10	660
bis-(2-Chloroethyl)ether	10	660
2-Chlorophenol	10	660
1,3-Dichlorobenzene	10	660
1,4-Dichlorobenzene	10	660
1,2-Dichlorobenzene	10	660
2-Methylphenol	10	660
2,2'-oxybis(1-Chloropropane)	10	660
4-Methylphenol	10	660
N-Nitroso-di-n-propylamine	10	660

	Limits of Detection	
Semivoilatiles (continued)	Water (ug/L)	Soil (ug/Kg)
Hexachloroethane	10	660
Nitrobenzene	10	660
Isophorone	10	660
2-Nitrophenol	10	660
2,4-Dimethylphenol	10	660
bis(2-Chloroethoxy)methane	10	660
2,4-Dichlorophenol	10	660
1,2,4-Trichlorobenzene	10	660
Naphthalene	10	660
4-Chloroaniline	20	1300
Hexachlorobutadiene	10	660
4-Chloro-3-methylphenol	20	1300
2-Methylnaphthalene	10	660
Hexachlorocylcopentadiene	10	660
2,4,6-Trichlorophenol	10	660
2,4,5-Trichlorophenol	10	660
2-Chloronaphthalene	10	660
2-Nitroaniline	50	3300
Dimethylphthalate	10	660
Acenaphthylene	10	660
2,6-Dinitrotoluene	10	660
3-Nitroaniline	50	3300
Acenaphthene	10	660
2,4-Dinitrophenol	50	3300
4-Nitrophenol	50	3300
Dibenzofuran	10	660
2,4-Dinitrotoluene	10	660
Diethylphthalate	10	660
4-Chlorophenyl-phenyl ether	10	660
Fluorene	10	660
4-Nitroaniline	20	830
4,6-Dinitro-2-methylphenol	50	3300
N-Nitroso-diphenylamine	10	660
4-Bromophenyl-phenylether	10	660
Hexachlorobenzene	10	660
Pentachlorophenol	50	3300
Phenanthrene	10	660
Anthracene	10	660
Carbazole	10	330
Di-n-butylphthalate	10	330
Fluoranthene	10	660
Pyrene	10	660
Butylbenzylphthalate	10	660
3,3'-Dichlorobenzidine	20	1300
Benzo(a)anthracene	10	660
Chrysene	10	660
bis(2-Ethylhexyl)phthalate	10	660
Di-n-octlyphthalate	10	660
Benzo(b)fluoranthene	10	660

	Limits of Detection	
Semivolatiles (continued)	Water (ug/L)	Soil (ug/Kg)
Benzo(k)fluoranthene	10	660
Benzo(a)pyrene	10	660
Indeno(1,2,3-cd)pyrene	10	660
Dibenzo(a,h)anthracene	10	660
Benzo(g,h,i)perylene	10	660
Pesticides/Aroclors		
alpha-BHC	0.05	1.9
beta-BHC	0.05	3.3
delta-BHC	0.05	1.7
gamma-BHC (Lindane)	0.05	2
Heptachlor	0.05	2.1
Aldrin	0.05	2
Heptachlor epoxide	0.05	2.1
Endosulfan I	0.05	2.1
Dieldrin	0.10	3.3
4,4'-DDE	0.10	4.2
Endrin	0.10	3.6
Endosulfan II	0.10	3.3
4,4'-DDD	0.10	4.2
Endosulfan sulfate	0.10	3.6
4,4'-DDT	0.10	3.6
Methoxychlor	0.50	17
Endrin ketone	0.10	3.3
Endrin aldehyde	0.10	3.3
alpha-Chlordane	0.05	1.7
gamma-Chlordane	0.05	1.7
Toxaphene	5.0	170
Aroclor-1016	1.0	33
Aroclor-1221	2.0	67
Aroclor-1232	1.0	33
Aroclor-1242	1.0	33
Aroclor-1248	1.0	33
Aroclor-1254	1.0	33
Aroclor-1260	1.0	33
Inorganics	ug/L	mg/Kg
Aluminum	200	40
Antimony	60	12
Arsenic	10	2
Barium	200	40
Beryllium	5	1
Cadmium	5	1
Calcium	5000	1000
Chromium	10	2

Inorganics (continued)	Limits of Detection	
	Water (ug/L)	Soil (mg/Kg)
Cobalt	50	10
Copper	25	5
Iron	100	20
Lead	3	0.6
Magnesium	5000	1000
Manganese	15	3
Mercury	0.2	0.1
Nickel	40	8
Potassium	5000	1000
Selenium	5	1
Silver	10	2
Sodium	5000	1000
Thallium	10	2
Vanadium	50	10
Zinc	20	4
Cyanide	10	0.5

Retention Time References, Quantitation References, Relative Retention Times, and Minimum Levels for CDDs and CDFs

Compound	Retention Time and Quantitation Reference	Relative Retention Time	Minimum Level[1] Water (pg/L; ppq)	Solid (ng/kg; ppt)	Extract (pg/µL; ppb)
Compounds using $^{13}C_{12}$-1,2,3,4-TCDD as the injection internal standard					
2,3,7,8-TCDF	$^{13}C_{12}$-2,3,7,8-TCDF	0.999–1.003	10	1	0.5
2,3,7,8-TCDD	$^{13}C_{12}$-2,3,7,8-TCDD	0.999–1.002	10	1	0.5
1,2,3,7,8-PeCDF	$^{13}C_{12}$-1,2,3,7,8-PeCDF	0.999–1.002	50	5	2.5
2,3,4,7,8-PeCDF	$^{13}C_{12}$-2,3,4,7,8-PeCDF	0.999–1.002	50	5	2.5
1,2,3,7,8-PeCDD	$^{13}C_{12}$-1,2,3,7,8-PeCDD	0.999–1.002	50	5	2.5
Compounds using $^{13}C_{12}$-1,2,3,7,8,9-HxCDD as the injection internal standard					
1,2,3,4,7,8-HxCDF	$^{13}C_{12}$-1,2,3,4,7,8-HxCDF	0.999–1.001	50	5	2.5
1,2,3,6,7,8-HxCDF	$^{13}C_{12}$-1,2,3,6,7,8-HxCDF	0.997–1.005	50	5	2.5
1,2,3,7,8,9-HxCDF	$^{13}C_{12}$-1,2,3,7,8,9-HxCDF	0.999–1.001	50	5	2.5
2,3,4,6,7,8-HxCDF	$^{13}C_{12}$-2,3,4,6,7,8,-HxCDF	0.999–1.001	50	5	2.5
1,2,3,4,7,8-HxCDD	$^{13}C_{12}$-1,2,3,4,7,8-HxCDD	0.999–1.001	50	5	2.5
1,2,3,6,7,8-HxCDD	$^{13}C_{12}$-1,2,3,6,7,8,-HxCDD	0.998–1.004	50	5	2.5
1,2,3,7,8,9-HxCDD	–[2]	1.000–1.019	50	5	2.5
1,2,3,4,6,7,8-HpCDF	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDF	0.999–1.001	50	5	2.5
1,2,3,4,7,8,9-HpCDF	$^{13}C_{12}$-1,2,3,4,7,8,9-HpCDF	0.999–1.001	50	5	2.5
1,2,3,4,6,7,8-HpCDD	$^{13}C_{12}$-1,2,3,4,6,7,8-HpCDD	0.999–1.001	50	5	2.5
OCDF	$^{13}C_{12}$-OCDD	0.999–1.008	100	10	5.0
OCDD	$^{13}C_{12}$-OCDD	0.999–1.001	100	10	5.0

1. The Minimum Level (ML) for each analyte is defined as the level at which the entire analytical system must give a recognizable signal and acceptable calibration point. It is equivalent to the concentration of the lowest calibration standard, assuming that all method-specified sample weights, volumes, and cleanup procedures have been employed.
2. The retention time reference for 1,2,3,7,8,9-HxCDD is $^{13}C_{12}$-1,2,3,6,7,8-HxCDD, and 1,2,3,7,8,9-HxCDD is quantified using the averaged responses for $^{13}C_{12}$-1,2,3,4,7,8-HxCDD and $^{13}C_{12}$-1,2,3,6,7,8-HxCDD.

Attachment 3: This is the toxicity equivalent factor guidance. Note that CDD and CDF are acronyms for chlorinated dibenzo-p-dioxins and chlorinated dibenzofurans. T, Pe, Hx, Hp, and O stand for tetra, penta, hexa, hepta, and octa, respectively.

Compound	Toxicity Equivalency Factor (TEF)
2,3,7,8-TCDD	1.000
1,2,3,7,8-PeCDD	0.500
1,2,3,4,7,8-HxCDD	0.100
1,2,3,6,7,8-HxCDD	0.100
1,2,3,7,8,9-HxCDD	0.100
1,2,3,4,6,7,8-HpCDD	0.010
1,2,3,4,6,7,8,9-OCDD	0.001
2,3,7,8-TCDF	0.100
1,2,3,7,8-PeCDF	0.050
2,3,4,7,8-PeCDF	0.500
1,2,3,6,7,8-HxCDF	0.100
1,2,3,7,8,9-HxCDF	0.100
1,2,3,4,7,8-HxCDF	0.100
2,3,4,6,7,8-HxCDF	0.100
1,2,3,4,6,7,8-HpCDF	0.010
1,2,3,4,7,8,9-HpCDF	0.010
1,2,3,4,6,7,8,9-OCDF	0.001

All other CDD and CDF have a TEF of zero.

Attachment 4

DETERMINATION OF TOTAL ORGANIC CARBON

1.0 APPLICATION AND SCOPE

This method, developed by the U.S. Environmental Protection Agency, Region II, Environmental Services Division laboratory in Edison, New Jersey, describes protocols for the determination of organic carbon in ocean sediments. Although the detection limit may vary with procedure or instrument, a minimum reporting value of 100 mg/kg will be required for the ocean dumping/dredging program. Several types of determinations, which are considered equivalent, are presented in this procedure. However, wet combustion methods are not considered to be equivalent to the pyrolytic methods described.

In this method, inorganic carbon from carbonates and bicarbonates is removed by acid treatment. The organic compounds are decomposed by pyrolysis in the presence of oxygen or air. The carbon dioxide that is formed is determined by direct nondispersive infrared detection, flame ionization gas chromatography after catalytic conversion of the carbon dioxide to methane; thermal conductivity gas chromatography, differential thermal conductivity detection by sequential removal of water and carbon dioxide; or thermal conductivity detection following removal of water with magnesium perchlorate.

Water content is determined on a separate portion of sediment and data are reported in mg/kg on a dry weight basis.

2.0 DEFINITIONS

The following terms and acronyms are associated with this procedure:

LRB	Laboratory record book
TOC	Total organic carbon

3.0 PROCEDURE

3.1 Sample collection

Collect sediments in glass jars with lids lined with Teflon or aluminum foil. Cool samples and maintain at 4°C. Analyze samples within 14 days. If unrepresentative material is to be removed from the sample, it should be removed in the field under the supervision of the chief scientist and noted in the LRB on the field log sheet.

3.2 Apparatus and Reagents

- Drying oven maintained at 103° to 105°C.
- Analytical instrument. No specific TOC analyzer is recommended as superior. The following listing is for information on instrument options only, and is not intended to restrict the use of other unlisted instruments capable of analyzing TOC. The instrument to be used must meet the following specifications:
  - A combustion boat that is heated in a stream of oxygen or air in a resistance or induction-type furnace to completely convert organic substances to CO_2 and water.
  - A means to physically or by measurement technique to separate water and other interferants from CO_2.
  - A means to quantitatively determine CO_2 with adequate sensitivity (100 mg/kg), and precision (25% at the 95% confidence level as demonstrated by repetitive measurements of a well-mixed ocean sediment sample).
  - A strip chart or other permanent recording device to document the analysis.

(1.) Perkin Elmer Model 240C Elemental Analyzer or equivalent. In this instrument, the sample from Section 3.5 is pyrolyzed under pure oxygen, water is removed by magnesium perchlorate and the carbon dioxide is removed by ascarite. The decrease in signal obtained by differential thermal conductivity detectors placed between the combustion gas stream before and after the ascarite tube is a measure of the organic carbon content.

(2.) Carlo Erba Model 1106 CHN Analyzer, or equivalent. In this apparatus, the sample is pyrolyzed in an induction-type furnace, and the resultant carbon dioxide is chromatographically separated and analyzed by a differential thermal conductivity

detector.

(3.) LECO Models WR12, WR112, or CR-12 carbon determinators, or Models 600 or 800 CHN analyzers. In the LECO WR-12, the sample is burned in high frequency induction furnace, and the carbon dioxide is selectively absorbed at room temperature in a molecular sieve. It is subsequently released by heating and is measured by a thermal conductivity detector. The WR-112 is an upgraded WR-12 employing microprocessor electronics and a printer to replace the electronic digital voltmeter.

In the LECO CR-12 carbon determinator, the sample is combusted in oxygen, moisture and dust are removed by appropriate traps, and the carbon dioxide is measured by a selective, solid state, infrared detector. The signal from the detector is then processed by a microprocessor and the carbon content is displayed on a digital readout and recorded on an integral printer.

In the LECO CHN-600 and CHN-800 elemental analyzers, the sample is burned under oxygen in a resistance furnace and the carbon dioxide is measured by a selective infrared detector.

(4.) Dohrman Model DC85 Digital High Temperature TOC Analyzer. In this instrument, the sample is burned in resistance furnace under oxygen, the interfering gases are removed by a sparger/scrubber system, and the carbon dioxide is measured by a non-dispersive infrared detector and shown on a digital display in concentration units.

- Reagents

(1.) Distilled water used in preparation of standards and for dilution of samples should be ultrapure to reduce the carbon concentration of the blank.

(2.) Potassium hydrogen phthalate, stock solution, 1000 mg carbon/L: Dissolve 0.2128 g of potassium hydrogen phthalate (Primary Standard Grade) in distilled water and dilute to 100.0 mL.

NOTE: Sodium oxalate and acetic acid are not recommended as stock solutions.

(3.) Potassium hydrogen phthalate, standard solutions: Prepare standard solutions from the stock solution by dilution with distilled water.

(4.) Phosphoric acid solution, 1:1 by volume.

3.3 Interferences

3.3.1 Volatile organics in the sediments may be lost in the decarbonation step resulting in a low bias.

3.3.2 Bacterial decomposition and volatilization of the organic compounds are minimized by maintaining the sample at 4 °C, analyzing within the specified holding time, and analyzing the wet sample.

3.4 Sample Preparation

3.4.1 Allow frozen samples to warm to room temperature. Homogenize each sample mechanically, incorporating any overlying water.

3.4.2 Weigh the well-mixed sample (up to 500 mg) into the combustion boat or cup. Add 1:1 phosphoric acid dropwise until effervescence stops. Heat to 75°C.

NOTE: This procedure will convert inorganic carbonates and bicarbonates to carbon dioxide and eliminate it from the sample.

3.5 Sample Analysis

Analyze the residue according to the instrument manufacturer's instructions.

3.6 Percent Residue Determination

Determine percent residue on a separate sample aliquot as follows:

3.6.1 Heat a clean 25-mL beaker at 103° to 105°C for 1 h. Cool in a desiccator, weigh to

the nearest mg, and store in desiccator until use.

3.6.2 Add 1 g, weighed to the nearest mg, of an aliquot of the well-mixed sample .

3.6.3 Dry and heat in the 103° to 105°C oven for 1 h. Cool in a desiccator. Weigh to the nearest mg.

3.7 Calibration

Follow instrument manufacturer's instructions for calibration. Prepare a calibration curve by plotting mg carbon vs. instrument response using four standards and a blank, covering the analytical range of interest.

3.8 Data Recording

Record all data and sample information in LRBs or on project-specific data forms.

All transfers of data to forms and data reductions (e.g., concentration calculations, means, standard deviations) should be checked by the analyst and approved by a lab manager, project manager, or principal investigator. Hard copies of sample data and spreadsheet reports should be kept in the testing laboratory's central files.

3.9 QA/QC Procedures

3.9.1 Precision and Accuracy The precision and accuracy will differ with the various instruments and matrices, and must be determined by the laboratories reporting data. A representative sample of well-mixed, meshed, sediment should be analyzed in quadruplicate for 4 days to determine the analytical precision.

3.9.2 It is critical that each sample be thoroughly homogenized in the laboratory before a subsample is taken for analysis. Laboratory homogenization should be conducted even if samples were homogenized in the field.

3.9.3 Dried samples should be cooled in a desiccator and held there until they are weighed. If a desiccator is not used, the sediment will accumulate ambient moisture and the sample weight will be overestimated. A color-indicating desiccant is recommended so that spent desiccant can be detected easily. Also, the seal on the desiccator should be checked periodically and, if necessary, the ground glass rims should be greased or the "O" rings replaced.

4.0 DATA REDUCTION, DOCUMENTATION, AND REPORTING

4.1 Data Reduction

Data analysis and calculations will be performed whenever possible on computers using commercial spreadsheet software such as Lotus 1-2-3, Quattro Pro, or Microsoft Excel.

4.2 Documentation

Keep all laboratory records, test results, measurements, other and supporting documentation for each sediment test in a LRB or project file dedicated to that purpose.

4.3 Reporting

A report should be prepared including, but not limited to, the following information:

- Sources of samples
- Description of methods
- Summary of sample analysis results
- Summary of any deviations from the project test plan
- Copies raw data, observations, or data forms

Total organic carbon should be reported as a percentage of the dry weight of the unacidified sample to the nearest 0.1 unit. The laboratory should report the results of all samples (including QC replicates, method blanks, and standard reference measurements) and should note any problems that may have influenced sample quality. The laboratory should also provide a summary of the calibration procedure and results (e.g., range covered, regression equation, coefficient of determination).

Source: U.S. Army Corps of Engineers - New York District and Environmental Protection Agency -Region II, 1992, "Guidance for Performing Tests on Dredged Material Proposed for Ocean Disposal," Draft-18 Dec 1992.

APPENDIX C
PCB CONGENER LIST

TABLE 2

NON-ORTHO COPLANAR PCB CONGENERS
SUBSTITUTED IN BOTH PARA AND TWO OR MORE META POSITIONS

IUPAC NUMBER	STRUCTURE	HOMOLOG GROUP
77	3,3',4,4'	Tetra-CB
81	3,4,4',5	Tetra-CB
126	3,3',4,4',5	Penta-CB
169	3,3',4,4',5,5'	Hexa-CB

TABLE 3

TARGETED PCB CONGENERS OTHER THAN NON-ORTHO PCBs

IUPAC NUMBER	CHLORINE POSITIONING	HOMOLOG GROUP
8	2,4'	Di-CB
18	2,2',5	Tri-CB
28	2,4,4'	Tri-CB
37	3,4,4'	Tri-CB
42	2,2',3,4'	Tetra-CB
44	2,2',3,5'	Tetra-CB
47	2,2',4,4'	Tetra-CB
49	2,2',4,5'	Tetra-CB
52	2,2',5,5'	Tetra-CB
60	2,3,4,4'	Tetra-CB
64	2,3,4',6	Tetra-CB
66	2,3',4,4'	Tetra-CB
70	2,3',4',5	Tetra-CB
74	2,4,4',5	Tetra-CB
80	3,3',5,5'	Tetra-CB
82	2,2',3,3',4	Penta-CB
84	2,2',3,3',6	Penta-CB
86	2,2',3,4,5	Penta-CB
87	2,2',3,4,5'	Penta-CB
91	2,2',3,4',6	Penta-CB

IUPAC NUMBER	CHLORINE POSITIONING	HOMOLOG GROUP
92	2,2',3,5,5'	Penta-CB
95	2,2',3,5',6	Penta-CB
97	2,2',3',4,5	Penta-CB
99	2,2',4,4',5	Penta-CB
101	2,2',4,5,5'	Penta-CB
105	2,3,3',4,4'	Penta-CB
110	2,3,3',4',6	Penta-CB
114	2,3,4,4',5	Penta-CB
118	2,3',4,4',5	Penta-CB
119	2,3',4,4',6	Penta-CB
120	2,3',4,5,5'	Penta-CB
123	2',3,4,4',5	Penta-CB
127	3,3',4,5,5'	Penta-CB
128	2,2',3,3',4,4'	Hexa-CB
137	2,2',3,4,4',5	Hexa-CB
138	2,2',3,4,4',5'	Hexa-CB
141	2,2',3,4,5,5'	Hexa-CB
146	2,2',3,4',5,5'	Hexa-CB
149	2,2',3,4',5',6	Hexa-CB
151	2,2',3,5,5',6	Hexa-CB
153	2,2',4,4',5,5'	Hexa-CB
156	2,3,3',4,4',5	Hexa-CB
157	2,3,3',4,4',5'	Hexa-CB

IUPAC NUMBER	CHLORINE POSITIONING	HOMOLOG GROUP
158	2,3,3',4,4',6	Hexa-CB
166	2,3,4,4',5,6	Hexa-CB
167	2,3',4,4',5,5'	Hexa-CB
168	2,3',4,4',5',6	Hexa-CB
170	2,2',3,3',4,4',5	Hepta-CB
171	2,2',3,3',4,4',6	Hepta-CB
174	2,2',3,3',4,5,6'	Hepta-CB
177	2,2',3,3',4',5,6	Hepta-CB
179	2,2',3,3',5,6,6'	Hepta-CB
180	2,2',3,4,4',5,5'	Hepta-CB
183	2,2',3,4,4',5',6	Hepta-CB
185	2,2',3,4,5,5',6	Hepta-CB
187	2,2',3,4',5,5',6	Hepta-CB
189	2,3,3',4,4',5,5'	Hepta-CB
190	2,3,3',4,4',5,6	Hepta-CB
191	2,3,3',4,4',5',6	Hepta-CB
194	2,2',3,3',4,4',5,5'	Octa-CB
195	2,2',3,3',4,4',5,6	Octa-CB
196	2,2',3,3',4,4',5',6	Octa-CB
198	2,2',3,3',4,5,5',6	Octa-CB
200	2,2',3,3',4,5',6,6'	Octa-CB
201	2,2',3,3',4',5,5',6	Octa-CB
203	2,2',3,4,4',5,5',6	Octa-CB

IUPAC NUMBER	CHLORINE POSITIONING	HOMOLOG GROUP
205	2,3,3',4,4',5,5',6	Octa-CB
206	2,2',3,3',4,4',5,5',6	Nona-CB
207	2,2',3,3',4,4',5,6,6'	Nona-CB
208	2,2',3,3',4,5,5',6,6'	Nona-CB
209	2,2',3,3',4,4',5,5',6,6'	Deca-CB

APPENDIX B

BLUE MARSH LABORATORIES ANALYSIS CERTIFICATES

Douglassville Location:
1605 Benjamin Franklin Highway
Douglassville, PA 19518
Phone: (610) 327-8196
Fax: (610) 327-6864

NJ DEP Cert #77925
PA DEP Cert #06-409

Blue Marsh
LABORATORIES • INC

Professional testing for the critical decision

Princeton Location:
267 Wall Street
Princeton, NJ 08540
Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook Dredge Disposal

Lab#: D994826-001
Sample ID: Inlet 1015
Sample Type: Solid

Collect Date: 18-Oct-99
Collected By: Craig Bruce

Date Received: *19-Oct-99*
Report Date: *04-Nov-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-sd							
	Dichlorofluoromethane	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	Chloromethane (Methyl Chloride)	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	Vinyl chloride	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	Bromomethane	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	Chloroethane	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	Trichlorofluoromethane	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	1,1-Dichloroethene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	Acetone	< 3.5	mg/kg	3.5	8260B	SDK 1857	11/3/99
	Methylene chloride (Dichloromethane)	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	t-Butyl alcohol	< 3.5	mg/kg	3.5	8260B	SDK 1857	11/3/99
	trans-1,2-dichloroethene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	Methyl tert-buytl ether (MTBE)	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	1,1-Dichloroethane	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	cis-1,2-Dichloroethene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	2,2-Dichloropropane	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	2-Butanone (MEK)	< 3.5	mg/kg	3.5	8260B	SDK 1857	11/3/99
	Bromochloromethane	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	Chloroform	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	1,1,1-Trichloroethane	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	1,1-Dichloropropene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	Carbon tetrachloride	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	Benzene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	1,2-Dichloroethane	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	Trichloroethene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	1,2-Dichloropropane	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	Dibromomethane	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	Bromodichloromethane	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	cis-1,3-Dichloropropene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	4-Methyl-2-pentanone (MIBK)	< 3.5	mg/kg	3.5	8260B	SDK 1857	11/3/99

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Blue Marsh
LABORATORIES • INC

Professional testing for the critical decision

Princeton Location:
267 Wall Street
Princeton, NJ 08540
Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook Dredge Disposal

Date Received: *19-Oct-99*

Lab#: D994826-001
Sample ID: Inlet 1015
Sample Type: Solid

Collect Date: 18-Oct-99
Collected By: Craig Bruce

Report Date: *04-Nov-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	trans-1,3-dichloropropene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	1,1,2-Trichloroethane	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	Tetrachloroethene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	1,3-Dichloropropane	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	2-Hexanone	< 3.5	mg/kg	3.5	8260B	SDK 1857	11/3/99
	Dibromochloromethane	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	1,2-Dibromoethane	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	Chlorobenzene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	1,1,1,2-Tetrachloroethane	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	Ethyl benzene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	m,p-Xylene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	o-Xylene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	Styrene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	Bromoform	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	Isopropylbenzene (Cumene)	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	Bromobenzene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	1,1,2,2-Tetrachloroethane	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	1,2,3-Trichloropropane	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	N-Propylbenzene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	2-Chlorotoluene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	4-Chlorotoluene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	1,3,5-Trimethylbenzene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	tert-Butylbenzene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	1,2,4-Trimethylbenzene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	sec-Butylbenzene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	1,3-Dichlorobenzene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	p-Isopropyltoluene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	1,4-Dichlorobenzene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	1,2-Dichlorobenzene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99

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PA DEP Cert #06-409

Blue Marsh
LABORATORIES • INC

Professional testing for the critical decision

Princeton Location:
267 Wall Street
Princeton, NJ 08540
Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook Dredge Disposal

Lab#: D994826-001
Sample ID: Inlet 1015
Sample Type: Solid

Collect Date: 18-Oct-99
Collected By: Craig Bruce

Date Received: *19-Oct-99*
Report Date: *04-Nov-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	1,2-Dibromo-3-chloropropane	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	1,2,4-Trichlorobenzene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	Hexachloro-1,3-butadiene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	Naphthalene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
	1,2,3-Trichlorobenzene	< 0.3	mg/kg	0.3	8260B	SDK 1857	11/3/99
SV-8270C-sd							
	2-Methylphenol	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	4-Methylphenol	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Benzioc acid	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Aniline	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Benzyl alcohol	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Naphthalene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Phenol	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	2-Chlorophenol	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	1,3-Dichlorobenzene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	1,4-Dichlorobenzene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	1,2-Dichlorobenzene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Hexachloroethane	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Nitrobenzene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Isophorone	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	1,2,4-Trichlorobenzene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	N-Nitrosodimethylamine	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Pyridine	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	bis(2-Chloroethyl)ether	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	bis(2-Chloroisopropyl)ether	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	N-Nitroso-Di-N-Propylamine	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	bis(2-Chloroethoxy)methane	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	2,4,5-Trichlorophenol	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	2-Methylnaphthalene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook Dredge Disposal

Date Received: *19-Oct-99*

Lab#: D994826-001
Sample ID: Inlet 1015
Sample Type: Solid

Collect Date: 18-Oct-99
Collected By: Craig Bruce

Report Date: *04-Nov-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Chloroaniline	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	2-Nitroaniline	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	3-Nitroaniline	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	4-Nitroaniline	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Acenaphthylene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	2-Nitrophenol	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	2,4-Dimethylphenol	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	2,4-Dichlorophenol	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Hexachloro-1,3-butadiene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Hexachlorocyclopentadiene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	2-Chloronaphthalene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	2,6-Dinitrotoluene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Dimethylphthalate	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Dibenzofuran	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Acenaphthene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Fluorene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	2,6-Dichlorophenol	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	4-Chloro-3-methylphenol	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	2,4,6-Trichlorophenol	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	2,4-Dinitrophenol	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	4-Nitrophenol	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	2,3,4,6-Tetrachorophenol	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	2-Methyl-4,6-Dinitrophenol	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Pentachlorophenol	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	2,4-Dinitrotoluene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Hexachlorobenzene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Azobenzene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Diethylphthalate	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	4-Chlorophenyl-phenylether	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	N-Nitrosodiphenylamine	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar

Project: Killcohook Dredge Disposal

Lab#: D994826-001
Sample ID: Inlet 1015
Sample Type: Solid

Collect Date: 18-Oct-99
Collected By: Craig Bruce

Date Received: *19-Oct-99*

Report Date: *04-Nov-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,2-Diphenylhydrazine	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	4-Bromophenyl-phenylether	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Benzidine	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	3,3'-Dichlorobenzidine	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Phenanthrene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Anthracene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Carbazole	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Fluoranthene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Pyrene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Benzo(a)anthracene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Chrysene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Di-n-butylphthalate	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Butylbenzylphthalate	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Benzo(b)fluoranthene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Benzo(k)fluoranthene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Benzo(a)pyrene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Indeno(1,2,3-cd)pyrene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Dibenzo(a,h))anthracene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	Benzo(ghi)perylene	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	DI-n-octylphthalate	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
	bis(2-Ethylhexyl)phthalate	< 472.	ug/kg	472.	8270C	DMP 0333	10/30/99
PEST-8081-sd							
	Aldrin	< 19.	ug/kg	19.	8081A	MDJ 1328	11/1/99
	alpha-BHC	< 19.	ug/kg	19.	8081A	MDJ 1328	11/1/99
	beta-BHC	< 19.	ug/kg	19.	8081A	MDJ 1328	11/1/99
	gamma-BHC (Lindane)	< 19.	ug/kg	19.	8081A	MDJ 1328	11/1/99
	delta-BHC	< 19.	ug/kg	19.	8081A	MDJ 1328	11/1/99
	alpha-Chlordane	< 19.	ug/kg	19.	8081A	MDJ 1328	11/1/99
	gamma-Chlordane	< 19.	ug/kg	19.	8081A	MDJ 1328	11/1/99
	Chlordane, technical	< 236.	ug/kg	236.	8081A	MDJ 1328	11/1/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook Dredge Disposal

Lab#: D994826-001
Sample ID: Inlet 1015
Sample Type: Solid

Collect Date: 18-Oct-99
Collected By: Craig Bruce

Date Received: *19-Oct-99*
Report Date: *04-Nov-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4,4'-DDD	< 38.	ug/kg	38.	8081A	MDJ 1328	11/1/99
	4,4'-DDE	< 38.	ug/kg	38.	8081A	MDJ 1328	11/1/99
	4,4'-DDT	< 38.	ug/kg	38.	8081A	MDJ 1328	11/1/99
	Dieldrin	< 38.	ug/kg	38.	8081A	MDJ 1328	11/1/99
	Endosulfan I	< 19.	ug/kg	19.	8081A	MDJ 1328	11/1/99
	Endosulfan II	< 38.	ug/kg	38.	8081A	MDJ 1328	11/1/99
	Endosulfan sulfate	< 38.	ug/kg	38.	8081A	MDJ 1328	11/1/99
	Endrin	< 38.	ug/kg	38.	8081A	MDJ 1328	11/1/99
	Endrin aldehyde	< 38.	ug/kg	38.	8081A	MDJ 1328	11/1/99
	Endrin ketone	< 38.	ug/kg	38.	8081A	MDJ 1328	11/1/99
	Heptachlor	< 19.	ug/kg	19.	8081A	MDJ 1328	11/1/99
	Heptachlor epoxide	< 19.	ug/kg	19.	8081A	MDJ 1328	11/1/99
	Methoxychlor	< 189.	ug/kg	189.	8081A	MDJ 1328	11/1/99
	Toxaphene	< 943.	ug/kg	943.	8081A	MDJ 1328	11/1/99
Cn,Tot-sd							
	Cyanide, total	< 0.13	mg/kg	0.13	9010B	DAW 1400	10/25/99
RCRA10-6010							
	Cadmium	2.4	mg/kg	2.4	6010B	TWH 1630	11/1/99
	Chromium	69.2	mg/kg	2.4	6010B	TWH 1630	11/1/99
	Copper	34.5	mg/kg	2.4	6010B	TWH 1630	11/1/99
	Lead	38.7	mg/kg	9.4	6010B	TWH 1630	11/1/99
	Nickel	38.4	mg/kg	2.4	6010B	TWH 1630	11/1/99
	Silver	< 2.4	mg/kg	2.4	6010B	TWH 1630	11/1/99
	Zinc	251.7	mg/kg	2.4	6010B	TWH 1630	11/1/99

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Princeton Location:
267 Wall Street
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Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook Dredge Disposal

Lab#: D994826-002
Sample ID: Inlet 1015
Sample Type: Liquid

Collect Date: 18-Oct-99
Collected By: Craig Bruce

Date Received: *19-Oct-99*
Report Date: *04-Nov-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	Chloromethane (Methyl Chloride)	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	Vinyl chloride	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	Bromomethane	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	Chloroethane	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	Trichlorofluoromethane	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	1,1-Dichloroethene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	Acetone	< 100.	ug/L	100.	8260B	AHU 1746	11/2/99
	Methylene chloride (Dichloromethane)	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	t-Butyl alcohol	< 100.	ug/L	100.	8260B	AHU 1746	11/2/99
	trans-1,2-dichloroethene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	Methyl tert-buytl ether (MTBE)	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	1,1-Dichloroethane	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	cis-1,2-Dichloroethene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	2,2-Dichloropropane	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	2-Butanone (MEK)	< 100.	ug/L	100.	8260B	AHU 1746	11/2/99
	Bromochloromethane	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	Chloroform	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	1,1,1-Trichloroethane	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	1,1-Dichloropropene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	Carbon tetrachloride	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	Benzene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	1,2-Dichloroethane	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	Trichloroethene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	1,2-Dichloropropane	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	Dibromomethane	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	Bromodichloromethane	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	cis-1,3-Dichloropropene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	4-Methyl-2-pentanone (MIBK)	< 100.	ug/L	100.	8260B	AHU 1746	11/2/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook Dredge Disposal

Date Received: *19-Oct-99*

Lab#: D994826-002
Sample ID: Inlet 1015
Sample Type: Liquid

Collect Date: 18-Oct-99
Collected By: Craig Bruce

Report Date: *04-Nov-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	trans-1,3-dichloropropene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	1,1,2-Trichloroethane	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	Tetrachloroethene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	1,3-Dichloropropane	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	2-Hexanone	< 100.	ug/L	100.	8260B	AHU 1746	11/2/99
	Dibromochloromethane	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	1,2-Dibromoethane	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	Chlorobenzene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	1,1,1,2-Tetrachloroethane	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	Ethyl benzene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	m,p-Xylene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	o-Xylene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	Styrene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	Bromoform	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	Isopropylbenzene (Cumene)	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	Bromobenzene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	1,1,2,2-Tetrachloroethane	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	1,2,3-Trichloropropane	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	N-Propylbenzene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	2-Chlorotoluene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	4-Chlorotoluene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	1,3,5-Trimethylbenzene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	tert-Butylbenzene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	1,2,4-Trimethylbenzene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	sec-Butylbenzene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	1,3-Dichlorobenzene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	p-Isopropyltoluene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	1,4-Dichlorobenzene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	1,2-Dichlorobenzene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook Dredge Disposal

Date Received: *19-Oct-99*

Lab#: D994826-002
Sample ID: Inlet 1015
Sample Type: Liquid

Collect Date: 18-Oct-99
Collected By: Craig Bruce

Report Date: *04-Nov-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	1,2-Dibromo-3-chloropropane	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	1,2,4-Trichlorobenzene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	Hexachloro-1,3-butadiene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	Naphthalene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
	1,2,3-Trichlorobenzene	< 10.	ug/L	10.	8260B	AHU 1746	11/2/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 0730	10/28/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 0730	10/28/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 0730	10/28/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 0730	10/28/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 0730	10/28/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 0730	10/28/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 0730	10/28/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 0730	10/28/99
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 0730	10/28/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 0730	10/28/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 0730	10/28/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 0730	10/28/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 0730	10/28/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 0730	10/28/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 0730	10/28/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 0730	10/28/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 0730	10/28/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 0730	10/28/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 0730	10/28/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 0730	10/28/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 0730	10/28/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 0730	10/28/99

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9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook Dredge Disposal

Date Received: *19-Oct-99*

Lab#: D994826-002
Sample ID: Inlet 1015
Sample Type: Liquid

Collect Date: 18-Oct-99
Collected By: Craig Bruce

Report Date: *04-Nov-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
SV-8270C-aq							
	2-Methylphenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	4-Methylphenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Benzoic acid	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Aniline	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Benzyl alcohol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Naphthalene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Phenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2-Chlorophenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	1,3-Dichlorobenzene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	1,4-Dichlorobenzene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	1,2-Dichlorobenzene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Hexachloroethane	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Nitrobenzene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Isophorone	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	1,2,4-Trichlorobenzene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	N-Nitrosodimethylamine	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Pyridine	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	bis(2-Chloroethyl)ether	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	bis(2-Chloroisopropyl)ether	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	N-Nitroso-Di-N-Propylamine	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	bis(2-Chloroethoxy)methane	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2,4,5-Trichlorophenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2-Methylnaphthalene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	4-Chloroaniline	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2-Nitroaniline	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	3-Nitroaniline	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	4-Nitroaniline	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Acenaphthylene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2-Nitrophenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook Dredge Disposal

Lab#: D994826-002
Sample ID: Inlet 1015
Sample Type: Liquid

Collect Date: 18-Oct-99
Collected By: Craig Bruce

Date Received: *19-Oct-99*
Report Date: *04-Nov-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	2,4-Dimethylphenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2,4-Dichlorophenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Hexachloro-1,3-butadiene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Hexachlorocyclopentadiene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2-Chloronaphthalene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2,6-Dinitrotoluene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Dimethylphthalate	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Dibenzofuran	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Acenaphthene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Fluorene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2,6-Dichlorophenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	4-Chloro-3-methylphenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2,4,6-Trichlorophenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2,4-Dinitrophenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	4-Nitrophenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2,3,4,6-Tetrachorophenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2-Methyl-4,6-Dinitrophenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Pentachlorophenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2,4-Dinitrotoluene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Hexachlorobenzene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Azobenzene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Diethylphthalate	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	4-Chlorophenyl-phenylether	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	N-Nitrosodiphenylamine	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	1,2-Diphenylhydrazine	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	4-Bromophenyl-phenylether	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Benzidine	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	3,3'-Dichlorobenzidine	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Phenanthrene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Anthracene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99

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Lab#: D994826-002
Sample ID: Inlet 1015
Sample Type: Liquid

Collect Date: 18-Oct-99
Collected By: Craig Bruce

Date Received: *19-Oct-99*
Report Date: *04-Nov-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Carbazole	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Fluoranthene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Pyrene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Benzo(a)anthracene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Chrysene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Di-n-butylphthalate	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Butylbenzylphthalate	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Benzo(b)fluoranthene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Benzo(k)fluoranthene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Benzo(a)pyrene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Indeno(1,2,3-cd)pyrene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Dibenzo(a,h))anthracene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Benzo(ghi)perylene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	DI-n-octylphthalate	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	bis(2-Ethylhexyl)phthalate	14.	ug/L	10.	8270C	DMP 1655	10/27/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1400	10/25/99
RCRA10-6010							
	Cadmium	0.005	mg/L	0.005	6010B	TWH 1410	11/1/99
	Chromium	0.153	mg/L	0.005	6010B	TWH 1410	11/1/99
	Copper	0.054	mg/L	0.005	6010B	TWH 1410	11/1/99
	Lead	0.05	mg/L	0.02	6010B	TWH 1410	11/1/99
	Nickel	0.080	mg/L	0.005	6010B	TWH 1410	11/1/99
	Silver	< 0.005	mg/L	0.005	6010B	TWH 1410	11/1/99
	Zinc	0.643	mg/L	0.005	6010B	TWH 1410	11/1/99

Reviewed and Approved by:

Laurel A Schwindt

Laurel A. Schwindt
Laboratory Manager

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BLUE MARSH LABORATORIES, INC.
1605 Benjamin Franklin Highway
Douglassville, PA 19518
Phone: (610) 327-8196 Fax: (610) 327-6864

CHAIN OF CUSTODY RECORD

9200 Rumsey Rd
Columbia, MD 21045
Contact: Jessica Farrar
Phone#: 410 964 9200
Fax#: 410 964 5156

Void per Jessica 10/19/99

BML LOT NO: 994826
PROJECT NO: 4033-026
P.O. NO:

PROJECT: Killcohook Dredge Disposal

TURNAROUND TIME REQUIRED: 24 HR ☐ 48 HR ☐ 72 HR ☐ 1 WEEK ☐ 2 WEEKS ☐

ANALYSIS NEEDED:

Fuel Type - Use Letter Code
A. Leaded Gas / Aviation-Jet Fuel
B. Unleaded Gas
C. Kerosene / Fuel #1
D. Diesel Fuel / Fuel Oil #2
E. Fuel Oil #4, #5, #6 / Lubricating Oil
F. Used Motor Oil

BML USE LAB ID NO.	DATE SAMPLED	TIME SAMPLED	COMP	GRAB	SAMPLE DESCRIPTION / CLIENT ID NO.	NO. OF CONTAINERS	SAMPLE TYPE (Use Reference)	TCLP (V/S/H/P/M)	FORM U/43	METALS-(please specify)	VOLATILES ** 8260	PA UST Code	Pesticides - 8081	SVOC 8270	~~Inorganics, dissolved~~	Inorganics, total	Cyanide			Remarks:
01	10-15-99	1150		X	INLET 1015 Solid	7					X		X	X	X	X	X			8260
02					Liquid															
																				2 Wm G liter
																				3 Plas liter
					Analyze solid and															2 VOA
					liquid portions															
					separately. (PB)															
																				Metals: Cu, Pb, Zn, Cd, Cr,
																				Ni, Ag.
																			(PB)	~~All need 2 ppb D.L. (aq. port.~~

Sampled by: Craig Bruce
Date: 10-18-99
Special Notes or Hazards: Faxed 11/4
COOLER TEMP: 2.1 °C

Relinquished by: (Signature) [signature]
Date/Time: 10-18-99 1000
Received by:

Relinquished by: (Signature)
Date/Time: 10/19/99
Received for Laboratory by: [signature]

REPORT FORMAT (Check One) ***
Standard (Data ☐ — Results Only ☐)
NJ Deliverables (Full ☐ — Reduced ☐)
CLP Format ☐
DW Forms ☐ PWS ID # _____

SAMPLE TYPE:
HZ Hazardous, SW Surface Water, SO Soil, WW Waste Water, DE Debris, GW Ground Water, SL Sludge, DW Drinking Water, SD Solid, LQ Liquid

PERMIT TYPE:
☐ MIPP
☐ NPDES

* Surcharge for 24 HR, 48 HR, 72 HR, and 1 week turnaround times. ** Specify method required. *** Surcharges may apply.

BML7a

Faxed prelim. 11/1/99 - all but Vol.

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Blue Marsh

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Princeton Location:
267 Wall Street
Princeton, NJ 08540
Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-001
Sample ID: MIX1021
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	Chloromethane (Methyl Chloride)	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	Vinyl chloride	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	Bromomethane	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	Chloroethane	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	Trichlorofluoromethane	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	1,1-Dichloroethene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	Acetone	< 10.	ug/L	10.	8260B	MJM 1425	11/4/99
	Methylene chloride (Dichloromethane)	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	t-Butyl alcohol	< 10.	ug/L	10.	8260B	MJM 1425	11/4/99
	trans-1,2-dichloroethene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	Methyl tert-buytl ether (MTBE)	1.	ug/L	1.	8260B	MJM 1425	11/4/99
	1,1-Dichloroethane	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	cis-1,2-Dichloroethene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	2,2-Dichloropropane	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	2-Butanone (MEK)	< 10.	ug/L	10.	8260B	MJM 1425	11/4/99
	Bromochloromethane	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	Chloroform	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	1,1,1-Trichloroethane	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	1,1-Dichloropropene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	Carbon tetrachloride	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	Benzene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	1,2-Dichloroethane	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	Trichloroethene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	1,2-Dichloropropane	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	Dibromomethane	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	Bromodichloromethane	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	cis-1,3-Dichloropropene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	4-Methyl-2-pentanone (MIBK)	< 10.	ug/L	10.	8260B	MJM 1425	11/4/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-001
Sample ID: MIX1021
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	trans-1,3-dichloropropene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	1,1,2-Trichloroethane	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	Tetrachloroethene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	1,3-Dichloropropane	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	2-Hexanone	< 10.	ug/L	10.	8260B	MJM 1425	11/4/99
	Dibromochloromethane	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	1,2-Dibromoethane	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	Chlorobenzene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	1,1,1,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	Ethyl benzene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	m,p-Xylene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	o-Xylene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	Styrene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	Bromoform	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	Isopropylbenzene (Cumene)	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	Bromobenzene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	1,1,2,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	1,2,3-Trichloropropane	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	N-Propylbenzene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	2-Chlorotoluene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	4-Chlorotoluene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	1,3,5-Trimethylbenzene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	tert-Butylbenzene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	1,2,4-Trimethylbenzene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	sec-Butylbenzene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	1,3-Dichlorobenzene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	p-Isopropyltoluene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	1,4-Dichlorobenzene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	1,2-Dichlorobenzene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-001
Sample ID: MIX1021
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	1,2-Dibromo-3-chloropropane	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	1,2,4-Trichlorobenzene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	Hexachloro-1,3-butadiene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	Naphthalene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
	1,2,3-Trichlorobenzene	< 1.	ug/L	1.	8260B	MJM 1425	11/4/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99

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9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-001
Sample ID: MIX1021
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99

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9200 Rumsey Road
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Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-001
Sample ID: MIX1021
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	bis(2-Ethylhexyl)phthalate	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1639	10/29/99

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Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1639	10/29/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1639	10/29/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	11/18/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1144	11/4/99
	Chromium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1144	11/4/99
	Copper, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1144	11/4/99
	Nickel, dissolved	0.003	mg/L	0.001	200.7	TWH 1144	11/4/99
	Silver, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1144	11/4/99
	Zinc, dissolved	0.030	mg/L	0.001	200.7	TWH 1144	11/4/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1400	10/25/99
TSS-aq							
	Solids, Total Suspended	34.	mg/L	1.	160.2	SBB 1000	10/25/99
TAL-6010-W							
	Aluminum	1.807	mg/L	0.004	6010B	TWH 1330	11/4/99
	Antimony	< 0.004	mg/L	0.004	6010B	TWH 1330	11/4/99

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267 Wall Street
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Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-001
Sample ID: MIX1021
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Arsenic	< 0.004	mg/L	0.004	6010B	TWH 1330	11/4/99
	Barium	0.028	mg/L	0.001	6010B	TWH 1330	11/4/99
	Beryllium	< 0.001	mg/L	0.001	6010B	TWH 1330	11/4/99
	Cadmium	< 0.001	mg/L	0.001	6010B	TWH 1330	11/4/99
	Calcium	31.2	mg/L	0.4	6010B	TWH 1330	11/4/99
	Chromium	0.006	mg/L	0.001	6010B	TWH 1330	11/4/99
	Cobalt	< 0.004	mg/L	0.004	6010B	TWH 1330	11/4/99
	Copper	0.004	mg/L	0.001	6010B	TWH 1330	11/4/99
	Iron	3.821	mg/L	0.001	6010B	TWH 1330	11/4/99
	Lead	0.008	mg/L	0.004	6010B	TWH 1330	11/4/99
	Magnesium	47.58	mg/L	0.09	6010B	TWH 1330	11/4/99
	Manganese	0.271	mg/L	0.001	6010B	TWH 1330	11/4/99
	Nickel	0.007	mg/L	0.001	6010B	TWH 1330	11/4/99
	Potassium	18.6	mg/L	0.4	6010B	TWH 1330	11/4/99
	Selenium	< 0.004	mg/L	0.004	6010B	TWH 1330	11/4/99
	Silver	< 0.001	mg/L	0.001	6010B	TWH 1330	11/4/99
	Sodium	378.	mg/L	4.	6010B	TWH 1330	11/4/99
	Thallium	0.010	mg/L	0.004	6010B	TWH 1330	11/4/99
	Vanadium	0.011	mg/L	0.004	6010B	TWH 1330	11/4/99
	Zinc	0.041	mg/L	0.001	6010B	TWH 1330	11/4/99
HG-7470A							
	Mercury	0.0003	mg/L	0.0002	7470A	JAM 1335	10/28/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-002
Sample ID: BG1021
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Chloromethane (Methyl Chloride)	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Vinyl chloride	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Bromomethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Chloroethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Trichlorofluoromethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,1-Dichloroethene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Acetone	< 20.	ug/L	20.	8260B	SDK 1604	11/4/99
	Methylene chloride (Dichloromethane)	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	t-Butyl alcohol	< 20.	ug/L	20.	8260B	SDK 1604	11/4/99
	trans-1,2-dichloroethene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Methyl tert-buytl ether (MTBE)	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,1-Dichloroethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	cis-1,2-Dichloroethene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	2,2-Dichloropropane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	2-Butanone (MEK)	< 20.	ug/L	20.	8260B	SDK 1604	11/4/99
	Bromochloromethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Chloroform	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,1,1-Trichloroethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,1-Dichloropropene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Carbon tetrachloride	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Benzene	6.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,2-Dichloroethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Trichloroethene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,2-Dichloropropane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Dibromomethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Bromodichloromethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	cis-1,3-Dichloropropene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	4-Methyl-2-pentanone (MIBK)	< 20.	ug/L	20.	8260B	SDK 1604	11/4/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-002
Sample ID: BG1021
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	11.	ug/L	2.	8260B	SDK 1604	11/4/99
	trans-1,3-dichloropropene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,1,2-Trichloroethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Tetrachloroethene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,3-Dichloropropane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	2-Hexanone	< 20.	ug/L	20.	8260B	SDK 1604	11/4/99
	Dibromochloromethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,2-Dibromoethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Chlorobenzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,1,1,2-Tetrachloroethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Ethyl benzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	m,p-Xylene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	o-Xylene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Styrene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Bromoform	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Isopropylbenzene (Cumene)	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Bromobenzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,1,2,2-Tetrachloroethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,2,3-Trichloropropane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	N-Propylbenzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	2-Chlorotoluene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	4-Chlorotoluene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,3,5-Trimethylbenzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	tert-Butylbenzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,2,4-Trimethylbenzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	sec-Butylbenzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	p-Isopropyltoluene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-002
Sample ID: BG1021
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,2-Dibromo-3-chloropropane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Naphthalene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,2,3-Trichlorobenzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-002
Sample ID: BG1021
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-002
Sample ID: BG1021
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
	bis(2-Ethylhexyl)phthalate	< 2.	ug/L	2.	8270C	DMP 1706	11/1/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1639	10/29/99

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267 Wall Street
Princeton, NJ 08540
Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-002
Sample ID: BG1021
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1639	10/29/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1639	10/29/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	11/18/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1144	11/4/99
	Chromium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1144	11/4/99
	Copper, dissolved	0.001	mg/L	0.001	200.7	TWH 1144	11/4/99
	Nickel, dissolved	0.003	mg/L	0.001	200.7	TWH 1144	11/4/99
	Silver, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1144	11/4/99
	Zinc, dissolved	0.014	mg/L	0.001	200.7	TWH 1144	11/4/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1400	10/25/99
TSS-aq							
	Solids, Total Suspended	25.	mg/L	1.	160.2	SBB 1000	10/25/99
G-7470A							
	Mercury	< 0.0002	mg/L	0.0002	7470A	JAM 1335	10/28/99

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9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-002
Sample ID: BG1021
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TAL-6010-W							
	Aluminum	1.135	mg/L	0.004	6010B	TWH 1323	11/4/99
	Antimony	< 0.004	mg/L	0.004	6010B	TWH 1323	11/4/99
	Arsenic	< 0.004	mg/L	0.004	6010B	TWH 1323	11/4/99
	Barium	0.023	mg/L	0.001	6010B	TWH 1323	11/4/99
	Beryllium	< 0.001	mg/L	0.001	6010B	TWH 1323	11/4/99
	Cadmium	< 0.001	mg/L	0.001	6010B	TWH 1323	11/4/99
	Calcium	23.2	mg/L	0.4	6010B	TWH 1323	11/4/99
	Chromium	0.004	mg/L	0.001	6010B	TWH 1323	11/4/99
	Cobalt	< 0.004	mg/L	0.004	6010B	TWH 1323	11/4/99
	Copper	0.003	mg/L	0.001	6010B	TWH 1323	11/4/99
	Iron	2.169	mg/L	0.001	6010B	TWH 1323	11/4/99
	Lead	0.005	mg/L	0.004	6010B	TWH 1323	11/4/99
	Magnesium	19.52	mg/L	0.09	6010B	TWH 1323	11/4/99
	Manganese	0.091	mg/L	0.001	6010B	TWH 1323	11/4/99
	Nickel	0.005	mg/L	0.001	6010B	TWH 1323	11/4/99
	Potassium	8.3	mg/L	0.4	6010B	TWH 1323	11/4/99
	Selenium	< 0.004	mg/L	0.004	6010B	TWH 1323	11/4/99
	Silver	0.001	mg/L	0.001	6010B	TWH 1323	11/4/99
	Sodium	131.	mg/L	4.	6010B	TWH 1323	11/4/99
	Thallium	0.009	mg/L	0.004	6010B	TWH 1323	11/4/99
	Vanadium	0.007	mg/L	0.004	6010B	TWH 1323	11/4/99
	Zinc	0.026	mg/L	0.001	6010B	TWH 1323	11/4/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-003
Sample ID: WIER1021
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Chloromethane (Methyl Chloride)	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Vinyl chloride	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Bromomethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Chloroethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Trichlorofluoromethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,1-Dichloroethene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Acetone	< 20.	ug/L	20.	8260B	SDK 1604	11/4/99
	Methylene chloride (Dichloromethane)	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	t-Butyl alcohol	< 20.	ug/L	20.	8260B	SDK 1604	11/4/99
	trans-1,2-dichloroethene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Methyl tert-buytl ether (MTBE)	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,1-Dichloroethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	cis-1,2-Dichloroethene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	2,2-Dichloropropane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	2-Butanone (MEK)	< 20.	ug/L	20.	8260B	SDK 1604	11/4/99
	Bromochloromethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Chloroform	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,1,1-Trichloroethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,1-Dichloropropene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Carbon tetrachloride	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Benzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,2-Dichloroethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Trichloroethene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,2-Dichloropropane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Dibromomethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Bromodichloromethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	cis-1,3-Dichloropropene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	4-Methyl-2-pentanone (MIBK)	< 20.	ug/L	20.	8260B	SDK 1604	11/4/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-003
Sample ID: WIER1021
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	trans-1,3-dichloropropene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,1,2-Trichloroethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Tetrachloroethene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,3-Dichloropropane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	2-Hexanone	< 20.	ug/L	20.	8260B	SDK 1604	11/4/99
	Dibromochloromethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,2-Dibromoethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Chlorobenzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,1,1,2-Tetrachloroethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Ethyl benzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	m,p-Xylene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	o-Xylene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Styrene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Bromoform	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Isopropylbenzene (Cumene)	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Bromobenzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,1,2,2-Tetrachloroethane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,2,3-Trichloropropane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	N-Propylbenzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	2-Chlorotoluene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	4-Chlorotoluene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,3,5-Trimethylbenzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	tert-Butylbenzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,2,4-Trimethylbenzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	sec-Butylbenzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	p-Isopropyltoluene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-003
Sample ID: WIER1021
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,2-Dibromo-3-chloropropane	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	Naphthalene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
	1,2,3-Trichlorobenzene	< 2.	ug/L	2.	8260B	SDK 1604	11/4/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Benzoic acid	2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99

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Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-003
Sample ID: WIER1021
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99

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Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-003
Sample ID: WIER1021
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 1655	10/27/99
	bis(2-Ethylhexyl)phthalate	3.	ug/L	2.	8270C	DMP 1655	10/27/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1639	10/29/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-003
Sample ID: WIER1021
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1639	10/29/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1639	10/29/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	11/18/99
RCRA10-Diss							
	Cadmium, dissolved	0.001	mg/L	0.001	200.7	TWH 1103	11/4/99
	Chromium, dissolved	0.001	mg/L	0.001	200.7	TWH 1103	11/4/99
	Copper, dissolved	0.025	mg/L	0.001	200.7	TWH 1103	11/4/99
	Nickel, dissolved	0.030	mg/L	0.001	200.7	TWH 1103	11/4/99
	Silver, dissolved	0.002	mg/L	0.001	200.7	TWH 1103	11/4/99
	Zinc, dissolved	0.173	mg/L	0.001	200.7	TWH 1103	11/4/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1400	10/25/99
TSS-aq							
	Solids, Total Suspended	76.	mg/L	1.	160.2	SBB 1000	10/25/99
TAL-6010-W							
	Aluminum	2.686	mg/L	0.004	6010B	TWH 1323	11/4/99
	Antimony	< 0.004	mg/L	0.004	6010B	TWH 1323	11/4/99

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Client: Versar, Inc.
9200 Rumsey Road
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Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-003
Sample ID: WIER1021
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Arsenic	< 0.004	mg/L	0.004	6010B	TWH 1323	11/4/99
	Barium	0.103	mg/L	0.001	6010B	TWH 1323	11/4/99
	Beryllium	< 0.001	mg/L	0.001	6010B	TWH 1323	11/4/99
	Cadmium	0.003	mg/L	0.001	6010B	TWH 1323	11/4/99
	Calcium	72.1	mg/L	0.4	6010B	TWH 1323	11/4/99
	Chromium	0.012	mg/L	0.001	6010B	TWH 1323	11/4/99
	Cobalt	0.007	mg/L	0.004	6010B	TWH 1323	11/4/99
	Copper	0.041	mg/L	0.001	6010B	TWH 1323	11/4/99
	Iron	9.25	mg/L	0.09	6010B	TWH 1323	11/4/99
	Lead	0.015	mg/L	0.004	6010B	TWH 1323	11/4/99
	Magnesium	145.57	mg/L	0.09	6010B	TWH 1323	11/4/99
	Manganese	8.08	mg/L	0.09	6010B	TWH 1323	11/4/99
	Nickel	0.038	mg/L	0.001	6010B	TWH 1323	11/4/99
	Potassium	50.1	mg/L	0.4	6010B	TWH 1323	11/4/99
	Selenium	0.037	mg/L	0.004	6010B	TWH 1323	11/4/99
	Silver	0.002	mg/L	0.001	6010B	TWH 1323	11/4/99
	Sodium	679.	mg/L	4.	6010B	TWH 1323	11/4/99
	Thallium	0.044	mg/L	0.004	6010B	TWH 1323	11/4/99
	Vanadium	0.014	mg/L	0.004	6010B	TWH 1323	11/4/99
	Zinc	0.293	mg/L	0.001	6010B	TWH 1323	11/4/99
HG-7470A							
	Mercury	0.0005	mg/L	0.0002	7470A	JAM 1335	10/28/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-004
Sample ID: WIER1020
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	48.	mg/L	1.	160.2	SBB 1000	10/25/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-005
Sample ID: WIER1019
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	355.	mg/L	1.	160.2	SBB 1000	10/25/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-006
Sample ID: INLET 1021 Soil
Sample Type: Soil

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-sd							
	Dichlorofluoromethane	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	Chloromethane (Methyl Chloride)	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	Vinyl chloride	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	Bromomethane	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	Chloroethane	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	Trichlorofluoromethane	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	1,1-Dichloroethene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	Acetone	< 1.2	mg/kg	1.2	8260B	SDK 1754	11/4/99
	Methylene chloride (Dichloromethane)	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	t-Butyl alcohol	< 1.2	mg/kg	1.2	8260B	SDK 1754	11/4/99
	trans-1,2-dichloroethene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	Methyl tert-buytl ether (MTBE)	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	1,1-Dichloroethane	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	cis-1,2-Dichloroethene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	2,2-Dichloropropane	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	2-Butanone (MEK)	< 1.2	mg/kg	1.2	8260B	SDK 1754	11/4/99
	Bromochloromethane	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	Chloroform	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	1,1,1-Trichloroethane	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	1,1-Dichloropropene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	Carbon tetrachloride	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	Benzene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	1,2-Dichloroethane	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	Trichloroethene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	1,2-Dichloropropane	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	Dibromomethane	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	Bromodichloromethane	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	cis-1,3-Dichloropropene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	4-Methyl-2-pentanone (MIBK)	< 1.2	mg/kg	1.2	8260B	SDK 1754	11/4/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-006
Sample ID: INLET 1021 Soil
Sample Type: Soil

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	trans-1,3-dichloropropene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	1,1,2-Trichloroethane	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	Tetrachloroethene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	1,3-Dichloropropane	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	2-Hexanone	< 1.2	mg/kg	1.2	8260B	SDK 1754	11/4/99
	Dibromochloromethane	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	1,2-Dibromoethane	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	Chlorobenzene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	1,1,1,2-Tetrachloroethane	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	Ethyl benzene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	m,p-Xylene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	o-Xylene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	Styrene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	Bromoform	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	Isopropylbenzene (Cumene)	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	Bromobenzene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	1,1,2,2-Tetrachloroethane	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	1,2,3-Trichloropropane	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	N-Propylbenzene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	2-Chlorotoluene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	4-Chlorotoluene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	1,3,5-Trimethylbenzene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	tert-Butylbenzene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	1,2,4-Trimethylbenzene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	sec-Butylbenzene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	1,3-Dichlorobenzene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	p-Isopropyltoluene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	1,4-Dichlorobenzene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	1,2-Dichlorobenzene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-006
Sample ID: INLET 1021 Soil
Sample Type: Soil

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	1,2-Dibromo-3-chloropropane	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	1,2,4-Trichlorobenzene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	Hexachloro-1,3-butadiene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	Naphthalene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
	1,2,3-Trichlorobenzene	< 0.1	mg/kg	0.1	8260B	SDK 1754	11/4/99
PEST-8081-sd							
	Aldrin	< 4.	ug/kg	4.	8081A	MDJ 2111	11/1/99
	alpha-BHC	< 4.	ug/kg	4.	8081A	MDJ 2111	11/1/99
	beta-BHC	< 4.	ug/kg	4.	8081A	MDJ 2111	11/1/99
	gamma-BHC (Lindane)	< 4.	ug/kg	4.	8081A	MDJ 2111	11/1/99
	delta-BHC	< 4.	ug/kg	4.	8081A	MDJ 2111	11/1/99
	alpha-Chlordane	< 4.	ug/kg	4.	8081A	MDJ 2111	11/1/99
	gamma-Chlordane	< 4.	ug/kg	4.	8081A	MDJ 2111	11/1/99
	Chlordane, technical	< 50.	ug/kg	50.	8081A	MDJ 2111	11/1/99
	4,4'-DDD	< 8.	ug/kg	8.	8081A	MDJ 2111	11/1/99
	4,4'-DDE	< 8.	ug/kg	8.	8081A	MDJ 2111	11/1/99
	4,4'-DDT	< 8.	ug/kg	8.	8081A	MDJ 2111	11/1/99
	Dieldrin	< 8.	ug/kg	8.	8081A	MDJ 2111	11/1/99
	Endosulfan I	< 4.	ug/kg	4.	8081A	MDJ 2111	11/1/99
	Endosulfan II	< 8.	ug/kg	8.	8081A	MDJ 2111	11/1/99
	Endosulfan sulfate	< 8.	ug/kg	8.	8081A	MDJ 2111	11/1/99
	Endrin	< 8.	ug/kg	8.	8081A	MDJ 2111	11/1/99
	Endrin aldehyde	< 8.	ug/kg	8.	8081A	MDJ 2111	11/1/99
	Endrin ketone	< 8.	ug/kg	8.	8081A	MDJ 2111	11/1/99
	Heptachlor	< 4.	ug/kg	4.	8081A	MDJ 2111	11/1/99
	Heptachlor epoxide	< 4.	ug/kg	4.	8081A	MDJ 2111	11/1/99
	Methoxychlor	< 40.	ug/kg	40.	8081A	MDJ 2111	11/1/99
	Toxaphene	< 200.	ug/kg	200.	8081A	MDJ 2111	11/1/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-006
Sample ID: INLET 1021 Soil
Sample Type: Soil

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
SV-8270C-sd							
	2-Methylphenol	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	4-Methylphenol	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Benzioc acid	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Aniline	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Benzyl alcohol	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Naphthalene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Phenol	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	2-Chlorophenol	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	1,3-Dichlorobenzene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	1,4-Dichlorobenzene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	1,2-Dichlorobenzene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Hexachloroethane	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Nitrobenzene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Isophorone	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	1,2,4-Trichlorobenzene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	N-Nitrosodimethylamine	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Pyridine	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	bis(2-Chloroethyl)ether	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	bis(2-Chloroisopropyl)ether	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	N-Nitroso-Di-N-Propylamine	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	bis(2-Chloroethoxy)methane	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	2,4,5-Trichlorophenol	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	2-Methylnaphthalene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	4-Chloroaniline	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	2-Nitroaniline	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	3-Nitroaniline	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	4-Nitroaniline	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Acenaphthylene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	2-Nitrophenol	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-006
Sample ID: INLET 1021 Soil
Sample Type: Soil

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	2,4-Dimethylphenol	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	2,4-Dichlorophenol	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Hexachloro-1,3-butadiene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Hexachlorocyclopentadiene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	2-Chloronaphthalene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	2,6-Dinitrotoluene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Dimethylphthalate	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Dibenzofuran	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Acenaphthene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Fluorene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	2,6-Dichlorophenol	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	4-Chloro-3-methylphenol	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	2,4,6-Trichlorophenol	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	2,4-Dinitrophenol	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	4-Nitrophenol	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	2,3,4,6-Tetrachorophenol	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	2-Methyl-4,6-Dinitrophenol	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Pentachlorophenol	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	2,4-Dinitrotoluene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Hexachlorobenzene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Azobenzene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Diethylphthalate	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	4-Chlorophenyl-phenylether	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	N-Nitrosodiphenylamine	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	1,2-Diphenylhydrazine	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	4-Bromophenyl-phenylether	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Benzidine	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	3,3'-Dichlorobenzidine	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Phenanthrene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Anthracene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-006
Sample ID: INLET 1021 Soil
Sample Type: Soil

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	POL	Method	Init / Time	Analysis Date
	Carbazole	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Fluoranthene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Pyrene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Benzo(a)anthracene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Chrysene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Di-n-butylphthalate	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Butylbenzylphthalate	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Benzo(b)fluoranthene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Benzo(k)fluoranthene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Benzo(a)pyrene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Indeno(1,2,3-cd)pyrene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Dibenzo(a,h))anthracene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	Benzo(ghi)perylene	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	DI-n-octylphthalate	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
	bis(2-Ethylhexyl)phthalate	< 100.	ug/kg	100.	8270C	DMP 0549	10/30/99
Cn,Tot-sd							
	Cyanide, total	< 0.13	mg/kg	0.13	9010B	DAW 1400	10/25/99
HG-7471A							
	Mercury	0.07	mg/kg	0.05	7471A	JAM 1210	10/28/99
TAL-6010-S							
	Aluminum	3972.3	mg/kg	2.0	6010B	TWH 1254	11/3/99
	Antimony	< 2.0	mg/kg	2.0	6010B	TWH 1254	11/3/99
	Arsenic	4.1	mg/kg	2.0	6010B	TWH 1254	11/3/99
	Barium	16.3	mg/kg	0.5	6010B	TWH 1254	11/3/99
	Beryllium	< 0.5	mg/kg	0.5	6010B	TWH 1254	11/3/99
	Cadmium	< 0.5	mg/kg	0.5	6010B	TWH 1254	11/3/99
	Calcium	973.9	mg/kg	2.0	6010B	TWH 1254	11/3/99
	Chromium	16.1	mg/kg	0.5	6010B	TWH 1254	11/3/99
	Cobalt	< 2.0	mg/kg	2.0	6010B	TWH 1254	11/3/99
	Copper	9.2	mg/kg	0.5	6010B	TWH 1254	11/3/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-006
Sample ID: INLET 1021 Soil
Sample Type: Soil

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Iron	9206.3	mg/kg	0.5	6010B	TWH 1254	11/3/99
	Lead	11.0	mg/kg	2.0	6010B	TWH 1254	11/3/99
	Magnesium	2158.3	mg/kg	0.5	6010B	TWH 1254	11/3/99
	Manganese	439.8	mg/kg	0.5	6010B	TWH 1254	11/3/99
	Nickel	8.1	mg/kg	0.5	6010B	TWH 1254	11/3/99
	Potassium	949.3	mg/kg	2.0	6010B	TWH 1254	11/3/99
	Selenium	< 2.0	mg/kg	2.0	6010B	TWH 1254	11/3/99
	Silver	< 0.5	mg/kg	0.5	6010B	TWH 1254	11/3/99
	Sodium	1482.5	mg/kg	2.0	6010B	TWH 1254	11/3/99
	Thallium	< 2.0	mg/kg	2.0	6010B	TWH 1254	11/3/99
	Vanadium	17.0	mg/kg	2.0	6010B	TWH 1254	11/3/99
	Zinc	57.9	mg/kg	0.5	6010B	TWH 1254	11/3/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-007
Sample ID: INLET 1021 Liquid
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	Chloromethane (Methyl Chloride)	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	Vinyl chloride	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	Bromomethane	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	Chloroethane	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	Trichlorofluoromethane	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	1,1-Dichloroethene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	Acetone	< 50.	ug/L	50.	8260B	SDK 1900	11/4/99
	Methylene chloride (Dichloromethane)	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	t-Butyl alcohol	< 50.	ug/L	50.	8260B	SDK 1900	11/4/99
	trans-1,2-dichloroethene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	Methyl tert-buytl ether (MTBE)	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	1,1-Dichloroethane	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	cis-1,2-Dichloroethene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	2,2-Dichloropropane	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	2-Butanone (MEK)	< 50.	ug/L	50.	8260B	SDK 1900	11/4/99
	Bromochloromethane	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	Chloroform	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	1,1,1-Trichloroethane	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	1,1-Dichloropropene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	Carbon tetrachloride	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	Benzene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	1,2-Dichloroethane	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	Trichloroethene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	1,2-Dichloropropane	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	Dibromomethane	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	Bromodichloromethane	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	cis-1,3-Dichloropropene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	4-Methyl-2-pentanone (MIBK)	< 50.	ug/L	50.	8260B	SDK 1900	11/4/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-007
Sample ID: *INLET 1021 Liquid*
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	trans-1,3-dichloropropene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	1,1,2-Trichloroethane	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	Tetrachloroethene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	1,3-Dichloropropane	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	2-Hexanone	< 50.	ug/L	50.	8260B	SDK 1900	11/4/99
	Dibromochloromethane	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	1,2-Dibromoethane	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	Chlorobenzene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	1,1,1,2-Tetrachloroethane	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	Ethyl benzene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	m,p-Xylene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	o-Xylene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	Styrene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	Bromoform	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	Isopropylbenzene (Cumene)	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	Bromobenzene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	1,1,2,2-Tetrachloroethane	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	1,2,3-Trichloropropane	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	N-Propylbenzene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	2-Chlorotoluene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	4-Chlorotoluene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	1,3,5-Trimethylbenzene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	tert-Butylbenzene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	1,2,4-Trimethylbenzene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	sec-Butylbenzene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	1,3-Dichlorobenzene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	p-Isopropyltoluene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	1,4-Dichlorobenzene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	1,2-Dichlorobenzene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99

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Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-007
Sample ID: INLET 1021 Liquid
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	1,2-Dibromo-3-chloropropane	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	1,2,4-Trichlorobenzene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	Hexachloro-1,3-butadiene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	Naphthalene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
	1,2,3-Trichlorobenzene	< 5.	ug/L	5.	8260B	SDK 1900	11/4/99
SV-8270C-aq							
	2-Methylphenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	4-Methylphenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Benzoic acid	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Aniline	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Benzyl alcohol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Naphthalene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Phenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2-Chlorophenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	1,3-Dichlorobenzene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	1,4-Dichlorobenzene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	1,2-Dichlorobenzene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Hexachloroethane	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Nitrobenzene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Isophorone	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	1,2,4-Trichlorobenzene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	N-Nitrosodimethylamine	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Pyridine	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	bis(2-Chloroethyl)ether	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	bis(2-Chloroisopropyl)ether	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	N-Nitroso-Di-N-Propylamine	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	bis(2-Chloroethoxy)methane	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2,4,5-Trichlorophenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2-Methylnaphthalene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99

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Princeton Location:
267 Wall Street
Princeton, NJ 08540
Phone: (609) 924-5151
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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-007
Sample ID: INLET 1021 Liquid
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Chloroaniline	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2-Nitroaniline	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	3-Nitroaniline	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	4-Nitroaniline	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Acenaphthylene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2-Nitrophenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2,4-Dimethylphenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2,4-Dichlorophenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Hexachloro-1,3-butadiene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Hexachlorocyclopentadiene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2-Chloronaphthalene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2,6-Dinitrotoluene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Dimethylphthalate	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Dibenzofuran	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Acenaphthene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Fluorene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2,6-Dichlorophenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	4-Chloro-3-methylphenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2,4,6-Trichlorophenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2,4-Dinitrophenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	4-Nitrophenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2,3,4,6-Tetrachorophenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2-Methyl-4,6-Dinitrophenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Pentachlorophenol	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	2,4-Dinitrotoluene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Hexachlorobenzene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Azobenzene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Diethylphthalate	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	4-Chlorophenyl-phenylether	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	N-Nitrosodiphenylamine	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99

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Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-007
Sample ID: INLET 1021 Liquid
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,2-Diphenylhydrazine	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	4-Bromophenyl-phenylether	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Benzidine	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	3,3'-Dichlorobenzidine	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Phenanthrene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Anthracene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Carbazole	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Fluoranthene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Pyrene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Benzo(a)anthracene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Chrysene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Di-n-butylphthalate	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Butylbenzylphthalate	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Benzo(b)fluoranthene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Benzo(k)fluoranthene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Benzo(a)pyrene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Indeno(1,2,3-cd)pyrene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Dibenzo(a,h))anthracene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Benzo(ghi)perylene	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	Di-n-octylphthalate	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
	bis(2-Ethylhexyl)phthalate	< 10.	ug/L	10.	8270C	DMP 1655	10/27/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1639	10/29/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-007
Sample ID: INLET 1021 Liquid
Sample Type: Liquid

Collect Date: *21-Oct-99*
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1639	10/29/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1639	10/29/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1400	10/25/99
RCRA10-6010							
	Cadmium	< 0.001	mg/L	0.001	6010B	TWH 1242	11/4/99
	Chromium	0.006	mg/L	0.001	6010B	TWH 1242	11/4/99
	Copper	0.002	mg/L	0.001	6010B	TWH 1242	11/4/99
	Lead	0.013	mg/L	0.004	6010B	TWH 1242	11/4/99
	Nickel	0.013	mg/L	0.001	6010B	TWH 1242	11/4/99
	Silver	0.003	mg/L	0.001	6010B	TWH 1242	11/4/99
	Zinc	0.034	mg/L	0.001	6010B	TWH 1242	11/4/99
TAL-6010-W							
	Aluminum	1.84	mg/L	0.00	6010B	TWH 1323	11/4/99
	Antimony	< 0.004	mg/L	0.004	6010B	TWH 1323	11/4/99
	Arsenic	< 0.004	mg/L	0.004	6010B	TWH 1323	11/4/99
	Barium	0.095	mg/L	0.001	6010B	TWH 1323	11/4/99
	Beryllium	< 0.001	mg/L	0.001	6010B	TWH 1323	11/4/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *22-Oct-99*

Lab#: D994920-007
Sample ID: INLET 1021 Liquid
Sample Type: Liquid

Collect Date: 21-Oct-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Cadmium	< 0.001	mg/L	0.001	6010B	TWH 1323	11/4/99
	Calcium	88.0	mg/L	0.4	6010B	TWH 1323	11/4/99
	Chromium	0.006	mg/L	0.001	6010B	TWH 1323	11/4/99
	Cobalt	< 0.004	mg/L	0.004	6010B	TWH 1323	11/4/99
	Copper	0.002	mg/L	0.001	6010B	TWH 1323	11/4/99
	Iron	4.80	mg/L	0.00	6010B	TWH 1323	11/4/99
	Lead	0.01	mg/L	0.00	6010B	TWH 1323	11/4/99
	Magnesium	207.56	mg/L	0.09	6010B	TWH 1323	11/4/99
	Manganese	9.22	mg/L	0.09	6010B	TWH 1323	11/4/99
	Nickel	0.013	mg/L	0.001	6010B	TWH 1323	11/4/99
	Potassium	62.1	mg/L	0.4	6010B	TWH 1323	11/4/99
	Selenium	0.05	mg/L	0.00	6010B	TWH 1323	11/4/99
	Silver	0.003	mg/L	0.001	6010B	TWH 1323	11/4/99
	Sodium	936.	mg/L	4.	6010B	TWH 1323	11/4/99
	Thallium	*0.04*	mg/L	0.00	6010B	TWH 1323	11/4/99
	Vanadium	0.01	mg/L	0.00	6010B	TWH 1323	11/4/99
	Zinc	0.034	mg/L	0.001	6010B	TWH 1323	11/4/99
HG-7470A							
	Mercury	0.0004	mg/L	0.0002	7470A	JAM 1500	12/1/99

Reviewed and Approved by:

Laurel A Schwindt

Laurel A. Schwindt
Laboratory Manager

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BLUE MARSH LABORATORIES, INC.
1605 Benjamin Franklin Highway
Douglassville, PA 19518
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CHAIN OF CUSTODY RECORD

Send Report to: VERSAR, INC
9200 RUMSEY RD
Columbia, MD
Contact: Jessica Farrar
Phone#: 4109649200
Fax#: 4109645156

BML LOT NO: 99420
PROJECT NO: 4033-026
P.O. NO:
PROJECT: Killcohook
TURNAROUND TIME REQUIRED: 24 HR ☐ 48 HR ☒ 72 HR ☐ 1 WEEK ☐ 2 WEEKS ☒

ANALYSIS NEEDED:

BML USE LAB ID NO.	DATE SAMPLED	TIME SAMPLED	COMP	GRAB	SAMPLE DESCRIPTION / CLIENT ID NO.	NO. OF CONTAINERS	SAMPLE TYPE (Use Reference)	TCLP (V/S/H/P/M)	FORM U / 43	METALS-(please specify)	VOLATILES ** 8260	PA UST Code	Pesticide	SVOC	Inorganics	Cyanide	155	Remarks:
01	102199	1200		X	MTX1021	8	LQ			X		X	X	X	X	X	X	2 liters WM 3P liter 2 VOA Vial
02	102199	1000		X	BG1021	8	LQ			X		X	X	X	X	X	X	" " " "
03	102199	1100	X		WIER1021	8	LQ			X		X	X	X	X	X	X	" " " "
04	102099		X		WIER1020	1	LQ										X	16 oz P
05	101999		X		WIER1019	1	LQ										X	" "
06	102199	1130		X	INLET 1021 Soil	7	SO			X		X	X	X	X	X		2 liter WM 3P liter 2 VOA
07					INLET 1021 Liquid		LQ			K		K	K	K	K	K	K	1 VOA

Fuel Type - Use Letter Code
A. Leaded Gas / Aviation-Jet Fuel
B. Unleaded Gas
C. Kerosene / Fuel #1
D. Diesel Fuel / Fuel Oil #2
E. Fuel Oil #4, #5, #6 / Lubricating Oil
F. Used Motor Oil

Sampled by: [signature]
Date: 10-21-99
Special Notes or Hazards: Iced 12/6
COOLER TEMP: ____ °C

Relinquished by: (Signature): [signature]
Date/Time: 102199 1600
Received by:

Relinquished by: (Signature):
Date/Time: 10/22/99
Received for Laboratory by: [signature]

REPORT FORMAT (Check One) ***
Standard (Data ☐ — Results Only ☐)
NJ Deliverables (Full ☐ — Reduced ☐)
CLP Format ☐
DW Forms ☐ PWS ID # ____

SAMPLE TYPE:
HZ Hazardous SW Surface Water
SO Soil WW Waste Water
DE Debris GW Ground Water
SL Sludge DW Drinking Water
SD Solid LQ Liquid

PERMIT TYPE:
☐ MIPP
☐ NPDES

* Surcharge for 24 HR, 48 HR, 72 HR, and 1 week turnaround times. ** Specify method required. *** Surcharges may apply.

BML7a

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *26-Oct-99*

Lab#: D994948-001
Sample ID: Mix 1025
Sample Type: Water

Collect Date: 25-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Chloromethane (Methyl Chloride)	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Vinyl chloride	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Bromomethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Chloroethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Trichlorofluoromethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,1-Dichloroethene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Acetone	< 10.	ug/L	10.	8260B	SDK 1717	11/5/99
	Methylene chloride (Dichloromethane)	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	t-Butyl alcohol	< 10.	ug/L	10.	8260B	SDK 1717	11/5/99
	trans-1,2-dichloroethene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Methyl tert-buytl ether (MTBE)	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,1-Dichloroethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	cis-1,2-Dichloroethene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	2,2-Dichloropropane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	2-Butanone (MEK)	< 10.	ug/L	10.	8260B	SDK 1717	11/5/99
	Bromochloromethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Chloroform	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,1,1-Trichloroethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,1-Dichloropropene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Carbon tetrachloride	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Benzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,2-Dichloroethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Trichloroethene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,2-Dichloropropane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Dibromomethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Bromodichloromethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	cis-1,3-Dichloropropene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	4-Methyl-2-pentanone (MIBK)	< 10.	ug/L	10.	8260B	SDK 1717	11/5/99

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Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *26-Oct-99*

Lab#: D994948-001
Sample ID: Mix 1025
Sample Type: Water

Collect Date: 25-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	trans-1,3-dichloropropene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,1,2-Trichloroethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Tetrachloroethene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,3-Dichloropropane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	2-Hexanone	< 10.	ug/L	10.	8260B	SDK 1717	11/5/99
	Dibromochloromethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,2-Dibromoethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Chlorobenzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,1,1,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Ethyl benzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	m,p-Xylene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	o-Xylene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Styrene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Bromoform	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Isopropylbenzene (Cumene)	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Bromobenzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,1,2,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,2,3-Trichloropropane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	N-Propylbenzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	2-Chlorotoluene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	4-Chlorotoluene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,3,5-Trimethylbenzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	tert-Butylbenzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,2,4-Trimethylbenzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	sec-Butylbenzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,3-Dichlorobenzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	p-Isopropyltoluene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,4-Dichlorobenzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,2-Dichlorobenzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *26-Oct-99*

Lab#: D994948-001
Sample ID: Mix 1025
Sample Type: Water

Collect Date: 25-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,2-Dibromo-3-chloropropane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,2,4-Trichlorobenzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Hexachloro-1,3-butadiene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Naphthalene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,2,3-Trichlorobenzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *26-Oct-99*

Lab#: D994948-001
Sample ID: Mix 1025
Sample Type: Water

Collect Date: 25-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *26-Oct-99*

Lab#: D994948-001
Sample ID: Mix 1025
Sample Type: Water

Collect Date: 25-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	bis(2-Ethylhexyl)phthalate	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1639	10/29/99

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9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar

Project: Killcohook

Date Received: *26-Oct-99*

Lab#: *D994948-001*

Sample ID: Mix 1025

Sample Type: Water

Collect Date: 25-Oct-99

Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1639	10/29/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1639	10/29/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	11/18/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1325	11/8/99
	Chromium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1325	11/8/99
	Copper, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1325	11/8/99
	Nickel, dissolved	0.003	mg/L	0.001	200.7	TWH 1325	11/8/99
	Silver, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1325	11/8/99
	Zinc, dissolved	0.014	mg/L	0.001	200.7	TWH 1325	11/8/99
Cn,Tot-WW							
	Cyanide, total	0.005	mg/L	0.005	335.2	DAW 1254	11/5/99
TSS-aq							
	Solids, Total Suspended	21.	mg/L	1.	160.2	SBB 1230	10/27/99
TAL-6010-W							
	Aluminum	2.306	mg/L	0.004	6010B	TWH 1645	11/8/99
	Antimony	< 0.004	mg/L	0.004	6010B	TWH 1645	11/8/99

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Date Received: *26-Oct-99*

Lab#: D994948-001
Sample ID: Mix 1025
Sample Type: Water

Collect Date: 25-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Arsenic	< 0.004	mg/L	0.004	6010B	TWH 1645	11/8/99
	Barium	0.027	mg/L	0.001	6010B	TWH 1645	11/8/99
	Beryllium	< 0.001	mg/L	0.001	6010B	TWH 1645	11/8/99
	Cadmium	< 0.001	mg/L	0.001	6010B	TWH 1645	11/8/99
	Calcium	29.4	mg/L	0.4	6010B	TWH 1645	11/8/99
	Chromium	0.008	mg/L	0.001	6010B	TWH 1645	11/8/99
	Cobalt	< 0.004	mg/L	0.004	6010B	TWH 1645	11/8/99
	Copper	0.005	mg/L	0.001	6010B	TWH 1645	11/8/99
	Iron	4.744	mg/L	0.001	6010B	TWH 1645	11/8/99
	Lead	0.009	mg/L	0.004	6010B	TWH 1645	11/8/99
	Magnesium	40.27	mg/L	0.09	6010B	TWH 1645	11/8/99
	Manganese	0.279	mg/L	0.001	6010B	TWH 1645	11/8/99
	Nickel	0.005	mg/L	0.001	6010B	TWH 1645	11/8/99
	Potassium	15.0	mg/L	0.4	6010B	TWH 1645	11/8/99
	Selenium	< 0.004	mg/L	0.004	6010B	TWH 1645	11/8/99
	Silver	< 0.001	mg/L	0.001	6010B	TWH 1645	11/8/99
	Sodium	326.	mg/L	4.	6010B	TWH 1645	11/8/99
	Thallium	< 0.004	mg/L	0.004	6010B	TWH 1645	11/8/99
	Vanadium	0.013	mg/L	0.004	6010B	TWH 1645	11/8/99
	Zinc	0.047	mg/L	0.001	6010B	TWH 1645	11/8/99
HG-7470A							
	Mercury	0.0005	mg/L	0.0002	7470A	JAM 1335	10/28/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *26-Oct-99*

Lab#: D994948-002
Sample ID: Weir 1025
Sample Type: Water

Collect Date: 25-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Chloromethane (Methyl Chloride)	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Vinyl chloride	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Bromomethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Chloroethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Trichlorofluoromethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,1-Dichloroethene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Acetone	< 10.	ug/L	10.	8260B	SDK 1717	11/5/99
	Methylene chloride (Dichloromethane)	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	t-Butyl alcohol	< 10.	ug/L	10.	8260B	SDK 1717	11/5/99
	trans-1,2-dichloroethene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Methyl tert-buytl ether (MTBE)	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,1-Dichloroethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	cis-1,2-Dichloroethene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	2,2-Dichloropropane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	2-Butanone (MEK)	< 10.	ug/L	10.	8260B	SDK 1717	11/5/99
	Bromochloromethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Chloroform	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,1,1-Trichloroethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,1-Dichloropropene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Carbon tetrachloride	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Benzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,2-Dichloroethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Trichloroethene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,2-Dichloropropane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Dibromomethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Bromodichloromethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	cis-1,3-Dichloropropene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	4-Methyl-2-pentanone (MIBK)	< 10.	ug/L	10.	8260B	SDK 1717	11/5/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia *MD* 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *26-Oct-99*

Lab#: D994948-002
Sample ID: Weir 1025
Sample Type: Water

Collect Date: 25-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	trans-1,3-dichloropropene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,1,2-Trichloroethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Tetrachloroethene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,3-Dichloropropane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	2-Hexanone	< 10.	ug/L	10.	8260B	SDK 1717	11/5/99
	Dibromochloromethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,2-Dibromoethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Chlorobenzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,1,1,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Ethyl benzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	m,p-Xylene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	o-Xylene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Styrene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Bromoform	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Isopropylbenzene (Cumene)	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Bromobenzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,1,2,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,2,3-Trichloropropane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	N-Propylbenzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	2-Chlorotoluene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	4-Chlorotoluene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,3,5-Trimethylbenzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	tert-Butylbenzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,2,4-Trimethylbenzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	sec-Butylbenzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,3-Dichlorobenzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	p-Isopropyltoluene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,4-Dichlorobenzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,2-Dichlorobenzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D994948-002
Sample ID: Weir 1025
Sample Type: Water
Collect Date: 25-Oct-99
Collected By: Katherine Dillon

Date Received: *26-Oct-99*
Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,2-Dibromo-3-chloropropane	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,2,4-Trichlorobenzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Hexachloro-1,3-butadiene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	Naphthalene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
	1,2,3-Trichlorobenzene	< 1.	ug/L	1.	8260B	SDK 1717	11/5/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *26-Oct-99*

Lab#: D994948-002
Sample ID: Weir 1025
Sample Type: Water

Collect Date: 25-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99

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Date Received: *26-Oct-99*

Lab#: D994948-002
Sample ID: Weir 1025
Sample Type: Water

Collect Date: 25-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 2226	11/1/99
	bis(2-Ethylhexyl)phthalate	2.	ug/L	2.	8270C	DMP 2226	11/1/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1639	10/29/99

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Project: Killcohook

Date Received: *26-Oct-99*

Lab#: D994948-002
Sample ID: Weir 1025
Sample Type: Water

Collect Date: 25-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1639	10/29/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1639	10/29/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1639	10/29/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1639	10/29/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	11/18/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1325	11/8/99
	Chromium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1325	11/8/99
	Copper, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1325	11/8/99
	Nickel, dissolved	0.018	mg/L	0.001	200.7	TWH 1325	11/8/99
	Silver, dissolved	0.002	mg/L	0.001	200.7	TWH 1325	11/8/99
	Zinc, dissolved	0.097	mg/L	0.001	200.7	TWH 1325	11/8/99
Cn,Tot-WW							
	Cyanide, total	0.008	mg/L	0.005	335.2	DAW 1254	11/5/99
TSS-aq							
	Solids, Total Suspended	55.	mg/L	1.	160.2	SBB 1230	10/27/99
HG-7470A							
	Mercury	0.0002	mg/L	0.0002	7470A	JAM 1335	10/28/99

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Lab#: D994948-002
Sample ID: Weir 1025
Sample Type: Water

Collect Date: 25-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TAL-6010-W							
	Aluminum	0.210	mg/L	0.004	6010B	TWH 1645	11/8/99
	Antimony	< 0.004	mg/L	0.004	6010B	TWH 1645	11/8/99
	Arsenic	< 0.004	mg/L	0.004	6010B	TWH 1645	11/8/99
	Barium	0.087	mg/L	0.001	6010B	TWH 1645	11/8/99
	Beryllium	< 0.001	mg/L	0.001	6010B	TWH 1645	11/8/99
	Cadmium	0.001	mg/L	0.001	6010B	TWH 1645	11/8/99
	Calcium	79.9	mg/L	0.4	6010B	TWH 1645	11/8/99
	Chromium	< 0.001	mg/L	0.001	6010B	TWH 1645	11/8/99
	Cobalt	0.005	mg/L	0.004	6010B	TWH 1645	11/8/99
	Copper	0.003	mg/L	0.001	6010B	TWH 1645	11/8/99
	Iron	0.897	mg/L	0.001	6010B	TWH 1645	11/8/99
	Lead	0.007	mg/L	0.004	6010B	TWH 1645	11/8/99
	Magnesium	166.33	mg/L	0.09	6010B	TWH 1645	11/8/99
	Manganese	6.330	mg/L	0.001	6010B	TWH 1645	11/8/99
	Nickel	0.019	mg/L	0.001	6010B	TWH 1645	11/8/99
	Potassium	57.0	mg/L	0.4	6010B	TWH 1645	11/8/99
	Selenium	0.042	mg/L	0.004	6010B	TWH 1645	11/8/99
	Silver	0.002	mg/L	0.001	6010B	TWH 1645	11/8/99
	Sodium	1301.	mg/L	4.	6010B	TWH 1645	11/8/99
	Thallium	0.024	mg/L	0.004	6010B	TWH 1645	11/8/99
	Vanadium	< 0.004	mg/L	0.004	6010B	TWH 1645	11/8/99
	Zinc	0.100	mg/L	0.001	6010B	TWH 1645	11/8/99

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Princeton Location:
267 Wall Street
Princeton, NJ 08540
Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar

Project: Killcohook

Date Received: *26-Oct-99*

Lab#: D994948-003

Sample ID: Weir 1024

Sample Type: Water

Collect Date: 24-Oct-99

Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	195.	mg/L	1.	160.2	SBB 1230	10/27/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *26-Oct-99*

Lab#: D994948-004
Sample ID: Weir 1023
Sample Type: Water

Collect Date: 23-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	54.	mg/L	1.	160.2	SBB 1230	10/27/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *26-Oct-99*

Lab#: D994948-005
Sample ID: Weir 1022
Sample Type: Water

Collect Date: 22-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	55.	mg/L	1.	160.2	SBB 1230	10/27/99

Reviewed and Approved by:

Laurel A. Schwindt

Laurel A. Schwindt
Laboratory Manager

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BLUE MARSH LABORATORIES, INC.
1605 Benjamin Franklin Highway
Douglassville, PA 19518
Phone: (610) 327-8196 Fax: (610) 327-6864

CHAIN OF CUSTODY RECORD

Send Report to: VERSAR INC.
9200 RUMSEY Rd
Col. Md 21045
Contact: Jessica Fakeiar
Phone#: 410-964-9200
Fax#: 410-964-5156

BML LOT NO: 99498
PROJECT NO: 4033-026
P.O. NO:
PROJECT: Killcohook
TURNAROUND TIME REQUIRED: 24 HR ☐ 48 HR ☐ 72 HR ☒ 1 WEEK ☐ 2 WEEKS ☐

Fuel Type - Use Letter Code
A. Leaded Gas / Aviation-Jet Fuel
B. Unleaded Gas
C. Kerosene / Fuel #1
D. Diesel Fuel / Fuel Oil #2
E. Fuel Oil #4, #5, #6 / Lubricating Oil
F. Used Motor Oil

BML USE* LAB ID NO	DATE SAMPLED	TIME SAMPLED	COMP	GRAB	SAMPLE DESCRIPTION / CLIENT ID NO.	NO. OF CONTAINERS	SAMPLE TYPE (Use Reference)	ANALYSIS NEEDED: TCLP (V/S/H/P/M)	FORM U / 43	METALS-(please specify)	VOLATILES** 8260	PA UST Code	625 base/acids	SVOC	Inorganics, dis	Inorganics, total	Cyanide	TSS	Remarks:
01	102599			X	MIX1025	8	Matr			X		X	X	X	X	X	X	X	2 1/2 Ltr Wm 3 gl P 1 Liter P 2 VOA
02	102599		X		WEIR1025	8				X		X	X	X	X	X	X	X	5 Ltr Wm 1 Liter P 2 VOA
03	102499		X		WEIR1024	1												X	1 Liter P
04	102399		X		WEIR1023	1												X	↓
05	102299		X		WEIR1022	1	↓											X	↓

Sampled by: Katherine Dillon
Date: 10/25/99
Special Notes or Hazards: Marked 12/6
COOLER TEMP: ____ °C

Relinquished by: (Signature) Katherine Dillon
Date/Time: 10/25/99 14:00
Received by:

Relinquished by: (Signature)
Date/Time: 10/26/99
Received for Laboratory by: Jennifer C. Wood

REPORT FORMAT (Check One) ***
Standard (Data ☐ — Results Only ☐)
NJ Deliverables (Full ☐ — Reduced ☐)
CLP Format ☐
DW Forms ☐ PWS ID # ____

SAMPLE TYPE:
HZ Hazardous SW Surface Water
SO Soil WW Waste Water
DE Debris GW Ground Water
SL Sludge DW Drinking Water
SD Solid LQ Liquid

PERMIT TYPE:
☐ MIPP
☐ NPDES

* Surcharge for 24 HR, 48 HR, 72 HR, and 1 week turnaround times. ** Specify method required. *** Surcharges may apply.

BML7

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-001
Sample ID: Inlet 1028 Soil
Sample Type: Soil

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TAL-6010-S							
	Aluminum	4607.6	mg/kg	2.0	6010B	TWH 2247	11/11/99
	Antimony	< 2.0	mg/kg	2.0	6010B	TWH 2247	11/11/99
	Arsenic	< 2.0	mg/kg	2.0	6010B	TWH 2247	11/11/99
	Barium	21.5	mg/kg	0.5	6010B	TWH 2247	11/11/99
	Beryllium	< 0.5	mg/kg	0.5	6010B	TWH 2247	11/11/99
	Cadmium	0.9	mg/kg	0.5	6010B	TWH 2247	11/11/99
	Calcium	981.7	mg/kg	2.0	6010B	TWH 2247	11/11/99
	Chromium	14.1	mg/kg	0.5	6010B	TWH 2247	11/11/99
	Cobalt	< 2.0	mg/kg	2.0	6010B	TWH 2247	11/11/99
	Copper	5.8	mg/kg	0.5	6010B	TWH 2247	11/11/99
	Iron	9114.8	mg/kg	0.5	6010B	TWH 2247	11/11/99
	Lead	13.3	mg/kg	2.0	6010B	TWH 2247	11/11/99
	Magnesium	1962.3	mg/kg	0.5	6010B	TWH 2247	11/11/99
	Manganese	436.6	mg/kg	0.5	6010B	TWH 2247	11/11/99
	Nickel	9.5	mg/kg	0.5	6010B	TWH 2247	11/11/99
	Potassium	978.6	mg/kg	2.0	6010B	TWH 2247	11/11/99
	Selenium	< 2.0	mg/kg	2.0	6010B	TWH 2247	11/11/99
	Silver	< 0.5	mg/kg	0.5	6010B	TWH 2247	11/11/99
	Sodium	276.5	mg/kg	2.0	6010B	TWH 2247	11/11/99
	Thallium	< 2.0	mg/kg	2.0	6010B	TWH 2247	11/11/99
	Vanadium	17.2	mg/kg	2.0	6010B	TWH 2247	11/11/99
	Zinc	64.0	mg/kg	0.5	6010B	TWH 2247	11/11/99
HG-7471A							
	Mercury	0.2	mg/kg	0.0	7471A	jam 1515	11/10/99
Cn,Tot-sd							
	Cyanide, total	< 0.5	mg/kg	0.5	9010B	DAW 1324	11/10/99
VOL-8260B-sd							
	Dichlorofluoromethane	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	Chloromethane (Methyl Chloride)	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-001
Sample ID: Inlet 1028 Soil
Sample Type: Soil

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Vinyl chloride	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	Bromomethane	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	Chloroethane	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	Trichlorofluoromethane	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	1,1-Dichloroethene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	Acetone	< 1.0	mg/kg	1.0	8260B	SDK 1544	11/10/99
	Methylene chloride (Dichloromethane)	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	t-Butyl alcohol	< 1.0	mg/kg	1.0	8260B	SDK 1544	11/10/99
	trans-1,2-dichloroethene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	Methyl tert-buytl ether (MTBE)	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	1,1-Dichloroethane	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	cis-1,2-Dichloroethene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	2,2-Dichloropropane	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	2-Butanone (MEK)	< 1.0	mg/kg	1.0	8260B	SDK 1544	11/10/99
	Bromochloromethane	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	Chloroform	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	1,1,1-Trichloroethane	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	1,1-Dichloropropene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	Carbon tetrachloride	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	Benzene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	1,2-Dichloroethane	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	Trichloroethene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	1,2-Dichloropropane	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	Dibromomethane	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	Bromodichloromethane	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	cis-1,3-Dichloropropene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	4-Methyl-2-pentanone (MIBK)	< 1.0	mg/kg	1.0	8260B	SDK 1544	11/10/99
	Toluene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	trans-1,3-dichloropropene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	1,1,2-Trichloroethane	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99

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Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-001
Sample ID: Inlet 1028 Soil
Sample Type: Soil

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Tetrachloroethene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	1,3-Dichloropropane	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	2-Hexanone	< 1.0	mg/kg	1.0	8260B	SDK 1544	11/10/99
	Dibromochloromethane	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	1,2-Dibromoethane	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	Chlorobenzene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	1,1,1,2-Tetrachloroethane	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	Ethyl benzene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	m,p-Xylene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	o-Xylene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	Styrene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	Bromoform	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	Isopropylbenzene (Cumene)	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	Bromobenzene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	1,1,2,2-Tetrachloroethane	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	1,2,3-Trichloropropane	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	N-Propylbenzene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	2-Chlorotoluene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	4-Chlorotoluene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	1,3,5-Trimethylbenzene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	tert-Butylbenzene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	1,2,4-Trimethylbenzene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	sec-Butylbenzene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	1,3-Dichlorobenzene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	p-Isopropyltoluene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	1,4-Dichlorobenzene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	1,2-Dichlorobenzene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	n-Butylbenzene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	1,2-Dibromo-3-chloropropane	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	1,2,4-Trichlorobenzene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D995024-001
Sample ID: Inlet 1028 Soil
Sample Type: Soil

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Date Received: *29-Oct-99*
Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Hexachloro-1,3-butadiene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	Naphthalene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
	1,2,3-Trichlorobenzene	< 0.1	mg/kg	0.1	8260B	SDK 1544	11/10/99
SV-8270C-sd							
	2-Methylphenol	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	4-Methylphenol	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	Benzioc acid	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	Aniline	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	Benzyl alcohol	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	Naphthalene	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	Phenol	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	2-Chlorophenol	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	1,3-Dichlorobenzene	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	1,4-Dichlorobenzene	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	1,2-Dichlorobenzene	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	Hexachloroethane	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	Nitrobenzene	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	Isophorone	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	1,2,4-Trichlorobenzene	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	N-Nitrosodimethylamine	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	Pyridine	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	bis(2-Chloroethyl)ether	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	bis(2-Chloroisopropyl)ether	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	N-Nitroso-Di-N-Propylamine	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	bis(2-Chloroethoxy)methane	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	2,4,5-Trichlorophenol	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	2-Methylnaphthalene	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	4-Chloroaniline	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	2-Nitroaniline	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	3-Nitroaniline	< 100.	ug/kg	100.	8270C	DMP	11/11/99

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PA DEP Cert #06-409

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Princeton Location:
267 Wall Street
Princeton, NJ 08540
Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-001
Sample ID: Inlet 1028 Soil
Sample Type: Soil

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Nitroaniline	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	Acenaphthylene	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	2-Nitrophenol	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	2,4-Dimethylphenol	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	2,4-Dichlorophenol	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	Hexachloro-1,3-butadiene	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	Hexachlorocyclopentadiene	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	2-Chloronaphthalene	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	2,6-Dinitrotoluene	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	Dimethylphthalate	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	Dibenzofuran	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	Acenaphthene	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	Fluorene	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	2,6-Dichlorophenol	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	4-Chloro-3-methylphenol	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	2,4,6-Trichlorophenol	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	2,4-Dinitrophenol	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	4-Nitrophenol	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	2,3,4,6-Tetrachorophenol	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	2-Methyl-4,6-Dinitrophenol	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	Pentachlorophenol	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	2,4-Dinitrotoluene	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	Hexachlorobenzene	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	Azobenzene	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	Diethylphthalate	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	4-Chlorophenyl-phenylether	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	N-Nitrosodiphenylamine	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	1,2-Diphenylhydrazine	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	4-Bromophenyl-phenylether	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	Benzidine	< 100.	ug/kg	100.	8270C	DMP	11/11/99

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Princeton Location:
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Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-001
Sample ID: Inlet 1028 Soil
Sample Type: Soil

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	3,3'-Dichlorobenzidine	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	Phenanthrene	564.	ug/kg	100.	8270C	DMP	11/11/99
	Anthracene	142.	ug/kg	100.	8270C	DMP	11/11/99
	Carbazole	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	Fluoranthene	850.	ug/kg	100.	8270C	DMP	11/11/99
	Pyrene	717.	ug/kg	100.	8270C	DMP	11/11/99
	Benzo(a)anthracene	416.	ug/kg	100.	8270C	DMP	11/11/99
	Chrysene	420.	ug/kg	100.	8270C	DMP	11/11/99
	Di-n-butylphthalate	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	Butylbenzylphthalate	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	Benzo(b)fluoranthene	342.	ug/kg	100.	8270C	DMP	11/11/99
	Benzo(k)fluoranthene	378.	ug/kg	100.	8270C	DMP	11/11/99
	Benzo(a)pyrene	408.	ug/kg	100.	8270C	DMP	11/11/99
	Indeno(1,2,3-cd)pyrene	172.	ug/kg	100.	8270C	DMP	11/11/99
	Dibenzo(a,h))anthracene	103.	ug/kg	100.	8270C	DMP	11/11/99
	Benzo(ghi)perylene	155.	ug/kg	100.	8270C	DMP	11/11/99
	DI-n-octylphthalate	< 100.	ug/kg	100.	8270C	DMP	11/11/99
	bis(2-Ethylhexyl)phthalate	< 100.	ug/kg	100.	8270C	DMP	11/11/99
PEST-8081-sd							
	Aldrin	< 4.	ug/kg	4.	8081A	MDJ 0953	11/11/99
	alpha-BHC	< 4.	ug/kg	4.	8081A	MDJ 0953	11/11/99
	beta-BHC	< 4.	ug/kg	4.	8081A	MDJ 0953	11/11/99
	gamma-BHC (Lindane)	< 4.	ug/kg	4.	8081A	MDJ 0953	11/11/99
	delta-BHC	< 4.	ug/kg	4.	8081A	MDJ 0953	11/11/99
	alpha-Chlordane	< 4.	ug/kg	4.	8081A	MDJ 0953	11/11/99
	gamma-Chlordane	< 4.	ug/kg	4.	8081A	MDJ 0953	11/11/99
	Chlordane, technical	< 50.	ug/kg	50.	8081A	MDJ 0953	11/11/99
	4,4'-DDD	< 8.	ug/kg	8.	8081A	MDJ 0953	11/11/99
	4,4'-DDE	< 8.	ug/kg	8.	8081A	MDJ 0953	11/11/99
	4,4'-DDT	< 8.	ug/kg	8.	8081A	MDJ 0953	11/11/99

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NJ DEP Cert #11198

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-001
Sample ID: Inlet 1028 Soil
Sample Type: Soil

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Dieldrin	< 8.	ug/kg	8.	8081A	MDJ 0953	11/11/99
	Endosulfan I	< 4.	ug/kg	4.	8081A	MDJ 0953	11/11/99
	Endosulfan II	< 8.	ug/kg	8.	8081A	MDJ 0953	11/11/99
	Endosulfan sulfate	< 8.	ug/kg	8.	8081A	MDJ 0953	11/11/99
	Endrin	< 8.	ug/kg	8.	8081A	MDJ 0953	11/11/99
	Endrin aldehyde	< 8.	ug/kg	8.	8081A	MDJ 0953	11/11/99
	Endrin ketone	< 8.	ug/kg	8.	8081A	MDJ 0953	11/11/99
	Heptachlor	< 4.	ug/kg	4.	8081A	MDJ 0953	11/11/99
	Heptachlor epoxide	< 4.	ug/kg	4.	8081A	MDJ 0953	11/11/99
	Methoxychlor	< 40.	ug/kg	40.	8081A	MDJ 0953	11/11/99
	Toxaphene	< 200.	ug/kg	200.	8081A	MDJ 0953	11/11/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-002
Sample ID: Weir 1028
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Chloromethane (Methyl Chloride)	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Vinyl chloride	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Bromomethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Chloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Trichlorofluoromethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1-Dichloroethene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Acetone	< 100.	ug/L	100.	8260B	SDK 0709	11/10/99
	Methylene chloride (Dichloromethane)	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	t-Butyl alcohol	< 100.	ug/L	100.	8260B	SDK 0709	11/10/99
	trans-1,2-dichloroethene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Methyl tert-buytl ether (MTBE)	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1-Dichloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	cis-1,2-Dichloroethene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	2,2-Dichloropropane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	2-Butanone (MEK)	< 100.	ug/L	100.	8260B	SDK 0709	11/10/99
	Bromochloromethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Chloroform	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1,1-Trichloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1-Dichloropropene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Carbon tetrachloride	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Benzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2-Dichloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Trichloroethene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2-Dichloropropane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Dibromomethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Bromodichloromethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	cis-1,3-Dichloropropene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	4-Methyl-2-pentanone (MIBK)	< 100.	ug/L	100.	8260B	SDK 0709	11/10/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-002
Sample ID: Weir 1028
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	trans-1,3-dichloropropene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1,2-Trichloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Tetrachloroethene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,3-Dichloropropane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	2-Hexanone	< 100.	ug/L	100.	8260B	SDK 0709	11/10/99
	Dibromochloromethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2-Dibromoethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Chlorobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1,1,2-Tetrachloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Ethyl benzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	m,p-Xylene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	o-Xylene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Styrene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Bromoform	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Isopropylbenzene (Cumene)	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Bromobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1,2,2-Tetrachloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2,3-Trichloropropane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	N-Propylbenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	2-Chlorotoluene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	4-Chlorotoluene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,3,5-Trimethylbenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	tert-Butylbenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2,4-Trimethylbenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	sec-Butylbenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,3-Dichlorobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	p-Isopropyltoluene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,4-Dichlorobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2-Dichlorobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99

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9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-002
Sample ID: Weir 1028
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2-Dibromo-3-chloropropane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2,4-Trichlorobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Hexachloro-1,3-butadiene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Naphthalene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2,3-Trichlorobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99

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Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-002
Sample ID: Weir 1028
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	4-Nitrophenol	4.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Pentachlorophenol	4.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-002
Sample ID: Weir 1028
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	bis(2-Ethylhexyl)phthalate	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1153	11/11/99

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Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-002
Sample ID: Weir 1028
Sample Type: *Liquid*

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1153	11/11/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1153	11/11/99
Cn,Tot-WW							
	Cyanide, total	0.006	mg/L	0.005	335.2	DAW 1254	11/5/99
TSS-aq							
	Solids, Total Suspended	162.	mg/L	1.	160.2	SBB 1300	11/2/99
TAL-6010-W							
	Aluminum	0.831	mg/L	0.004	6010B	TWH 1525	11/12/99
	Antimony	< 0.004	mg/L	0.004	6010B	TWH 1525	11/12/99
	Arsenic	< 0.004	mg/L	0.004	6010B	TWH 1525	11/12/99
	Barium	0.098	mg/L	0.001	6010B	TWH 1525	11/12/99
	Beryllium	< 0.001	mg/L	0.001	6010B	TWH 1525	11/12/99
	Cadmium	0.001	mg/L	0.001	6010B	TWH 1525	11/12/99
	Calcium	77.5	mg/L	0.4	6010B	TWH 1525	11/12/99
	Chromium	0.001	mg/L	0.001	6010B	TWH 1525	11/12/99
	Cobalt	< 0.004	mg/L	0.004	6010B	TWH 1525	11/12/99
	Copper	0.024	mg/L	0.001	6010B	TWH 1525	11/12/99
	Iron	2.667	mg/L	0.001	6010B	TWH 1525	11/12/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D995024-002
Sample ID: Weir 1028
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Date Received: *29-Oct-99*

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Lead	0.018	mg/L	0.004	6010B	TWH 1525	11/12/99
	Magnesium	149.58	mg/L	0.09	6010B	TWH 1525	11/12/99
	Manganese	5.584	mg/L	0.001	6010B	TWH 1525	11/12/99
	Nickel	0.016	mg/L	0.001	6010B	TWH 1525	11/12/99
	Potassium	50.7	mg/L	0.4	6010B	TWH 1525	11/12/99
	Selenium	0.043	mg/L	0.004	6010B	TWH 1525	11/12/99
	Silver	0.001	mg/L	0.001	6010B	TWH 1525	11/12/99
	Sodium	1088.	mg/L	4.	6010B	TWH 1525	11/12/99
	Thallium	0.015	mg/L	0.004	6010B	TWH 1525	11/12/99
	Vanadium	0.006	mg/L	0.004	6010B	TWH 1525	11/12/99
	Zinc	0.118	mg/L	0.001	6010B	TWH 1525	11/12/99
HG-7470A							
	Mercury	< 0.0002	mg/L	0.0002	7470A	JAM 1530	11/10/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	11/18/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 2111	11/11/99
	Chromium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 2111	11/11/99
	Copper, dissolved	0.010	mg/L	0.001	200.7	TWH 2111	11/11/99
	Nickel, dissolved	0.016	mg/L	0.001	200.7	TWH 2111	11/11/99
	Silver, dissolved	0.002	mg/L	0.001	200.7	TWH 2111	11/11/99
	Zinc, dissolved	0.061	mg/L	0.001	200.7	TWH 2111	11/11/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-003
Sample ID: Weir 1027
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	POL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	195.	mg/L	1.	160.2	SBB 1300	11/2/99

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Client: Versar, Inc.
9200 Rumsey Road
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Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-004
Sample ID: Weir 1026
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	189.	mg/L	1.	160.2	SBB 1300	11/2/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-005
Sample ID: Mix 1028
Sample Type: Liquid
Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Chloromethane (Methyl Chloride)	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Vinyl chloride	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Bromomethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Chloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Trichlorofluoromethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1-Dichloroethene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Acetone	< 100.	ug/L	100.	8260B	SDK 0709	11/10/99
	Methylene chloride (Dichloromethane)	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	t-Butyl alcohol	< 100.	ug/L	100.	8260B	SDK 0709	11/10/99
	trans-1,2-dichloroethene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Methyl tert-buytl ether (MTBE)	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1-Dichloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	cis-1,2-Dichloroethene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	2,2-Dichloropropane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	2-Butanone (MEK)	< 100.	ug/L	100.	8260B	SDK 0709	11/10/99
	Bromochloromethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Chloroform	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1,1-Trichloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1-Dichloropropene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Carbon tetrachloride	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Benzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2-Dichloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Trichloroethene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2-Dichloropropane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Dibromomethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Bromodichloromethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	cis-1,3-Dichloropropene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	4-Methyl-2-pentanone (MIBK)	< 100.	ug/L	100.	8260B	SDK 0709	11/10/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D995024-005
Sample ID: Mix 1028
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Date Received: *29-Oct-99*

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	trans-1,3-dichloropropene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1,2-Trichloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Tetrachloroethene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,3-Dichloropropane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	2-Hexanone	< 100.	ug/L	100.	8260B	SDK 0709	11/10/99
	Dibromochloromethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2-Dibromoethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Chlorobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1,1,2-Tetrachloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Ethyl benzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	m,p-Xylene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	o-Xylene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Styrene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Bromoform	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Isopropylbenzene (Cumene)	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Bromobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1,2,2-Tetrachloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2,3-Trichloropropane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	N-Propylbenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	2-Chlorotoluene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	4-Chlorotoluene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,3,5-Trimethylbenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	tert-Butylbenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2,4-Trimethylbenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	sec-Butylbenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,3-Dichlorobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	p-Isopropyltoluene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,4-Dichlorobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2-Dichlorobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-005
Sample ID: Mix 1028
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2-Dibromo-3-chloropropane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2,4-Trichlorobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Hexachloro-1,3-butadiene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Naphthalene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2,3-Trichlorobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-005
Sample ID: Mix 1028
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-005
Sample ID: Mix 1028
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	bis(2-Ethylhexyl)phthalate	2.	ug/L	2.	8270C	DMP 1244	11/8/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1153	11/11/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-005
Sample ID: Mix 1028
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1153	11/11/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1153	11/11/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1254	11/5/99
TSS-aq							
	Solids, Total Suspended	135.	mg/L	1.	160.2	SBB 1300	11/2/99
TAL-6010-W							
	Aluminum	1.872	mg/L	0.004	6010B	TWH 1525	11/12/99
	Antimony	< 0.004	mg/L	0.004	6010B	TWH 1525	11/12/99
	Arsenic	< 0.004	mg/L	0.004	6010B	TWH 1525	11/12/99
	Barium	0.047	mg/L	0.001	6010B	TWH 1525	11/12/99
	Beryllium	< 0.001	mg/L	0.001	6010B	TWH 1525	11/12/99
	Cadmium	< 0.001	mg/L	0.001	6010B	TWH 1525	11/12/99
	Calcium	50.2	mg/L	0.4	6010B	TWH 1525	11/12/99
	Chromium	0.007	mg/L	0.001	6010B	TWH 1525	11/12/99
	Cobalt	< 0.004	mg/L	0.004	6010B	TWH 1525	11/12/99
	Copper	0.006	mg/L	0.001	6010B	TWH 1525	11/12/99
	Iron	4.149	mg/L	0.001	6010B	TWH 1525	11/12/99

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9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-005
Sample ID: Mix 1028
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Lead	0.013	mg/L	0.004	6010B	TWH 1525	11/12/99
	Magnesium	83.26	mg/L	0.09	6010B	TWH 1525	11/12/99
	Manganese	1.896	mg/L	0.001	6010B	TWH 1525	11/12/99
	Nickel	0.009	mg/L	0.001	6010B	TWH 1525	11/12/99
	Potassium	28.8	mg/L	0.4	6010B	TWH 1525	11/12/99
	Selenium	0.025	mg/L	0.004	6010B	TWH 1525	11/12/99
	Silver	0.001	mg/L	0.001	6010B	TWH 1525	11/12/99
	Sodium	585.	mg/L	4.	6010B	TWH 1525	11/12/99
	Thallium	0.012	mg/L	0.004	6010B	TWH 1525	11/12/99
	Vanadium	0.010	mg/L	0.004	6010B	TWH 1525	11/12/99
	Zinc	0.070	mg/L	0.001	6010B	TWH 1525	11/12/99
HG-7470A							
	Mercury	< 0.0002	mg/L	0.0002	7470A	JAM 1530	11/10/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	11/18/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 2111	11/11/99
	Chromium, dissolved	0.002	mg/L	0.001	200.7	TWH 2111	11/11/99
	Copper, dissolved	0.005	mg/L	0.001	200.7	TWH 2111	11/11/99
	Nickel, dissolved	0.006	mg/L	0.001	200.7	TWH 2111	11/11/99
	Silver, dissolved	0.001	mg/L	0.001	200.7	TWH 2111	11/11/99
	Zinc, dissolved	0.040	mg/L	0.001	200.7	TWH 2111	11/11/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-006
Sample ID: BG 1028
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Chloromethane (Methyl Chloride)	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Vinyl chloride	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Bromomethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Chloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Trichlorofluoromethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1-Dichloroethene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Acetone	< 100.	ug/L	100.	8260B	SDK 0709	11/10/99
	Methylene chloride (Dichloromethane)	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	t-Butyl alcohol	< 100.	ug/L	100.	8260B	SDK 0709	11/10/99
	trans-1,2-dichloroethene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Methyl tert-buytl ether (MTBE)	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1-Dichloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	cis-1,2-Dichloroethene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	2,2-Dichloropropane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	2-Butanone (MEK)	< 100.	ug/L	100.	8260B	SDK 0709	11/10/99
	Bromochloromethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Chloroform	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1,1-Trichloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1-Dichloropropene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Carbon tetrachloride	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Benzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2-Dichloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Trichloroethene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2-Dichloropropane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Dibromomethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Bromodichloromethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	cis-1,3-Dichloropropene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	4-Methyl-2-pentanone (MIBK)	< 100.	ug/L	100.	8260B	SDK 0709	11/10/99

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Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-006
Sample ID: BG 1028
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	trans-1,3-dichloropropene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1,2-Trichloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Tetrachloroethene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,3-Dichloropropane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	2-Hexanone	< 100.	ug/L	100.	8260B	SDK 0709	11/10/99
	Dibromochloromethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2-Dibromoethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Chlorobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1,1,2-Tetrachloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Ethyl benzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	m,p-Xylene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	o-Xylene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Styrene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Bromoform	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Isopropylbenzene (Cumene)	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Bromobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1,2,2-Tetrachloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2,3-Trichloropropane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	N-Propylbenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	2-Chlorotoluene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	4-Chlorotoluene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,3,5-Trimethylbenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	tert-Butylbenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2,4-Trimethylbenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	sec-Butylbenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,3-Dichlorobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	p-Isopropyltoluene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,4-Dichlorobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2-Dichlorobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99

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Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: *D995024-006*
Sample ID: BG 1028
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2-Dibromo-3-chloropropane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2,4-Trichlorobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Hexachloro-1,3-butadiene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Naphthalene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2,3-Trichlorobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-006
Sample ID: BG 1028
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-006
Sample ID: BG 1028
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	bis(2-Ethylhexyl)phthalate	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1153	11/11/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D995024-006
Sample ID: BG 1028
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Date Received: *29-Oct-99*

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1153	11/11/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1153	11/11/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1254	11/5/99
TSS-aq							
	Solids, Total Suspended	155.	mg/L	1.	160.2	SBB 1300	11/2/99
TAL-6010-W							
	Aluminum	1.839	mg/L	0.004	6010B	TWH 1525	11/12/99
	Antimony	< 0.004	mg/L	0.004	6010B	TWH 1525	11/12/99
	Arsenic	< 0.004	mg/L	0.004	6010B	TWH 1525	11/12/99
	Barium	0.026	mg/L	0.001	6010B	TWH 1525	11/12/99
	Beryllium	< 0.001	mg/L	0.001	6010B	TWH 1525	11/12/99
	Cadmium	< 0.001	mg/L	0.001	6010B	TWH 1525	11/12/99
	Calcium	29.9	mg/L	0.4	6010B	TWH 1525	11/12/99
	Chromium	0.003	mg/L	0.001	6010B	TWH 1525	11/12/99
	Cobalt	< 0.004	mg/L	0.004	6010B	TWH 1525	11/12/99
	Copper	0.008	mg/L	0.001	6010B	TWH 1525	11/12/99
	Iron	3.273	mg/L	0.001	6010B	TWH 1525	11/12/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-006
Sample ID: BG 1028
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Lead	0.013	mg/L	0.004	6010B	TWH 1525	11/12/99
	Magnesium	33.99	mg/L	0.09	6010B	TWH 1525	11/12/99
	Manganese	0.134	mg/L	0.001	6010B	TWH 1525	11/12/99
	Nickel	0.006	mg/L	0.001	6010B	TWH 1525	11/12/99
	Potassium	12.9	mg/L	0.4	6010B	TWH 1525	11/12/99
	Selenium	< 0.004	mg/L	0.004	6010B	TWH 1525	11/12/99
	Silver	< 0.001	mg/L	0.001	6010B	TWH 1525	11/12/99
	Sodium	243.6	mg/L	0.4	6010B	TWH 1525	11/12/99
	Thallium	< 0.004	mg/L	0.004	6010B	TWH 1525	11/12/99
	Vanadium	0.010	mg/L	0.004	6010B	TWH 1525	11/12/99
	Zinc	0.043	mg/L	0.001	6010B	TWH 1525	11/12/99
HG-7470A							
	Mercury	< 0.0002	mg/L	0.0002	7470A	JAM 1530	11/10/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	11/18/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 2111	11/11/99
	Chromium, dissolved	0.002	mg/L	0.001	200.7	TWH 2111	11/11/99
	Copper, dissolved	< 0.001	mg/L	0.001	200.7	TWH 2111	11/11/99
	Nickel, dissolved	0.002	mg/L	0.001	200.7	TWH 2111	11/11/99
	Silver, dissolved	< 0.001	mg/L	0.001	200.7	TWH 2111	11/11/99
	Zinc, dissolved	0.022	mg/L	0.001	200.7	TWH 2111	11/11/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-007
Sample ID: Inlet 1028 Liquid
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TAL-6010-W							
	Aluminum	13.96	mg/L	0.02	6010B	TWH 1525	11/12/99
	Antimony	< 0.02	mg/L	0.02	6010B	TWH 1525	11/12/99
	Arsenic	< 0.02	mg/L	0.02	6010B	TWH 1525	11/12/99
	Barium	0.161	mg/L	0.005	6010B	TWH 1525	11/12/99
	Beryllium	< 0.005	mg/L	0.005	6010B	TWH 1525	11/12/99
	Cadmium	< 0.005	mg/L	0.005	6010B	TWH 1525	11/12/99
	Calcium	67.70	mg/L	0.02	6010B	TWH 1525	11/12/99
	Chromium	0.095	mg/L	0.005	6010B	TWH 1525	11/12/99
	Cobalt	< 0.02	mg/L	0.02	6010B	TWH 1525	11/12/99
	Copper	0.013	mg/L	0.005	6010B	TWH 1525	11/12/99
	Iron	17.106	mg/L	0.005	6010B	TWH 1525	11/12/99
	Lead	0.02	mg/L	0.02	6010B	TWH 1525	11/12/99
	Magnesium	122.7	mg/L	0.5	6010B	TWH 1525	11/12/99
	Manganese	7.645	mg/L	0.005	6010B	TWH 1525	11/12/99
	Nickel	0.037	mg/L	0.005	6010B	TWH 1525	11/12/99
	Potassium	58.04	mg/L	0.02	6010B	TWH 1525	11/12/99
	Selenium	0.04	mg/L	0.02	6010B	TWH 1525	11/12/99
	Silver	0.011	mg/L	0.005	6010B	TWH 1525	11/12/99
	Sodium	638.	mg/L	2.	6010B	TWH 1525	11/12/99
	Thallium	0.03	mg/L	0.02	6010B	TWH 1525	11/12/99
	Vanadium	0.04	mg/L	0.02	6010B	TWH 1525	11/12/99
	Zinc	0.153	mg/L	0.005	6010B	TWH 1525	11/12/99
HG-7470A							
	Mercury	< 0.0002	mg/L	0.0002	7470A	JAM 1530	11/10/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1254	11/5/99
VOL-8260B-aq							
	Dichlorofluoromethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Chloromethane (Methyl Chloride)	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99

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PA DEP Cert #06-409

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Princeton Location:
267 Wall Street
Princeton, NJ 08540
Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D995024-007
Sample ID: Inlet 1028 Liquid
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Date Received: *29-Oct-99*
Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Vinyl chloride	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Bromomethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Chloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Trichlorofluoromethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1-Dichloroethene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Acetone	< 100.	ug/L	100.	8260B	SDK 0709	11/10/99
	Methylene chloride (Dichloromethane)	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	t-Butyl alcohol	< 100.	ug/L	100.	8260B	SDK 0709	11/10/99
	trans-1,2-dichloroethene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Methyl tert-buytl ether (MTBE)	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1-Dichloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	cis-1,2-Dichloroethene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	2,2-Dichloropropane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	2-Butanone (MEK)	< 100.	ug/L	100.	8260B	SDK 0709	11/10/99
	Bromochloromethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Chloroform	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1,1-Trichloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1-Dichloropropene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Carbon tetrachloride	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Benzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2-Dichloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Trichloroethene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2-Dichloropropane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Dibromomethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Bromodichloromethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	cis-1,3-Dichloropropene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	4-Methyl-2-pentanone (MIBK)	< 100.	ug/L	100.	8260B	SDK 0709	11/10/99
	Toluene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	trans-1,3-dichloropropene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1,2-Trichloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99

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Princeton Location:
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Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: 29-Oct-99

Lab#: D995024-007
Sample ID: Inlet 1028 Liquid
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: 02-Dec-99

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Tetrachloroethene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,3-Dichloropropane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	2-Hexanone	< 100.	ug/L	100.	8260B	SDK 0709	11/10/99
	Dibromochloromethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2-Dibromoethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Chlorobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1,1,2-Tetrachloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Ethyl benzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	m,p-Xylene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	o-Xylene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Styrene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Bromoform	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Isopropylbenzene (Cumene)	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Bromobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,1,2,2-Tetrachloroethane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2,3-Trichloropropane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	N-Propylbenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	2-Chlorotoluene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	4-Chlorotoluene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,3,5-Trimethylbenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	tert-Butylbenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2,4-Trimethylbenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	sec-Butylbenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,3-Dichlorobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	p-Isopropyltoluene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,4-Dichlorobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2-Dichlorobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	n-Butylbenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2-Dibromo-3-chloropropane	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2,4-Trichlorobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D995024-007
Sample ID: Inlet 1028 Liquid
Sample Type: Liquid
Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Date Received: *29-Oct-99*
Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Hexachloro-1,3-butadiene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	Naphthalene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
	1,2,3-Trichlorobenzene	< 10.	ug/L	10.	8260B	SDK 0709	11/10/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-007
Sample ID: Inlet 1028 Liquid
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-007
Sample ID: Inlet 1028 Liquid
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	POL	Method	Init / Time	Analysis Date
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 1244	11/8/99
	bis(2-Ethylhexyl)phthalate	3.	ug/L	2.	8270C	DMP 1244	11/8/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1153	11/11/99
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *29-Oct-99*

Lab#: D995024-007
Sample ID: Inlet 1028 Liquid
Sample Type: Liquid

Collect Date: 28-Oct-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1153	11/11/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1153	11/11/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1153	11/11/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1153	11/11/99

Reviewed and Approved by:

Laurel A Schwindt

Laurel A. Schwindt
Laboratory Manager

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CHAIN OF CUSTODY RECORD

BLUE MARSH LABORATORIES, INC.
1605 Benjamin Franklin Highway
Douglassville, PA 19518
Phone: (610) 327-8196 Fax: (610) 327-6864

9200 Rumsey Rd.
Columbia, Md. 21045
Contact: Jessica Farral
Phone#: 410-964-9200
Fax#: 410-964-5156

BML LOT NO: 995024
PROJECT NO:
P.O. NO:

PROJECT: Kill Co Hook

TURNAROUND TIME REQUIRED: 24 HR ☐ 48 HR ☐ 72 HR ☐ 1 WEEK ☐ 2 WEEKS ☐

BML USE LAB ID NO.	DATE SAMPLED	TIME SAMPLED	COMP	GRAB	SAMPLE DESCRIPTION / CLIENT ID NO.	SAMPLE TYPE	Number of Containers: TOTAL	H2SO4	HCl	HNO3	NaOH	Sterile (Bact)	MeOH - NJ - VOC	MeOH - PA - VOC	SB - PA - VOC	Unpreserved	Other	ANALYSIS NEEDED: TCL VOA ug/L (ppb)	TCL VOA MG/KG (ppm)	TCL BNA (Please Specify)	Volatiles * Bake	PCB's TCLP	SVOC	Pesticides	Cyanide
01	102899	10:15		X	INLET 1028	L	10	2				2				2			X	X		X	X	X	
02	102899		X		WEIR 1028 5 Hr Wm	S	8	2										X	X	X	X	X	X	X	
03	102799		X		WEIR 1027 16hr P	L	1														X				
04	102699		X		WEIR 1026 1	L	1														X				
05	102899	9:45		X	Mix 1028 2 Hr Wm	S	8											X	X	X	X	X	X	X	
06	102899	11:30		X	BG 1028 2 Hr Wm	S	8											X	X	X	X	X	X	X	
07					INLET Liquid 1028	L													X	X		X	X	X	Run same as other Inlet.

Do not ANALYZE INLET UNTIL AUTHORIZED

Inlet taken off of hold 11/1 per Jessica

PA Fuel Type - Use Letter Code
A. Leaded Gas / Aviation-Jet Fuel
B. Unleaded Gas
C. Kerosene / Fuel #1
D. Diesel Fuel / Fuel Oil #2
E. Fuel Oil #4, #5, #6 / Lubricating Oil
F. Used Motor Oil

Remarks / Additional Analysis:

Sampled by: Katherine Diller
Date: 10-28-99

Relinquished by: (Signature) Katherine Diller
Date/Time: 10/28/99 15:00
Received by:

Relinquished by: (Signature)
Date/Time: 10/29/99
Received for Laboratory by:

FAX INFO:
Date/Time Faxed: Faxed 11/1/99
TAT Met?: Yes ☐ No ☐

REPORT FORMAT (Check One) ***
Standard (Data ☐ — Results Only ☐)
NJ Deliverables (Disk ☐ — Reduced ☐)
CLP Format ☐
DW Forms ☐ PWS ID # _____

SAMPLE TYPE:
HZ Hazardous SW Surface Water
SO Soil WW Waste Water
DE Debris GW Ground Water
SL Sludge DW Drinking Water
SD Solid LQ Liquid

COOLER TEMP _____ °C

PERMIT TYPE:
☐ MIPP
☐ NPDES

BML7s 10/98

* Surcharge for 24 HR, 48 HR, 72 HR, and 1 week turnaround times. ** Specify method required. *** Surcharges may apply.

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Princeton Location:
267 Wall Street
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Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *02-Nov-99*

Lab#: D995057-001
Sample ID: Weir 1101
Sample Type: Water
Collect Date: 01-Nov-99
Collected By: Katherine Dillon
Report Date: *09-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TAL-6010-W							
	Aluminum	0.112	mg/L	0.004	6010B	TWH 1215	11/15/99
	Antimony	< 0.004	mg/L	0.004	6010B	TWH 1215	11/15/99
	Arsenic	< 0.004	mg/L	0.004	6010B	TWH 1215	11/15/99
	Barium	0.108	mg/L	0.001	6010B	TWH 1215	11/15/99
	Beryllium	< 0.001	mg/L	0.001	6010B	TWH 1215	11/15/99
	Cadmium	< 0.001	mg/L	0.001	6010B	TWH 1215	11/15/99
	Calcium	84.0	mg/L	0.4	6010B	TWH 1215	11/15/99
	Chromium	0.003	mg/L	0.001	6010B	TWH 1215	11/15/99
	Cobalt	< 0.004	mg/L	0.004	6010B	TWH 1215	11/15/99
	Copper	0.020	mg/L	0.001	6010B	TWH 1215	11/15/99
	Iron	1.633	mg/L	0.001	6010B	TWH 1215	11/15/99
	Lead	0.015	mg/L	0.004	6010B	TWH 1215	11/15/99
	Magnesium	160.89	mg/L	0.09	6010B	TWH 1215	11/15/99
	Manganese	7.774	mg/L	0.001	6010B	TWH 1215	11/15/99
	Nickel	0.017	mg/L	0.001	6010B	TWH 1215	11/15/99
	Potassium	55.9	mg/L	0.4	6010B	TWH 1215	11/15/99
	Selenium	0.074	mg/L	0.004	6010B	TWH 1215	11/15/99
	Silver	0.002	mg/L	0.001	6010B	TWH 1215	11/15/99
	Sodium	1643.	mg/L	4.	6010B	TWH 1215	11/15/99
	Thallium	0.049	mg/L	0.004	6010B	TWH 1215	11/15/99
	Vanadium	0.004	mg/L	0.004	6010B	TWH 1215	11/15/99
	Zinc	0.050	mg/L	0.001	6010B	TWH 1215	11/15/99
HG-7470A							
	Mercury	0.0005	mg/L	0.0002	7470A	JAM 1540	11/11/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	11/18/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1350	11/15/99
	Chromium, dissolved	0.002	mg/L	0.001	200.7	TWH 1350	11/15/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D995057-001
Sample ID: Weir 1101
Sample Type: Water
Collect Date: 01-Nov-99
Collected By: Katherine Dillon

Date Received: *02-Nov-99*
Report Date: *09-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Copper, dissolved	0.019	mg/L	0.001	200.7	TWH 1350	11/15/99
	Nickel, dissolved	0.018	mg/L	0.001	200.7	TWH 1350	11/15/99
	Silver, dissolved	0.003	mg/L	0.001	200.7	TWH 1350	11/15/99
	Zinc, dissolved	0.039	mg/L	0.001	200.7	TWH 1350	11/15/99
VOL-8260B-aq							
	Dichlorofluoromethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Chloromethane (Methyl Chloride)	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Vinyl chloride	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Bromomethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Chloroethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Trichlorofluoromethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,1-Dichloroethene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Acetone	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Methylene chloride (Dichloromethane)	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	t-Butyl alcohol	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	trans-1,2-dichloroethene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Methyl tert-buytl ether (MTBE)	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,1-Dichloroethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	cis-1,2-Dichloroethene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	2,2-Dichloropropane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	2-Butanone (MEK)	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Bromochloromethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Chloroform	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,1,1-Trichloroethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,1-Dichloropropene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Carbon tetrachloride	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Benzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,2-Dichloroethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Trichloroethene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,2-Dichloropropane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *02-Nov-99*

Lab#: D995057-001
Sample ID: Weir 1101
Sample Type: Water

Collect Date: 01-Nov-99
Collected By: Katherine Dillon

Report Date: *09-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Dibromomethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Bromodichloromethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	cis-1,3-Dichloropropene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	4-Methyl-2-pentanone (MIBK)	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Toluene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	trans-1,3-dichloropropene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,1,2-Trichloroethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Tetrachloroethene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,3-Dichloropropane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	2-Hexanone	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Dibromochloromethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,2-Dibromoethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Chlorobenzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,1,1,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Ethyl benzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	m,p-Xylene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	o-Xylene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Styrene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Bromoform	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Isopropylbenzene (Cumene)	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Bromobenzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,1,2,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,2,3-Trichloropropane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	N-Propylbenzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	2-Chlorotoluene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	4-Chlorotoluene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,3,5-Trimethylbenzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	tert-Butylbenzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,2,4-Trimethylbenzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	sec-Butylbenzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D995057-001
Sample ID: Weir 1101
Sample Type: Water
Collect Date: 01-Nov-99
Collected By: Katherine Dillon

Date Received: *02-Nov-99*
Report Date: *09-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,3-Dichlorobenzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	p-Isopropyltoluene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,4-Dichlorobenzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,2-Dichlorobenzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	n-Butylbenzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,2-Dibromo-3-chloropropane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,2,4-Trichlorobenzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Hexachloro-1,3-butadiene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Naphthalene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,2,3-Trichlorobenzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *02-Nov-99*

Lab#: D995057-001
Sample ID: Weir 1101
Sample Type: Water

Collect Date: 01-Nov-99
Collected By: Katherine Dillon

Report Date: *09-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99

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9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *02-Nov-99*

Lab#: D995057-001
Sample ID: Weir 1101
Sample Type: Water

Collect Date: 01-Nov-99
Collected By: Katherine Dillon

Report Date: *09-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	bis(2-Ethylhexyl)phthalate	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1254	11/5/99
TSS-aq							
	Solids, Total Suspended	33.	mg/L	1.	160.2	SBB 1100	11/3/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *02-Nov-99*

Lab#: D995057-001
Sample ID: Weir 1101
Sample Type: Water

Collect Date: 01-Nov-99
Collected By: Katherine Dillon

Report Date: *09-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1738	11/13/99
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1738	11/13/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1738	11/13/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D995057-002
Sample ID: Mix 1101
Sample Type: Water
Collect Date: 01-Nov-99
Collected By: Katherine Dillon

Date Received: *02-Nov-99*
Report Date: *09-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TAL-6010-W							
	Aluminum	0.573	mg/L	0.004	6010B	TWH 1215	11/15/99
	Antimony	< 0.004	mg/L	0.004	6010B	TWH 1215	11/15/99
	Arsenic	< 0.004	mg/L	0.004	6010B	TWH 1215	11/15/99
	Barium	0.031	mg/L	0.001	6010B	TWH 1215	11/15/99
	Beryllium	< 0.001	mg/L	0.001	6010B	TWH 1215	11/15/99
	Cadmium	< 0.001	mg/L	0.001	6010B	TWH 1215	11/15/99
	Calcium	42.8	mg/L	0.4	6010B	TWH 1215	11/15/99
	Chromium	0.002	mg/L	0.001	6010B	TWH 1215	11/15/99
	Cobalt	< 0.004	mg/L	0.004	6010B	TWH 1215	11/15/99
	Copper	0.009	mg/L	0.001	6010B	TWH 1215	11/15/99
	Iron	1.204	mg/L	0.001	6010B	TWH 1215	11/15/99
	Lead	0.009	mg/L	0.004	6010B	TWH 1215	11/15/99
	Magnesium	79.04	mg/L	0.09	6010B	TWH 1215	11/15/99
	Manganese	1.230	mg/L	0.001	6010B	TWH 1215	11/15/99
	Nickel	0.006	mg/L	0.001	6010B	TWH 1215	11/15/99
	Potassium	31.3	mg/L	0.4	6010B	TWH 1215	11/15/99
	Selenium	0.025	mg/L	0.004	6010B	TWH 1215	11/15/99
	Silver	< 0.001	mg/L	0.001	6010B	TWH 1215	11/15/99
	Sodium	654.2	mg/L	0.4	6010B	TWH 1215	11/15/99
	Thallium	0.018	mg/L	0.004	6010B	TWH 1215	11/15/99
	Vanadium	0.006	mg/L	0.004	6010B	TWH 1215	11/15/99
	Zinc	0.033	mg/L	0.001	6010B	TWH 1215	11/15/99
HG-7470A							
	Mercury	0.0005	mg/L	0.0002	7470A	JAM 1540	11/11/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	11/18/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1350	11/15/99
	Chromium, dissolved	0.001	mg/L	0.001	200.7	TWH 1350	11/15/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *02-Nov-99*

Lab#: D995057-002
Sample ID: Mix 1101
Sample Type: Water
Collect Date: 01-Nov-99
Collected By: Katherine Dillon
Report Date: *09-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Copper, dissolved	0.011	mg/L	0.001	200.7	TWH 1350	11/15/99
	Nickel, dissolved	0.005	mg/L	0.001	200.7	TWH 1350	11/15/99
	Silver, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1350	11/15/99
	Zinc, dissolved	0.031	mg/L	0.001	200.7	TWH 1350	11/15/99
VOL-8260B-aq							
	Dichlorofluoromethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Chloromethane (Methyl Chloride)	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Vinyl chloride	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Bromomethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Chloroethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Trichlorofluoromethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,1-Dichloroethene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Acetone	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Methylene chloride (Dichloromethane)	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	t-Butyl alcohol	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	trans-1,2-dichloroethene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Methyl tert-buytl ether (MTBE)	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,1-Dichloroethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	cis-1,2-Dichloroethene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	2,2-Dichloropropane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	2-Butanone (MEK)	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Bromochloromethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Chloroform	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,1,1-Trichloroethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,1-Dichloropropene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Carbon tetrachloride	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Benzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,2-Dichloroethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Trichloroethene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,2-Dichloropropane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D995057-002
Sample ID: Mix 1101
Sample Type: Water
Collect Date: 01-Nov-99
Collected By: Katherine Dillon

Date Received: *02-Nov-99*
Report Date: *09-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Dibromomethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Bromodichloromethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	cis-1,3-Dichloropropene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	4-Methyl-2-pentanone (MIBK)	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Toluene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	trans-1,3-dichloropropene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,1,2-Trichloroethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Tetrachloroethene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,3-Dichloropropane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	2-Hexanone	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Dibromochloromethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,2-Dibromoethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Chlorobenzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,1,1,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Ethyl benzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	m,p-Xylene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	o-Xylene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Styrene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Bromoform	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Isopropylbenzene (Cumene)	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Bromobenzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,1,2,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,2,3-Trichloropropane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	N-Propylbenzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	2-Chlorotoluene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	4-Chlorotoluene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,3,5-Trimethylbenzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	tert-Butylbenzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,2,4-Trimethylbenzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	sec-Butylbenzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *02-Nov-99*

Lab#: D995057-002
Sample ID: Mix 1101
Sample Type: Water
Collect Date: 01-Nov-99
Collected By: Katherine Dillon

Report Date: *09-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,3-Dichlorobenzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	p-Isopropyltoluene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,4-Dichlorobenzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,2-Dichlorobenzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	n-Butylbenzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,2-Dibromo-3-chloropropane	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,2,4-Trichlorobenzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Hexachloro-1,3-butadiene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	Naphthalene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
	1,2,3-Trichlorobenzene	< 1.	ug/L	1.	8260B	DRA 2015	11/12/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Benzoic acid	5.	ug/L	2.	8270C	DMP 2059	11/14/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D995057-002
Sample ID: Mix 1101
Sample Type: Water
Collect Date: 01-Nov-99
Collected By: Katherine Dillon

Date Received: *02-Nov-99*
Report Date: *09-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99

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PA DEP Cert #06-409

Blue Marsh
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Princeton Location:
267 Wall Street
Princeton, NJ 08540
Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *02-Nov-99*

Lab#: D995057-002
Sample ID: Mix 1101
Sample Type: Water
Collect Date: 01-Nov-99
Collected By: Katherine Dillon

Report Date: *09-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 2059	11/14/99
	bis(2-Ethylhexyl)phthalate	2.	ug/L	2.	8270C	DMP 2059	11/14/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1254	11/5/99
TSS-aq							
	Solids, Total Suspended	109.	mg/L	1.	160.2	SBB 1100	11/3/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *02-Nov-99*

Lab#: D995057-002
Sample ID: Mix 1101
Sample Type: Water

Collect Date: 01-Nov-99
Collected By: Katherine Dillon

Report Date: *09-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1738	11/13/99
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1738	11/13/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1738	11/13/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *02-Nov-99*

Lab#: D995057-003
Sample ID: Weir 1029
Sample Type: Water

Collect Date: 01-Nov-99
Collected By: Katherine Dillon

Report Date: *09-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	139.	mg/L	1.	160.2	SBB 1100	11/3/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *02-Nov-99*

Lab#: D995057-004
Sample ID: Weir 1030
Sample Type: Water
Collect Date: 01-Nov-99
Collected By: Katherine Dillon
Report Date: *09-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	24.	mg/L	1.	160.2	SBB 1100	11/3/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *02-Nov-99*

Lab#: D995057-005
Sample ID: Weir 1031
Sample Type: Water
Collect Date: 01-Nov-99
Collected By: Katherine Dillon
Report Date: *09-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	31.	mg/L	1.	160.2	SBB 1100	11/3/99

Reviewed and Approved by:

Laurel A. Schwindt

Laurel A. Schwindt
Laboratory Manager

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BLUE MARSH LABORATORIES, INC.
1605 Benjamin Franklin Highway
Douglassville, PA 19518
Phone: (610) 327-8196 Fax: (610) 327-6864

CHAIN OF CUSTODY RECORD

9200 Rumsey Rd.
Columbia, MD. 2104
Contact: Jessica Farrar
Phone#: 410-964-9200
Fax#: 410-964-5156

BML LOT NO: 995057
PROJECT NO:
P.O. NO:

PROJECT: Killcohook

TURNAROUND TIME REQUIRED: 24 HR ☐ 48 HR ☐ 72 HR ☐ 1 WEEK ☐ 2 WEEKS ☐

PA Fuel Type - Use Letter Code
A. Leaded Gas / Aviation-Jet Fuel
B. Unleaded Gas
C. Kerosene / Fuel #1
D. Diesel Fuel / Fuel Oil #2
E. Fuel Oil #4, #5, #6 / Lubricating Oil
F. Used Motor Oil

BML USE LAB ID NO.	DATE SAMPLED	TIME SAMPLED	COMP	GRAB	SAMPLE DESCRIPTION / CLIENT ID NO.	SAMPLE TYPE	TOTAL	H_2SO_4	HCl	HNO_3	NaOH	Sterile (Bact)	MeOH - NJ - VOC	MeOH - PA - VOC	SB - PA - VOC	Unpreserved	Other	TCLP V/S/M/A	Metals Inorganics, Total	Volatiles * 8260	PA US Code 5VOC	Cyanide	TSS	Pesticide	Remarks / Additional Analysis:
01	1101	1101	X		WEIR 1101		WATER											X	X	X	X	X	X	X	5 liter gl 16oz P 2VOA
02	1101	1030		X	Mix 1101		↓											X	X	X	X	X	X	X	3 p liter, 2 liter gl, 16oz P, 2VOC
03			X		WEIR 1029		↓																X		16oz P
04			X		WEIR 1030		↓																X		↓
05			X		WEIR 1031		↓																X		↓

Sampled by: Katherine Dillon
Date: 11/1/99
FAX INFO:
Date/Time Faxed: 12/9/99 1900
TAT Met?: Yes ☒ No ☐
COOLER TEMP _____ °C

Relinquished by: (Signature) Katherine Dillon
Date/Time: 11/1/99 15:00
Received by:

Relinquished by: (Signature)
Date/Time:
Received for Laboratory by: [signature]

REPORT FORMAT (Check One) ***
Standard (Data ☐ — Results Only ☐)
NJ Deliverables (Disk ☐ — Reduced ☐)
CLP Format ☐
DW Forms ☐ PWS ID # _____

SAMPLE TYPE:
HZ Hazardous, SW Surface Water
SO Soil, WW Waste Water
DE Debris, GW Ground Water
SL Sludge, DW Drinking Water
SD Solid, LQ Liquid

PERMIT TYPE:
☐ MIPP
☐ NPDES

* Surcharge for 24 HR, 48 HR, 72 HR, and 1 week turnaround times. ** Specify method required. *** Surcharges may apply.

BML7a 10/98

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267 Wall Street
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Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Kilcohook

Date Received: *05-Nov-99*

Lab#: D995130-001
Sample ID: WIER 1102
Sample Type: Liquid

Collect Date: 02-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	44.	mg/L	1.	160.2	SBB 1530	11/5/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Kilcohook

Date Received: *05-Nov-99*

Lab#: D995130-002
Sample ID: WIER 1103
Sample Type: Liquid

Collect Date: 02-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	298.	mg/L	1.	160.2	SBB 1530	11/5/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-003
Sample ID: WIER 1104
Sample Type: Liquid

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Chloromethane (Methyl Chloride)	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Vinyl chloride	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Bromomethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Chloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Trichlorofluoromethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1-Dichloroethene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Acetone	< 10.	ug/L	10.	8260B	MJM 1352	11/14/99
	Methylene chloride (Dichloromethane)	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	t-Butyl alcohol	< 10.	ug/L	10.	8260B	MJM 1352	11/14/99
	trans-1,2-dichloroethene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Methyl tert-buyil ether (MTBE)	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1-Dichloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	cis-1,2-Dichloroethene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	2,2-Dichloropropane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	2-Butanone (MEK)	< 10.	ug/L	10.	8260B	MJM 1352	11/14/99
	Bromochloromethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Chloroform	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1,1-Trichloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1-Dichloropropene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Carbon tetrachloride	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Benzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2-Dichloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Trichloroethene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2-Dichloropropane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Dibromomethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Bromodichloromethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	cis-1,3-Dichloropropene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-003
Sample ID: WIER 1104
Sample Type: Liquid

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	trans-1,3-dichloropropene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1,2-Trichloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Tetrachloroethene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,3-Dichloropropane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	2-Hexanone	< 10.	ug/L	10.	8260B	MJM 1352	11/14/99
	Dibromochloromethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2-Dibromoethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Chlorobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1,1,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Ethyl benzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	m,p-Xylene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	o-Xylene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Styrene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Bromoform	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Isopropylbenzene (Cumene)	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Bromobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1,2,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2,3-Trichloropropane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	N-Propylbenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	2-Chlorotoluene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	4-Chlorotoluene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,3,5-Trimethylbenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	tert-Butylbenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2,4-Trimethylbenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	sec-Butylbenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,3-Dichlorobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	p-Isopropyltoluene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,4-Dichlorobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2-Dichlorobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99

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PA DEP Cert #06-409

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267 Wall Street
Princeton, NJ 08540
Phone: (609) 924-5151
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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-003
Sample ID: WIER 1104
Sample Type: Liquid

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2-Dibromo-3-chloropropane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2,4-Trichlorobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Hexachloro-1,3-butadiene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Naphthalene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2,3-Trichlorobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-003
Sample ID: WIER 1104
Sample Type: Liquid

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-003
Sample ID: WIER 1104
Sample Type: Liquid

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	bis(2-Ethylhexyl)phthalate	2.	ug/L	2.	8270C	DMP 1009	11/15/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1738	11/13/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D995130-003
Sample ID: WIER 1104
Sample Type: Liquid

Collect Date: 04-Nov-99
Collected By: Client

Date Received: *05-Nov-99*
Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1738	11/13/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1738	11/13/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1324	11/10/99
TSS-aq							
	Solids, Total Suspended	43.	mg/L	1.	160.2	SBB 1600	11/8/99
TAL-6010-W							
	Aluminum	0.980	mg/L	0.004	6010B	TWH 1510	11/18/99
	Antimony	< 0.004	mg/L	0.004	6010B	TWH 1510	11/18/99
	Arsenic	< 0.004	mg/L	0.004	6010B	TWH 1510	11/18/99
	Barium	0.111	mg/L	0.001	6010B	TWH 1510	11/18/99
	Beryllium	< 0.001	mg/L	0.001	6010B	TWH 1510	11/18/99
	Cadmium	0.001	mg/L	0.001	6010B	TWH 1510	11/18/99
	Calcium	125.	mg/L	4.	6010B	TWH 1510	11/18/99
	Chromium	0.003	mg/L	0.001	6010B	TWH 1510	11/18/99
	Cobalt	< 0.004	mg/L	0.004	6010B	TWH 1510	11/18/99
	Copper	0.009	mg/L	0.001	6010B	TWH 1510	11/18/99
	Iron	3.979	mg/L	0.001	6010B	TWH 1510	11/18/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-003
Sample ID: WIER 1104
Sample Type: Liquid

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Lead	0.013	mg/L	0.004	6010B	TWH 1510	11/18/99
	Magnesium	181.0	mg/L	0.9	6010B	TWH 1510	11/18/99
	Manganese	6.230	mg/L	0.001	6010B	TWH 1510	11/18/99
	Nickel	0.014	mg/L	0.001	6010B	TWH 1510	11/18/99
	Potassium	53.	mg/L	4.	6010B	TWH 1510	11/18/99
	Selenium	0.048	mg/L	0.004	6010B	TWH 1510	11/18/99
	Silver	0.001	mg/L	0.001	6010B	TWH 1510	11/18/99
	Sodium	1116.	mg/L	4.	6010B	TWH 1510	11/18/99
	Thallium	0.038	mg/L	0.004	6010B	TWH 1510	11/18/99
	Vanadium	0.006	mg/L	0.004	6010B	TWH 1510	11/18/99
	Zinc	0.097	mg/L	0.001	6010B	TWH 1510	11/18/99
HG-7470A							
	Mercury	< 0.0002	mg/L	0.0002	7470A	jam 1600	11/15/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	11/16/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	twh 1415	11/18/99
	Chromium, dissolved	< 0.001	mg/L	0.001	200.7	twh 1415	11/18/99
	Copper, dissolved	0.002	mg/L	0.001	200.7	twh 1415	11/18/99
	Nickel, dissolved	0.009	mg/L	0.001	200.7	twh 1415	11/18/99
	Silver, dissolved	< 0.001	mg/L	0.001	200.7	twh 1415	11/18/99
	Zinc, dissolved	0.035	mg/L	0.001	200.7	twh 1415	11/18/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-004
Sample ID: Mix 1104
Sample Type: Liquid

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Chloromethane (Methyl Chloride)	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Vinyl chloride	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Bromomethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Chloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Trichlorofluoromethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1-Dichloroethene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Acetone	< 10.	ug/L	10.	8260B	MJM 1352	11/14/99
	Methylene chloride (Dichloromethane)	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	t-Butyl alcohol	< 10.	ug/L	10.	8260B	MJM 1352	11/14/99
	trans-1,2-dichloroethene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Methyl tert-buytl ether (MTBE)	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1-Dichloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	cis-1,2-Dichloroethene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	2,2-Dichloropropane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	2-Butanone (MEK)	< 10.	ug/L	10.	8260B	MJM 1352	11/14/99
	Bromochloromethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Chloroform	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1,1-Trichloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1-Dichloropropene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Carbon tetrachloride	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Benzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2-Dichloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Trichloroethene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2-Dichloropropane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Dibromomethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Bromodichloromethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	cis-1,3-Dichloropropene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	4-Methyl-2-pentanone (MIBK)	< 10.	ug/L	10.	8260B	MJM 1352	11/14/99

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Sample Type: Liquid

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Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	trans-1,3-dichloropropene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1,2-Trichloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Tetrachloroethene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,3-Dichloropropane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	2-Hexanone	< 10.	ug/L	10.	8260B	MJM 1352	11/14/99
	Dibromochloromethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2-Dibromoethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Chlorobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1,1,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Ethyl benzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	m,p-Xylene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	o-Xylene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Styrene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Bromoform	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Isopropylbenzene (Cumene)	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Bromobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1,2,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2,3-Trichloropropane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	N-Propylbenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	2-Chlorotoluene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	4-Chlorotoluene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,3,5-Trimethylbenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	tert-Butylbenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2,4-Trimethylbenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	sec-Butylbenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,3-Dichlorobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	p-Isopropyltoluene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,4-Dichlorobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2-Dichlorobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99

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267 Wall Street
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Phone: (609) 924-5151
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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-004
Sample ID: Mix 1104
Sample Type: Liquid

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2-Dibromo-3-chloropropane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2,4-Trichlorobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Hexachloro-1,3-butadiene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Naphthalene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2,3-Trichlorobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: 05-Nov-99

Lab#: D995130-004
Sample ID: Mix 1104
Sample Type: Liquid

Collect Date: 04-Nov-99
Collected By: Client

Report Date: 02-Dec-99

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-004
Sample ID: Mix 1104
Sample Type: Liquid

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	bis(2-Ethylhexyl)phthalate	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1738	11/13/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-004
Sample ID: Mix 1104
Sample Type: Liquid

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1738	11/13/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1738	11/13/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1324	11/10/99
TSS-aq							
	Solids, Total Suspended	147.	mg/L	1.	160.2	SBB 1600	11/8/99
TAL-6010-W							
	Aluminum	2.394	mg/L	0.004	6010B	TWH 1510	11/18/99
	Antimony	< 0.004	mg/L	0.004	6010B	TWH 1510	11/18/99
	Arsenic	< 0.004	mg/L	0.004	6010B	TWH 1510	11/18/99
	Barium	0.030	mg/L	0.001	6010B	TWH 1510	11/18/99
	Beryllium	< 0.001	mg/L	0.001	6010B	TWH 1510	11/18/99
	Cadmium	< 0.001	mg/L	0.001	6010B	TWH 1510	11/18/99
	Calcium	67.	mg/L	4.	6010B	TWH 1510	11/18/99
	Chromium	0.007	mg/L	0.001	6010B	TWH 1510	11/18/99
	Cobalt	< 0.004	mg/L	0.004	6010B	TWH 1510	11/18/99
	Copper	0.008	mg/L	0.001	6010B	TWH 1510	11/18/99
	Iron	4.688	mg/L	0.001	6010B	TWH 1510	11/18/99

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9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-004
Sample ID: Mix 1104
Sample Type: Liquid

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Lead	0.011	mg/L	0.004	6010B	TWH 1510	11/18/99
	Magnesium	61.3	mg/L	0.9	6010B	TWH 1510	11/18/99
	Manganese	0.232	mg/L	0.001	6010B	TWH 1510	11/18/99
	Nickel	0.007	mg/L	0.001	6010B	TWH 1510	11/18/99
	Potassium	23.	mg/L	4.	6010B	TWH 1510	11/18/99
	Selenium	< 0.004	mg/L	0.004	6010B	TWH 1510	11/18/99
	Silver	< 0.001	mg/L	0.001	6010B	TWH 1510	11/18/99
	Sodium	442.	mg/L	4.	6010B	TWH 1510	11/18/99
	Thallium	0.011	mg/L	0.004	6010B	TWH 1510	11/18/99
	Vanadium	0.013	mg/L	0.004	6010B	TWH 1510	11/18/99
	Zinc	0.048	mg/L	0.001	6010B	TWH 1510	11/18/99
HG-7470A							
	Mercury	< 0.0002	mg/L	0.0002	7470A	jam 1600	11/15/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	11/16/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	twh 1415	11/18/99
	Chromium, dissolved	< 0.001	mg/L	0.001	200.7	twh 1415	11/18/99
	Copper, dissolved	0.005	mg/L	0.001	200.7	twh 1415	11/18/99
	Nickel, dissolved	0.002	mg/L	0.001	200.7	twh 1415	11/18/99
	Silver, dissolved	< 0.001	mg/L	0.001	200.7	twh 1415	11/18/99
	Zinc, dissolved	0.016	mg/L	0.001	200.7	twh 1415	11/18/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-005
Sample ID: Inlet 1104 Soil
Sample Type: Soil

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TAL-6010-S							
	Aluminum	4686.1	mg/kg	2.0	6010B	TWH 1816	11/18/99
	Antimony	< 2.0	mg/kg	2.0	6010B	TWH 1816	11/18/99
	Arsenic	< 2.0	mg/kg	2.0	6010B	TWH 1816	11/18/99
	Barium	37.0	mg/kg	0.5	6010B	TWH 1816	11/18/99
	Beryllium	< 0.5	mg/kg	0.5	6010B	TWH 1816	11/18/99
	Cadmium	1.2	mg/kg	0.5	6010B	TWH 1816	11/18/99
	Calcium	1292.7	mg/kg	2.0	6010B	TWH 1816	11/18/99
	Chromium	17.6	mg/kg	0.5	6010B	TWH 1816	11/18/99
	Cobalt	3.6	mg/kg	2.0	6010B	TWH 1816	11/18/99
	Copper	11.8	mg/kg	0.5	6010B	TWH 1816	11/18/99
	Iron	10349.0	mg/kg	0.5	6010B	TWH 1816	11/18/99
	Lead	16.6	mg/kg	2.0	6010B	TWH 1816	11/18/99
	Magnesium	2031.4	mg/kg	0.5	6010B	TWH 1816	11/18/99
	Manganese	571.1	mg/kg	0.5	6010B	TWH 1816	11/18/99
	Nickel	10.8	mg/kg	0.5	6010B	TWH 1816	11/18/99
	Potassium	949.5	mg/kg	2.0	6010B	TWH 1816	11/18/99
	Selenium	< 2.0	mg/kg	2.0	6010B	TWH 1816	11/18/99
	Silver	< 0.5	mg/kg	0.5	6010B	TWH 1816	11/18/99
	Sodium	531.7	mg/kg	2.0	6010B	TWH 1816	11/18/99
	Thallium	< 2.0	mg/kg	2.0	6010B	TWH 1816	11/18/99
	Vanadium	17.1	mg/kg	2.0	6010B	TWH 1816	11/18/99
	Zinc	84.6	mg/kg	0.5	6010B	TWH 1816	11/18/99
HG-7471A							
	Mercury	0.1	mg/kg	0.0	7471A	jam 1600	11/15/99
Cn,Tot-sd							
	Cyanide, total	< 0.5	mg/kg	0.5	9010B	DAW 1324	11/10/99
VOL-8260B-sd							
	Dichlorofluoromethane	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	Chloromethane (Methyl Chloride)	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99

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267 Wall Street
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Phone: (609) 924-5151
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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-005
Sample ID: Inlet 1104 Soil
Sample Type: Soil

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Vinyl chloride	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	Bromomethane	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	Chloroethane	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	Trichlorofluoromethane	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	1,1-Dichloroethene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	Acetone	< 0.5	mg/kg	0.5	8260B	DRA 1453	11/17/99
	Methylene chloride (Dichloromethane)	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	t-Butyl alcohol	< 0.5	mg/kg	0.5	8260B	DRA 1453	11/17/99
	trans-1,2-dichloroethene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	Methyl tert-buytl ether (MTBE)	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	1,1-Dichloroethane	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	cis-1,2-Dichloroethene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	2,2-Dichloropropane	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	2-Butanone (MEK)	< 0.5	mg/kg	0.5	8260B	DRA 1453	11/17/99
	Bromochloromethane	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	Chloroform	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	1,1,1-Trichloroethane	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	1,1-Dichloropropene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	Carbon tetrachloride	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	Benzene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	1,2-Dichloroethane	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	Trichloroethene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	1,2-Dichloropropane	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	Dibromomethane	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	Bromodichloromethane	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	cis-1,3-Dichloropropene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	4-Methyl-2-pentanone (MIBK)	< 0.5	mg/kg	0.5	8260B	DRA 1453	11/17/99
	Toluene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	trans-1,3-dichloropropene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	1,1,2-Trichloroethane	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99

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267 Wall Street
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Phone: (609) 924-5151
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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-005
Sample ID: Inlet 1104 Soil
Sample Type: Soil

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Tetrachloroethene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	1,3-Dichloropropane	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	2-Hexanone	< 0.5	mg/kg	0.5	8260B	DRA 1453	11/17/99
	Dibromochloromethane	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	1,2-Dibromoethane	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	Chlorobenzene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	1,1,1,2-Tetrachloroethane	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	Ethyl benzene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	m,p-Xylene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	o-Xylene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	Styrene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	Bromoform	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	Isopropylbenzene (Cumene)	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	Bromobenzene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	1,1,2,2-Tetrachloroethane	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	1,2,3-Trichloropropane	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	N-Propylbenzene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	2-Chlorotoluene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	4-Chlorotoluene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	1,3,5-Trimethylbenzene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	tert-Butylbenzene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	1,2,4-Trimethylbenzene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	sec-Butylbenzene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	1,3-Dichlorobenzene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	p-Isopropyltoluene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	1,4-Dichlorobenzene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	1,2-Dichlorobenzene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	n-Butylbenzene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	1,2-Dibromo-3-chloropropane	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	1,2,4-Trichlorobenzene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D995130-005
Sample ID: Inlet 1104 Soil
Sample Type: Soil

Collect Date: 04-Nov-99
Collected By: Client

Date Received: *05-Nov-99*
Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Hexachloro-1,3-butadiene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	Naphthalene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
	1,2,3-Trichlorobenzene	< 0.1	mg/kg	0.1	8260B	DRA 1453	11/17/99
SV-8270C-sd							
	2-Methylphenol	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	4-Methylphenol	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Benzioc acid	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Aniline	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Benzyl alcohol	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Naphthalene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Phenol	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	2-Chlorophenol	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	1,3-Dichlorobenzene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	1,4-Dichlorobenzene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	1,2-Dichlorobenzene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Hexachloroethane	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Nitrobenzene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Isophorone	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	1,2,4-Trichlorobenzene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	N-Nitrosodimethylamine	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Pyridine	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	bis(2-Chloroethyl)ether	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	bis(2-Chloroisopropyl)ether	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	N-Nitroso-Di-N-Propylamine	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	bis(2-Chloroethoxy)methane	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	2,4,5-Trichlorophenol	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	2-Methylnaphthalene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	4-Chloroaniline	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	2-Nitroaniline	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	3-Nitroaniline	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-005
Sample ID: Inlet 1104 Soil
Sample Type: Soil

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	POL	Method	Init / Time	Analysis Date
	4-Nitroaniline	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Acenaphthylene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	2-Nitrophenol	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	2,4-Dimethylphenol	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	2,4-Dichlorophenol	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Hexachloro-1,3-butadiene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Hexachlorocyclopentadiene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	2-Chloronaphthalene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	2,6-Dinitrotoluene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Dimethylphthalate	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Dibenzofuran	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Acenaphthene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Fluorene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	2,6-Dichlorophenol	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	4-Chloro-3-methylphenol	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	2,4,6-Trichlorophenol	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	2,4-Dinitrophenol	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	4-Nitrophenol	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	2,3,4,6-Tetrachorophenol	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	2-Methyl-4,6-Dinitrophenol	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Pentachlorophenol	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	2,4-Dinitrotoluene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Hexachlorobenzene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Azobenzene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Diethylphthalate	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	4-Chlorophenyl-phenylether	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	N-Nitrosodiphenylamine	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	1,2-Diphenylhydrazine	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	4-Bromophenyl-phenylether	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Benzidine	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-005
Sample ID: Inlet 1104 Soil
Sample Type: Soil

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	3,3'-Dichlorobenzidine	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Phenanthrene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Anthracene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Carbazole	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Fluoranthene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Pyrene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Benzo(a)anthracene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Chrysene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Di-n-butylphthalate	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Butylbenzylphthalate	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Benzo(b)fluoranthene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Benzo(k)fluoranthene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Benzo(a)pyrene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Indeno(1,2,3-cd)pyrene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Dibenzo(a,h))anthracene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	Benzo(ghi)perylene	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	DI-n-octylphthalate	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
	bis(2-Ethylhexyl)phthalate	< 100.	ug/kg	100.	8270C	DMP 1221	11/18/99
PEST-8081-sd							
	Aldrin	< 4.	ug/kg	4.	8081A	MDJ 1412	11/18/99
	alpha-BHC	< 4.	ug/kg	4.	8081A	MDJ 1412	11/18/99
	beta-BHC	< 4.	ug/kg	4.	8081A	MDJ 1412	11/18/99
	gamma-BHC (Lindane)	< 4.	ug/kg	4.	8081A	MDJ 1412	11/18/99
	delta-BHC	< 4.	ug/kg	4.	8081A	MDJ 1412	11/18/99
	alpha-Chlordane	< 4.	ug/kg	4.	8081A	MDJ 1412	11/18/99
	gamma-Chlordane	< 4.	ug/kg	4.	8081A	MDJ 1412	11/18/99
	Chlordane, technical	< 50.	ug/kg	50.	8081A	MDJ 1412	11/18/99
	4,4'-DDD	< 8.	ug/kg	8.	8081A	MDJ 1412	11/18/99
	4,4'-DDE	< 8.	ug/kg	8.	8081A	MDJ 1412	11/18/99
	4,4'-DDT	< 8.	ug/kg	8.	8081A	MDJ 1412	11/18/99

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9200 Rumsey Road
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Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-005
Sample ID: Inlet 1104 Soil
Sample Type: Soil

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Dieldrin	< 8.	ug/kg	8.	8081A	MDJ 1412	11/18/99
	Endosulfan I	< 4.	ug/kg	4.	8081A	MDJ 1412	11/18/99
	Endosulfan II	< 8.	ug/kg	8.	8081A	MDJ 1412	11/18/99
	Endosulfan sulfate	< 8.	ug/kg	8.	8081A	MDJ 1412	11/18/99
	Endrin	< 8.	ug/kg	8.	8081A	MDJ 1412	11/18/99
	Endrin aldehyde	< 8.	ug/kg	8.	8081A	MDJ 1412	11/18/99
	Endrin ketone	< 8.	ug/kg	8.	8081A	MDJ 1412	11/18/99
	Heptachlor	< 4.	ug/kg	4.	8081A	MDJ 1412	11/18/99
	Heptachlor epoxide	< 4.	ug/kg	4.	8081A	MDJ 1412	11/18/99
	Methoxychlor	< 40.	ug/kg	40.	8081A	MDJ 1412	11/18/99
	Toxaphene	< 200.	ug/kg	200.	8081A	MDJ 1412	11/18/99

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Princeton Location:
267 Wall Street
Princeton, NJ 08540
Phone: (609) 924-5151
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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D995130-006
Sample ID: BG 1104
Sample Type: Liquid
Collect Date: 04-Nov-99
Collected By: Client

Date Received: *05-Nov-99*
Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Chloromethane (Methyl Chloride)	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Vinyl chloride	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Bromomethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Chloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Trichlorofluoromethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1-Dichloroethene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Acetone	< 10.	ug/L	10.	8260B	MJM 1352	11/14/99
	Methylene chloride (Dichloromethane)	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	t-Butyl alcohol	< 10.	ug/L	10.	8260B	MJM 1352	11/14/99
	trans-1,2-dichloroethene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Methyl tert-buytl ether (MTBE)	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1-Dichloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	cis-1,2-Dichloroethene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	2,2-Dichloropropane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	2-Butanone (MEK)	< 10.	ug/L	10.	8260B	MJM 1352	11/14/99
	Bromochloromethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Chloroform	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1,1-Trichloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1-Dichloropropene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Carbon tetrachloride	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Benzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2-Dichloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Trichloroethene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2-Dichloropropane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Dibromomethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Bromodichloromethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	cis-1,3-Dichloropropene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	4-Methyl-2-pentanone (MIBK)	< 10.	ug/L	10.	8260B	MJM 1352	11/14/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-006
Sample ID: BG 1104
Sample Type: Liquid

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	trans-1,3-dichloropropene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1,2-Trichloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Tetrachloroethene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,3-Dichloropropane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	2-Hexanone	< 10.	ug/L	10.	8260B	MJM 1352	11/14/99
	Dibromochloromethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2-Dibromoethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Chlorobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1,1,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Ethyl benzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	m,p-Xylene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	o-Xylene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Styrene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Bromoform	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Isopropylbenzene (Cumene)	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Bromobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1,2,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2,3-Trichloropropane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	N-Propylbenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	2-Chlorotoluene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	4-Chlorotoluene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,3,5-Trimethylbenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	tert-Butylbenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2,4-Trimethylbenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	sec-Butylbenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,3-Dichlorobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	p-Isopropyltoluene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,4-Dichlorobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2-Dichlorobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D995130-006
Sample ID: BG 1104
Sample Type: Liquid
Collect Date: 04-Nov-99
Collected By: Client

Date Received: *05-Nov-99*
Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2-Dibromo-3-chloropropane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2,4-Trichlorobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Hexachloro-1,3-butadiene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Naphthalene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2,3-Trichlorobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-006
Sample ID: BG 1104
Sample Type: Liquid

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-006
Sample ID: BG 1104
Sample Type: Liquid

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	bis(2-Ethylhexyl)phthalate	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1738	11/13/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-006
Sample ID: BG 1104
Sample Type: Liquid

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1738	11/13/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1738	11/13/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1324	11/10/99
TSS-aq							
	Solids, Total Suspended	161.	mg/L	1.	160.2	SBB 1600	11/8/99
TAL-6010-W							
	Aluminum	2.659	mg/L	0.004	6010B	TWH 1510	11/18/99
	Antimony	< 0.004	mg/L	0.004	6010B	TWH 1510	11/18/99
	Arsenic	< 0.004	mg/L	0.004	6010B	TWH 1510	11/18/99
	Barium	0.030	mg/L	0.001	6010B	TWH 1510	11/18/99
	Beryllium	< 0.001	mg/L	0.001	6010B	TWH 1510	11/18/99
	Cadmium	< 0.001	mg/L	0.001	6010B	TWH 1510	11/18/99
	Calcium	60.	mg/L	4.	6010B	TWH 1510	11/18/99
	Chromium	0.008	mg/L	0.001	6010B	TWH 1510	11/18/99
	Cobalt	< 0.004	mg/L	0.004	6010B	TWH 1510	11/18/99
	Copper	0.007	mg/L	0.001	6010B	TWH 1510	11/18/99
	Iron	4.900	mg/L	0.001	6010B	TWH 1510	11/18/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-006
Sample ID: BG 1104
Sample Type: Liquid

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Lead	0.010	mg/L	0.004	6010B	TWH 1510	11/18/99
	Magnesium	32.4	mg/L	0.9	6010B	TWH 1510	11/18/99
	Manganese	0.230	mg/L	0.001	6010B	TWH 1510	11/18/99
	Nickel	0.007	mg/L	0.001	6010B	TWH 1510	11/18/99
	Potassium	15.	mg/L	4.	6010B	TWH 1510	11/18/99
	Selenium	< 0.004	mg/L	0.004	6010B	TWH 1510	11/18/99
	Silver	< 0.001	mg/L	0.001	6010B	TWH 1510	11/18/99
	Sodium	207.	mg/L	4.	6010B	TWH 1510	11/18/99
	Thallium	0.014	mg/L	0.004	6010B	TWH 1510	11/18/99
	Vanadium	0.012	mg/L	0.004	6010B	TWH 1510	11/18/99
	Zinc	0.049	mg/L	0.001	6010B	TWH 1510	11/18/99
HG-7470A							
	Mercury	< 0.0002	mg/L	0.0002	7470A	jam 1600	11/15/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	11/16/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	twh 1415	11/18/99
	Chromium, dissolved	< 0.001	mg/L	0.001	200.7	twh 1415	11/18/99
	Copper, dissolved	0.003	mg/L	0.001	200.7	twh 1415	11/18/99
	Nickel, dissolved	0.002	mg/L	0.001	200.7	twh 1415	11/18/99
	Silver, dissolved	< 0.001	mg/L	0.001	200.7	twh 1415	11/18/99
	Zinc, dissolved	0.012	mg/L	0.001	200.7	twh 1415	11/18/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-007
Sample ID: Inlet 1104 Liquid
Sample Type: Liquid

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Chloromethane (Methyl Chloride)	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Vinyl chloride	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Bromomethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Chloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Trichlorofluoromethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1-Dichloroethene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Acetone	< 10.	ug/L	10.	8260B	MJM 1352	11/14/99
	Methylene chloride (Dichloromethane)	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	t-Butyl alcohol	< 10.	ug/L	10.	8260B	MJM 1352	11/14/99
	trans-1,2-dichloroethene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Methyl tert-buytl ether (MTBE)	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1-Dichloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	cis-1,2-Dichloroethene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	2,2-Dichloropropane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	2-Butanone (MEK)	< 10.	ug/L	10.	8260B	MJM 1352	11/14/99
	Bromochloromethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Chloroform	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1,1-Trichloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1-Dichloropropene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Carbon tetrachloride	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Benzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2-Dichloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Trichloroethene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2-Dichloropropane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Dibromomethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Bromodichloromethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	cis-1,3-Dichloropropene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	4-Methyl-2-pentanone (MIBK)	< 10.	ug/L	10.	8260B	MJM 1352	11/14/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-007
Sample ID: Inlet 1104 Liquid
Sample Type: Liquid

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	trans-1,3-dichloropropene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1,2-Trichloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Tetrachloroethene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,3-Dichloropropane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	2-Hexanone	< 10.	ug/L	10.	8260B	MJM 1352	11/14/99
	Dibromochloromethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2-Dibromoethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Chlorobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1,1,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Ethyl benzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	m,p-Xylene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	o-Xylene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Styrene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Bromoform	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Isopropylbenzene (Cumene)	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Bromobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,1,2,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2,3-Trichloropropane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	N-Propylbenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	2-Chlorotoluene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	4-Chlorotoluene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,3,5-Trimethylbenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	tert-Butylbenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2,4-Trimethylbenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	sec-Butylbenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,3-Dichlorobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	p-Isopropyltoluene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,4-Dichlorobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2-Dichlorobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-007
Sample ID: Inlet 1104 Liquid
Sample Type: Liquid

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2-Dibromo-3-chloropropane	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2,4-Trichlorobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Hexachloro-1,3-butadiene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	Naphthalene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
	1,2,3-Trichlorobenzene	< 1.	ug/L	1.	8260B	MJM 1352	11/14/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-007
Sample ID: Inlet 1104 Liquid
Sample Type: Liquid

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99

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Client: Versar, Inc.
9200 Rumsey Road
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Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-007
Sample ID: Inlet 1104 Liquid
Sample Type: Liquid

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 1009	11/15/99
	bis(2-Ethylhexyl)phthalate	3.	ug/L	2.	8270C	DMP 1009	11/15/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 0513	11/17/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 0513	11/17/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 0513	11/17/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 0513	11/17/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 0513	11/17/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 0513	11/17/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 0513	11/17/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 0513	11/17/99

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Douglassville, PA 19518
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PA DEP Cert #06-409

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Princeton Location:
267 Wall Street
Princeton, NJ 08540
Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-007
Sample ID: Inlet 1104 Liquid
Sample Type: Liquid

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 0513	11/17/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 0513	11/17/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 0513	11/17/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 0513	11/17/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 0513	11/17/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 0513	11/17/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 0513	11/17/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 0513	11/17/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 0513	11/17/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 0513	11/17/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 0513	11/17/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 0513	11/17/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 0513	11/17/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 0513	11/17/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1324	11/10/99
TAL-6010-W							
	Aluminum	0.683	mg/L	0.004	6010B	TWH 1510	11/18/99
	Antimony	< 0.004	mg/L	0.004	6010B	TWH 1510	11/18/99
	Arsenic	< 0.004	mg/L	0.004	6010B	TWH 1510	11/18/99
	Barium	0.219	mg/L	0.001	6010B	TWH 1510	11/18/99
	Beryllium	< 0.001	mg/L	0.001	6010B	TWH 1510	11/18/99
	Cadmium	< 0.001	mg/L	0.001	6010B	TWH 1510	11/18/99
	Calcium	140.	mg/L	4.	6010B	TWH 1510	11/18/99
	Chromium	0.002	mg/L	0.001	6010B	TWH 1510	11/18/99
	Cobalt	0.005	mg/L	0.004	6010B	TWH 1510	11/18/99
	Copper	0.005	mg/L	0.001	6010B	TWH 1510	11/18/99
	Iron	1.785	mg/L	0.001	6010B	TWH 1510	11/18/99
	Lead	0.013	mg/L	0.004	6010B	TWH 1510	11/18/99
	Magnesium	101.9	mg/L	0.9	6010B	TWH 1510	11/18/99

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267 Wall Street
Princeton, NJ 08540
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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *05-Nov-99*

Lab#: D995130-007
Sample ID: Inlet 1104 Liquid
Sample Type: Liquid

Collect Date: 04-Nov-99
Collected By: Client

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Manganese	7.063	mg/L	0.001	6010B	TWH 1510	11/18/99
	Nickel	0.012	mg/L	0.001	6010B	TWH 1510	11/18/99
	Potassium	28.	mg/L	4.	6010B	TWH 1510	11/18/99
	Selenium	0.028	mg/L	0.004	6010B	TWH 1510	11/18/99
	Silver	0.001	mg/L	0.001	6010B	TWH 1510	11/18/99
	Sodium	506.	mg/L	4.	6010B	TWH 1510	11/18/99
	Thallium	0.025	mg/L	0.004	6010B	TWH 1510	11/18/99
	Vanadium	< 0.004	mg/L	0.004	6010B	TWH 1510	11/18/99
	Zinc	0.040	mg/L	0.001	6010B	TWH 1510	11/18/99
HG-7470A							
	Mercury	< 0.0002	mg/L	0.0002	7470A	jam 1600	11/15/99

Reviewed and Approved by:

Laurel A. Schwindt

Laurel A. Schwindt
Laboratory Manager

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BLUE MARSH LABORATORIES, INC.
1605 Benjamin Franklin Highway
Douglassville, PA 19518
Phone: (610) 327-8196 Fax: (610) 327-6864

CHAIN OF CUSTODY RECORD

Send Report to: VERSAR, INC
9200 Rumsey Rd
Columbia, MD 21045
Contact: Jessica Farrar
Phone#: 4109649200
Fax#: 4109645156

BML LOT NO: 995130
PROJECT NO: 4033-026
P.O. NO:
PROJECT: Kilcohook
* TURNAROUND TIME REQUIRED: 24 HR ☐ 48 HR ☐ 72 HR ☐ 1 WEEK ☑ 2 WEEKS ☐

BML USE LAB ID NO.	DATE SAMPLED	TIME SAMPLED	COMP	GRAB	SAMPLE DESCRIPTION / CLIENT ID NO.	SAMPLE TYPE	Number of Containers: TOTAL	5VOC	TSS	HNO3	NaOH	Sterile (Bact)	MeOH - NJ - VOC	MeOH - PA - VOC	SB - PA - VOC	Unpreserved	Other Pesticide	ANALYSIS NEEDED: TCLP	VS/H/P/M	Metals (Please Specify)	Volatiles 8260	TOTAL INORGANIC	DISSOLVED INORGANIC	Cyanide
01	110299		X		WIER1102		10		X															
02	110399		X		WIER1103				X															
03	110499	930	X		WIER1104	8			XX								X				X	X	X	X
04	110499	1000		X	MIX1104	8			XX								X				X	X	X	X
05	110499	1030		X	INLET1104	6	50		X								X				X	X		X
06	110499	1200		X	BG1104	8	10		XX								X				X	X	X	X
07					INLET Liquid																			

PA Fuel Type - Use Letter Code
A. Leaded Gas / Aviation-Jet Fuel
B. Unleaded Gas
C. Kerosene / Fuel #1
D. Diesel Fuel / Fuel Oil #2
E. Fuel Oil #4, #5, #6 / Lubricating Oil
F. Used Motor Oil

Remarks / Additional Analysis:

Do you have C-O-C's that aren't so fully preprinted?

Sampled by:
Date: 1500 110499

FAX INFO:
Date/Time Faxed: faxed 12/6
TAT Met?: Yes ☐ No ☐

COOLER TEMP: _____ °C

Relinquished by: (Signature)	Date/Time:	Received by:
	1500 110499	
Relinquished by: (Signature)	Date/Time:	Received for Laboratory by:
	11/5/99	Kenneth A. Mroz

REPORT FORMAT (Check One) ***
Standard (Data ☐ — Results Only ☐)
NJ Deliverables (Disk ☐ — Reduced ☐)
CLP Format ☐
DW Forms ☐ PWS ID # _____

SAMPLE TYPE:
HZ Hazardous SW Surface Water
SO Soil WW Waste Water
DE Debris GW Ground Water
SL Sludge DW Drinking Water
SD Solid LQ Liquid

PERMIT TYPE:
☐ MIPP
☐ NPDES

* Surcharge for 24 HR, 48 HR, 72 HR, and 1 week turnaround times. ** Specify method required. *** Surcharges may apply.

BML7a 10/

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Professional testing for the critical decision

Princeton Location:
267 Wall Street
Princeton, NJ 08540
Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *09-Nov-99*

Lab#: D995188-001
Sample ID: Weir 1105
Sample Type: Water

Collect Date: 05-Nov-99
Collected By: Katherine Dillow

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	75.	mg/L	1.	160.2	SBB 1030	11/10/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *09-Nov-99*

Lab#: D995188-002
Sample ID: Weir 1106
Sample Type: Water

Collect Date: 06-Nov-99
Collected By: Katherine Dillow

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	32.	mg/L	1.	160.2	SBB 1030	11/10/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *09-Nov-99*

Lab#: D995188-003
Sample ID: Weir 1107
Sample Type: Water

Collect Date: 07-Nov-99
Collected By: Katherine Dillow

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	35.	mg/L	1.	160.2	SBB 1030	11/10/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *09-Nov-99*

Lab#: D995188-004
Sample ID: Weir 1108
Sample Type: Liquid

Collect Date: 08-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Chloromethane (Methyl Chloride)	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Vinyl chloride	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Bromomethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Chloroethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Trichlorofluoromethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,1-Dichloroethene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Acetone	< 10.	ug/L	10.	8260B	PMW 1449	11/19/99
	Methylene chloride (Dichloromethane)	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	t-Butyl alcohol	< 10.	ug/L	10.	8260B	PMW 1449	11/19/99
	trans-1,2-dichloroethene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Methyl tert-buytl ether (MTBE)	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,1-Dichloroethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	cis-1,2-Dichloroethene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	2,2-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	2-Butanone (MEK)	< 10.	ug/L	10.	8260B	PMW 1449	11/19/99
	Bromochloromethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Chloroform	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,1,1-Trichloroethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,1-Dichloropropene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Carbon tetrachloride	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Benzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,2-Dichloroethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Trichloroethene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,2-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Dibromomethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Bromodichloromethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	cis-1,3-Dichloropropene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	4-Methyl-2-pentanone (MIBK)	< 10.	ug/L	10.	8260B	PMW 1449	11/19/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *09-Nov-99*

Lab#: D995188-004
Sample ID: Weir 1108
Sample Type: Liquid

Collect Date: 08-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	trans-1,3-dichloropropene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,1,2-Trichloroethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Tetrachloroethene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,3-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	2-Hexanone	< 10.	ug/L	10.	8260B	PMW 1449	11/19/99
	Dibromochloromethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,2-Dibromoethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Chlorobenzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,1,1,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Ethyl benzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	m,p-Xylene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	o-Xylene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Styrene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Bromoform	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Isopropylbenzene (Cumene)	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Bromobenzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,1,2,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,2,3-Trichloropropane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	N-Propylbenzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	2-Chlorotoluene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	4-Chlorotoluene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,3,5-Trimethylbenzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	tert-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,2,4-Trimethylbenzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	sec-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,3-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	p-Isopropyltoluene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,4-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,2-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99

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9200 Rumsey Road
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Attn: Jessica Farrar
Project: Killcohook

Lab#: D995188-004
Sample ID: Weir 1108
Sample Type: Liquid

Collect Date: 08-Nov-99
Collected By: Katherine Dillon

Date Received: *09-Nov-99*
Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,2-Dibromo-3-chloropropane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,2,4-Trichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Hexachloro-1,3-butadiene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Naphthalene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,2,3-Trichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99

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Princeton Location:
267 Wall Street
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Phone: (609) 924-5151
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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *09-Nov-99*

Lab#: D995188-004
Sample ID: Weir 1108
Sample Type: Liquid

Collect Date: 08-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *09-Nov-99*

Lab#: D995188-004
Sample ID: Weir 1108
Sample Type: Liquid

Collect Date: 08-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	bis(2-Ethylhexyl)phthalate	3.	ug/L	2.	8270C	DMP 1837	11/20/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1014	11/17/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1014	11/17/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1014	11/17/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1014	11/17/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1014	11/17/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1014	11/17/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1014	11/17/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1014	11/17/99

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- CERTIFICATE OF ANALYSIS -

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9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *09-Nov-99*

Lab#: D995188-004
Sample ID: Weir 1108
Sample Type: Liquid

Collect Date: 08-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1014	11/17/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1014	11/17/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1014	11/17/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1014	11/17/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1014	11/17/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1014	11/17/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1014	11/17/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1014	11/17/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1014	11/17/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1014	11/17/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1014	11/17/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1014	11/17/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1014	11/17/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1014	11/17/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1324	11/10/99
TSS-aq							
	Solids, Total Suspended	50.	mg/L	1.	160.2	SBB 1030	11/10/99
TAL-6010-W							
	Aluminum	0.07	mg/L	0.00	6010B	TWH 1300	11/29/99
	Antimony	< 0.004	mg/L	0.004	6010B	TWH 1300	11/29/99
	Arsenic	< 0.004	mg/L	0.004	6010B	TWH 1300	11/29/99
	Barium	0.097	mg/L	0.001	6010B	TWH 1300	11/29/99
	Beryllium	< 0.001	mg/L	0.001	6010B	TWH 1300	11/29/99
	Cadmium	0.001	mg/L	0.001	6010B	TWH 1300	11/29/99
	Calcium	90.	mg/L	4.	6010B	TWH 1300	11/29/99
	Chromium	< 0.001	mg/L	0.001	6010B	TWH 1300	11/29/99
	Cobalt	0.004	mg/L	0.004	6010B	TWH 1300	11/29/99
	Copper	0.015	mg/L	0.001	6010B	TWH 1300	11/29/99
	Iron	0.760	mg/L	0.001	6010B	TWH 1300	11/29/99

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Attn: Jessica Farrar
Project: Killcohook

Date Received: *09-Nov-99*

Lab#: D995188-004
Sample ID: Weir 1108
Sample Type: Liquid

Collect Date: 08-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Lead	0.010	mg/L	0.004	6010B	TWH 1300	11/29/99
	Magnesium	135.5	mg/L	0.9	6010B	TWH 1300	11/29/99
	Manganese	8.097	mg/L	0.001	6010B	TWH 1300	11/29/99
	Nickel	0.022	mg/L	0.001	6010B	TWH 1300	11/29/99
	Potassium	47.2	mg/L	0.4	6010B	TWH 1300	11/29/99
	Selenium	0.042	mg/L	0.004	6010B	TWH 1300	11/29/99
	Silver	0.002	mg/L	0.001	6010B	TWH 1300	11/29/99
	Sodium	80.	mg/L	4.	6010B	TWH 1300	11/29/99
	Thallium	0.028	mg/L	0.004	6010B	TWH 1300	11/29/99
	Vanadium	< 0.004	mg/L	0.004	6010B	TWH 1300	11/29/99
	Zinc	0.091	mg/L	0.001	6010B	TWH 1300	11/29/99
HG-7470A							
	Mercury	0.0005	mg/L	0.0002	7470A	JAM 1530	11/19/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	11/22/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1537	11/22/99
	Chromium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1537	11/22/99
	Copper, dissolved	0.022	mg/L	0.001	200.7	TWH 1537	11/22/99
	Nickel, dissolved	0.020	mg/L	0.001	200.7	TWH 1537	11/22/99
	Silver, dissolved	0.001	mg/L	0.001	200.7	TWH 1537	11/22/99
	Zinc, dissolved	0.076	mg/L	0.001	200.7	TWH 1537	11/22/99

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9200 Rumsey Road
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Attn: Jessica Farrar
Project: Killcohook

Date Received: 09-Nov-99

Lab#: D995188-005
Sample ID: Mix 1108
Sample Type: Liquid

Collect Date: 08-Nov-99
Collected By: Katherine Dillon

Report Date: 02-Dec-99

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Chloromethane (Methyl Chloride)	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Vinyl chloride	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Bromomethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Chloroethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Trichlorofluoromethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,1-Dichloroethene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Acetone	< 10.	ug/L	10.	8260B	PMW 1449	11/19/99
	Methylene chloride (Dichloromethane)	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	t-Butyl alcohol	< 10.	ug/L	10.	8260B	PMW 1449	11/19/99
	trans-1,2-dichloroethene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Methyl tert-buytl ether (MTBE)	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,1-Dichloroethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	cis-1,2-Dichloroethene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	2,2-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	2-Butanone (MEK)	< 10.	ug/L	10.	8260B	PMW 1449	11/19/99
	Bromochloromethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Chloroform	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,1,1-Trichloroethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,1-Dichloropropene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Carbon tetrachloride	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Benzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,2-Dichloroethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Trichloroethene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,2-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Dibromomethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Bromodichloromethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	cis-1,3-Dichloropropene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	4-Methyl-2-pentanone (MIBK)	< 10.	ug/L	10.	8260B	PMW 1449	11/19/99

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Attn: Jessica Farrar
Project: Killcohook

Date Received: *09-Nov-99*

Lab#: D995188-005
Sample ID: Mix 1108
Sample Type: Liquid

Collect Date: 08-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	trans-1,3-dichloropropene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,1,2-Trichloroethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Tetrachloroethene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,3-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	2-Hexanone	< 10.	ug/L	10.	8260B	PMW 1449	11/19/99
	Dibromochloromethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,2-Dibromoethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Chlorobenzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,1,1,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Ethyl benzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	m,p-Xylene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	o-Xylene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Styrene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Bromoform	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Isopropylbenzene (Cumene)	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Bromobenzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,1,2,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,2,3-Trichloropropane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	N-Propylbenzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	2-Chlorotoluene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	4-Chlorotoluene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,3,5-Trimethylbenzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	tert-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,2,4-Trimethylbenzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	sec-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,3-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	p-Isopropyltoluene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,4-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,2-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99

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Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,2-Dibromo-3-chloropropane	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,2,4-Trichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Hexachloro-1,3-butadiene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	Naphthalene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
	1,2,3-Trichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1449	11/19/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99

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Princeton Location:
267 Wall Street
Princeton, NJ 08540
Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *09-Nov-99*

Lab#: D995188-005
Sample ID: Mix 1108
Sample Type: Liquid

Collect Date: 08-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99

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267 Wall Street
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Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *09-Nov-99*

Lab#: D995188-005
Sample ID: Mix 1108
Sample Type: Liquid

Collect Date: 08-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 1837	11/20/99
	bis(2-Ethylhexyl)phthalate	2.	ug/L	2.	8270C	DMP 1837	11/20/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1738	11/13/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *09-Nov-99*

Lab#: D995188-005
Sample ID: Mix 1108
Sample Type: Liquid

Collect Date: 08-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1738	11/13/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1738	11/13/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1738	11/13/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1738	11/13/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1324	11/10/99
TSS-aq							
	Solids, Total Suspended	135.	mg/L	1.	160.2	SBB 1030	11/10/99
TAL-6010-W							
	Aluminum	0.250	mg/L	0.004	6010B	TWH 1300	11/29/99
	Antimony	< 0.004	mg/L	0.004	6010B	TWH 1300	11/29/99
	Arsenic	< 0.004	mg/L	0.004	6010B	TWH 1300	11/29/99
	Barium	0.018	mg/L	0.001	6010B	TWH 1300	11/29/99
	Beryllium	< 0.001	mg/L	0.001	6010B	TWH 1300	11/29/99
	Cadmium	< 0.001	mg/L	0.001	6010B	TWH 1300	11/29/99
	Calcium	25.	mg/L	4.	6010B	TWH 1300	11/29/99
	Chromium	< 0.001	mg/L	0.001	6010B	TWH 1300	11/29/99
	Cobalt	< 0.004	mg/L	0.004	6010B	TWH 1300	11/29/99
	Copper	0.009	mg/L	0.001	6010B	TWH 1300	11/29/99
	Iron	0.379	mg/L	0.001	6010B	TWH 1300	11/29/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: *Jessica Farrar*
Project: Killcohook

Date Received: *09-Nov-99*

Lab#: D995188-005
Sample ID: Mix 1108
Sample Type: Liquid

Collect Date: 08-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Lead	0.004	mg/L	0.004	6010B	TWH 1300	11/29/99
	Magnesium	43.3	mg/L	0.9	6010B	TWH 1300	11/29/99
	Manganese	0.136	mg/L	0.001	6010B	TWH 1300	11/29/99
	Nickel	0.003	mg/L	0.001	6010B	TWH 1300	11/29/99
	Potassium	15.2	mg/L	0.4	6010B	TWH 1300	11/29/99
	Selenium	< 0.004	mg/L	0.004	6010B	TWH 1300	11/29/99
	Silver	< 0.001	mg/L	0.001	6010B	TWH 1300	11/29/99
	Sodium	282.7	mg/L	0.4	6010B	TWH 1300	11/29/99
	Thallium	0.008	mg/L	0.004	6010B	TWH 1300	11/29/99
	Vanadium	0.004	mg/L	0.004	6010B	TWH 1300	11/29/99
	Zinc	0.034	mg/L	0.001	6010B	TWH 1300	11/29/99
HG-7470A							
	Mercury	0.0006	mg/L	0.0002	7470A	JAM 1530	11/19/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	11/22/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1537	11/22/99
	Chromium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1537	11/22/99
	Copper, dissolved	0.013	mg/L	0.001	200.7	TWH 1537	11/22/99
	Nickel, dissolved	0.003	mg/L	0.001	200.7	TWH 1537	11/22/99
	Silver, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1537	11/22/99
	Zinc, dissolved	0.057	mg/L	0.001	200.7	TWH 1537	11/22/99

Reviewed and Approved by:

Laurel A. Schwindt

Laurel A. Schwindt
Laboratory Manager

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BLUE MARSH LABORATORIES, INC.
1605 Benjamin Franklin Highway
Douglassville, PA 19518
Phone: (610) 327-8196 Fax: (610) 327-6864

CHAIN OF CUSTODY RECORD

Send Report to: Versar, Inc.
9200 Rumsey Rd.
Columbia, MD 21045
Contact: Jessica Farrar
Phone#: 410-964-9200
Fax#: 410-964-5156

BML LOT NO: 9951188
PROJECT NO:
P.O. NO:
PROJECT: Killcohook
* TURNAROUND TIME REQUIRED: 24 HR ☐ 48 HR ☐ 72 HR ☐ 1 WEEK ☐ 2 WEEKS ☐

BML USE LAB ID NO.	DATE SAMPLED	TIME SAMPLED	COMP	GRAB	SAMPLE DESCRIPTION / CLIENT ID NO.	SAMPLE TYPE	Number of Containers: TOTAL	H_2SO_4	HCl	HNO_3	NaOH	Sterile (Bact)	MeOH - NJ - VOC	MeOH - PA - VOC	SB - PA - VOC	Unpreserved	Other 735	ANALYSIS NEEDED: TCL TAL/NJ Metals Pkg TAL/NJ Pkg, 735	Volatiles * 8260	PCBs 8081	Pesticides	Cyanide	Remarks / Additional Analysis:
01	11/5/99		X		Weir 1105												X						
02	11/6/99		X		Weir 1106												X						
03	11/7/99		X		Weir 1107												X						
04	11/8/99		X		Weir 1108												X	X	X	X	X	X	X	
05	11/8/99			X	Mix 1108												X	X	X	X	X	X	X	

Sampled by: Katherine Dillow
Date: 11/8/99
Relinquished by: (Signature) Katherine Dillow
Date/Time: 11/8/99 14:00
Received by:
Relinquished by: (Signature)
Date/Time:
Received for Laboratory by:

FAX INFO:
Date/Time Faxed: faxed 12/6
TAT Met?: Yes ☐ No ☐

REPORT FORMAT (Check One) ***
Standard (Data ☐ — Results Only ☐)
NJ Deliverables (Disk ☐ — Reduced ☐)
CLP Format ☐
DW Forms ☐ PWS ID # _____

SAMPLE TYPE:
HZ Hazardous SW Surface Water
SO Soil WW Waste Water
DE Debris GW Ground Water
SL Sludge DW Drinking Water
SD Solid LQ Liquid

COOLER TEMP _____ °C

PERMIT TYPE:
☐ MIPP
☐ NPDES

PA Fuel Type - Use Letter Code
A. Leaded Gas / Aviation-Jet Fuel
B. Unleaded Gas
C. Kerosene / Fuel #1
D. Diesel Fuel / Fuel Oil #2
E. Fuel Oil #4, #5, #6 / Lubricating Oil
F. Used Motor Oil

* Surcharge for 24 HR, 48 HR, 72 HR, and 1 week turnaround times. ** Specify method required. *** Surcharges may apply.

BML7a 10/

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267 Wall Street
Princeton, NJ 08540
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Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *12-Nov-99*

Lab#: D995284-001
Sample ID: Weir 1111
Sample Type: Water

Collect Date: 11-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	Chloromethane (Methyl Chloride)	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	Vinyl chloride	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	Bromomethane	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	Chloroethane	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	Trichlorofluoromethane	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	1,1-Dichloroethene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	Acetone	< 10.	ug/L	10.	8260B	MJM 0440	11/24/99
	Methylene chloride (Dichloromethane)	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	t-Butyl alcohol	< 10.	ug/L	10.	8260B	MJM 0440	11/24/99
	trans-1,2-dichloroethene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	Methyl tert-buytl ether (MTBE)	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	1,1-Dichloroethane	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	cis-1,2-Dichloroethene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	2,2-Dichloropropane	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	2-Butanone (MEK)	< 10.	ug/L	10.	8260B	MJM 0440	11/24/99
	Bromochloromethane	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	Chloroform	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	1,1,1-Trichloroethane	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	1,1-Dichloropropene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	Carbon tetrachloride	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	Benzene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	1,2-Dichloroethane	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	Trichloroethene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	1,2-Dichloropropane	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	Dibromomethane	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	Bromodichloromethane	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	cis-1,3-Dichloropropene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	4-Methyl-2-pentanone (MIBK)	< 10.	ug/L	10.	8260B	MJM 0440	11/24/99

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267 Wall Street
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Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D995284-001
Sample ID: Weir 1111
Sample Type: Water
Collect Date: 11-Nov-99
Collected By: Katherine Dillon

Date Received: *12-Nov-99*
Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	trans-1,3-dichloropropene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	1,1,2-Trichloroethane	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	Tetrachloroethene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	1,3-Dichloropropane	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	2-Hexanone	< 10.	ug/L	10.	8260B	MJM 0440	11/24/99
	Dibromochloromethane	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	1,2-Dibromoethane	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	Chlorobenzene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	1,1,1,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	Ethyl benzene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	m,p-Xylene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	o-Xylene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	Styrene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	Bromoform	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	Isopropylbenzene (Cumene)	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	Bromobenzene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	1,1,2,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	1,2,3-Trichloropropane	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	N-Propylbenzene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	2-Chlorotoluene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	4-Chlorotoluene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	1,3,5-Trimethylbenzene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	tert-Butylbenzene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	1,2,4-Trimethylbenzene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	sec-Butylbenzene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	1,3-Dichlorobenzene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	p-Isopropyltoluene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	1,4-Dichlorobenzene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	1,2-Dichlorobenzene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: *Killcohook*

Date Received: *12-Nov-99*

Lab#: D995284-001
Sample ID: Weir 1111
Sample Type: Water

Collect Date: 11-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	1,2-Dibromo-3-chloropropane	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	1,2,4-Trichlorobenzene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	Hexachloro-1,3-butadiene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	Naphthalene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
	1,2,3-Trichlorobenzene	< 1.	ug/L	1.	8260B	MJM 0440	11/24/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *12-Nov-99*

Lab#: D995284-001
Sample ID: Weir 1111
Sample Type: Water

Collect Date: 11-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *12-Nov-99*

Lab#: *D995284-001*
Sample ID: Weir 1111
Sample Type: Water

Collect Date: 11-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	bis(2-Ethylhexyl)phthalate	6.	ug/L	2.	8270C	DMP 1943	11/20/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1251	11/30/99

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Attn: Jessica Farrar
Project: Killcohook

Date Received: *12-Nov-99*

Lab#: D995284-001
Sample ID: Weir 1111
Sample Type: Water

Collect Date: 11-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1251	11/30/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1251	11/30/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1341	11/15/99
TSS-aq							
	Solids, Total Suspended	6.	mg/L	1.	160.2	SBB 1530	11/15/99
TAL-6010-W							
	Aluminum	0.42	mg/L	0.02	6010B	TWH 1800	11/30/99
	Antimony	< 0.02	mg/L	0.02	6010B	TWH 1800	11/30/99
	Arsenic	< 0.02	mg/L	0.02	6010B	TWH 1800	11/30/99
	Barium	0.648	mg/L	0.005	6010B	TWH 1800	11/30/99
	Beryllium	< 0.005	mg/L	0.005	6010B	TWH 1800	11/30/99
	Cadmium	0.007	mg/L	0.005	6010B	TWH 1800	11/30/99
	Calcium	396.	mg/L	2.	6010B	TWH 1800	11/30/99
	Chromium	< 0.005	mg/L	0.005	6010B	TWH 1800	11/30/99
	Cobalt	0.03	mg/L	0.02	6010B	TWH 1800	11/30/99
	Copper	0.101	mg/L	0.005	6010B	TWH 1800	11/30/99
	Iron	6.308	mg/L	0.005	6010B	TWH 1800	11/30/99

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Lab#: D995284-001
Sample ID: Weir 1111
Sample Type: Water
Collect Date: 11-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Lead	0.05	mg/L	0.02	6010B	TWH 1800	11/30/99
	Magnesium	607.1	mg/L	0.5	6010B	TWH 1800	11/30/99
	Manganese	48.4	mg/L	0.5	6010B	TWH 1800	11/30/99
	Nickel	0.108	mg/L	0.005	6010B	TWH 1800	11/30/99
	Potassium	175.	mg/L	2.	6010B	TWH 1800	11/30/99
	Selenium	0.18	mg/L	0.02	6010B	TWH 1800	11/30/99
	Silver	0.008	mg/L	0.005	6010B	TWH 1800	11/30/99
	Sodium	3046.	mg/L	2.	6010B	TWH 1800	11/30/99
	Thallium	0.18	mg/L	0.02	6010B	TWH 1800	11/30/99
	Vanadium	< 0.02	mg/L	0.02	6010B	TWH 1800	11/30/99
	Zinc	0.579	mg/L	0.005	6010B	TWH 1800	11/30/99
HG-7470A							
	Mercury	< 0.0002	mg/L	0.0002	7470A	JAM 1630	11/29/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	11/22/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1723	11/30/99
	Chromium, dissolved	0.001	mg/L	0.001	200.7	TWH 1723	11/30/99
	Copper, dissolved	0.007	mg/L	0.001	200.7	TWH 1723	11/30/99
	Nickel, dissolved	0.018	mg/L	0.001	200.7	TWH 1723	11/30/99
	Silver, dissolved	0.001	mg/L	0.001	200.7	TWH 1723	11/30/99
	Zinc, dissolved	0.125	mg/L	0.001	200.7	TWH 1723	11/30/99

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Project: Killcohook

Date Received: *12-Nov-99*

Lab#: D995284-002
Sample ID: Weir 1110
Sample Type: Water

Collect Date: 10-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	45.	mg/L	1.	160.2	SBB 1530	11/15/99

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267 Wall Street
Princeton, NJ 08540
Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar

Project: Killcohook

Date Received: *12-Nov-99*

Lab#: *D995284-003*

Sample ID: Weir 1109

Sample Type: Water

Collect Date: 09-Nov-99

Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	37.	mg/L	1.	160.2	SBB 1530	11/15/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *12-Nov-99*

Lab#: D995284-004
Sample ID: Mix 1111
Sample Type: Water

Collect Date: 11-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Chloromethane (Methyl Chloride)	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Vinyl chloride	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Bromomethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Chloroethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Trichlorofluoromethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,1-Dichloroethene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Acetone	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Methylene chloride (Dichloromethane)	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	t-Butyl alcohol	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	trans-1,2-dichloroethene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Methyl tert-buytl ether (MTBE)	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,1-Dichloroethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	cis-1,2-Dichloroethene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	2,2-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	2-Butanone (MEK)	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Bromochloromethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Chloroform	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,1,1-Trichloroethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,1-Dichloropropene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Carbon tetrachloride	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Benzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,2-Dichloroethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Trichloroethene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,2-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Dibromomethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Bromodichloromethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	cis-1,3-Dichloropropene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	4-Methyl-2-pentanone (MIBK)	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *12-Nov-99*

Lab#: D995284-004
Sample ID: Mix 1111
Sample Type: Water

Collect Date: 11-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	trans-1,3-dichloropropene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,1,2-Trichloroethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Tetrachloroethene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,3-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	2-Hexanone	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Dibromochloromethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,2-Dibromoethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Chlorobenzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,1,1,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Ethyl benzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	m,p-Xylene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	o-Xylene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Styrene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Bromoform	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Isopropylbenzene (Cumene)	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Bromobenzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,1,2,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,2,3-Trichloropropane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	N-Propylbenzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	2-Chlorotoluene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	4-Chlorotoluene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,3,5-Trimethylbenzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	tert-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,2,4-Trimethylbenzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	sec-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,3-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	p-Isopropyltoluene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,4-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,2-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *12-Nov-99*

Lab#: D995284-004
Sample ID: Mix 1111
Sample Type: Water

Collect Date: 11-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,2-Dibromo-3-chloropropane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,2,4-Trichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Hexachloro-1,3-butadiene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Naphthalene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,2,3-Trichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *12-Nov-99*

Lab#: D995284-004
Sample ID: Mix 1111
Sample Type: Water

Collect Date: 11-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *12-Nov-99*

Lab#: D995284-004
Sample ID: Mix 1111
Sample Type: Water

Collect Date: 11-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	bis(2-Ethylhexyl)phthalate	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1251	11/30/99

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Attn: Jessica Farrar
Project: Killcohook

Date Received: *12-Nov-99*

Lab#: D995284-004
Sample ID: Mix 1111
Sample Type: Water

Collect Date: 11-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1251	11/30/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1251	11/30/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1341	11/15/99
TSS-aq							
	Solids, Total Suspended	462.	mg/L	1.	160.2	SBB 1530	11/15/99
TAL-6010-W							
	Aluminum	7.43	mg/L	0.02	6010B	TWH 1800	11/30/99
	Antimony	< 0.02	mg/L	0.02	6010B	TWH 1800	11/30/99
	Arsenic	< 0.02	mg/L	0.02	6010B	TWH 1800	11/30/99
	Barium	0.112	mg/L	0.005	6010B	TWH 1800	11/30/99
	Beryllium	< 0.005	mg/L	0.005	6010B	TWH 1800	11/30/99
	Cadmium	< 0.005	mg/L	0.005	6010B	TWH 1800	11/30/99
	Calcium	142.	mg/L	2.	6010B	TWH 1800	11/30/99
	Chromium	0.020	mg/L	0.005	6010B	TWH 1800	11/30/99
	Cobalt	< 0.02	mg/L	0.02	6010B	TWH 1800	11/30/99
	Copper	0.047	mg/L	0.005	6010B	TWH 1800	11/30/99
	Iron	10.427	mg/L	0.005	6010B	TWH 1800	11/30/99

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Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *12-Nov-99*

Lab#: D995284-004
Sample ID: Mix 1111
Sample Type: Water

Collect Date: 11-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Lead	0.03	mg/L	0.02	6010B	TWH 1800	11/30/99
	Magnesium	217.4	mg/L	0.5	6010B	TWH 1800	11/30/99
	Manganese	0.336	mg/L	0.005	6010B	TWH 1800	11/30/99
	Nickel	0.014	mg/L	0.005	6010B	TWH 1800	11/30/99
	Potassium	76.	mg/L	2.	6010B	TWH 1800	11/30/99
	Selenium	< 0.02	mg/L	0.02	6010B	TWH 1800	11/30/99
	Silver	< 0.005	mg/L	0.005	6010B	TWH 1800	11/30/99
	Sodium	1662.	mg/L	20.	6010B	TWH 1800	11/30/99
	Thallium	< 0.02	mg/L	0.02	6010B	TWH 1800	11/30/99
	Vanadium	0.04	mg/L	0.02	6010B	TWH 1800	11/30/99
	Zinc	0.146	mg/L	0.005	6010B	TWH 1800	11/30/99
HG-7470A							
	Mercury	0.0004	mg/L	0.0002	7470A	JAM 1630	11/29/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	11/22/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1723	11/30/99
	Chromium, dissolved	0.002	mg/L	0.001	200.7	TWH 1723	11/30/99
	Copper, dissolved	0.009	mg/L	0.001	200.7	TWH 1723	11/30/99
	Nickel, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1723	11/30/99
	Silver, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1723	11/30/99
	Zinc, dissolved	0.029	mg/L	0.001	200.7	TWH 1723	11/30/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *12-Nov-99*

Lab#: D995284-005
Sample ID: BG1111
Sample Type: Water

Collect Date: 11-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Chloromethane (Methyl Chloride)	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Vinyl chloride	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Bromomethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Chloroethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Trichlorofluoromethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,1-Dichloroethene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Acetone	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Methylene chloride (Dichloromethane)	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	t-Butyl alcohol	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	trans-1,2-dichloroethene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Methyl tert-buytl ether (MTBE)	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,1-Dichloroethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	cis-1,2-Dichloroethene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	2,2-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	2-Butanone (MEK)	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Bromochloromethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Chloroform	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,1,1-Trichloroethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,1-Dichloropropene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Carbon tetrachloride	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Benzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,2-Dichloroethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Trichloroethene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,2-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Dibromomethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Bromodichloromethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	cis-1,3-Dichloropropene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	4-Methyl-2-pentanone (MIBK)	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *12-Nov-99*

Lab#: D995284-005
Sample ID: BG1111
Sample Type: Water

Collect Date: 11-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	trans-1,3-dichloropropene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,1,2-Trichloroethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Tetrachloroethene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,3-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	2-Hexanone	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Dibromochloromethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,2-Dibromoethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Chlorobenzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,1,1,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Ethyl benzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	m,p-Xylene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	o-Xylene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Styrene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Bromoform	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Isopropylbenzene (Cumene)	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Bromobenzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,1,2,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,2,3-Trichloropropane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	N-Propylbenzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	2-Chlorotoluene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	4-Chlorotoluene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,3,5-Trimethylbenzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	tert-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,2,4-Trimethylbenzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	sec-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,3-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	p-Isopropyltoluene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,4-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,2-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *12-Nov-99*

Lab#: D995284-005
Sample ID: BG1111
Sample Type: Water

Collect Date: 11-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,2-Dibromo-3-chloropropane	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,2,4-Trichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Hexachloro-1,3-butadiene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	Naphthalene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
	1,2,3-Trichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1014	11/30/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99

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9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *12-Nov-99*

Lab#: D995284-005
Sample ID: BG1111
Sample Type: Water

Collect Date: 11-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99

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Attn: Jessica Farrar
Project: Killcohook

Lab#: D995284-005
Sample ID: BG1111
Sample Type: Water
Collect Date: 11-Nov-99
Collected By: Katherine Dillon

Date Received: *12-Nov-99*
Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 1943	11/20/99
	bis(2-Ethylhexyl)phthalate	2.	ug/L	2.	8270C	DMP 1943	11/20/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1251	11/30/99

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PA DEP Cert #06-409

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Princeton Location:
267 Wall Street
Princeton, NJ 08540
Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *12-Nov-99*

Lab#: D995284-005
Sample ID: BG1111
Sample Type: Water

Collect Date: 11-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1251	11/30/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1251	11/30/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1251	11/30/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1251	11/30/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1341	11/15/99
TSS-aq							
	Solids, Total Suspended	185.	mg/L	1.	160.2	SBB 1530	11/15/99
TAL-6010-W							
	Aluminum	1.73	mg/L	0.02	6010B	TWH 1800	11/30/99
	Antimony	< 0.02	mg/L	0.02	6010B	TWH 1800	11/30/99
	Arsenic	< 0.02	mg/L	0.02	6010B	TWH 1800	11/30/99
	Barium	0.080	mg/L	0.005	6010B	TWH 1800	11/30/99
	Beryllium	< 0.005	mg/L	0.005	6010B	TWH 1800	11/30/99
	Cadmium	< 0.005	mg/L	0.005	6010B	TWH 1800	11/30/99
	Calcium	151.	mg/L	2.	6010B	TWH 1800	11/30/99
	Chromium	< 0.005	mg/L	0.005	6010B	TWH 1800	11/30/99
	Cobalt	< 0.02	mg/L	0.02	6010B	TWH 1800	11/30/99
	Copper	0.039	mg/L	0.005	6010B	TWH 1800	11/30/99
	Iron	2.151	mg/L	0.005	6010B	TWH 1800	11/30/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *12-Nov-99*

Lab#: D995284-005
Sample ID: BG1111
Sample Type: Water

Collect Date: 11-Nov-99
Collected By: Katherine Dillon

Report Date: *02-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Lead	< 0.02	mg/L	0.02	6010B	TWH 1800	11/30/99
	Magnesium	132.2	mg/L	0.5	6010B	TWH 1800	11/30/99
	Manganese	0.039	mg/L	0.005	6010B	TWH 1800	11/30/99
	Nickel	0.007	mg/L	0.005	6010B	TWH 1800	11/30/99
	Potassium	50.	mg/L	2.	6010B	TWH 1800	11/30/99
	Selenium	< 0.02	mg/L	0.02	6010B	TWH 1800	11/30/99
	Silver	< 0.005	mg/L	0.005	6010B	TWH 1800	11/30/99
	Sodium	774.	mg/L	2.	6010B	TWH 1800	11/30/99
	Thallium	0.04	mg/L	0.02	6010B	TWH 1800	11/30/99
	Vanadium	0.02	mg/L	0.02	6010B	TWH 1800	11/30/99
	Zinc	0.077	mg/L	0.005	6010B	TWH 1800	11/30/99
HG-7470A							
	Mercury	0.0003	mg/L	0.0002	7470A	JAM 1630	11/29/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	11/22/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1723	11/30/99
	Chromium, dissolved	0.001	mg/L	0.001	200.7	TWH 1723	11/30/99
	Copper, dissolved	0.015	mg/L	0.001	200.7	TWH 1723	11/30/99
	Nickel, dissolved	0.001	mg/L	0.001	200.7	TWH 1723	11/30/99
	Silver, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1723	11/30/99
	Zinc, dissolved	0.015	mg/L	0.001	200.7	TWH 1723	11/30/99

Reviewed and Approved by:

Laurel A Schwindt

Laurel A. Schwindt
Laboratory Manager

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BLUE MARSH LABORATORIES, INC.
1605 Benjamin Franklin Highway
Douglassville, PA 19518
Phone: (610) 327-8196 Fax: (610) 327-6864

CHAIN OF CUSTODY RECORD

9200 RUMSEY RD
COLUMBIA, MD 21045
Contact: JESSICA FARRAR
Phone#: 410-964-9200
Fax#: 410-964-5156

BML LOT NO: 935284
PROJECT NO: 4033-026
P.O. NO:

PROJECT: Killcohook

*TURNAROUND TIME REQUIRED: 24 HR ☐ 48 HR ☐ 72 HR ☐ 1 WEEK ☐ 2 WEEKS ☐

PA Fuel Type - Use Letter Code
A. Leaded Gas / Aviation-Jet Fuel
B. Unleaded Gas
C. Kerosene / Fuel #1
D. Diesel Fuel / Fuel Oil #2
E. Fuel Oil #4, #5, #6 / Lubricating Oil
F. Used Motor Oil

BML USE LAB ID NO.	DATE SAMPLED	TIME SAMPLED	COMP	GRAB	SAMPLE DESCRIPTION / CLIENT ID NO.	SAMPLE TYPE	TOTAL	H_2SO_4	HCl	HNO_3	NaOH	Sterile (Bact)	MeOH - NJ - VOC	MeOH - PA - VOC	SB - PA - VOC	Unpreserved	Other	TCLP	Metals	Volatiles **	TSS	Cyanide	Pesticides	SVOCs	Remarks / Additional Analysis:
01	11/11/99		X		Weir1111		8											X	X	X	X	X	X	X	
02	11/10/99		X		Weir1110		1														X				
03	11/09/99		X		Weir1109		1														X				
04	11/11/99			X	Mix1111		8											X	X	X	X	X	X	X	
05	11/11/99			X	BG1111		8											X	X	X	X	X	X	X	

Number of Containers; ANALYSIS NEEDED: LAMORGANICS, DISSOLVED; LAMORGANICS, TOTAL; Volatiles ** 8260; TSS; Cyanide; Pesticides; SVOCs

Sampled by: Katherine Dillow
Date: 11/11/99
FAX INFO:
Date/Time Faxed: faxed 12/6
TAT Met?: Yes ☐ No ☐
COOLER TEMP ____ °C

Relinquished by: (Signature) Katherine Dillow
Date/Time: 11/11/99 14:00
Received by:

Relinquished by: (Signature)
Date/Time: 11/12/99
Received for Laboratory by: Kenneth A. Moch

REPORT FORMAT (Check One) ***
Standard (Data ☐ — Results Only ☐)
NJ Deliverables (Disk ☐ — Reduced ☐)
CLP Format ☐
DW Forms ☐ PWS ID # ____

SAMPLE TYPE:
HZ Hazardous, SO Soil, DE Debris, SL Sludge, SD Solid, SW Surface Water, WW Waste Water, GW Ground Water, DW Drinking Water, LQ Liquid

PERMIT TYPE:
☐ MIPP
☐ NPDES

BML7a 10/98

* Surcharge for 24 HR, 48 HR, 72 HR, and 1 week turnaround times. ** Specify method required. *** Surcharges may apply.

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Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *16-Nov-99*

Lab#: D995366-001
Sample ID: Weir 1115
Sample Type: Water
Collect Date: 15-Nov-99
Collected By: Katherine Dillow
Report Date: *08-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Chloromethane (Methyl Chloride)	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Vinyl chloride	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Bromomethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Chloroethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Trichlorofluoromethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,1-Dichloroethene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Acetone	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Methylene chloride (Dichloromethane)	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	t-Butyl alcohol	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	trans-1,2-dichloroethene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Methyl tert-buytl ether (MTBE)	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,1-Dichloroethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	cis-1,2-Dichloroethene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	2,2-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	2-Butanone (MEK)	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Bromochloromethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Chloroform	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,1,1-Trichloroethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,1-Dichloropropene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Carbon tetrachloride	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Benzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,2-Dichloroethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Trichloroethene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,2-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Dibromomethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Bromodichloromethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	cis-1,3-Dichloropropene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	4-Methyl-2-pentanone (MIBK)	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *16-Nov-99*

Lab#: D995366-001
Sample ID: Weir 1115
Sample Type: Water

Collect Date: 15-Nov-99
Collected By: Katherine Dillow

Report Date: *08-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	trans-1,3-dichloropropene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,1,2-Trichloroethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Tetrachloroethene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,3-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	2-Hexanone	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Dibromochloromethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,2-Dibromoethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Chlorobenzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,1,1,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Ethyl benzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	m,p-Xylene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	o-Xylene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Styrene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Bromoform	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Isopropylbenzene (Cumene)	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Bromobenzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,1,2,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,2,3-Trichloropropane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	N-Propylbenzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	2-Chlorotoluene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	4-Chlorotoluene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,3,5-Trimethylbenzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	tert-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,2,4-Trimethylbenzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	sec-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,3-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	p-Isopropyltoluene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,4-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,2-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99

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9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *16-Nov-99*

Lab#: D995366-001
Sample ID: Weir 1115
Sample Type: Water

Collect Date: 15-Nov-99
Collected By: Katherine Dillow

Report Date: *08-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,2-Dibromo-3-chloropropane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,2,4-Trichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Hexachloro-1,3-butadiene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Naphthalene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,2,3-Trichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Benzoic acid	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Aniline	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Naphthalene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Phenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Isophorone	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Pyridine	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99

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Client: Versar, Inc.
9200 Rumsey Road
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Attn: Jessica Farrar
Project: Killcohook

Date Received: *16-Nov-99*

Lab#: D995366-001
Sample ID: Weir 1115
Sample Type: Water

Collect Date: 15-Nov-99
Collected By: Katherine Dillow

Report Date: *08-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Chloroaniline	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Acenaphthene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Fluorene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Azobenzene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99

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Princeton Location:
267 Wall Street
Princeton, NJ 08540
Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D995366-001
Sample ID: Weir 1115
Sample Type: Water
Collect Date: 15-Nov-99
Collected By: Katherine Dillow

Date Received: *16-Nov-99*
Report Date: *08-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Benzidine	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Phenanthrene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Anthracene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Carbazole	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Fluoranthene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Pyrene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Chrysene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	bis(2-Ethylhexyl)phthalate	2.	ug/L	2.	8270C	dmp 1718	11/19/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1519	12/1/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1519	12/1/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1519	12/1/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1519	12/1/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1519	12/1/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1519	12/1/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1519	12/1/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1519	12/1/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D995366-001
Sample ID: Weir 1115
Sample Type: Water
Collect Date: 15-Nov-99
Collected By: Katherine Dillow

Date Received: *16-Nov-99*
Report Date: *08-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1519	12/1/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1519	12/1/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1519	12/1/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1519	12/1/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1519	12/1/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1519	12/1/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1519	12/1/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1519	12/1/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1519	12/1/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1519	12/1/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1519	12/1/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1519	12/1/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1519	12/1/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1519	12/1/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1258	12/1/99
TSS-aq							
	Solids, Total Suspended	80.	mg/L	1.	160.2	SBB 1500	11/17/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	*SM3113B*	*SUB 0000*	*12/3/99*
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1723	11/30/99
	Chromium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1723	11/30/99
	Copper, dissolved	0.018	mg/L	0.001	200.7	TWH 1723	11/30/99
	Nickel, dissolved	0.016	mg/L	0.001	200.7	TWH 1723	11/30/99
	Silver, dissolved	0.001	mg/L	0.001	200.7	TWH 1723	11/30/99
	Zinc, dissolved	0.057	mg/L	0.001	200.7	TWH 1723	11/30/99
HG-245.1							
	Mercury	< 0.0002	mg/L	0.0002	245.1	JAM 1500	12/1/99

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Attn: Jessica Farrar
Project: Killcohook

Date Received: *16-Nov-99*

Lab#: D995366-001
Sample ID: Weir 1115
Sample Type: Water
Collect Date: 15-Nov-99
Collected By: Katherine Dillow

Report Date: *08-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TAL-200.7							
	Aluminum	0.094	mg/L	0.004	200.7	TWH 1800	11/30/99
	Antimony	< 0.004	mg/L	0.004	200.7	TWH 1800	11/30/99
	Arsenic	< 0.004	mg/L	0.004	200.7	TWH 1800	11/30/99
	Barium	0.122	mg/L	0.001	200.7	TWH 1800	11/30/99
	Beryllium	< 0.001	mg/L	0.001	200.7	TWH 1800	11/30/99
	Cadmium	< 0.001	mg/L	0.001	200.7	TWH 1800	11/30/99
	Calcium	81.1	mg/L	0.4	200.7	TWH 1800	11/30/99
	Chromium	< 0.001	mg/L	0.001	200.7	TWH 1800	11/30/99
	Cobalt	0.005	mg/L	0.001	200.7	TWH 1800	11/30/99
	Copper	0.015	mg/L	0.001	200.7	TWH 1800	11/30/99
	Iron	1.139	mg/L	0.001	200.7	TWH 1800	11/30/99
	Lead	0.009	mg/L	0.004	200.7	TWH 1800	11/30/99
	Magnesium	103.2	mg/L	0.1	200.7	TWH 1800	11/30/99
	Manganese	8.2	mg/L	0.1	200.7	TWH 1800	11/30/99
	Nickel	0.018	mg/L	0.001	200.7	TWH 1800	11/30/99
	Potassium	32.6	mg/L	0.4	200.7	TWH 1800	11/30/99
	Selenium	0.027	mg/L	0.004	200.7	TWH 1800	11/30/99
	Silver	0.002	mg/L	0.001	200.7	TWH 1800	11/30/99
	Sodium	521.2	mg/L	0.4	200.7	TWH 1800	11/30/99
	Thallium	0.020	mg/L	0.004	200.7	TWH 1800	11/30/99
	Vanadium	< 0.001	mg/L	0.001	200.7	TWH 1800	11/30/99
	Zinc	0.081	mg/L	0.001	200.7	TWH 1800	11/30/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *16-Nov-99*

Lab#: D995366-002
Sample ID: Mix 1115
Sample Type: Water

Collect Date: 15-Nov-99
Collected By: Katherine Dillow

Report Date: *08-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Chloromethane (Methyl Chloride)	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Vinyl chloride	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Bromomethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Chloroethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Trichlorofluoromethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,1-Dichloroethene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Acetone	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Methylene chloride (Dichloromethane)	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	t-Butyl alcohol	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	trans-1,2-dichloroethene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Methyl tert-butyl ether (MTBE)	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,1-Dichloroethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	cis-1,2-Dichloroethene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	2,2-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	2-Butanone (MEK)	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Bromochloromethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Chloroform	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,1,1-Trichloroethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,1-Dichloropropene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Carbon tetrachloride	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Benzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,2-Dichloroethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Trichloroethene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,2-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Dibromomethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Bromodichloromethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	cis-1,3-Dichloropropene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	4-Methyl-2-pentanone (MIBK)	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *16-Nov-99*

Lab#: D995366-002
Sample ID: Mix 1115
Sample Type: Water

Collect Date: 15-Nov-99
Collected By: Katherine Dillow

Report Date: *08-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	trans-1,3-dichloropropene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,1,2-Trichloroethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Tetrachloroethene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,3-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	2-Hexanone	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Dibromochloromethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,2-Dibromoethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Chlorobenzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,1,1,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Ethyl benzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	m,p-Xylene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	o-Xylene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Styrene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Bromoform	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Isopropylbenzene (Cumene)	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Bromobenzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,1,2,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,2,3-Trichloropropane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	N-Propylbenzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	2-Chlorotoluene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	4-Chlorotoluene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,3,5-Trimethylbenzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	tert-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,2,4-Trimethylbenzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	sec-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,3-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	p-Isopropyltoluene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,4-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,2-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99

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Lab#: D995366-002
Sample ID: Mix 1115
Sample Type: Water
Collect Date: 15-Nov-99
Collected By: Katherine Dillow

Date Received: *16-Nov-99*
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Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,2-Dibromo-3-chloropropane	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,2,4-Trichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Hexachloro-1,3-butadiene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	Naphthalene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
	1,2,3-Trichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1104	11/27/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Benzoic acid	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Aniline	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Naphthalene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Phenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Isophorone	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Pyridine	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99

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PA DEP Cert #06-409

Blue Marsh
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Princeton Location:
267 Wall Street
Princeton, NJ 08540
Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *16-Nov-99*

Lab#: D995366-002
Sample ID: Mix 1115
Sample Type: Water

Collect Date: 15-Nov-99
Collected By: Katherine Dillow

Report Date: *08-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Chloroaniline	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Acenaphthene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Fluorene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Azobenzene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99

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Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *16-Nov-99*

Lab#: D995366-002
Sample ID: Mix 1115
Sample Type: Water

Collect Date: 15-Nov-99
Collected By: Katherine Dillow

Report Date: *08-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Benzidine	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Phenanthrene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Anthracene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Carbazole	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Fluoranthene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Pyrene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Chrysene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
	bis(2-Ethylhexyl)phthalate	< 2.	ug/L	2.	8270C	dmp 1718	11/19/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1519	12/1/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1519	12/1/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1519	12/1/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1519	12/1/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1519	12/1/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1519	12/1/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1519	12/1/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1519	12/1/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *16-Nov-99*

Lab#: D995366-002
Sample ID: Mix 1115
Sample Type: Water

Collect Date: 15-Nov-99
Collected By: Katherine Dillow

Report Date: *08-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1519	12/1/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1519	12/1/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1519	12/1/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1519	12/1/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1519	12/1/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1519	12/1/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1519	12/1/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1519	12/1/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1519	12/1/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1519	12/1/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1519	12/1/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1519	12/1/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1519	12/1/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1519	12/1/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1258	12/1/99
TSS-aq							
	Solids, Total Suspended	315.	mg/L	1.	160.2	SBB 1500	11/17/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	12/3/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1723	11/30/99
	Chromium, dissolved	0.001	mg/L	0.001	200.7	TWH 1723	11/30/99
	Copper, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1723	11/30/99
	Nickel, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1723	11/30/99
	Silver, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1723	11/30/99
	Zinc, dissolved	0.026	mg/L	0.001	200.7	TWH 1723	11/30/99
TAL-200.7							
	Aluminum	2.483	mg/L	0.004	200.7	TWH 1800	11/30/99
	Antimony	< 0.004	mg/L	0.004	200.7	TWH 1800	11/30/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *16-Nov-99*

Lab#: D995366-002
Sample ID: Mix 1115
Sample Type: Water

Collect Date: 15-Nov-99
Collected By: Katherine Dillow

Report Date: *08-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Arsenic	< 0.004	mg/L	0.004	200.7	TWH 1800	11/30/99
	Barium	0.024	mg/L	0.001	200.7	TWH 1800	11/30/99
	Beryllium	< 0.001	mg/L	0.001	200.7	TWH 1800	11/30/99
	Cadmium	< 0.001	mg/L	0.001	200.7	TWH 1800	11/30/99
	Calcium	30.3	mg/L	0.4	200.7	TWH 1800	11/30/99
	Chromium	0.060	mg/L	0.001	200.7	TWH 1800	11/30/99
	Cobalt	< 0.001	mg/L	0.001	200.7	TWH 1800	11/30/99
	Copper	0.013	mg/L	0.001	200.7	TWH 1800	11/30/99
	Iron	3.982	mg/L	0.001	200.7	TWH 1800	11/30/99
	Lead	0.007	mg/L	0.004	200.7	TWH 1800	11/30/99
	Magnesium	32.7	mg/L	0.1	200.7	TWH 1800	11/30/99
	Manganese	0.174	mg/L	0.001	200.7	TWH 1800	11/30/99
	Nickel	0.005	mg/L	0.001	200.7	TWH 1800	11/30/99
	Potassium	12.4	mg/L	0.4	200.7	TWH 1800	11/30/99
	Selenium	0.005	mg/L	0.004	200.7	TWH 1800	11/30/99
	Silver	< 0.001	mg/L	0.001	200.7	TWH 1800	11/30/99
	Sodium	197.4	mg/L	0.4	200.7	TWH 1800	11/30/99
	Thallium	0.009	mg/L	0.004	200.7	TWH 1800	11/30/99
	Vanadium	0.011	mg/L	0.001	200.7	TWH 1800	11/30/99
	Zinc	0.046	mg/L	0.001	200.7	TWH 1800	11/30/99
HG-245.1							
	Mercury	0.0003	mg/L	0.0002	245.1	JAM 1500	12/1/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *16-Nov-99*

Lab#: D995366-003
Sample ID: Weir 1114
Sample Type: Water

Collect Date: 14-Nov-99
Collected By: Katherine Dillow

Report Date: *08-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	57.	mg/L	1.	160.2	SBB 1500	11/17/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *16-Nov-99*

Lab#: D995366-004
Sample ID: Weir 1113
Sample Type: Water

Collect Date: 13-Nov-99
Collected By: Katherine Dillow

Report Date: *08-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	77.	mg/L	1.	160.2	SBB 1500	11/17/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *16-Nov-99*

Lab#: D995366-005
Sample ID: Weir 1112
Sample Type: Water
Collect Date: 12-Nov-99
Collected By: Katherine Dillow

Report Date: *08-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	95.	mg/L	1.	160.2	SBB 1500	11/17/99

Reviewed and Approved by:

Laurel A. Schwindt

Laurel A. Schwindt
Laboratory Manager

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DEUL MARSH LABORATORIES, INC.
1605 Benjamin Franklin Highway
Douglassville, PA 19518
Phone: (610) 327-8196 Fax: (610) 327-6864

CHAIN OF CUSTODY RECORD

VERSAR [illegible]
[illegible]
Columbia [illegible]
Contact: [illegible]
Phone#: 410-964-9200
Fax#: 410-964-5120

BML LOT NO: 995366
PROJECT NO:
P.O. NO:
PROJECT: Killcohook

TURNAROUND TIME REQUIRED: 24 HR ☐ 48 HR ☐ 72 HR ☐ 1 WEEK ☐ 2 WEEKS ☐

PA Fuel Type - Use Letter Code
A. Leaded Gas / Aviation-Jet Fuel
B. Unleaded Gas
C. Kerosene / Fuel #1
D. Diesel Fuel / Fuel Oil #2
E. Fuel Oil #4, #5, #6 / Lubricating Oil
F. Used Motor Oil

BML USE: LAB ID NO:	DATE SAMPLED	TIME SAMPLED	COMP	GRAB	SAMPLE DESCRIPTION / CLIENT ID NO.	SAMPLE TYPE	Number of Containers: TOTAL	H_2SO_4	HCl	HNO_3	NaOH	Sterile (Bact)	MeOH - NJ - VOC	MeOH - PA - VOC	SB - PA - VOC	Unpreserved	Other	ANALYSIS NEEDED: TCLP	Metals (Please Specify)	Volatiles **	PA UST Code	Cyanide	Pesticides	SVOCs
01	11/15/99		X		Weir 1115	2												X	X	X	X	X	X	X
02	11/15/99			X	Mix 1115	2												X	X	X	X	X	X	X
03	11/14/99		X		Weir 1114	1															X			
04	11/13/99		X		Weir 1113	1															X			
05	11/12/99		X		Weir 1112	1															X			

Remarks / Additional Analysis:

Sampled by: Katherine Dillow
Date: Nov 15 99
Relinquished by: (Signature) Katherine Dillow
Date/Time: Nov 15 99
Received by:
Relinquished by: (Signature)
Date/Time: 11/16
Received for Laboratory by: [illegible]

FAX INFO:
Date/Time Faxed: Faxed 12/8
TAT Met?: Yes ☐ No ☐

COOLER TEMP _____ °C

REPORT FORMAT (Check One) ***
Standard (Data ☐ — Results Only ☐)
NJ Deliverables (Disk ☐ — Reduced ☐)
CLP Format ☒
DW Forms ☐ PWS ID # _____

SAMPLE TYPE:
HZ Hazardous, SO Soil, DE Debris, SL Sludge, SD Solid, SW Surface Water, WW Waste Water, GW Ground Water, DW Drinking Water, LQ Liquid

PERMIT TYPE:
☐ MIPP
☐ NPDES

Surcharge for 24 HR, 48 HR, 72 HR, and 1 week turnaround times. ** Specify method required. *** Surcharges may apply.

BML7a 10/98

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Kilcohook

Date Received: *19-Nov-99*

Lab#: D995462-001
Sample ID: Mix 1118
Sample Type: Water

Collect Date: 18-Nov-99
Collected By: Katherine Dillow

Report Date: *13-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Chloromethane (Methyl Chloride)	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Vinyl chloride	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Bromomethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Chloroethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Trichlorofluoromethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,1-Dichloroethene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Acetone	< 10.	ug/L	10.	8260B	MJM 2226	11/25/99
	Methylene chloride (Dichloromethane)	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	t-Butyl alcohol	< 10.	ug/L	10.	8260B	MJM 2226	11/25/99
	trans-1,2-dichloroethene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Methyl tert-buytl ether (MTBE)	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,1-Dichloroethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	cis-1,2-Dichloroethene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	2,2-Dichloropropane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	2-Butanone (MEK)	< 10.	ug/L	10.	8260B	MJM 2226	11/25/99
	Bromochloromethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Chloroform	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,1,1-Trichloroethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,1-Dichloropropene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Carbon tetrachloride	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Benzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,2-Dichloroethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Trichloroethene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,2-Dichloropropane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Dibromomethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Bromodichloromethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	cis-1,3-Dichloropropene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	4-Methyl-2-pentanone (MIBK)	< 10.	ug/L	10.	8260B	MJM 2226	11/25/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Kilcohook

Lab#: D995462-001
Sample ID: Mix 1118
Sample Type: Water

Collect Date: 18-Nov-99
Collected By: Katherine Dillow

Date Received: *19-Nov-99*

Report Date: *13-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	trans-1,3-dichloropropene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,1,2-Trichloroethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Tetrachloroethene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,3-Dichloropropane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	2-Hexanone	< 10.	ug/L	10.	8260B	MJM 2226	11/25/99
	Dibromochloromethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,2-Dibromoethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Chlorobenzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,1,1,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Ethyl benzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	m,p-Xylene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	o-Xylene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Styrene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Bromoform	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Isopropylbenzene (Cumene)	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Bromobenzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,1,2,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,2,3-Trichloropropane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	N-Propylbenzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	2-Chlorotoluene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	4-Chlorotoluene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,3,5-Trimethylbenzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	tert-Butylbenzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,2,4-Trimethylbenzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	sec-Butylbenzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,3-Dichlorobenzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	p-Isopropyltoluene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,4-Dichlorobenzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,2-Dichlorobenzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Kilcohook

Date Received: *19-Nov-99*

Lab#: D995462-001
Sample ID: Mix 1118
Sample Type: Water

Collect Date: 18-Nov-99
Collected By: Katherine Dillow

Report Date: *13-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,2-Dibromo-3-chloropropane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,2,4-Trichlorobenzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Hexachloro-1,3-butadiene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Naphthalene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,2,3-Trichlorobenzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Kilcohook

Date Received: *19-Nov-99*

Lab#: D995462-001
Sample ID: Mix 1118
Sample Type: Water

Collect Date: 18-Nov-99
Collected By: Katherine Dillow

Report Date: *13-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Kilcohook

Date Received: *19-Nov-99*

Lab#: D995462-001
Sample ID: Mix 1118
Sample Type: Water

Collect Date: 18-Nov-99
Collected By: Katherine Dillow

Report Date: *13-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	bis(2-Ethylhexyl)phthalate	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1620	12/6/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1620	12/6/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1620	12/6/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1620	12/6/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1620	12/6/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1620	12/6/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1620	12/6/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1620	12/6/99

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9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Kilcohook

Date Received: *19-Nov-99*

Lab#: D995462-001
Sample ID: Mix 1118
Sample Type: Water

Collect Date: 18-Nov-99
Collected By: Katherine Dillow

Report Date: *13-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1620	12/6/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1620	12/6/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1620	12/6/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1620	12/6/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1620	12/6/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1620	12/6/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1620	12/6/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1620	12/6/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1620	12/6/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1620	12/6/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1620	12/6/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1620	12/6/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1620	12/6/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1620	12/6/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1204	11/23/99
TSS-aq							
	Solids, Total Suspended	77.	mg/L	1.	160.2	SBB 1530	11/22/99
TAL-200.7							
	Aluminum	0.098	mg/L	0.004	200.7	TWH 1220	12/9/99
	Antimony	< 0.004	mg/L	0.004	200.7	TWH 1220	12/9/99
	Arsenic	< 0.004	mg/L	0.004	200.7	TWH 1220	12/9/99
	Barium	0.018	mg/L	0.001	200.7	TWH 1220	12/9/99
	Beryllium	< 0.001	mg/L	0.001	200.7	TWH 1220	12/9/99
	Cadmium	< 0.001	mg/L	0.001	200.7	TWH 1220	12/9/99
	Calcium	53.9	mg/L	0.4	200.7	TWH 1220	12/9/99
	Chromium	0.004	mg/L	0.001	200.7	TWH 1220	12/9/99
	Cobalt	< 0.001	mg/L	0.001	200.7	TWH 1220	12/9/99
	Copper	< 0.001	mg/L	0.001	200.7	TWH 1220	12/9/99
	Iron	0.188	mg/L	0.001	200.7	TWH 1220	12/9/99

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Attn: Jessica Farrar
Project: Kilcohook

Date Received: *19-Nov-99*

Lab#: D995462-001
Sample ID: Mix 1118
Sample Type: Water

Collect Date: 18-Nov-99
Collected By: Katherine Dillow

Report Date: *13-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Lead	0.007	mg/L	0.004	200.7	TWH 1220	12/9/99
	Magnesium	111.1	mg/L	0.1	200.7	TWH 1220	12/9/99
	Manganese	0.482	mg/L	0.001	200.7	TWH 1220	12/9/99
	Nickel	< 0.001	mg/L	0.001	200.7	TWH 1220	12/9/99
	Potassium	37.8	mg/L	0.4	200.7	TWH 1220	12/9/99
	Selenium	0.039	mg/L	0.004	200.7	TWH 1220	12/9/99
	Silver	< 0.001	mg/L	0.001	200.7	TWH 1220	12/9/99
	Sodium	1036.	mg/L	4.	200.7	TWH 1220	12/9/99
	Thallium	< 0.004	mg/L	0.004	200.7	TWH 1220	12/9/99
	Vanadium	0.010	mg/L	0.001	200.7	TWH 1220	12/9/99
	Zinc	0.025	mg/L	0.001	200.7	TWH 1220	12/9/99
HG-245.1							
	Mercury	0.0002	mg/L	0.0002	245.1	JAM 1500	12/1/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	12/3/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1716	12/3/99
	Chromium, dissolved	0.001	mg/L	0.001	200.7	TWH 1716	12/3/99
	Copper, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1716	12/3/99
	Nickel, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1716	12/3/99
	Silver, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1716	12/3/99
	Zinc, dissolved	0.013	mg/L	0.001	200.7	TWH 1716	12/3/99

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Princeton Location:
267 Wall Street
Princeton, NJ 08540
Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Kilcohook

Date Received: *19-Nov-99*

Lab#: D995462-002
Sample ID: Weir 1118
Sample Type: Water

Collect Date: 18-Nov-99
Collected By: Katherine Dillow

Report Date: *13-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Chloromethane (Methyl Chloride)	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Vinyl chloride	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Bromomethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Chloroethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Trichlorofluoromethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,1-Dichloroethene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Acetone	< 10.	ug/L	10.	8260B	MJM 2226	11/25/99
	Methylene chloride (Dichloromethane)	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	t-Butyl alcohol	< 10.	ug/L	10.	8260B	MJM 2226	11/25/99
	trans-1,2-dichloroethene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Methyl tert-buytl ether (MTBE)	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,1-Dichloroethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	cis-1,2-Dichloroethene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	2,2-Dichloropropane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	2-Butanone (MEK)	< 10.	ug/L	10.	8260B	MJM 2226	11/25/99
	Bromochloromethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Chloroform	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,1,1-Trichloroethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,1-Dichloropropene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Carbon tetrachloride	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Benzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,2-Dichloroethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Trichloroethene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,2-Dichloropropane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Dibromomethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Bromodichloromethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	cis-1,3-Dichloropropene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	4-Methyl-2-pentanone (MIBK)	< 10.	ug/L	10.	8260B	MJM 2226	11/25/99

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Princeton, NJ 08540
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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Kilcohook

Lab#: D995462-002
Sample ID: Weir 1118
Sample Type: Water
Collect Date: 18-Nov-99
Collected By: Katherine Dillow

Date Received: *19-Nov-99*
Report Date: *13-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	trans-1,3-dichloropropene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,1,2-Trichloroethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Tetrachloroethene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,3-Dichloropropane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	2-Hexanone	< 10.	ug/L	10.	8260B	MJM 2226	11/25/99
	Dibromochloromethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,2-Dibromoethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Chlorobenzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,1,1,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Ethyl benzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	m,p-Xylene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	o-Xylene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Styrene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Bromoform	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Isopropylbenzene (Cumene)	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Bromobenzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,1,2,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,2,3-Trichloropropane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	N-Propylbenzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	2-Chlorotoluene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	4-Chlorotoluene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,3,5-Trimethylbenzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	tert-Butylbenzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,2,4-Trimethylbenzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	sec-Butylbenzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,3-Dichlorobenzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	p-Isopropyltoluene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,4-Dichlorobenzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,2-Dichlorobenzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Kilcohook

Date Received: *19-Nov-99*

Lab#: D995462-002
Sample ID: Weir 1118
Sample Type: Water

Collect Date: 18-Nov-99
Collected By: Katherine Dillow

Report Date: *13-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,2-Dibromo-3-chloropropane	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,2,4-Trichlorobenzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Hexachloro-1,3-butadiene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	Naphthalene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
	1,2,3-Trichlorobenzene	< 1.	ug/L	1.	8260B	MJM 2226	11/25/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Kilcohook

Lab#: D995462-002
Sample ID: Weir 1118
Sample Type: Water
Collect Date: 18-Nov-99
Collected By: Katherine Dillow

Date Received: *19-Nov-99*
Report Date: *13-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Kilcohook

Lab#: D995462-002
Sample ID: Weir 1118
Sample Type: Water
Collect Date: 18-Nov-99
Collected By: Katherine Dillow

Date Received: *19-Nov-99*
Report Date: *13-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
	bis(2-Ethylhexyl)phthalate	< 2.	ug/L	2.	8270C	DMP 1424	11/26/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1620	12/6/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1620	12/6/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1620	12/6/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1620	12/6/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1620	12/6/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1620	12/6/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1620	12/6/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1620	12/6/99

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9200 Rumsey Road
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Attn: Jessica Farrar
Project: Kilcohook

Lab#: D995462-002
Sample ID: Weir 1118
Sample Type: Water

Collect Date: 18-Nov-99
Collected By: Katherine Dillow

Date Received: *19-Nov-99*
Report Date: *13-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1620	12/6/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1620	12/6/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1620	12/6/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1620	12/6/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1620	12/6/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1620	12/6/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1620	12/6/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1620	12/6/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1620	12/6/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1620	12/6/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1620	12/6/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1620	12/6/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1620	12/6/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1620	12/6/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1204	11/23/99
TSS-aq							
	Solids, Total Suspended	45.	mg/L	1.	160.2	SBB 1530	11/22/99
TAL-200.7							
	Aluminum	< 0.004	mg/L	0.004	200.7	TWH 1220	12/9/99
	Antimony	< 0.004	mg/L	0.004	200.7	TWH 1220	12/9/99
	Arsenic	< 0.004	mg/L	0.004	200.7	TWH 1220	12/9/99
	Barium	0.100	mg/L	0.001	200.7	TWH 1220	12/9/99
	Beryllium	< 0.001	mg/L	0.001	200.7	TWH 1220	12/9/99
	Cadmium	< 0.001	mg/L	0.001	200.7	TWH 1220	12/9/99
	Calcium	83.7	mg/L	0.4	200.7	TWH 1220	12/9/99
	Chromium	0.002	mg/L	0.001	200.7	TWH 1220	12/9/99
	Cobalt	< 0.001	mg/L	0.001	200.7	TWH 1220	12/9/99
	Copper	0.003	mg/L	0.001	200.7	TWH 1220	12/9/99
	Iron	1.093	mg/L	0.001	200.7	TWH 1220	12/9/99

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Blue Marsh

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Professional testing for the critical decision

Princeton Location:
267 Wall Street
Princeton, NJ 08540
Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Kilcohook

Date Received: *19-Nov-99*

Lab#: D995462-002
Sample ID: Weir 1118
Sample Type: Water

Collect Date: 18-Nov-99
Collected By: Katherine Dillow

Report Date: *13-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Lead	0.009	mg/L	0.004	200.7	TWH 1220	12/9/99
	Magnesium	105.0	mg/L	0.1	200.7	TWH 1220	12/9/99
	Manganese	8.443	mg/L	0.001	200.7	TWH 1220	12/9/99
	Nickel	0.003	mg/L	0.001	200.7	TWH 1220	12/9/99
	Potassium	29.3	mg/L	0.4	200.7	TWH 1220	12/9/99
	Selenium	< 0.004	mg/L	0.004	200.7	TWH 1220	12/9/99
	Silver	< 0.001	mg/L	0.001	200.7	TWH 1220	12/9/99
	Sodium	678.	mg/L	4.	200.7	TWH 1220	12/9/99
	Thallium	0.041	mg/L	0.004	200.7	TWH 1220	12/9/99
	Vanadium	0.008	mg/L	0.001	200.7	TWH 1220	12/9/99
	Zinc	0.076	mg/L	0.001	200.7	TWH 1220	12/9/99
HG-245.1							
	Mercury	< 0.0002	mg/L	0.0002	245.1	JAM 1500	12/1/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	12/3/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1716	12/3/99
	Chromium, dissolved	0.002	mg/L	0.001	200.7	TWH 1716	12/3/99
	Copper, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1716	12/3/99
	Nickel, dissolved	0.002	mg/L	0.001	200.7	TWH 1716	12/3/99
	Silver, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1716	12/3/99
	Zinc, dissolved	0.075	mg/L	0.001	200.7	TWH 1716	12/3/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Fred Kelley
Project: Kilcohook

Date Received: *19-Nov-99*

Lab#: D995462-003
Sample ID: Weir 1117
Sample Type: Water
Collect Date: 17-Nov-99
Collected By: Katherine Dillow

Report Date: *13-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	37.	mg/L	1.	160.2	SBB 1530	11/22/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Kilcohook

Date Received: *19-Nov-99*

Lab#: D995462-004
Sample ID: Weir 1116
Sample Type: Water

Collect Date: 16-Nov-99
Collected By: Katherine Dillow

Report Date: *13-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	22.	mg/L	1.	160.2	SBB 1530	11/22/99

Reviewed and Approved by:

Laurel A Schwindt

Laurel A. Schwindt
Laboratory Manager

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BLUE MARSH LABORATORIES, INC.
1605 Benjamin Franklin Highway
Douglassville, PA 19518
Phone: (610) 327-8196 Fax: (610) 327-6864

CHAIN OF CUSTODY RECORD

9700 RUSSELL RD.
COL MD. 21045.
Contact: JESSICA FARRAR
Phone#: 410-964-9200
Fax#: 4109645156

BML LOT NO: 99562
PROJECT NO: 4033-026
P.O. NO:
PROJECT: Kilahook
* TURNAROUND TIME REQUIRED: 24 HR ☐ 48 HR ☐ 72 HR ☐ 1 WEEK ☐ 2 WEEKS ☐

BML USE LAB ID NO	DATE SAMPLED	TIME SAMPLED	COMP	GRAB	SAMPLE DESCRIPTION / CLIENT ID NO.	SAMPLE TYPE	Number of Containers: TOTAL	H2SO4	HCl	HNO3	NaOH	Sterile (Bact)	MeOH - NJ - VOC	MeOH - PA - VOC	SB - PA - VOC	Unpreserved	Other	ANALYSIS NEEDED: TCLP VOA/BNA/METALS/PEST/HERB/PCB/DIOX, TOTAL VOA/BNA/METALS/PEST/HERB/PCB/DIOX, Metals ____, Volatiles ** 8260, PA 155 Code ____, CHLORINE, PESTICIDES 5 VOC
01	11/18/99			X	Mix 1118	8												X X X X X X X
02	11/18/99		X		Wet 1118	8												X X X X X X X
03	11/17/99		X		Wet 1117	1												X
04	11/16/99		X		Wet 1116	1												X

Remarks / Additional Analysis: 3 pt 2 gl Amber pt + p 2 VOA 5 pt gl pt p. PCB L

PA Fuel Type - Use Letter Code
A. Leaded Gas / Aviation-Jet Fuel
B. Unleaded Gas
C. Kerosene / Fuel #1
D. Diesel Fuel / Fuel Oil #2
E. Fuel Oil #4, #5, #6 / Lubricating Oil
F. Used Motor Oil

Sampled by: Katherine Dillon
Date:
Relinquished by: (Signature) Katherine Dillon
Date/Time: 11/18/99 1730
Received by:
Relinquished by: (Signature)
Date/Time: 11/18/99
Received for Laboratory by: Kenneth C Mack

FAX INFO: Date/Time Faxed: (2) faxed 1113
TAT Met?: Yes ☐ No ☐

COOLER TEMP: ____ °C

REPORT FORMAT (Check One) ***
Standard (Data ☐ — Results Only ☐)
NJ Deliverables (Disk ☐ — Reduced ☐)
CLP Format ☐
DW Forms ☐ PWS ID # ____

SAMPLE TYPE:
HZ Hazardous SW Surface Water
SO Soil WW Waste Water
DE Debris GW Ground Water
SL Sludge DW Drinking Water
SD Solid LQ Liquid

PERMIT TYPE:
☐ MIPP
☐ NPDES

* Surcharge for 24 HR, 48 HR, 72 HR, and 1 week turnaround times. ** Specify method required. *** Surcharges may apply.

BML7a 10/98

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Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *23-Nov-99*

Lab#: D995513-001
Sample ID: Wier1122
Sample Type: Water

Collect Date: *22-Nov-99*
Collected By: Katherine Dillon

Report Date: *15-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Chloromethane (Methyl Chloride)	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Vinyl chloride	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Bromomethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Chloroethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Trichlorofluoromethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,1-Dichloroethene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Acetone	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Methylene chloride (Dichloromethane)	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	t-Butyl alcohol	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	trans-1,2-dichloroethene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Methyl tert-buytl ether (MTBE)	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,1-Dichloroethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	cis-1,2-Dichloroethene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	2,2-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	2-Butanone (MEK)	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Bromochloromethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Chloroform	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,1,1-Trichloroethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,1-Dichloropropene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Carbon tetrachloride	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Benzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,2-Dichloroethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Trichloroethene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,2-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Dibromomethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Bromodichloromethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	cis-1,3-Dichloropropene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	4-Methyl-2-pentanone (MIBK)	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99

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Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D995513-001
Sample ID: Wier1122
Sample Type: Water
Collect Date: 22-Nov-99
Collected By: Katherine Dillon

Date Received: *23-Nov-99*
Report Date: *15-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	trans-1,3-dichloropropene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,1,2-Trichloroethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Tetrachloroethene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,3-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	2-Hexanone	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Dibromochloromethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,2-Dibromoethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Chlorobenzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,1,1,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Ethyl benzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	m,p-Xylene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	o-Xylene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Styrene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Bromoform	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Isopropylbenzene (Cumene)	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Bromobenzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,1,2,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,2,3-Trichloropropane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	N-Propylbenzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	2-Chlorotoluene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	4-Chlorotoluene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,3,5-Trimethylbenzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	tert-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,2,4-Trimethylbenzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	sec-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,3-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	p-Isopropyltoluene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,4-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,2-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *23-Nov-99*

Lab#: D995513-001
Sample ID: Wier1122
Sample Type: Water

Collect Date: 22-Nov-99
Collected By: Katherine Dillon

Report Date: *15-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,2-Dibromo-3-chloropropane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,2,4-Trichlorobenzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Hexachloro-1,3-butadiene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Naphthalene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,2,3-Trichlorobenzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *23-Nov-99*

Lab#: D995513-001
Sample ID: Wier1122
Sample Type: Water

Collect Date: 22-Nov-99
Collected By: Katherine Dillon

Report Date: *15-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99

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Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *23-Nov-99*

Lab#: D995513-001
Sample ID: Wier1122
Sample Type: Water

Collect Date: 22-Nov-99
Collected By: Katherine Dillon

Report Date: *15-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	bis(2-Ethylhexyl)phthalate	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 0322	12/8/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 0322	12/8/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 0322	12/8/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 0322	12/8/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 0322	12/8/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 0322	12/8/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 0322	12/8/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 0322	12/8/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *23-Nov-99*

Lab#: D995513-001
Sample ID: Wier1122
Sample Type: Water

Collect Date: 22-Nov-99
Collected By: Katherine Dillon

Report Date: *15-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 0322	12/8/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 0322	12/8/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 0322	12/8/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 0322	12/8/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 0322	12/8/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 0322	12/8/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 0322	12/8/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 0322	12/8/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 0322	12/8/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 0322	12/8/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 0322	12/8/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 0322	12/8/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 0322	12/8/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 0322	12/8/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1500	12/3/99
TSS-aq							
	Solids, Total Suspended	49.	mg/L	1.	160.2	SBB 1500	11/24/99
TAL-200.7							
	Aluminum	0.008	mg/L	0.004	200.7	TWH 1423	12/13/99
	Antimony	< 0.004	mg/L	0.004	200.7	TWH 1423	12/13/99
	Arsenic	< 0.004	mg/L	0.004	200.7	TWH 1423	12/13/99
	Barium	0.098	mg/L	0.001	200.7	TWH 1423	12/13/99
	Beryllium	< 0.001	mg/L	0.001	200.7	TWH 1423	12/13/99
	Cadmium	< 0.001	mg/L	0.001	200.7	TWH 1423	12/13/99
	Calcium	124.	mg/L	4.	200.7	TWH 1423	12/13/99
	Chromium	0.001	mg/L	0.001	200.7	TWH 1423	12/13/99
	Cobalt	< 0.001	mg/L	0.001	200.7	TWH 1423	12/13/99
	Copper	0.001	mg/L	0.001	200.7	TWH 1423	12/13/99
	Iron	0.284	mg/L	0.001	200.7	TWH 1423	12/13/99

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9200 Rumsey Road
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Attn: Jessica Farrar
Project: Killcohook

Date Received: *23-Nov-99*

Lab#: D995513-001
Sample ID: Wier1122
Sample Type: Water

Collect Date: 22-Nov-99
Collected By: Katherine Dillon

Report Date: *15-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Lead	0.011	mg/L	0.004	200.7	TWH 1423	12/13/99
	Magnesium	124.	mg/L	1.	200.7	TWH 1423	12/13/99
	Manganese	7.289	mg/L	0.001	200.7	TWH 1423	12/13/99
	Nickel	0.008	mg/L	0.001	200.7	TWH 1423	12/13/99
	Potassium	27.	mg/L	4.	200.7	TWH 1423	12/13/99
	Selenium	0.029	mg/L	0.004	200.7	TWH 1423	12/13/99
	Silver	0.001	mg/L	0.001	200.7	TWH 1423	12/13/99
	Sodium	605.	mg/L	4.	200.7	TWH 1423	12/13/99
	Thallium	0.026	mg/L	0.004	200.7	TWH 1423	12/13/99
	Vanadium	0.003	mg/L	0.001	200.7	TWH 1423	12/13/99
	Zinc	0.040	mg/L	0.001	200.7	TWH 1423	12/13/99
HG-245.1							
	Mercury	0.0005	mg/L	0.0002	245.1	JAM 1415	12/6/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	12/3/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1428	12/13/99
	Chromium, dissolved	0.003	mg/L	0.001	200.7	TWH 1428	12/13/99
	Copper, dissolved	0.004	mg/L	0.001	200.7	TWH 1428	12/13/99
	Nickel, dissolved	0.016	mg/L	0.001	200.7	TWH 1428	12/13/99
	Silver, dissolved	0.002	mg/L	0.001	200.7	TWH 1428	12/13/99
	Zinc, dissolved	0.058	mg/L	0.001	200.7	TWH 1428	12/13/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *23-Nov-99*

Lab#: D995513-002
Sample ID: Mix1122
Sample Type: Water

Collect Date: 22-Nov-99
Collected By: Katherine Dillon

Report Date: *15-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Chloromethane (Methyl Chloride)	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Vinyl chloride	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Bromomethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Chloroethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Trichlorofluoromethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,1-Dichloroethene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Acetone	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Methylene chloride (Dichloromethane)	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	t-Butyl alcohol	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	trans-1,2-dichloroethene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Methyl tert-buytl ether (MTBE)	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,1-Dichloroethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	cis-1,2-Dichloroethene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	2,2-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	2-Butanone (MEK)	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Bromochloromethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Chloroform	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,1,1-Trichloroethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,1-Dichloropropene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Carbon tetrachloride	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Benzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,2-Dichloroethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Trichloroethene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,2-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Dibromomethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Bromodichloromethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	cis-1,3-Dichloropropene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	4-Methyl-2-pentanone (MIBK)	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *23-Nov-99*

Lab#: D995513-002
Sample ID: Mix1122
Sample Type: Water

Collect Date: 22-Nov-99
Collected By: Katherine Dillon

Report Date: *15-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	trans-1,3-dichloropropene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,1,2-Trichloroethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Tetrachloroethene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,3-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	2-Hexanone	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Dibromochloromethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,2-Dibromoethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Chlorobenzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,1,1,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Ethyl benzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	m,p-Xylene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	o-Xylene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Styrene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Bromoform	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Isopropylbenzene (Cumene)	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Bromobenzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,1,2,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,2,3-Trichloropropane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	N-Propylbenzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	2-Chlorotoluene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	4-Chlorotoluene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,3,5-Trimethylbenzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	tert-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,2,4-Trimethylbenzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	sec-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,3-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	p-Isopropyltoluene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,4-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,2-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99

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9200 Rumsey Road
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Attn: Jessica Farrar
Project: Killcohook

Date Received: *23-Nov-99*

Lab#: D995513-002
Sample ID: Mix1122
Sample Type: Water
Collect Date: 22-Nov-99
Collected By: Katherine Dillon
Report Date: *15-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,2-Dibromo-3-chloropropane	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,2,4-Trichlorobenzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Hexachloro-1,3-butadiene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	Naphthalene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
	1,2,3-Trichlorobenzene	< 1.	ug/L	1.	8260B	PMW 2358	12/1/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99

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Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *23-Nov-99*

Lab#: D995513-002
Sample ID: Mix1122
Sample Type: Water

Collect Date: 22-Nov-99
Collected By: Katherine Dillon

Report Date: *15-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99

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Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *23-Nov-99*

Lab#: D995513-002
Sample ID: Mix1122
Sample Type: Water

Collect Date: 22-Nov-99
Collected By: Katherine Dillon

Report Date: *15-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
	bis(2-Ethylhexyl)phthalate	< 2.	ug/L	2.	8270C	DMP 1718	12/4/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 0322	12/8/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 0322	12/8/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 0322	12/8/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 0322	12/8/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 0322	12/8/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 0322	12/8/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 0322	12/8/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 0322	12/8/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *23-Nov-99*

Lab#: D995513-002
Sample ID: Mix1122
Sample Type: Water

Collect Date: 22-Nov-99
Collected By: Katherine Dillon

Report Date: *15-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 0322	12/8/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 0322	12/8/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 0322	12/8/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 0322	12/8/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 0322	12/8/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 0322	12/8/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 0322	12/8/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 0322	12/8/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 0322	12/8/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 0322	12/8/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 0322	12/8/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 0322	12/8/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 0322	12/8/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 0322	12/8/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1500	12/3/99
TSS-aq							
	Solids, Total Suspended	104.	mg/L	1.	160.2	SBB 1500	11/24/99
TAL-200.7							
	Aluminum	0.088	mg/L	0.004	200.7	TWH 1423	12/13/99
	Antimony	< 0.004	mg/L	0.004	200.7	TWH 1423	12/13/99
	Arsenic	< 0.004	mg/L	0.004	200.7	TWH 1423	12/13/99
	Barium	0.004	mg/L	0.001	200.7	TWH 1423	12/13/99
	Beryllium	< 0.001	mg/L	0.001	200.7	TWH 1423	12/13/99
	Cadmium	< 0.001	mg/L	0.001	200.7	TWH 1423	12/13/99
	Calcium	80.912	mg/L	4.000	200.7	TWH 1423	12/13/99
	Chromium	0.003	mg/L	0.001	200.7	TWH 1423	12/13/99
	Cobalt	< 0.001	mg/L	0.001	200.7	TWH 1423	12/13/99
	Copper	< 0.001	mg/L	0.001	200.7	TWH 1423	12/13/99
	Iron	0.248	mg/L	0.001	200.7	TWH 1423	12/13/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *23-Nov-99*

Lab#: D995513-002
Sample ID: Mix1122
Sample Type: Water

Collect Date: 22-Nov-99
Collected By: Katherine Dillon

Report Date: *15-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Lead	0.010	mg/L	0.004	200.7	TWH 1423	12/13/99
	Magnesium	143.528	mg/L	1.000	200.7	TWH 1423	12/13/99
	Manganese	0.021	mg/L	0.001	200.7	TWH 1423	12/13/99
	Nickel	< 0.001	mg/L	0.001	200.7	TWH 1423	12/13/99
	Potassium	44.	mg/L	4.	200.7	TWH 1423	12/13/99
	Selenium	0.045	mg/L	0.004	200.7	TWH 1423	12/13/99
	Silver	0.001	mg/L	0.001	200.7	TWH 1423	12/13/99
	Sodium	1233.	mg/L	4.	200.7	TWH 1423	12/13/99
	Thallium	< 0.004	mg/L	0.004	200.7	TWH 1423	12/13/99
	Vanadium	0.007	mg/L	0.001	200.7	TWH 1423	12/13/99
	Zinc	0.022	mg/L	0.001	200.7	TWH 1423	12/13/99
HG-245.1							
	Mercury	0.0004	mg/L	0.0002	245.1	JAM 1415	12/6/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	12/3/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1428	12/13/99
	Chromium, dissolved	0.002	mg/L	0.001	200.7	TWH 1428	12/13/99
	Copper, dissolved	0.002	mg/L	0.001	200.7	TWH 1428	12/13/99
	Nickel, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1428	12/13/99
	Silver, dissolved	0.002	mg/L	0.001	200.7	TWH 1428	12/13/99
	Zinc, dissolved	0.030	mg/L	0.001	200.7	TWH 1428	12/13/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *23-Nov-99*

Lab#: D995513-003
Sample ID: Wier1121
Sample Type: Water

Collect Date: 21-Nov-99
Collected By: Katherine Dillon

Report Date: *15-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	68.	mg/L	1.	160.2	SBB 1500	11/24/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *23-Nov-99*

Lab#: D995513-004
Sample ID: Wier1120
Sample Type: Water
Collect Date: 20-Nov-99
Collected By: Katherine Dillon
Report Date: *15-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	73.	mg/L	1.	160.2	SBB 1500	11/24/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *23-Nov-99*

Lab#: D995513-005
Sample ID: Wier1119
Sample Type: Water

Collect Date: 19-Nov-99
Collected By: Katherine Dillon

Report Date: *15-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	70.	mg/L	1.	160.2	SBB 1500	11/24/99

Reviewed and Approved by:

Laurel A. Schwindt

Laurel A. Schwindt
Laboratory Manager

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BLUE MARSH LABORATORIES, INC.
1605 Benjamin Franklin Highway
Douglassville, PA 19518
Phone: (610) 327-8196 Fax: (610) 327-6864

CHAIN OF CUSTODY RECORD

9200 Kumsey Rd.
Columbia, MD 21045
Contact: Jessica Farrar
Phone#: 410-964-9200
Fax#: 410-964-5156

BML LOT NO: 995513
PROJECT NO: 4033-026
P.O. NO:

PROJECT: Killcohook

TURNAROUND TIME REQUIRED: 24 HR ☐ 48 HR ☐ 72 HR ☐ 1 WEEK ☐ 2 WEEKS ☐

PA Fuel Type - Use Letter Code
A. Leaded Gas / Aviation-Jet Fuel
B. Unleaded Gas
C. Kerosene / Fuel #1
D. Diesel Fuel / Fuel Oil #2
E. Fuel Oil #4, #5, #6 / Lubricating Oil
F. Used Motor Oil

BML USE: LAB ID NO.	DATE SAMPLED	TIME SAMPLED	COMP	GRAB	SAMPLE DESCRIPTION / CLIENT ID NO.	SAMPLE TYPE	TOTAL	H_2SO_4	HCl	HNO_3	NaOH	Sterile (Bact)	MeOH - NJ - VOC	MeOH - PA - VOC	SB - PA - VOC	Unpreserved	Other	TOC	Metals	Volatiles * 8260	PA DST Code	Cyanide	Pesticides	SVOC	Remarks / Additional Analysis:
01	11/22/99		X		Weir 1122	8												X	X	X	X	X	X	X	
02	11/22/99			X	Mix 1122	8												X	X	X	X	X	X	X	
03	11/21/99		X		Weir 1121	1															X				
04	11/20/99		X		Weir 1120	1															X				
05	11/19/99		X		Weir 1119	1															X				
					~~Weir 1118~~																				

Sampled by: Katherine Dillon
Date:
FAX INFO:
Date/Time Faxed: faxed 12/15
TAT Met?: Yes ☐ No ☐
COOLER TEMP _____ °C

Relinquished by: (Signature) Katherine Dillon
Date/Time: 11/22/99 17:30
Received by:

Relinquished by: (Signature)
Date/Time: 11/23/99
Received for Laboratory by: [signature]

REPORT FORMAT (Check One) ***
Standard (Data ☐ — Results Only ☐)
NJ Deliverables (Disk ☐ — Reduced ☐)
CLP Format ☐
DW Forms ☐ PWS ID # _____

SAMPLE TYPE:
HZ Hazardous, SO Soil, DE Debris, SL Sludge, SD Solid, SW Surface Water, WW Waste Water, GW Ground Water, DW Drinking Water, LQ Liquid

PERMIT TYPE:
☐ MIPP
☐ NPDES

BML7a 10/98

Surcharge for 24 HR, 48 HR, 72 HR, and 1 week turnaround times. ** Specify method required. *** Surcharges may apply.

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *30-Nov-99*

Lab#: D995612-001
Sample ID: Weir 1129
Sample Type: Water

Collect Date: 29-Nov-99
Collected By: Katherine Dillon

Report Date: *11-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TAL-6010-W							
	Aluminum	0.020	mg/L	0.004	6010B	TWH 1707	12/13/99
	Antimony	< 0.004	mg/L	0.004	6010B	TWH 1707	12/13/99
	Arsenic	< 0.004	mg/L	0.004	6010B	TWH 1707	12/13/99
	Barium	0.093	mg/L	0.001	6010B	TWH 1707	12/13/99
	Beryllium	< 0.001	mg/L	0.001	6010B	TWH 1707	12/13/99
	Cadmium	< 0.001	mg/L	0.001	6010B	TWH 1707	12/13/99
	Calcium	77.9	mg/L	0.4	6010B	TWH 1707	12/13/99
	Chromium	0.001	mg/L	0.001	6010B	TWH 1707	12/13/99
	Cobalt	< 0.004	mg/L	0.004	6010B	TWH 1707	12/13/99
	Copper	0.002	mg/L	0.001	6010B	TWH 1707	12/13/99
	Iron	1.083	mg/L	0.001	6010B	TWH 1707	12/13/99
	Lead	0.008	mg/L	0.004	6010B	TWH 1707	12/13/99
	Magnesium	93.670	mg/L	0.090	6010B	TWH 1707	12/13/99
	Manganese	7.109	mg/L	0.001	6010B	TWH 1707	12/13/99
	Nickel	0.019	mg/L	0.001	6010B	TWH 1707	12/13/99
	Potassium	26.7	mg/L	0.4	6010B	TWH 1707	12/13/99
	Selenium	0.030	mg/L	0.004	6010B	TWH 1707	12/13/99
	Silver	0.001	mg/L	0.001	6010B	TWH 1707	12/13/99
	Sodium	621.	mg/L	4.	6010B	TWH 1707	12/13/99
	Thallium	< 0.004	mg/L	0.004	6010B	TWH 1707	12/13/99
	Vanadium	< 0.004	mg/L	0.004	6010B	TWH 1707	12/13/99
	Zinc	0.085	mg/L	0.001	6010B	TWH 1707	12/13/99
HG-7470A							
	Mercury	0.0003	mg/L	0.0002	7470A	JAM 1415	12/6/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	12/3/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1637	12/13/99
	Chromium, dissolved	0.003	mg/L	0.001	200.7	TWH 1637	12/13/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *30-Nov-99*

Lab#: D995612-001
Sample ID: Weir 1129
Sample Type: Water

Collect Date: 29-Nov-99
Collected By: Katherine Dillon

Report Date: *11-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Copper, dissolved	0.005	mg/L	0.001	200.7	TWH 1637	12/13/99
	Nickel, dissolved	0.010	mg/L	0.001	200.7	TWH 1637	12/13/99
	Silver, dissolved	0.002	mg/L	0.001	200.7	TWH 1637	12/13/99
	Zinc, dissolved	0.076	mg/L	0.001	200.7	TWH 1637	12/13/99
VOL-8260B-aq							
	Dichlorofluoromethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Chloromethane (Methyl Chloride)	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Vinyl chloride	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Bromomethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Chloroethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Trichlorofluoromethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,1-Dichloroethene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Acetone	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Methylene chloride (Dichloromethane)	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	t-Butyl alcohol	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	trans-1,2-dichloroethene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Methyl tert-buytl ether (MTBE)	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,1-Dichloroethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	cis-1,2-Dichloroethene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	2,2-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	2-Butanone (MEK)	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Bromochloromethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Chloroform	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,1,1-Trichloroethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,1-Dichloropropene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Carbon tetrachloride	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Benzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,2-Dichloroethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Trichloroethene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,2-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *30-Nov-99*

Lab#: D995612-001
Sample ID: Weir 1129
Sample Type: Water

Collect Date: 29-Nov-99
Collected By: Katherine Dillon

Report Date: *11-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Dibromomethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Bromodichloromethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	cis-1,3-Dichloropropene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	4-Methyl-2-pentanone (MIBK)	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Toluene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	trans-1,3-dichloropropene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,1,2-Trichloroethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Tetrachloroethene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,3-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	2-Hexanone	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Dibromochloromethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,2-Dibromoethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Chlorobenzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,1,1,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Ethyl benzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	m,p-Xylene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	o-Xylene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Styrene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Bromoform	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Isopropylbenzene (Cumene)	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Bromobenzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,1,2,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,2,3-Trichloropropane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	N-Propylbenzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	2-Chlorotoluene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	4-Chlorotoluene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,3,5-Trimethylbenzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	tert-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,2,4-Trimethylbenzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	sec-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *30-Nov-99*

Lab#: D995612-001
Sample ID: Weir 1129
Sample Type: Water

Collect Date: 29-Nov-99
Collected By: Katherine Dillon

Report Date: *11-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,3-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	p-Isopropyltoluene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,4-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,2-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	n-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,2-Dibromo-3-chloropropane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,2,4-Trichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Hexachloro-1,3-butadiene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Naphthalene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,2,3-Trichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
TSS-aq							
	Solids, Total Suspended	24.	mg/L	1.	160.2	SBB 1000	12/1/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D995612-001
Sample ID: Weir 1129
Sample Type: Water
Collect Date: 29-Nov-99
Collected By: Katherine Dillon

Date Received: *30-Nov-99*
Report Date: *11-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2-Methylnaphthalene	7.	ug/L	2.	8270C	DMP 2014	12/10/99
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Fluorene	2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D995612-001
Sample ID: Weir 1129
Sample Type: Water
Collect Date: 29-Nov-99
Collected By: Katherine Dillon

Date Received: *30-Nov-99*
Report Date: *11-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Phenanthrene	4.	ug/L	2.	8270C	DMP 2014	12/10/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	bis(2-Ethylhexyl)phthalate	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 0254	12/9/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 0254	12/9/99

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- CERTIFICATE OF ANALYSIS -

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9200 Rumsey Road
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Attn: Jessica Farrar
Project: Killcohook

Date Received: *30-Nov-99*

Lab#: D995612-001
Sample ID: Weir 1129
Sample Type: Water

Collect Date: *29-Nov-99*
Collected By: Katherine Dillon

Report Date: *11-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 0254	12/9/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 0254	12/9/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 0254	12/9/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 0254	12/9/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 0254	12/9/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 0254	12/9/99
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 0254	12/9/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 0254	12/9/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 0254	12/9/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 0254	12/9/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 0254	12/9/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 0254	12/9/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 0254	12/9/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 0254	12/9/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 0254	12/9/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 0254	12/9/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 0254	12/9/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 0254	12/9/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 0254	12/9/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 0254	12/9/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1500	12/3/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *30-Nov-99*

Lab#: D995612-002
Sample ID: Weir 1128
Sample Type: Water

Collect Date: 28-Nov-99
Collected By: Katherine Dillon

Report Date: *11-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	30.	mg/L	1.	160.2	SBB 1000	12/1/99

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Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *30-Nov-99*

Lab#: D995612-003
Sample ID: Weir 1127
Sample Type: Water

Collect Date: 27-Nov-99
Collected By: Katherine Dillon

Report Date: *11-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	74.	mg/L	1.	160.2	SBB 1000	12/1/99

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1605 Benjamin Franklin Highway
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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *30-Nov-99*

Lab#: D995612-004
Sample ID: Weir 1126
Sample Type: Water

Collect Date: 26-Nov-99
Collected By: Katherine Dillon

Report Date: *11-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	54.	mg/L	1.	160.2	SBB 1000	12/1/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar

Project: Killcohook

Date Received: *30-Nov-99*

Lab#: D995612-005

Sample ID: Weir 1125

Sample Type: Water

Collect Date: 25-Nov-99

Collected By: Katherine Dillon

Report Date: *11-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	68.	mg/L	1.	160.2	SBB 1000	12/1/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *30-Nov-99*

Lab#: D995612-006
Sample ID: Weir 1124
Sample Type: Water
Collect Date: 24-Nov-99
Collected By: Katherine Dillon
Report Date: *11-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	48.	mg/L	1.	160.2	SBB 1000	12/1/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *30-Nov-99*

Lab#: D995612-007
Sample ID: Weir 1123
Sample Type: Water

Collect Date: 23-Nov-99
Collected By: Katherine Dillon

Report Date: *11-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	48.	mg/L	1.	160.2	SBB 1000	12/1/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *30-Nov-99*

Lab#: D995612-008
Sample ID: Mix 1129
Sample Type: Water

Collect Date: 29-Nov-99
Collected By: Katherine Dillon

Report Date: *11-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TAL-6010-W							
	Aluminum	0.147	mg/L	0.004	6010B	TWH 1300	1/3/00
	Antimony	< 0.004	mg/L	0.004	6010B	TWH 1300	1/3/00
	Arsenic	< 0.004	mg/L	0.004	6010B	TWH 1300	1/3/00
	Barium	0.041	mg/L	0.001	6010B	TWH 1300	1/3/00
	Beryllium	0.001	mg/L	0.001	6010B	TWH 1300	1/3/00
	Cadmium	< 0.001	mg/L	0.001	6010B	TWH 1300	1/3/00
	Calcium	44.2	mg/L	0.4	6010B	TWH 1300	1/3/00
	Chromium	0.001	mg/L	0.001	6010B	TWH 1300	1/3/00
	Cobalt	< 0.004	mg/L	0.004	6010B	TWH 1300	1/3/00
	Copper	0.015	mg/L	0.001	6010B	TWH 1300	1/3/00
	Iron	0.755	mg/L	0.001	6010B	TWH 1300	1/3/00
	Lead	0.005	mg/L	0.004	6010B	TWH 1300	1/3/00
	Magnesium	59.81	mg/L	0.09	6010B	TWH 1300	1/3/00
	Manganese	2.353	mg/L	0.001	6010B	TWH 1300	1/3/00
	Nickel	0.007	mg/L	0.001	6010B	TWH 1300	1/3/00
	Potassium	18.9	mg/L	0.4	6010B	TWH 1300	1/3/00
	Selenium	< 0.004	mg/L	0.004	6010B	TWH 1300	1/3/00
	Silver	< 0.001	mg/L	0.001	6010B	TWH 1300	1/3/00
	Sodium	531.	mg/L	4.	6010B	TWH 1300	1/3/00
	Thallium	< 0.004	mg/L	0.004	6010B	TWH 1300	1/3/00
	Vanadium	0.004	mg/L	0.004	6010B	TWH 1300	1/3/00
	Zinc	0.122	mg/L	0.001	6010B	TWH 1300	1/3/00
HG-7470A							
	Mercury	0.0002	mg/L	0.0002	7470A	JAM 1415	12/6/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	12/3/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1330	1/4/00
	Chromium, dissolved	0.003	mg/L	0.001	200.7	TWH 1330	1/4/00

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9200 Rumsey Road
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Attn: Jessica Farrar
Project: Killcohook

Date Received: *30-Nov-99*

Lab#: D995612-008
Sample ID: Mix 1129
Sample Type: Water

Collect Date: 29-Nov-99
Collected By: Katherine Dillon

Report Date: *11-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Copper, dissolved	0.011	mg/L	0.001	200.7	TWH 1330	1/4/00
	Nickel, dissolved	0.002	mg/L	0.001	200.7	TWH 1330	1/4/00
	Silver, dissolved	0.001	mg/L	0.001	200.7	TWH 1330	1/4/00
	Zinc, dissolved	0.042	mg/L	0.001	200.7	TWH 1330	1/4/00
VOL-8260B-aq							
	Dichlorofluoromethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Chloromethane (Methyl Chloride)	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Vinyl chloride	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Bromomethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Chloroethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Trichlorofluoromethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,1-Dichloroethene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Acetone	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Methylene chloride (Dichloromethane)	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	t-Butyl alcohol	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	trans-1,2-dichloroethene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Methyl tert-buytl ether (MTBE)	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,1-Dichloroethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	cis-1,2-Dichloroethene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	2,2-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	2-Butanone (MEK)	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Bromochloromethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Chloroform	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,1,1-Trichloroethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,1-Dichloropropene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Carbon tetrachloride	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Benzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,2-Dichloroethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Trichloroethene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,2-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *30-Nov-99*

Lab#: D995612-008
Sample ID: Mix 1129
Sample Type: Water

Collect Date: 29-Nov-99
Collected By: Katherine Dillon

Report Date: *11-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Dibromomethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Bromodichloromethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	cis-1,3-Dichloropropene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	4-Methyl-2-pentanone (MIBK)	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Toluene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	trans-1,3-dichloropropene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,1,2-Trichloroethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Tetrachloroethene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,3-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	2-Hexanone	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Dibromochloromethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,2-Dibromoethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Chlorobenzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,1,1,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Ethyl benzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	m,p-Xylene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	o-Xylene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Styrene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Bromoform	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Isopropylbenzene (Cumene)	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Bromobenzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,1,2,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,2,3-Trichloropropane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	N-Propylbenzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	2-Chlorotoluene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	4-Chlorotoluene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,3,5-Trimethylbenzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	tert-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,2,4-Trimethylbenzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	sec-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *30-Nov-99*

Lab#: D995612-008
Sample ID: Mix 1129
Sample Type: Water

Collect Date: 29-Nov-99
Collected By: Katherine Dillon

Report Date: *11-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	1,3-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	p-Isopropyltoluene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,4-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,2-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	n-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,2-Dibromo-3-chloropropane	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,2,4-Trichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Hexachloro-1,3-butadiene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	Naphthalene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
	1,2,3-Trichlorobenzene	< 1.	ug/L	1.	8260B	PMW 1207	12/3/99
TSS-aq							
	Solids, Total Suspended	86.	mg/L	1.	160.2	SBB 1000	12/1/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99

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Attn: Jessica Farrar
Project: Killcohook

Date Received: *30-Nov-99*

Lab#: D995612-008
Sample ID: Mix 1129
Sample Type: Water

Collect Date: 29-Nov-99
Collected By: Katherine Dillon

Report Date: *11-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2-Methylnaphthalene	6.	ug/L	2.	8270C	DMP 2014	12/10/99
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99

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PA DEP Cert #06-409

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Princeton Location:
267 Wall Street
Princeton, NJ 08540
Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *30-Nov-99*

Lab#: D995612-008
Sample ID: Mix 1129
Sample Type: Water

Collect Date: 29-Nov-99
Collected By: Katherine Dillon

Report Date: *11-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Phenanthrene	3.	ug/L	2.	8270C	DMP 2014	12/10/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 2014	12/10/99
	bis(2-Ethylhexyl)phthalate	2.	ug/L	2.	8270C	DMP 2014	12/10/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 0254	12/9/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 0254	12/9/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D995612-008
Sample ID: Mix 1129
Sample Type: Water
Collect Date: 29-Nov-99
Collected By: Katherine Dillon

Date Received: *30-Nov-99*
Report Date: *11-Jan-00*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 0254	12/9/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 0254	12/9/99
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 0254	12/9/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 0254	12/9/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 0254	12/9/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 0254	12/9/99
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 0254	12/9/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 0254	12/9/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 0254	12/9/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 0254	12/9/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 0254	12/9/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 0254	12/9/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 0254	12/9/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 0254	12/9/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 0254	12/9/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 0254	12/9/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 0254	12/9/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 0254	12/9/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 0254	12/9/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 0254	12/9/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1500	12/3/99

Reviewed and Approved by:

Laurel A. Schwindt

Laurel A. Schwindt
Laboratory Manager

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BLUE MARSH LABORATORIES, INC.
1605 Benjamin Franklin Highway
Douglassville, PA 19518
Phone: (610) 327-8196 Fax: (610) 327-6864

CHAIN OF CUSTODY RECORD

Send Report to: Versar, Inc
9200 Rumsey Rd.
Columbia, MD 21045
Contact: Jessica Farrar
Phone#: 410-964-9200
Fax#: 410-964-5156

BML LOT NO: 98612
PROJECT NO: 4033-026
P.O. NO:
PROJECT: Killwhook
* TURNAROUND TIME REQUIRED: 24 HR ☐ 48 HR ☐ 72 HR ☐ 1 WEEK ☐ 2 WEEKS ☐

PA Fuel Type - Use Letter Code
A. Leaded Gas / Aviation-Jet Fuel
B. Unleaded Gas
C. Kerosene / Fuel #1
D. Diesel Fuel / Fuel Oil #2
E. Fuel Oil #4, #5, #6 / Lubricating Oil
F. Used Motor Oil

BML USE LAB ID NO.	DATE SAMPLED	TIME SAMPLED	COMP	GRAB	SAMPLE DESCRIPTION / CLIENT ID NO.	SAMPLE TYPE	TOTAL	H_2SO_4	HCl	HNO_3	NaOH	Sterile (Bact)	MeOH - NJ - VOC	MeOH - PA - VOC	SB - PA - VOC	Unpreserved	Other	TCLP VISUAL	Metals	Volatiles *	PA Fuel Code	SVOC	Pesticides	Cyanide	Remarks / Additional Analysis:
01	11/29/99		X		Weir 1129	7												X	X	X	X	X	X	X	5 liter wm 16oz P 1 VOA
02	11/28/99		X		Weir 1128																X				16oz P
03	11/27/99		X		Weir 1127																X				
04	11/26/99		X		Weir 1126																X				
05	11/25/99		X		Weir 1125																X				
06	11/24/99		X		Weir 1124																X				
07	11/23/99		X		Weir 1123																X				
08	11/29/99			X	Mix 1129	8												X	X	X	X	X	X	X	2 liter amb, 3 liter P, 16oz P 1 VOA

Sampled by: Katherine Dillon
Date: 11/29/99
Relinquished by: (Signature) Katherine Dillon
Date/Time: 11/29/99 17:30
Received by:
Relinquished by: (Signature)
Date/Time: 11/30/99
Received for Laboratory by: [signature]

FAX INFO:
Date/Time Faxed: [signature] 1/13
TAT Met?: Yes ☐ No ☐
COOLER TEMP ____ °C

REPORT FORMAT (Check One) ***
Standard (Data ☐ — Results Only ☐)
NJ Deliverables (Disk ☐ — Reduced ☐)
CLP Format ☐
DW Forms ☐ PWS ID # ____

SAMPLE TYPE:
HZ Hazardous, SO Soil, DE Debris, SL Sludge, SD Solid, SW Surface Water, WW Waste Water, GW Ground Water, DW Drinking Water, LQ Liquid

PERMIT TYPE:
☐ MIPP
☐ NPDES

* Surcharge for 2[illegible], 48 HR, 72 HR, and 1 week turnaround times. ** Specify method requi[illegible] *** Surcharges may apply.

BML7a 10/98

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Princeton Location:
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Princeton, NJ 08540
Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *07-Dec-99*

Lab#: D995737-001
Sample ID: Weir 1206
Sample Type: Water

Collect Date: 06-Dec-99
Collected By: Katherine Dillon

Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Chloromethane (Methyl Chloride)	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Vinyl chloride	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Bromomethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Chloroethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Trichlorofluoromethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,1-Dichloroethene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Acetone	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Methylene chloride (Dichloromethane)	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	t-Butyl alcohol	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	trans-1,2-dichloroethene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Methyl tert-buyl ether (MTBE)	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,1-Dichloroethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	cis-1,2-Dichloroethene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	2,2-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	2-Butanone (MEK)	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Bromochloromethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Chloroform	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,1,1-Trichloroethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,1-Dichloropropene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Carbon tetrachloride	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Benzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2-Dichloroethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Trichloroethene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Dibromomethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Bromodichloromethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	cis-1,3-Dichloropropene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	4-Methyl-2-pentanone (MIBK)	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *07-Dec-99*

Lab#: D995737-001
Sample ID: Weir 1206
Sample Type: Water

Collect Date: 06-Dec-99
Collected By: Katherine Dillon

Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	trans-1,3-dichloropropene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,1,2-Trichloroethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Tetrachloroethene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,3-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	2-Hexanone	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Dibromochloromethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2-Dibromoethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Chlorobenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,1,1,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Ethyl benzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	m,p-Xylene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	o-Xylene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Styrene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Bromoform	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Isopropylbenzene (Cumene)	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Bromobenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,1,2,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2,3-Trichloropropane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	N-Propylbenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	2-Chlorotoluene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	4-Chlorotoluene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,3,5-Trimethylbenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	tert-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2,4-Trimethylbenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	sec-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,3-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	p-Isopropyltoluene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,4-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D995737-001
Sample ID: Weir 1206
Sample Type: Water
Collect Date: 06-Dec-99
Collected By: Katherine Dillon

Date Received: *07-Dec-99*
Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2-Dibromo-3-chloropropane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2,4-Trichlorobenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Hexachloro-1,3-butadiene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Naphthalene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2,3-Trichlorobenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
TSS-aq							
	Solids, Total Suspended	42.	mg/L	1.	160.2	SBB 1100	12/9/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1158	12/13/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *07-Dec-99*

Lab#: D995737-001
Sample ID: Weir 1206
Sample Type: Water

Collect Date: 06-Dec-99
Collected By: Katherine Dillon

Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99

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Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *07-Dec-99*

Lab#: D995737-001
Sample ID: Weir 1206
Sample Type: Water

Collect Date: 06-Dec-99
Collected By: Katherine Dillon

Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	bis(2-Ethylhexyl)phthalate	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D995737-001
Sample ID: Weir 1206
Sample Type: Water
Collect Date: 06-Dec-99
Collected By: Katherine Dillon

Date Received: *07-Dec-99*
Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1755	12/13/99
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1755	12/13/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1755	12/13/99
TAL-200.7							
	Aluminum	0.54	mg/L	0.00	200.7	TWH 1100	12/23/99
	Antimony	0.01	mg/L	0.00	200.7	TWH 1100	12/23/99
	Arsenic	< 0.00	mg/L	0.00	200.7	TWH 1100	12/23/99
	Barium	0.112	mg/L	0.001	200.7	TWH 1100	12/23/99
	Beryllium	< 0.001	mg/L	0.001	200.7	TWH 1100	12/23/99
	Cadmium	< 0.001	mg/L	0.001	200.7	TWH 1100	12/23/99
	Calcium	79.40	mg/L	0.40	200.7	TWH 1100	12/23/99
	Chromium	0.004	mg/L	0.001	200.7	TWH 1100	12/23/99
	Cobalt	0.002	mg/L	0.001	200.7	TWH 1100	12/23/99
	Copper	0.018	mg/L	0.001	200.7	TWH 1100	12/23/99
	Iron	4.182	mg/L	0.001	200.7	TWH 1100	12/23/99

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- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *07-Dec-99*

Lab#: D995737-001
Sample ID: Weir 1206
Sample Type: Water

Collect Date: 06-Dec-99
Collected By: Katherine Dillon

Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Lead	< 0.00	mg/L	0.00	200.7	TWH 1100	12/23/99
	Magnesium	98.540	mg/L	0.100	200.7	TWH 1100	12/23/99
	Manganese	8.144	mg/L	0.100	200.7	TWH 1100	12/23/99
	Nickel	0.021	mg/L	0.001	200.7	TWH 1100	12/23/99
	Potassium	31.96	mg/L	0.40	200.7	TWH 1100	12/23/99
	Selenium	0.00	mg/L	0.00	200.7	TWH 1100	12/23/99
	Silver	< 0.001	mg/L	0.001	200.7	TWH 1100	12/23/99
	Sodium	651.00	mg/L	4.00	200.7	TWH 1100	12/23/99
	Thallium	< 0.00	mg/L	0.00	200.7	TWH 1100	12/23/99
	Vanadium	0.006	mg/L	0.001	200.7	TWH 1100	12/23/99
	Zinc	0.123	mg/L	0.001	200.7	TWH 1100	12/23/99
HG-245.1							
	Mercury	< 0.0002	mg/L	0.0002	245.1	JAM 1430	12/8/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1710	12/21/99
	Chromium, dissolved	0.001	mg/L	0.001	200.7	TWH 1710	12/21/99
	Copper, dissolved	0.019	mg/L	0.001	200.7	TWH 1710	12/21/99
	Nickel, dissolved	0.019	mg/L	0.001	200.7	TWH 1710	12/21/99
	Silver, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1710	12/21/99
	Zinc, dissolved	0.073	mg/L	0.001	200.7	TWH 1710	12/21/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	12/20/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar

Project: Killcohook

Date Received: *07-Dec-99*

Lab#: D995737-002

Sample ID: Weir 1205

Sample Type: Water

Collect Date: 06-Dec-99

Collected By: Katherine Dillon

Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	44.	mg/L	1.	160.2	SBB 1100	12/9/99

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Client: Versar, Inc.
9200 Rumsey Road
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Attn: Jessica Farrar
Project: Killcohook

Date Received: *07-Dec-99*

Lab#: D995737-003
Sample ID: Weir 1204
Sample Type: Water

Collect Date: 06-Dec-99
Collected By: Katherine Dillon

Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	50.	mg/L	1.	160.2	SBB 1100	12/9/99

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Attn: Jessica Farrar
Project: Killcohook

Date Received: *07-Dec-99*

Lab#: D995737-004
Sample ID: Weir 1203
Sample Type: Water
Collect Date: 06-Dec-99
Collected By: Katherine Dillon

Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	67.	mg/L	1.	160.2	SBB 1100	12/9/99

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Client: Versar, Inc.
9200 Rumsey Road
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Attn: Jessica Farrar
Project: Killcohook

Date Received: *07-Dec-99*

Lab#: D995737-005
Sample ID: Weir 1202
Sample Type: Water

Collect Date: 06-Dec-99
Collected By: Katherine Dillon

Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	65.	mg/L	1.	160.2	SBB 1100	12/9/99

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Client: Versar, Inc.
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Attn: Jessica Farrar
Project: Killcohook

Date Received: *07-Dec-99*

Lab#: D995737-006
Sample ID: Weir 1201
Sample Type: Water

Collect Date: 06-Dec-99
Collected By: Katherine Dillon

Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	45.	mg/L	1.	160.2	SBB 1100	12/9/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *07-Dec-99*

Lab#: D995737-007
Sample ID: Weir 1130
Sample Type: Water

Collect Date: 06-Dec-99
Collected By: Katherine Dillon

Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
TSS-aq							
	Solids, Total Suspended	47.	mg/L	1.	160.2	SBB 1100	12/9/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D995737-008
Sample ID: Mix 1206
Sample Type: Water

Collect Date: 06-Dec-99
Collected By: Katherine Dillon

Date Received: *07-Dec-99*
Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Chloromethane (Methyl Chloride)	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Vinyl chloride	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Bromomethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Chloroethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Trichlorofluoromethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,1-Dichloroethene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Acetone	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Methylene chloride (Dichloromethane)	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	t-Butyl alcohol	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	trans-1,2-dichloroethene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Methyl tert-buytl ether (MTBE)	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,1-Dichloroethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	cis-1,2-Dichloroethene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	2,2-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	2-Butanone (MEK)	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Bromochloromethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Chloroform	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,1,1-Trichloroethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,1-Dichloropropene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Carbon tetrachloride	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Benzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2-Dichloroethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Trichloroethene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Dibromomethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Bromodichloromethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	cis-1,3-Dichloropropene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	4-Methyl-2-pentanone (MIBK)	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99

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Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *07-Dec-99*

Lab#: D995737-008
Sample ID: Mix 1206
Sample Type: Water

Collect Date: 06-Dec-99
Collected By: Katherine Dillon

Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	trans-1,3-dichloropropene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,1,2-Trichloroethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Tetrachloroethene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,3-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	2-Hexanone	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Dibromochloromethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2-Dibromoethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Chlorobenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,1,1,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Ethyl benzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	m,p-Xylene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	o-Xylene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Styrene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Bromoform	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Isopropylbenzene (Cumene)	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Bromobenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,1,2,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2,3-Trichloropropane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	N-Propylbenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	2-Chlorotoluene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	4-Chlorotoluene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,3,5-Trimethylbenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	tert-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2,4-Trimethylbenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	sec-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,3-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	p-Isopropyltoluene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,4-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Lab#: D995737-008
Sample ID: Mix 1206
Sample Type: Water

Collect Date: 06-Dec-99
Collected By: Katherine Dillon

Date Received: *07-Dec-99*
Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2-Dibromo-3-chloropropane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2,4-Trichlorobenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Hexachloro-1,3-butadiene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Naphthalene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2,3-Trichlorobenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
TSS-aq							
	Solids, Total Suspended	106.	mg/L	1.	160.2	SBB 1100	12/9/99
Cn,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1158	12/13/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *07-Dec-99*

Lab#: D995737-008
Sample ID: Mix 1206
Sample Type: Water

Collect Date: 06-Dec-99
Collected By: Katherine Dillon

Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *07-Dec-99*

Lab#: D995737-008
Sample ID: Mix 1206
Sample Type: Water

Collect Date: 06-Dec-99
Collected By: Katherine Dillon

Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	bis(2-Ethylhexyl)phthalate	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99

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9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *07-Dec-99*

Lab#: D995737-008
Sample ID: Mix 1206
Sample Type: Water

Collect Date: 06-Dec-99
Collected By: Katherine Dillon

Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1755	12/13/99
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1755	12/13/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1755	12/13/99
TAL-200.7							
	Aluminum	0.09	mg/L	0.00	200.7	TWH 1100	12/23/99
	Antimony	0.01	mg/L	0.00	200.7	TWH 1100	12/23/99
	Arsenic	< 0.00	mg/L	0.00	200.7	TWH 1100	12/23/99
	Barium	0.021	mg/L	0.001	200.7	TWH 1100	12/23/99
	Beryllium	< 0.001	mg/L	0.001	200.7	TWH 1100	12/23/99
	Cadmium	< 0.001	mg/L	0.001	200.7	TWH 1100	12/23/99
	Calcium	50.30	mg/L	0.40	200.7	TWH 1100	12/23/99
	Chromium	< 0.001	mg/L	0.001	200.7	TWH 1100	12/23/99
	Cobalt	< 0.001	mg/L	0.001	200.7	TWH 1100	12/23/99
	Copper	0.011	mg/L	0.001	200.7	TWH 1100	12/23/99
	Iron	0.180	mg/L	0.001	200.7	TWH 1100	12/23/99

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Date Received: *07-Dec-99*

Lab#: D995737-008
Sample ID: Mix 1206
Sample Type: Water
Collect Date: 06-Dec-99
Collected By: Katherine Dillon

Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Lead	< 0.00	mg/L	0.00	200.7	TWH 1100	12/23/99
	Magnesium	92.300	mg/L	0.100	200.7	TWH 1100	12/23/99
	Manganese	0.113	mg/L	0.001	200.7	TWH 1100	12/23/99
	Nickel	0.003	mg/L	0.001	200.7	TWH 1100	12/23/99
	Potassium	35.58	mg/L	0.40	200.7	TWH 1100	12/23/99
	Selenium	< 0.00	mg/L	0.00	200.7	TWH 1100	12/23/99
	Silver	< 0.001	mg/L	0.001	200.7	TWH 1100	12/23/99
	Sodium	970.80	mg/L	4.00	200.7	TWH 1100	12/23/99
	Thallium	< 0.00	mg/L	0.00	200.7	TWH 1100	12/23/99
	Vanadium	0.004	mg/L	0.001	200.7	TWH 1100	12/23/99
	Zinc	0.023	mg/L	0.001	200.7	TWH 1100	12/23/99
HG-245.1							
	Mercury	< 0.0002	mg/L	0.0002	245.1	JAM 1430	12/8/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1710	12/21/99
	Chromium, dissolved	0.001	mg/L	0.001	200.7	TWH 1710	12/21/99
	Copper, dissolved	0.018	mg/L	0.001	200.7	TWH 1710	12/21/99
	Nickel, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1710	12/21/99
	Silver, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1710	12/21/99
	Zinc, dissolved	0.041	mg/L	0.001	200.7	TWH 1710	12/21/99
Pb,diss-7421							
	Lead, dissolved	2.	ug/L	2.	SM3113B	SUB 0000	12/20/99

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Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *07-Dec-99*

Lab#: D995737-009
Sample ID: Field Blank 1206
Sample Type: Water

Collect Date: 06-Dec-99
Collected By: Katherine Dillon

Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
VOL-8260B-aq							
	Dichlorofluoromethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Chloromethane (Methyl Chloride)	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Vinyl chloride	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Bromomethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Chloroethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Trichlorofluoromethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,1-Dichloroethene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Acetone	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Methylene chloride (Dichloromethane)	6.	ug/L	1.	8260B	PMW 0014	12/11/99
	t-Butyl alcohol	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	trans-1,2-dichloroethene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Methyl tert-butyl ether (MTBE)	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,1-Dichloroethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	cis-1,2-Dichloroethene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	2,2-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	2-Butanone (MEK)	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Bromochloromethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Chloroform	26.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,1,1-Trichloroethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,1-Dichloropropene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Carbon tetrachloride	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Benzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2-Dichloroethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Trichloroethene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Dibromomethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Bromodichloromethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	cis-1,3-Dichloropropene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	4-Methyl-2-pentanone (MIBK)	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99

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267 Wall Street
Princeton, NJ 08540
Phone: (609) 924-5151
Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *07-Dec-99*

Lab#: D995737-009
Sample ID: Field Blank 1206
Sample Type: Water

Collect Date: 06-Dec-99
Collected By: Katherine Dillon

Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Toluene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	trans-1,3-dichloropropene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,1,2-Trichloroethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Tetrachloroethene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,3-Dichloropropane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	2-Hexanone	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Dibromochloromethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2-Dibromoethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Chlorobenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,1,1,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Ethyl benzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	m,p-Xylene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	o-Xylene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Styrene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Bromoform	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Isopropylbenzene (Cumene)	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Bromobenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,1,2,2-Tetrachloroethane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2,3-Trichloropropane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	N-Propylbenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	2-Chlorotoluene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	4-Chlorotoluene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,3,5-Trimethylbenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	tert-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2,4-Trimethylbenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	sec-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,3-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	p-Isopropyltoluene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,4-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2-Dichlorobenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *07-Dec-99*

Lab#: D995737-009
Sample ID: Field Blank 1206
Sample Type: Water

Collect Date: 06-Dec-99
Collected By: Katherine Dillon

Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	n-Butylbenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2-Dibromo-3-chloropropane	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2,4-Trichlorobenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Hexachloro-1,3-butadiene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	Naphthalene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
	1,2,3-Trichlorobenzene	< 1.	ug/L	1.	8260B	PMW 0014	12/11/99
TSS-aq							
	Solids, Total Suspended	24.	mg/L	1.	160.2	SBB 1100	12/9/99
n,Tot-WW							
	Cyanide, total	< 0.005	mg/L	0.005	335.2	DAW 1158	12/13/99
SV-8270C-aq							
	2-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	4-Methylphenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Benzoic acid	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Aniline	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Benzyl alcohol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Naphthalene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Phenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2-Chlorophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	1,3-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	1,4-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	1,2-Dichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Hexachloroethane	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Nitrobenzene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Isophorone	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	1,2,4-Trichlorobenzene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	N-Nitrosodimethylamine	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Pyridine	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	bis(2-Chloroethyl)ether	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	bis(2-Chloroisopropyl)ether	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99

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NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *07-Dec-99*

Lab#: D995737-009
Sample ID: Field Blank 1206
Sample Type: Water

Collect Date: 06-Dec-99
Collected By: Katherine Dillon

Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	N-Nitroso-Di-N-Propylamine	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	bis(2-Chloroethoxy)methane	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,4,5-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2-Methylnaphthalene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	4-Chloroaniline	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	3-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	4-Nitroaniline	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Acenaphthylene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,4-Dimethylphenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,4-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Hexachloro-1,3-butadiene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Hexachlorocyclopentadiene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2-Chloronaphthalene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,6-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Dimethylphthalate	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Dibenzofuran	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Acenaphthene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Fluorene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,6-Dichlorophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	4-Chloro-3-methylphenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,4,6-Trichlorophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,4-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	4-Nitrophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,3,4,6-Tetrachorophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2-Methyl-4,6-Dinitrophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Pentachlorophenol	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	2,4-Dinitrotoluene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Hexachlorobenzene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99

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Fax: (609) 924-9692

NJ DEP Cert #11198

- CERTIFICATE OF ANALYSIS -

Client: Versar, Inc.
9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *07-Dec-99*

Lab#: D995737-009
Sample ID: Field Blank 1206
Sample Type: Water

Collect Date: 06-Dec-99
Collected By: Katherine Dillon

Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Azobenzene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Diethylphthalate	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	4-Chlorophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	N-Nitrosodiphenylamine	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	1,2-Diphenylhydrazine	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	4-Bromophenyl-phenylether	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Benzidine	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	3,3'-Dichlorobenzidine	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Phenanthrene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Anthracene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Carbazole	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Fluoranthene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Pyrene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Benzo(a)anthracene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Chrysene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Di-n-butylphthalate	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Butylbenzylphthalate	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Benzo(b)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Benzo(k)fluoranthene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Benzo(a)pyrene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Indeno(1,2,3-cd)pyrene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Dibenzo(a,h))anthracene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	Benzo(ghi)perylene	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	DI-n-octylphthalate	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
	bis(2-Ethylhexyl)phthalate	< 2.	ug/L	2.	8270C	DMP 1327	12/13/99
PEST-8081-aq							
	Aldrin	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	alpha-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	beta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	gamma-BHC (Lindane)	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99

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9200 Rumsey Road
Columbia MD 21045

Attn: Jessica Farrar
Project: Killcohook

Date Received: *07-Dec-99*

Lab#: D995737-009
Sample ID: Field Blank 1206
Sample Type: Water

Collect Date: 06-Dec-99
Collected By: Katherine Dillon

Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	delta-BHC	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	alpha-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	gamma-Chlordane	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	Chlordane, technical	< 10.	ug/L	10.	8081A	MDJ 1755	12/13/99
	4,4'-DDD	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	4,4'-DDE	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	4,4'-DDT	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	Dieldrin	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	Endosulfan I	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	Endosulfan II	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	Endosulfan sulfate	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	Endrin	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	Endrin aldehyde	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	Endrin ketone	< 0.9	ug/L	0.9	8081A	MDJ 1755	12/13/99
	Heptachlor	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	Heptachlor epoxide	< 0.5	ug/L	0.5	8081A	MDJ 1755	12/13/99
	Methoxychlor	< 5.	ug/L	5.	8081A	MDJ 1755	12/13/99
	Toxaphene	< 50.	ug/L	50.	8081A	MDJ 1755	12/13/99
TAL-200.7							
	Aluminum	0.01	mg/L	0.00	200.7	TWH 1100	12/23/99
	Antimony	0.01	mg/L	0.00	200.7	TWH 1100	12/23/99
	Arsenic	0.01	mg/L	0.00	200.7	TWH 1100	12/23/99
	Barium	< 0.001	mg/L	0.001	200.7	TWH 1100	12/23/99
	Beryllium	< 0.001	mg/L	0.001	200.7	TWH 1100	12/23/99
	Cadmium	< 0.001	mg/L	0.001	200.7	TWH 1100	12/23/99
	Calcium	0.07	mg/L	0.00	200.7	TWH 1100	12/23/99
	Chromium	< 0.001	mg/L	0.001	200.7	TWH 1100	12/23/99
	Cobalt	< 0.001	mg/L	0.001	200.7	TWH 1100	12/23/99
	Copper	< 0.001	mg/L	0.001	200.7	TWH 1100	12/23/99
	Iron	0.003	mg/L	0.001	200.7	TWH 1100	12/23/99

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9200 Rumsey Road
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Attn: Jessica Farrar
Project: Killcohook

Date Received: *07-Dec-99*

Lab#: D995737-009
Sample ID: Field Blank 1206
Sample Type: Water

Collect Date: 06-Dec-99
Collected By: Katherine Dillon

Report Date: *23-Dec-99*

Test Group	Test	Result	Units	PQL	Method	Init / Time	Analysis Date
	Lead	< 0.00	mg/L	0.00	200.7	TWH 1100	12/23/99
	Magnesium	0.004	mg/L	0.001	200.7	TWH 1100	12/23/99
	Manganese	0.005	mg/L	0.001	200.7	TWH 1100	12/23/99
	Nickel	< 0.001	mg/L	0.001	200.7	TWH 1100	12/23/99
	Potassium	0.00	mg/L	0.00	200.7	TWH 1100	12/23/99
	Selenium	< 0.00	mg/L	0.00	200.7	TWH 1100	12/23/99
	Silver	< 0.001	mg/L	0.001	200.7	TWH 1100	12/23/99
	Sodium	0.24	mg/L	0.00	200.7	TWH 1100	12/23/99
	Thallium	< 0.00	mg/L	0.00	200.7	TWH 1100	12/23/99
	Vanadium	< 0.001	mg/L	0.001	200.7	TWH 1100	12/23/99
	Zinc	0.001	mg/L	0.001	200.7	TWH 1100	12/23/99
HG-245.1							
	Mercury	< 0.0002	mg/L	0.0002	245.1	JAM 1430	12/8/99
RCRA10-Diss							
	Cadmium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1710	12/21/99
	Chromium, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1710	12/21/99
	Copper, dissolved	0.003	mg/L	0.001	200.7	TWH 1710	12/21/99
	Nickel, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1710	12/21/99
	Silver, dissolved	< 0.001	mg/L	0.001	200.7	TWH 1710	12/21/99
	Zinc, dissolved	0.029	mg/L	0.001	200.7	TWH 1710	12/21/99
Pb,diss-7421							
	Lead, dissolved	< 2.	ug/L	2.	SM3113B	SUB 0000	12/20/99

Reviewed and Approved by:

Laurel A Schwindt

Laurel A. Schwindt
Laboratory Manager

This report is intended to be reproduced in its entirety only. The results in this report apply to only the sample(s) submitted and analyzed.

BLUE MARSH LABORATORIES, INC.
1605 Benjamin Franklin Highway
Douglassville, PA 19518
Phone: (610) 327-8196 Fax: (610) 327-6864

CHAIN OF CUSTODY RECORD

Dookumsey Rd
Columbia, MD 21045
Contact: Jessica Farrar
Phone#: 410-964-9200
Fax#: 410-964-5156

BML LOT NO: 995737
PROJECT NO: 4033-026
P.O. NO:
PROJECT: Killcohook

TURNAROUND TIME REQUIRED: 24 HR ☐ 48 HR ☐ 72 HR ☐ 1 WEEK ☐ 2 WEEKS ☐

PA Fuel Type - Use Letter Code
A. Leaded Gas / Aviation-Jet Fuel
B. Unleaded Gas
C. Kerosene / Fuel #1
D. Diesel Fuel / Fuel Oil #2
E. Fuel Oil #4, #5, #6 / Lubricating Oil
F. Used Motor Oil

BML USE LAB ID NO.	DATE SAMPLED	TIME SAMPLED	COMP	GRAB	SAMPLE DESCRIPTION / CLIENT ID NO.	SAMPLE TYPE	TOTAL	H_2SO_4	HCl	HNO_3	NaOH	Sterile (Bact)	MeOH - NJ - VOC	MeOH - PA - VOC	SB - PA - VOC	Unpreserved	Other	TCLP Volatiles	Metals (Plastic)	Volatiles *	PA/JSD Code	Cyanide	SVOC	Pesticides	Remarks / Additional Analysis
01	12/6/99		X		Weir1206	8												X	X	X	X	X	X	X	~~[illegible]~~ - 2 Amb liter 16oz P 2VOA
02	12/5/99		X		Weir1205	1															X				16oz P
03	12/4/99		X		Weir1204	1															X				
04	12/3/99		X		Weir1203	1															X				
05	12/2/99		X		Weir1202	1															X				
06	12/1/99		X		Weir1201	1															X				
07	11/30/99		X		Weir1130	1															X				
08	12/6/99			X	Mix1206	8												X	X	X	X	X	X	X	3 p-gb 2 Amb Liter 16oz P 2VOA
09	12/6/99			X	Field Blank1206	7												X	X	X	X	X	X	X	5 glass liter Pt P 1VOA

Sampled by: Katherine Dellon
Date: 12/6/99
Relinquished by: (Signature) Katherine Dellon
Date/Time: 12/6/99 18:30
Received by:
Relinquished by: (Signature)
Date/Time: 12/7/99 10:45
Received for Laboratory by: Kenneth C. [illegible]

FAX INFO:
Date/Time Faxed: 12/23/99 5:15 PM
TAT Met?: Yes ☐ No ☐

COOLER TEMP ____ °C

REPORT FORMAT (Check One) ***
Standard (Data ☐ — Results Only ☐)
NJ Deliverables (Disk ☐ — Reduced ☐)
CLP Format ☐
DW Forms ☐ PWS ID # ____

SAMPLE TYPE:
HZ Hazardous, SO Soil, DE Debris, SL Sludge, SD Solid, SW Surface Water, WW Waste Water, GW Ground Water, DW Drinking Water, LQ Liquid

PERMIT TYPE:
☐ MIPP
☐ NPDES

BML7a 10/98

* Surcharge for 24 HR, 48 HR, 72 HR, and 1 week turnaround times. ** Specify method required. *** Surcharges may apply.

APPENDIX C

MRI ANALYTICAL RESULTS

Congener-Specific PCB Native Analyte Results for Water Samples (pg/L)

Isomer	MRI Number	Method Blank	99001955	99001956	99001957	99001961	99001962
	Field ID	Method Blank	INLET 1015	MIX 1021	INLET 1021	MIX 1025	WEIR 1025
	MS File	H00B291-3	H00B291-20	H00B291-12	H00B291-21	H00B291-7	H00B291-6
	Matrix	Water	Water	Water	Water	Water	Water
8 Di		U (162)	U (144)	U (150)	U (144)	U (149)	U (485)
18 Tri		U (125)	U (125)	140	U (125)	U (125)	U (392 EMPC)
28 Tri		U (125)	U (125)	163	U (125)	U (169 EMPC)	U (561 EMPC)
37 Tri		U (125)	U (125)	U (125)	U (125)	U (125)	U (220 EMPC)
52 Tetra		U (125)	U (125)	201	128	201	784
49 Tetra		U (125)	U (125)	U (125)	U (125)	137	466
47 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	332
44 Tetra		U (125)	U (125)	U (125)	U (125)	137	U (393 EMPC)
42 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (172 EMPC)
64 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (289 EMPC)
74 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	131
70 Tetra		U (125)	U (125)	U (125)	U (125)	133	370
80 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U(125)
66 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	310
60 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	146
79 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
78 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
81 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
77 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
95 Penta		U (125)	136	209	140	196	682
91 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	161
[redacted]enta		U (125)	U (125)	U (125)	U (125)	U (125)	168
84/101 Penta		U (250)	U (250)	U (250)	U (250)	U (250)	570
99 Penta		U (125)	U (125)	U (125)	U (125)	144	471
119 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
97 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	229
86 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
87 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	329
120 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
110 Penta		U (125)	199	264	192	285	807
82 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
123 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
118 Penta		U (125)	U (125)	159	U (125)	180	U (456 EMPC)
114 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
105/127 Penta		U (250)	U (250)	U (250)	U (250)	U (250)	U (250)
126 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
151 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	221
149 Hexa		U (125)	141	247	159	284	818
146 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	190
153 Hexa		U (125)	140	277	172	333	873
168 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	225
141 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	U (147 EMPC)
137 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
138 Hexa		U (125)	177	319	195	350	984
158 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
[redacted]6 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)

Congener-Specific PCB Native Analyte Results for Water Samples (pg/L)

	MRI Number	Method Blank	99001955	99001956	99001957	99001961	99001962
	Field ID	Method Blank	INLET 1015	MIX 1021	INLET 1021	MIX 1025	WEIR 1025
	MS File	H00B291-3	H00B291-20	H00B291-12	H00B291-21	H00B291-7	H00B291-6
Isomer	Matrix	Water	Water	Water	Water	Water	Water
128/167 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
156 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
157 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
169 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
179 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	203
187 Hepta		U (125)	U (125)	140	U (125)	174	469
183 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	187
185 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
174 Hepta		U (125)	U (125)	125	U (125)	139	357
177 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	214
171 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
180 Hepta		U (125)	U (125)	240	157	275	785
191 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
170 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	273
190 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
189 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
200 Octa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
198 Octa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
201 Octa		U (125)	125	215	149	280	U (767 EMPC)
196/203 Octa		U (250)	U (250)	U (250)	U (250)	U (250)	293
195 Octa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
194 Octa		U (125)	U (125)	U (125)	U (125)	U (125)	261
205 Octa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
208 Nona		U (125)	U (125)	221	139	246	811
207 Nona		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
206 Nona		U (125)	131	377	257	403	1470
209 Deca		U (125)	324	1240	705	878	3550

U- Undetected with a method detection limit based on a 10:1 dilution of the low calibration standard.

EMPC- A peak was detected that did not meet the identification criteria. The peak areas have been used to calculate an Estimated Maximum Possible Concentration for the detection limit.

Congener-Specific PCB Native Analyte Results for Water Samples (pg/L)

	MRI Number	99001981	99001992	99002059	99002060	99002075	99002112
	Field ID	INLET 1028	MIX 1101	MIX 1104	INLET 1104	MIX 1108	MIX 1111
	MS File	H00B291-22	H00B291-19	H00B291-13	H00B291-23	H00B291-8	H00B291-14
omer	Matrix	Water	Water	Water	Water	Water	Water
8 Di		U (138)	U (153)	U (183)	U (198)	U (176)	U (186)
18 Tri		U (152 EMPC)	U (125)	275	129	U (130 EMPC)	U (125)
28 Tri		U (220 EMPC)	U (130 EMPC)	U (332 EMPC)	U (209 EMPC)	U (180 EMPC)	128
37 Tri		U (356 EMPC)	U (125)	U (125)	U (125)	U (125)	U (125)
52 Tetra		328	151	711	208	240	158
49 Tetra		270	U (125)	268	137	155	U (125)
47 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
44 Tetra		490	U (125)	630	129	148	U (125)
42 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
64 Tetra		325	U (125)	U (321 EMPC)	U (125)	U (125)	U (125)
74 Tetra		232	U (125)	366	U (125)	U (125)	U (125)
70 Tetra		624	U (125)	1630	222	U (125)	U (125)
80 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
66 Tetra		447	U (125)	U (125)	U (125)	U (125)	U (125)
60 Tetra		475	U (125)	403	U (125)	U (125)	U (125)
79 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
78 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
81 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
77 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
95 Penta		352	177	3140	513	224	189
91 Penta		U (125)	U (125)	483	U (125)	U (125)	U (125)
92 Penta		U (125)	U (125)	687	130	U (125)	U (125)
/101 Penta		294	U (250)	3530	528	U (250)	U (250)
99 Penta		218	U (125)	2360	359	150	141
119 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
97 Penta		133	U (125)	1800	276	U (125)	U (125)
86 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
87 Penta		220	U (125)	4150	555	U (125)	U (125)
120 Penta		U (125)	U (125)	880	U (125)	U (125)	U (125)
110 Penta		424	215	7430	1110	283	277
82 Penta		U (125)	U (125)	U (703 EMPC)	U (125)	U (125)	U (125)
123 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
118 Penta		223	U (125)	U (4390 EMPC)	U (633 EMPC)	U (152 EMPC)	161
114 Penta		U (125)	U (125)	143	U (125)	U (125)	U (125)
105/127 Penta		U (250)	U (250)	578	U (250)	U (250)	U (250)
126 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
151 Hexa		U (125)	U (125)	599	U (125)	U (125)	U (125)
149 Hexa		258	192	3120	698	274	248
146 Hexa		U (125)	U (125)	425	131	U (125)	U (125)
153 Hexa		287	226	2840	735	355	306
168 Hexa		U (125)	U (125)	1410	330	U (125)	U (125)
141 Hexa		U (125)	U (125)	595	170	U (125)	U (125)
137 Hexa		U (125)	U (125)	297	U (125)	U (125)	U (125)
138 Hexa		301	222	3560	931	357	326
158 Hexa		U (125)	U (125)	505	U (125)	U (125)	U (125)
166 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)

Congener-Specific PCB Native Analyte Results for Water Samples (pg/L)

	MRI Number	99001981	99001992	99002059	99002060	99002075	99002112
	Field ID	INLET 1028	MIX 1101	MIX 1104	INLET 1104	MIX 1108	MIX 1111
	MS File	H00B291-22	H00B291-19	H00B291-13	H00B291-23	H00B291-8	H00B291-14
Isomer	Matrix	Water	Water	Water	Water	Water	Water
128/167 Hexa		U (125)	U (125)	300	U (125)	U (125)	U (125)
156 Hexa		U (125)	U (125)	191	U (125)	U (125)	U (125)
157 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
169 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
179 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
187 Hepta		147	U (125)	211	190	183	130
183 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
185 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
174 Hepta		U (125)	U (125)	176	136	U (125)	U (125)
177 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
171 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
180 Hepta		232	183	285	432	306	195
191 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
170 Hepta		U (125)	U (125)	U (125)	128	U (125)	U (125)
190 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
189 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
200 Octa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
198 Octa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
201 Octa		219	184	145	494	295	184
196/203 Octa		U (250)	U (250)	U (250)	U (250)	U (250)	U (250)
195 Octa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
194 Octa		U (125)	U (125)	U (125)	373	U (125)	U (125)
205 Octa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
208 Nona		228	163	U (125)	287	315	212
207 Nona		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
206 Nona		378	279	U (125)	682	514	325
209 Deca		874	746	188	1360	2170	872

U- Undetected with a method detection limit based on a 10:1 dilution of the low calibration standard.

EMPC- A peak was detected that did not meet the identification criteria. The peak areas have been used to calculate an Estimated Maximum Possible Concentration for the detection limit.

Congener-Specific PCB Native Analyte Results for Water Samples (pg/L)

Isomer	MRI Number / Field ID / MS File / Matrix	99002124 / MIX 1115 / H00B291-17 / Water	99002142 / MIX 1118 / H00B291-9 / Water	99002160 / MIX 1122 / H00B291-10 / Water	99002201 / MIX 1129 / H00B291-11 / Water	99002229 / MIX 1206 / H00B291-18 / Water
8 Di		U (126)	U (179)	U (164)	U (180)	U (162)
18 Tri		U (125)	U (125)	U (125)	U (125)	U (125)
28 Tri		U (209 EMPC)	U (125)	U (125)	U (125)	131
37 Tri		U (125)	U (125)	U (125)	U (125)	U (125)
52 Tetra		265	131	U (125)	148	138
49 Tetra		182	U (125)	U (125)	U (125)	U (125)
47 Tetra		U (125)	U (125)	128	U (125)	U (125)
44 Tetra		161	U (125)	U (125)	U (125)	U (125)
42 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)
64 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)
74 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)
70 Tetra		147	U (125)	U (125)	U (125)	U (125)
80 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)
66 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)
60 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)
79 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)
78 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)
81 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)
77 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)
95 Penta		317	141	U (125)	141	159
91 Penta		U (125)	U (125)	U (125)	U (125)	U (125)
92 Penta		U (125)	U (125)	U (125)	U (125)	U (125)
84/101 Penta		259	U (250)	U (250)	U (250)	U (250)
99 Penta		205	U (125)	U (125)	U (125)	U (125)
119 Penta		U (125)	U (125)	U (125)	U (125)	U (125)
97 Penta		U (125)	U (125)	U (125)	U (125)	U (125)
86 Penta		U (125)	U (125)	U (125)	U (125)	U (125)
87 Penta		143	U (125)	U (125)	U (125)	U (125)
120 Penta		U (125)	U (125)	U (125)	U (125)	U (125)
110 Penta		401	187	143	181	206
82 Penta		U (125)	U (125)	U (125)	U (125)	U (125)
123 Penta		U (125)	U (125)	U (125)	U (125)	U (125)
118 Penta		U (197 EMPC)	U (125)	U (125)	U (125)	U (125)
114 Penta		U (125)	U (125)	U (125)	U (125)	U (125)
105/127 Penta		U (250)	U (250)	U (250)	U (250)	U (250)
126 Penta		U (125)	U (125)	U (125)	U (125)	U (125)
151 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)
149 Hexa		380	U (162 EMPC)	U (125)	196	197
146 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)
153 Hexa		485	210	142	234	260
168 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)
141 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)
137 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)
138 Hexa		471	208	U (125)	240	267
158 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)
166 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)

Congener-Specific PCB Native Analyte Results for Water Samples (pg/L)

	MRI Number	99002124	99002142	99002160	99002201	99002229
	Field ID	MIX 1115	MIX 1118	MIX 1122	MIX 1129	MIX 1206
	MS File	H00B291-17	H00B291-9	H00B291-10	H00B291-11	H00B291-18
Isomer	Matrix	Water	Water	Water	Water	Water
128/167 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)
156 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)
157 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)
169 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)
179 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)
187 Hepta		277	155	U (125)	141	125
183 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)
185 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)
174 Hepta		211	U (125)	U (125)	U (125)	U (125)
177 Hepta		131	U (125)	U (125)	U (125)	U (125)
171 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)
180 Hepta		484	351	U (125)	254	211
191 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)
170 Hepta		U (153 EMPC)	U (125)	U (125)	U (125)	U (125)
190 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)
189 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)
200 Octa		U (125)	U (125)	U (125)	U (125)	U (125)
198 Octa		U (125)	U (125)	U (125)	U (125)	U (125)
201 Octa		460	418	U (125)	274	193
196/203 Octa		U (250)	U (250)	U (250)	U (250)	U (250)
195 Octa		U (125)	U (125)	U (125)	U (125)	U (125)
194 Octa		184	237	U (125)	U (125)	U (125)
205 Octa		U (125)	U (125)	U (125)	U (125)	U (125)
208 Nona		413	151	U (125)	216	190
207 Nona		U (125)	U (125)	U (125)	U (125)	U (125)
206 Nona		747	340	139	365	343
209 Deca		2410	611	656	808	1180

U- Undetected with a method detection limit based on a 10:1 dilution of the low calibration standard.

EMPC- A peak was detected that did not meet the identification criteria. The peak areas have been used to calculate an Estimated Maximum Possible Concentration for the detection limit.

Congener-Specific PCB Native Analyte Results for Water Samples (pg/L)

Isomer	MRI Number	Method Blank	99001956	99001958	99001980	99001982	99001983
	Field ID	Method Blank	WEIR 1021	BG 1021	WEIR 1028	BG 1028	MIX 1028
	MS File	H00B281-3	H00B281-6	H00B281-7	H00B281-8	H00B281-9	H00B281-10
	Matrix	Water	Water	Water	Water	Water	Water
8 Di		U (125)	U (125)	U (145)	U (125)	U (125)	U (125)
18 Tri		U (125)	U (125)	U (133 EMPC)	U (125)	U (125)	U (125)
28 Tri		U (125)	U (125)	U (133 EMPC)	U (125)	U (125)	U (125)
37 Tri		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
52 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
49 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
47 Tetra		U (125)	U (125)	U (132 EMPC)	U (125)	U (125)	U (125)
44 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
42 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
64 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
74 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
70 Tetra		518	404	U (125)	U (125)	160	U (125)
80 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
66 Tetra		153	189	U (125)	U (125)	U (125)	U (125)
60 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
79 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
78 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
81 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
77 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
95 Penta		778	588	161	174	400	133
91 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
[illegible] Penta		312	216	U (125)	U (125)	U (125)	U (125)
[illegible]/101 Penta		1400	974	U (250)	U (250)	376	U (250)
99 Penta		876	686	U (125)	139	246	U (125)
119 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
97 Penta		684	468	U (125)	U (125)	199	U (125)
86 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
87 Penta		1590	1060	U (125)	U (125)	370	U (125)
120 Penta		310	U (125)	U (125)	U (125)	U (125)	U (125)
110 Penta		2940	2120	177	234	780	184
82 Penta		296	179	U (125)	U (125)	U (125)	U (125)
123 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
118 Penta		U (2120 EMPC)	U (1560 EMPC)	U (135 EMPC)	162	U (442 EMPC)	U (125)
114 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
105/127 Penta		258	U (250)	U (250)	U (250)	U (250)	U (250)
126 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
151 Hexa		314	262	U (125)	U (125)	U (125)	U (125)
149 Hexa		1610	1360	162	266	514	160
146 Hexa		242	284	U (125)	U (125)	U (125)	U (125)
153 Hexa		1620	1580	181	334	554	190
168 Hexa		752	612	U (125)	U (125)	226	U (125)
141 Hexa		420	388	U (125)	U (125)	130	U (125)
137 Hexa		155	135	U (125)	U (125)	U (125)	U (125)
138 Hexa		1960	1920	222	350	704	206
158 Hexa		260	U (222 EMPC)	U (125)	U (125)	U (125)	U (125)
[illegible]66 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)

Congener-Specific PCB Native Analyte Results for Water Samples (pg/L)

	MRI Number	Method Blank	99001956	99001958	99001980	99001982	99001983
	Field ID	Method Blank	WEIR 1021	BG 1021	WEIR 1028	BG 1028	MIX 1028
	MS File	H00B281-3	H00B281-6	H00B281-7	H00B281-8	H00B281-9	H00B281-10
Isomer	Matrix	Water	Water	Water	Water	Water	Water
128/167 Hexa		U (125)	U (164 EMPC)	U (125)	U (125)	U (125)	U (125)
156 Hexa		126	142	U (125)	U (125)	U (125)	U (125)
157 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
169 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
179 Hepta		U (125)	208	U (125)	U (125)	U (125)	U (125)
187 Hepta		238	526	U (125)	208	260	U (125)
183 Hepta		U (125)	230	U (125)	U (125)	U (125)	U (125)
185 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
174 Hepta		196	398	U (125)	136	169	U (125)
177 Hepta		U (125)	220	U (125)	U (125)	U (125)	U (125)
171 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
180 Hepta		330	824	149	U (125)	318	188
191 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
170 Hepta		U (125)	260	U (125)	U (125)	U (125)	U (125)
190 Hepta		U (125)	260	U (125)	U (125)	U (125)	U (125)
189 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
200 Octa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
198 Octa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
201 Octa		206	844	U (125)	U (125)	338	163
196/203 Octa		U (250)	360	U (250)	U (250)	U (250)	U (250)
195 Octa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
194 Octa		U (125)	316	U (125)	U (125)	U (125)	U (125)
205 Octa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
208 Nona		U (125)	714	U (125)	U (125)	208	162
207 Nona		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
206 Nona		U (125)	1310	U (125)	U (125)	326	266
209 Deca		U (125)	3240	U (131 EMPC)	2310	694	718

U- Undetected with a method detection limit based on a 10:1 dilution of the low calibration standard.

EMPC- A peak was detected that did not meet the identification criteria. The peak areas have been used to calculate an Estimated Maximum Possible Concentration for the detection limit.

Congener-Specific PCB Native Analyte Results for Water Samples (pg/L)

	MRI Number	99001991	99002058	99002061	99002074	99002111	99002113
	Field ID	WIER 1101	WEIR 1104	BG 1104	WEIR 1108	WEIR 1111	BG 1111
	MS File	H00B281-11	H00B281-12	H00B281-13	H00B281-14	H00B281-17	H00B281-18
Isomer	Matrix	Water	Water	Water	Water	Water	Water
8 Di		U (125)	U (125)	U (125)	U (125)	U (167)	U (125)
18 Tri		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
28 Tri		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
37 Tri		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
52 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
49 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
47 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
44 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
42 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
64 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
74 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
70 Tetra		U (125)	U (125)	U (125)	U (125)	156	326
80 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
66 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	144
60 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
79 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
78 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
81 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
77 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
95 Penta		U (155 EMPC)	160	185	U (125)	270	572
91 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
92 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	204
84/101 Penta		U (250)	U (250)	U (250)	U (250)	U (250)	898
99 Penta		U (125)	U (125)	U (125)	U (125)	192	638
119 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
97 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	462
86 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
87 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	1050
120 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
110 Penta		240	212	222	216	318	2040
82 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	181
123 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
118 Penta		169	129	U (125)	173	192	U (1320 EMPC)
114 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
105/127 Penta		U (250)	U (250)	U (250)	U (250)	U (250)	U (250)
126 Penta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
151 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	240
149 Hexa		206	U (218 EMPC)	244	202	U (334 EMPC)	1160
146 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	191
153 Hexa		264	300	282	306	398	1260
168 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	490
141 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	294
137 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
138 Hexa		294	270	272	294	440	1480
158 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	184
166 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)

Congener-Specific PCB Native Analyte Results for Water Samples (pg/L)

	MRI Number	99001991	99002058	99002061	99002074	99002111	99002113
	Field ID	WIER 1101	WEIR 1104	BG 1104	WEIR 1108	WEIR 1111	BG 1111
	MS File	H00B281-11	H00B281-12	H00B281-13	H00B281-14	H00B281-17	H00B281-18
Isomer	Matrix	Water	Water	Water	Water	Water	Water
128/167 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
156 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
157 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
169 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
179 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	127
187 Hepta		173	260	174	160	252	250
183 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
185 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
174 Hepta		U (125)	U (132 EMPC)	145	U (125)	196	U (204 EMPC)
177 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
171 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
180 Hepta		238	496	310	282	412	318
191 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
170 Hepta		U (125)	U (125)	U (125)	U (125)	142	U (125)
190 Hepta		U (125)	U (125)	U (125)	U (125)	142	U (125)
189 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
200 Octa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
198 Octa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
201 Octa		220	516	304	268	356	197
196/203 Octa		U (250)	U (250)	U (250)	U (250)	U (250)	U (250)
195 Octa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
194 Octa		U (125)	274	U (125)	U (125)	U (125)	U (125)
205 Octa		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
208 Nona		218	U (346 EMPC)	470	318	402	186
207 Nona		U (125)	U (125)	U (125)	U (125)	U (125)	U (125)
206 Nona		362	642	890	514	570	292
209 Deca		896	1320	1760	1290	1450	663

U-
EMPC-

Congener-Specific PCB Native Analyte Results for Water Samples (pg/L)

	MRI Number	99002125	99002141	99002159	99002202	99002228
	Field ID	WEIR 1115	WEIR 1118	WEIR 1122	WEIR 1129	WEIR 1206
	MS File	H00B281-19	H00B281-20	H00B281-21	H00B281-22	H00B281-23
Isomer	Matrix	Water	Water	Water	Water	Water
8 Di		U (125)	U (125)	U (125)	U (125)	232
18 Tri		U (125)	U (125)	U (125)	U (125)	175
28 Tri		U (125)	U (125)	U (125)	U (125)	206
37 Tri		U (125)	U (125)	U (125)	U (125)	U (125)
52 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)
49 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)
47 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)
44 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)
42 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)
64 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)
74 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)
70 Tetra		138	U (125)	147	496	230
80 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)
66 Tetra		U (125)	U (125)	U (125)	193	U (125)
60 Tetra		U (125)	U (125)	U (125)	135	U (125)
79 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)
78 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)
81 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)
77 Tetra		U (125)	U (125)	U (125)	U (125)	U (125)
95 Penta		224	190	354	916	338
91 Penta		U (125)	U (125)	U (125)	148	U (125)
2 Penta		U (125)	U (125)	U (125)	191	U (125)
84/101 Penta		252	U (250)	342	1060	500
99 Penta		196	129	232	740	328
119 Penta		U (125)	U (125)	U (125)	U (125)	U (125)
97 Penta		U (125)	U (125)	226	578	248
86 Penta		U (125)	U (125)	U (125)	U (125)	U (125)
87 Penta		192	144	378	1270	546
120 Penta		U (125)	U (125)	U (125)	U (125)	U (125)
110 Penta		432	276	846	2460	1060
82 Penta		U (125)	U (125)	U (125)	U (204 EMPC)	U (125)
123 Penta		U (125)	U (125)	U (125)	U (125)	U (125)
118 Penta		U (274 EMPC)	U (147 EMPC)	U (478 EMPC)	U (1500 EMPC)	U (748 EMPC)
114 Penta		U (125)	U (125)	U (125)	U (125)	U (125)
105/127 Penta		U (250)	U (250)	U (250)	U (250)	U (250)
126 Penta		U (125)	U (125)	U (125)	U (125)	U (125)
151 Hexa		U (125)	U (125)	U (125)	191	U (125)
149 Hexa		332	240	620	978	598
146 Hexa		U (125)	U (125)	U (125)	U (143 EMPC)	U (125)
153 Hexa		454	304	680	978	702
168 Hexa		U (125)	U (125)	334	464	294
141 Hexa		U (125)	U (125)	U (155 EMPC)	184	176
137 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)
138 Hexa		492	300	1130	1200	872
158 Hexa		U (125)	U (125)	131	181	U (125)
166 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)

Congener-Specific PCB Native Analyte Results for Water Samples (pg/L)

	MRI Number	99002125	99002141	99002159	99002202	99002228
	Field ID	WEIR 1115	WEIR 1118	WEIR 1122	WEIR 1129	WEIR 1206
	MS File	H00B281-19	H00B281-20	H00B281-21	H00B281-22	H00B281-23
Isomer	Matrix	Water	Water	Water	Water	Water
128/167 Hexa		U (125)	U (125)	192	U (125)	U (125)
156 Hexa		U (125)	U (125)	163	U (125)	U (125)
157 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)
169 Hexa		U (125)	U (125)	U (125)	U (125)	U (125)
179 Hepta		U (125)	U (125)	171	U (125)	U (125)
187 Hepta		U (175 EMPC)	U (125)	512	U (125)	175
183 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)
185 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)
174 Hepta		166	126	352	U (125)	U (125)
177 Hepta		U (125)	U (125)	171	U (125)	U (125)
171 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)
180 Hepta		358	274	648	200	278
191 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)
170 Hepta		U (125)	U (125)	326	U (125)	U (125)
190 Hepta		U (125)	U (125)	326	U (125)	U (125)
189 Hepta		U (125)	U (125)	U (125)	U (125)	U (125)
200 Octa		U (125)	U (125)	143	U (125)	U (125)
198 Octa		U (125)	U (125)	U (125)	U (125)	U (125)
201 Octa		298	208	1580	129	184
196/203 Octa		U (250)	U (250)	608	U (250)	U (250)
195 Octa		U (125)	U (125)	U (125)	U (125)	U (125)
194 Octa		U (125)	U (125)	U (125)	U (125)	U (125)
205 Octa		U (125)	U (125)	U (125)	U (125)	U (125)
208 Nona		328	240	792	149	148
207 Nona		U (125)	U (125)	U (125)	U (125)	U (125)
206 Nona		502	354	U (125)	U (125)	U (125)
209 Deca		1200	820	1040	554	517

U-
EMPC-

Congener-Specific PCB Native Analyte Results for Combined Samples (pg/g and pg/L)

	MRI Number	99001955			99001957			99001962		
	Field ID	INLET 1015			INLET 1021			WEIR 1025		
	MS File	H00C021-14	H00B291-20		H00C021-17	H00B291-21		H00C021-19	H00B291-6	
	Matrix	Solid	Water	Slurry	Solid	Water	Slurry	Solid	Water	Slurry
	% solids			25.79			20.14			4.92
Isomer	Units	pg/g	pg/L	pg/L	pg/g	pg/L	pg/L	pg/g	pg/L	pg/L
8 Di		127	U (144)	32753	126	U (144)	25376.4	176	U (485)	8659
18 Tri		206	U (125)	53127	220	U (125)	44308	141	U (392 EMPC)	6937
28 Tri		633	U (125)	163251	637	U (125)	128292	927	U (561 EMPC)	45608
37 Tri		342	U (125)	88202	284	U (125)	57198	395	U (220 EMPC)	19434
52 Tetra		528	U (125)	136171	520	128	104856	722	784	36306
49 Tetra		448	U (125)	115539	479	U (125)	96471	694	466	34611
47 Tetra		246	U (125)	63443	243	U (125)	48940	349	332	17503
44 Tetra		345	U (125)	88976	343	U (125)	69080	422	U (393 EMPC)	20762
42 Tetra		175	U (125)	45133	174	U (125)	35044	254	U (172 EMPC)	12497
64 Tetra		193	U (125)	49775	196	U (125)	39474	298	U (289 EMPC)	14662
74 Tetra		209	U (125)	53901	204	U (125)	41086	353	131	17499
70 Tetra		214	U (125)	55191	209	U (125)	42093	1070	370	53014
80 Tetra		292	U (125)	75307	299	U (125)	60219	539	U(125)	26519
66 Tetra		531	U (125)	136945	522	U (125)	105131	948	310	46952
60 Tetra		264	U (125)	68086	253	U (125)	50954	463	146	22926
79 Tetra		U (12.5)	U (125)	U	U (12.5)	U (125)	U	U (13.7)	U (125)	U
78 Tetra		U (12.5)	U (125)	U	U (12.5)	U (125)	U	U (14.1)	U (125)	U
81 Tetra		U (12.5)	U (125)	U	U (12.5)	U (125)	U	15.5	U (125)	763
77 Tetra		176	U (125)	45390	143	U (125)	28800	259	U (125)	12743
95 Penta		774	136	199751	793	140	159850	1690	682	83830
91 Penta		212	U (125)	54675	227	U (125)	45718	458	161	22695
92 Penta		203	U (125)	52354	204	U (125)	41086	426	168	21127
84/101 Penta		713	U (250)	183883	729	U (250)	146821	1460	570	72402
99 Penta		714	U (125)	184141	751	U (125)	151251	1440	471	71319
119 Penta		59.6	U (125)	15371	60.9	U (125)	12265	122	U (125)	6002
97 Penta		257	U (125)	66280	273	U (125)	54982	536	229	26600
86 Penta		U (12.5)	U (125)	U	U (12.5)	U (125)	U	24.4	U (125)	1200
87 Penta		296	U (125)	76338	281	U (125)	56593	620	329	30833
120 Penta		112	U (125)	28885	113	U (125)	22758	223	U (125)	10972
110 Penta		971	199	250620	983	192	198168	1970	807	97731
82 Penta		81.2	U (125)	20941	75.9	U (125)	15286	152	U (125)	7478
123 Penta		36.6	U (125)	9439	37.0	U (125)	7452	70.0	U (125)	3444
118 Penta		694	U (125)	178983	646	U (125)	130104	1060	U (456 EMPC)	52152

Congener-Specific PC[illegible]tive Analyte Results for Combined Samples (pg/g and pg/L)

	MRI Number	99001955			99001957			99001962		
	Field ID	INLET 1015			INLET 1021			WEIR 1025		
	MS File	H00C021-14	H00B291-20		H00C021-17	H00B291-21		H00C021-19	H00B291-6	
	Matrix	Solid	Water	Slurry	Solid	Water	Slurry	Solid	Water	Slurry
	% solids			25.79			20.14			4.92
Isomer	Units	pg/g	pg/L	pg/L	pg/g	pg/L	pg/L	pg/g	pg/L	pg/L
114 Penta		U (12.5)	U (125)	U	U (12.5)	U (125)	U	17.1	U (125)	841
105/127 Penta		76.3	U (250)	19678	70.1	U (250)	14118	124	U (250)	6101
126 Penta		U (12.5)	U (125)	U	U (12.5)	U (125)	U	U (24.2 EMPC)	U (125)	U
151 Hexa		274	U (125)	70665	250	U (125)	50350	524	221	26002
149 Hexa		1050	141	270936	1050	159	211629	2110	818	104630
146 Hexa		284	U (125)	73244	281	U (125)	56593	525	190	26020
153 Hexa		1330	140	343147	1310	172	264006	2570	873	127317
168 Hexa		257	U (125)	66280	251	U (125)	50551	521	225	25858
141 Hexa		175	U (125)	45133	170	U (125)	34238	358	U (147 EMPC)	17614
137 Hexa		39.9	U (125)	10290	38.9	U (125)	7834	72.4	U (125)	3562
138 Hexa		1180	177	304499	1180	195	237847	2250	984	111684
158 Hexa		91.1	U (125)	23495	85.3	U (125)	17179	166	U (125)	8167
166 Hexa		U (12.5)	U (125)	U	U (12.5)	U (125)	U	U (12.5)	U (125)	U
128/167 Hexa		29.6	U (125)	7634	34.9	U (125)	7029	53.0	U (125)	2608
156 Hexa		102	U (125)	26306	99.9	U (125)	20120	U (12.5)	U (125)	U
157 Hexa		27.6	U (125)	7118	26.8	U (125)	5398	50.1	U (125)	2465
169 Hexa		U (12.5)	U (125)	U	U (12.5)	U (125)	U	U (12.5)	U (125)	U
179 Hepta		251	U (125)	64733	241	U (125)	48537	536	203	26574
187 Hepta		643	U (125)	165830	645	U (125)	129903	1230	469	60985
183 Hepta		248	U (125)	63959	246	U (125)	49544	480	187	23803
185 Hepta		41.1	U (125)	10600	40.0	U (125)	8056	85.9	U (125)	4226
174 Hepta		432	U (125)	111413	423	U (125)	85192	847	357	42029
177 Hepta		295	U (125)	76081	286	U (125)	57600	581	214	28799
171 Hepta		112	U (125)	28885	107	U (125)	21550	229	U (125)	11267
180 Hepta		912	U (125)	235205	879	157	177188	1840	785	91313
191 Hepta		13.2	U (125)	3404	12.8	U (125)	2578	26.4	U (125)	1299
170 Hepta		331	U (125)	85365	315	U (125)	63441	669	273	33188
190 Hepta		61.2	U (125)	15783	58.9	U (125)	11862	120	U (125)	5904
189 Hepta		U (16.9 EMPC)	U (125)	U	14.1	U (125)	2840	27.2	U (125)	1338
200 Octa		154	U (125)	39717	152	U (125)	30613	268	U (125)	13186
198 Octa		49.4	U (125)	12740	44.8	U (125)	9023	85.1	U (125)	4187
201 Octa		985	125	254157	925	149	186444	1830	U (767 EMPC)	90036

Congener-Specific PCB Native Analyte Results for Combined Samples (pg/g and pg/L)

	MRI Number	99001955			99001957			99001962		
	Field ID	INLET 1015			INLET 1021			WEIR 1025		
	MS File	H00C021-14	H00B291-20		H00C021-17	H00B291-21		H00C021-19	H00B291-6	
	Matrix	Solid	Water	Slurry	Solid	Water	Slurry	Solid	Water	Slurry
	% solids			25.79			20.14			4.92
Isomer	Units	pg/g	pg/L	pg/L	pg/g	pg/L	pg/L	pg/g	pg/L	pg/L
196/203 Octa		344	U (250)	88718	327	U (250)	65858	640	293	31781
195 Octa		90.8	U (125)	23417	85.0	U (125)	17119	162	U (125)	7970
194 Octa		290	U (125)	74791	280	U (125)	56392	504	261	25058
205 Octa		14.8	U (125)	3817	14.5	U (125)	2920	25.2	U (125)	1240
208 Nona		1400	U (125)	361060	1280	139	257931	2400	811	118891
207 Nona		184	U (125)	47454	174	U (125)	35044	300	U (125)	14760
206 Nona		2130	131	549458	2150	257	433267	3310	1470	164322
209 Deca		4500	324	1160874	4140	705	834501	6600	3550	328270

Slurry pg/L-=Sediment component of slurry pg/L + Aqueous Component of Slurry pg/L
where Sediment component=pg/g X g solids/Liter slurry

U- Undetected with a method detection limit based on a 10:1 dilution of the low calibration standard.

EMPC- A peak was detected that did not meet the identification criteria. The peak areas have been used to calculate an Estimated Maximum Possible Concentration for the detection limit.

Congener-Specific PC[illegible]ative Analyte Results for Combined Samples (pg/g and pg/L)

	MRI Number	99001981			99002060		
	Field ID	INLET 1028			INLET 1104		
	MS File	H00C021-18	H00B291-22		H00C021-13	H00B291-13	
	Matrix	Solid	Water	Slurry	Solid	Water	Slurry
	% solids			5.52			14.25
Isomer	Units	pg/g	pg/L	pg/L	pg/g	pg/L	pg/L
8 Di		156	U (138)	8611.2	126	U (198)	17955
18 Tri		148	U (152 EMPC)	8170	268	129	38319
28 Tri		823	U (220 EMPC)	45430	U (738 EMPC)	U (209 EMPC)	U
37 Tri		389	U (356 EMPC)	21473	U (297 EMPC)	U (125)	U
52 Tetra		758	328	42170	776	208	110788
49 Tetra		565	270	31458	708	137	101027
47 Tetra		355	U (125)	19596	421	U (125)	59993
44 Tetra		487	490	27372	484	129	69099
42 Tetra		214	U (125)	11813	226	U (125)	32205
64 Tetra		259	325	14622	289	U (125)	41183
74 Tetra		338	232	18890	263	U (125)	37478
70 Tetra		902	624	50414	711	222	101540
80 Tetra		U (12.5)	U (125)	U	U (12.5)	U (125)	U
66 Tetra		771	447	43006	589	U (125)	83933
60 Tetra		402	475	22665	315	U (125)	44888
79 Tetra		U (18.6 EMPC)	U (125)	U	U (16.1 EMPC)	U (125)	U
78 Tetra		U (12.5)	U (125)	U	U (12.5)	U (125)	U
81 Tetra		15.7	U (125)	867	U (12.5)	U (125)	U
77 Tetra		199	U (125)	10985	161	U (125)	22943
95 Penta		1310	352	72664	1090	513	155838
91 Penta		322	U (125)	17774	236	U (125)	33630
92 Penta		329	U (125)	18161	289	130	41313
84/101 Penta		1150	294	63774	956	528	136758
99 Penta		1110	218	61490	810	359	115784
119 Penta		86.0	U (125)	4747	68.9	U (125)	9818
97 Penta		412	133	22875	324	276	46446
86 Penta		20.1	U (125)	1110	U (16.8 EMPC)	U (125)	U
87 Penta		522	220	29034	429	555	61688
120 Penta		178	U (125)	9826	151	U (125)	21518
110 Penta		1540	424	85432	1260	1110	180660
82 Penta		138	U (125)	7618	125	U (125)	17813
123 Penta		60.1	U (125)	3318	44.1	U (125)	6284
118 Penta		934	223	51780	819	U (633 EMPC)	116708

Congener-Specific PCB Native Analyte Results for Combined Samples (pg/g and pg/L)

	MRI Number	99001981			99002060		
	Field ID	INLET 1028			INLET 1104		
	MS File	H00C021-18	H00B291-22		H00C021-13	H00B291-13	
	Matrix	Solid	Water	Slurry	Solid	Water	Slurry
	% solids			5.52			14.25
Isomer	Units	pg/g	pg/L	pg/L	pg/g	pg/L	pg/L
114 Penta		U (16.8 EMPC)	U (125)	U	U (13.7 EMPC)	U (125)	U
105/127 Penta		127	U (250)	7010	98.9	U (250)	14093
126 Penta		16.0	U (125)	883	U (12.5)	U (125)	U
151 Hexa		454	U (125)	25061	400	U (125)	57000
149 Hexa		1640	258	90786	1310	698	187373
146 Hexa		409	U (125)	22577	322	131	46016
153 Hexa		2010	287	111239	1550	735	221610
168 Hexa		460	U (125)	25392	381	330	54623
141 Hexa		296	U (125)	16339	262	170	37505
137 Hexa		63.0	U (125)	3478	53.3	U (125)	7595
138 Hexa		1860	301	102973	1500	931	214681
158 Hexa		151	U (125)	8335	136	U (125)	19380
166 Hexa		U (12.5)	U (125)	U	U (12.5)	U (125)	U
128/167 Hexa		45.1	U (125)	2490	31.2	U (125)	4446
156 Hexa		172	U (125)	9494	134	U (125)	19095
157 Hexa		43.0	U (125)	2374	32.2	U (125)	4589
169 Hexa		U (12.5)	U (125)	U	U (12.5)	U (125)	U
179 Hepta		413	U (125)	22798	324	U (125)	46170
187 Hepta		989	147	54740	758	190	108205
183 Hepta		399	U (125)	22025	304	U (125)	43320
185 Hepta		74.6	U (125)	4118	58.3	U (125)	8308
174 Hepta		758	U (125)	41842	580	136	82786
177 Hepta		487	U (125)	26882	362	U (125)	51585
171 Hepta		199	U (125)	10985	149	U (125)	21233
180 Hepta		1650	232	91312	1180	432	168582
191 Hepta		25.2	U (125)	1391	19.1	U (125)	2722
170 Hepta		605	U (125)	33396	423	128	60406
190 Hepta		125	U (125)	6900	81.0	U (125)	11543
189 Hepta		25.5	U (125)	1408	18.1	U (125)	2579
200 Octa		191	U (125)	10543	120	U (125)	17100
198 Octa		64.9	U (125)	3582	45.7	U (125)	6512
201 Octa		1410	219	78051	986	494	140999

Congener-Specific PC[redacted]ative Analyte Results for Combined Samples (pg/g and pg/L)

	MRI Number	99001981			99002060		
	Field ID	INLET 1028			INLET 1104		
	MS File	H00C021-18	H00B291-22		H00C021-13	H00B291-13	
	Matrix	Solid	Water	Slurry	Solid	Water	Slurry
	% solids			5.52			14.25
Isomer	Units	pg/g	pg/L	pg/L	pg/g	pg/L	pg/L
196/203 Octa		507	U (250)	27986	354	U (250)	50445
195 Octa		145	U (125)	8004	104	U (125)	14820
194 Octa		471	U (125)	25999	338	373	48538
205 Octa		24.2	U (125)	1336	17.8	U (125)	2537
208 Nona		1750	228	96828	1290	287	184112
207 Nona		226	U (125)	12475	154	U (125)	21945
206 Nona		2690	378	148866	2160	682	308482
209 Deca		5480	874	303370	4740	1360	676810

Slurry pg/L where Sedi
U- Undetected
EMPC- A peak wa: been used

APPENDIX D

DELAWARE RIVER LOADINGS ANALYSIS

Table D-1. Ambient Delaware River contaminant concentrations and loadings compared with daily Killcohook weir contaminant concentrations.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily Concentrations (mg/L) 21-Oct	22-Oct	23-Oct	24-Oct	25-Oct	26-Oct
PCBs	6.78E-06	a	6.92E-02	2.328E-05	1.814E-05	1.814E-05	1.814E-05	1.814E-05	4.313E-06
Aluminum	1.65	b	1.68E+04	2.69	0.21	0.21	0.21	0.21	0.831
Antimony	0.004	a	4.08E+01	<	<	<	<	<	<
Arsenic	0.01	b	1.02E+02	<	<	<	<	<	<
Barium	0.03975	a	4.05E+02	0.103	0.087	0.087	0.087	0.087	0.098
Beryllium	0.001	ND	1.02E+01	<	<	<	<	<	<
Cadmium	0.001	ND	1.02E+01	0.003	0.001	0.001	0.001	0.001	0.001
Calcium	105.5	a	1.08E+06	72.1	79.9	79.9	79.9	79.9	77.5
Chromium	0.004375	a	4.46E+01	0.012	<	<	<	<	0.001
Cobalt	0.004	a	4.08E+01	0.007	0.005	0.005	0.005	0.005	<
Copper	0.01	c	1.18E+02	0.041	0.003	0.003	0.003	0.003	0.024
Cyanide	**0.0025**	ND	2.55E+01	<	0.008	0.008	0.008	0.008	0.006
Iron	1.86	b	1.90E+04	9.25	0.897	0.897	0.897	0.897	2.667
Lead	0.01	c	1.40E+02	0.015	0.007	0.007	0.007	0.007	0.018
Magnesium	54.5275	a	5.56E+05	145.57	166.33	166.33	166.33	166.33	149.58
Manganese	0.1	b	1.02E+03	8.08	6.330	6.330	6.330	6.330	5.584
Mercury	6.80E-06	c	6.94E-02	0.0005	0.0002	0.0002	0.0002	0.0002	<
Nickel	0.00625	a	6.38E+01	0.038	0.019	0.019	0.019	0.019	0.016
Potassium	21.55	a	2.20E+05	50.1	57	57	57	57	50.7
Selenium	0.004	a	4.08E+01	0.037	0.042	0.042	0.042	0.042	0.043
Silver	0.001125	a	1.15E+01	0.002	0.002	0.002	0.002	0.002	0.001
Sodium	338.9	a	3.46E+06	679	1301	1301	1301	1301	1088
Thallium	0.01625	a	1.66E+02	0.044	0.024	0.024	0.024	0.024	0.015
Vanadium	0.01225	a	1.25E+02	0.014	<	<	<	<	0.006
Zinc	0.06	c	5.96E+02	0.293	0.1	0.1	0.1	0.1	0.118

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-1. Ambient Delaware River contaminant concentrations and loadings compared with daily Killcohook weir contaminant concentrations.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily Concentrations (mg/L) 27-Oct	28-Oct	29-Oct	30-Oct	31-Oct	1-Nov
PCBs	6.78E-06	a	6.92E-02	4.313E-06	4.313E-06	3.28E-06	3.28E-06	3.28E-06	3.28E-06
Aluminum	1.65	b	1.68E+04	0.831	0.831	0.112	0.112	0.112	0.112
Antimony	0.004	a	4.08E+01	<	<	<	<	<	<
Arsenic	0.01	b	1.02E+02	<	<	<	<	<	<
Barium	0.03975	a	4.05E+02	0.098	0.098	0.108	0.108	0.108	0.108
Beryllium	*0.001*	*ND*	1.02E+01	<	<	<	<	<	<
Cadmium	0.001	ND	1.02E+01	0.001	0.001	<	<	<	<
Calcium	105.5	a	1.08E+06	77.5	77.5	84	84	84	84
Chromium	0.004375	a	4.46E+01	0.001	0.001	0.003	0.003	0.003	0.003
Cobalt	0.004	a	4.08E+01	<	<	<	<	<	<
Copper	0.01	c	1.18E+02	0.024	0.024	0.02	0.02	0.02	0.02
Cyanide	**0.0025**	ND	2.55E+01	0.006	0.006	<	<	<	<
Iron	1.86	b	1.90E+04	2.667	2.667	1.633	1.633	1.633	1.633
Lead	0.01	c	1.40E+02	0.018	0.018	0.015	0.015	0.015	0.015
Magnesium	54.5275	a	5.56E+05	149.58	149.58	160.89	160.89	160.89	160.89
Manganese	0.1	b	1.02E+03	5.584	5.584	7.774	7.774	7.774	7.774
Mercury	6.80E-06	c	6.94E-02	<	<	0.0005	0.0005	0.0005	0.0005
Nickel	0.00625	a	6.38E+01	0.016	0.016	0.017	0.017	0.017	0.017
Potassium	21.55	a	2.20E+05	50.7	50.7	55.9	55.9	55.9	55.9
Selenium	0.004	a	4.08E+01	0.043	0.043	0.074	0.074	0.074	0.074
Silver	0.001125	a	1.15E+01	0.001	0.001	0.002	0.002	0.002	0.002
Sodium	338.9	a	3.46E+06	1088	1088	1643	1643	1643	1643
Thallium	0.01625	a	1.66E+02	0.015	0.015	0.049	0.049	0.049	0.049
Vanadium	0.01225	a	1.25E+02	0.006	0.006	0.004	0.004	0.004	0.004
Zinc	0.06	c	5.96E+02	0.118	0.118	0.05	0.05	0.05	0.05

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD *ambient river concentrations exceed acute water quality criteria.*

Table D-1. Ambient Delaware River contaminant concentrations and loadings compared with daily Killcohook weir contaminant concentrations.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily Concentrations (mg/L) 2-Nov	3-Nov	4-Nov	5-Nov	6-Nov	7-Nov
PCBs	6.78E-06	a	6.92E-02	4.579E-06	4.579E-06	4.579E-06	4.023E-06	4.023E-06	4.023E-06
Aluminum	1.65	b	1.68E+04	0.98	0.98	0.98	0.07	0.07	0.07
Antimony	0.004	a	4.08E+01	<	<	<	<	<	<
Arsenic	0.01	b	1.02E+02	<	<	<	<	<	<
Barium	0.03975	a	4.05E+02				0.097	0.097	0.097
Beryllium	0.001	ND	1.02E+01	<	<	<	<	<	<
Cadmium	0.001	ND	1.02E+01	0.001	0.001	0.001	0.001	0.001	0.001
Calcium	105.5	a	1.08E+06	125	125	125	90	90	90
Chromium	0.004375	a	4.46E+01	0.003	0.003	0.003	<	<	<
Cobalt	0.004	a	4.08E+01	<	<	<	0.004	0.004	0.004
Copper	0.01	c	1.18E+02	0.009	0.009	0.009	0.015	0.015	0.015
Cyanide	**0.0025**	ND	2.55E+01	<	<	<	<	<	<
Iron	1.86	b	1.90E+04	3.979	3.979	3.979	0.760	0.760	0.760
Lead	0.01	c	1.40E+02	0.013	0.013	0.013	0.01	0.01	0.01
Magnesium	54.5275	a	5.56E+05	181	181	181	135.5	135.5	135.5
Manganese	0.1	b	1.02E+03	6.23	6.23	6.23	8.097	8.097	8.097
Mercury	6.80E-06	c	6.94E-02	<	<	<	0.0005	0.0005	0.0005
Nickel	0.00625	a	6.38E+01	0.014	0.014	0.014	0.022	0.022	0.022
Potassium	21.55	a	2.20E+05	53	53	53	47.2	47.2	47.2
Selenium	0.004	a	4.08E+01	0.048	0.048	0.048	0.042	0.042	0.042
Silver	0.001125	a	1.15E+01	0.001	0.001	0.001	0.002	0.002	0.002
Sodium	338.9	a	3.46E+06	1116	1116	1116	80	80	80
Thallium	0.01625	a	1.66E+02	0.038	0.038	0.038	0.028	0.028	0.028
Vanadium	0.01225	a	1.25E+02	0.006	0.006	0.006	<	<	<
Zinc	0.06	c	5.96E+02	0.097	0.097	0.097	0.091	0.091	0.091

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-1. Ambient Delaware River contaminant concentrations and loadings compared with daily Killcohook weir contaminant concentrations.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily Concentrations (mg/L) 8-Nov	9-Nov	10-Nov	11-Nov	12-Nov	13-Nov
PCBs	6.78E-06	a	6.92E-02	4.023E-06	5.888E-06	5.888E-06	5.888E-06	5.564E-06	5.564E-06
Aluminum	1.65	b	1.68E+04	0.07	0.42	0.42	0.42	0.094	0.094
Antimony	0.004	a	4.08E+01	<	<	<	<	<	<
Arsenic	0.01	b	1.02E+02	<	<	<	<	<	<
Barium	0.03975	a	4.05E+02	0.097	0.648	0.648	0.648	0.122	0.122
Beryllium	0.001	ND	1.02E+01	<	<	<	<	<	<
Cadmium	0.001	ND	1.02E+01	0.001	0.007	0.007	0.007	<	<
Calcium	105.5	a	1.08E+06	90	396	396	396	81.1	81.1
Chromium	0.004375	a	4.46E+01	<	<	<	<	<	<
Cobalt	0.004	a	4.08E+01	0.004	0.03	0.03	0.03	0.005	0.005
Copper	0.01	c	1.18E+02	0.015	0.101	0.101	0.101	0.015	0.015
Cyanide	**0.0025**	ND	2.55E+01	<	<	<	<	<	<
Iron	1.86	b	1.90E+04	0.760	6.308	6.308	6.308	1.139	1.139
Lead	0.01	c	1.40E+02	0.01	0.05	0.05	0.05	0.009	0.009
Magnesium	54.5275	a	5.56E+05	135.5	607.1	607.1	607.1	103.2	103.2
Manganese	0.1	b	1.02E+03	8.097	48.4	48.4	48.4	8.2	8.2
Mercury	6.80E-06	c	6.94E-02	0.0005	<	<	<	<	<
Nickel	0.00625	a	6.38E+01	0.022	0.108	0.108	0.108	0.018	0.018
Potassium	21.55	a	2.20E+05	47.2	175	175	175	32.6	32.6
Selenium	0.004	a	4.08E+01	0.042	0.18	0.18	0.18	0.027	0.027
Silver	0.001125	a	1.15E+01	0.002	0.008	0.008	0.008	0.002	0.002
Sodium	338.9	a	3.46E+06	80	3046	3046	3046	521.2	521.2
Thallium	0.01625	a	1.66E+02	0.028	0.18	0.18	0.18	0.020	0.020
Vanadium	0.01225	a	1.25E+02	<	<	<	<	<	<
Zinc	0.06	c	5.96E+02	0.091	0.579	0.579	0.579	0.081	0.081

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-1. Ambient Delaware River contaminant concentrations and loadings compared with daily Killcohook weir contaminant concentrations.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily Concentrations (mg/L) 14-Nov	15-Nov	16-Nov	17-Nov	18-Nov	19-Nov
PCBs	6.78E-06	a	6.92E-02	5.564E-06	5.564E-06	3.605E-06	3.605E-06	3.605E-06	1.244E-05
Aluminum	1.65	b	1.68E+04	0.094	0.094	<	<	<	0.008
Antimony	0.004	a	4.08E+01	<	<	<	<	<	<
Arsenic	0.01	b	1.02E+02	<	<	<	<	<	<
Barium	0.03975	a	4.05E+02	0.122	0.122	0.1	0.1	0.1	0.098
Beryllium	0.001	ND	1.02E+01	<	<	<	<	<	<
Cadmium	0.001	ND	1.02E+01	<	<	<	<	<	<
Calcium	105.5	a	1.08E+06	81.1	81.1	83.7	83.7	83.7	124
Chromium	0.004375	a	4.46E+01	<	<	0.002	0.002	0.002	0.001
Cobalt	0.004	a	4.08E+01	0.005	0.005	<	<	<	<
Copper	**0.01**	c	1.18E+02	0.015	0.015	0.003	0.003	0.003	0.001
Cyanide	**0.0025**	ND	2.55E+01	<	<	<	<	<	<
Iron	1.86	b	1.90E+04	1.139	1.139	1.093	1.093	1.093	0.284
Lead	0.01	c	1.40E+02	0.009	0.009	0.009	0.009	0.009	0.011
Magnesium	54.5275	a	5.56E+05	103.2	103.2	105.0	105.0	105.0	124.
Manganese	0.1	b	1.02E+03	8.2	8.2	8.443	8.443	8.443	7.289
Mercury	6.80E-06	c	6.94E-02	<	<	<	<	<	0.0005
Nickel	0.00625	a	6.38E+01	0.018	0.018	0.003	0.003	0.003	0.008
Potassium	21.55	a	2.20E+05	32.6	32.6	29.3	29.3	29.3	27
Selenium	0.004	a	4.08E+01	0.027	0.027	<	<	<	0.029
Silver	0.001125	a	1.15E+01	0.002	0.002	<	<	<	0.001
Sodium	338.9	a	3.46E+06	521.2	521.2	678	678	678	605
Thallium	0.01625	a	1.66E+02	0.020	0.020	0.041	0.041	0.041	0.026
Vanadium	0.01225	a	1.25E+02	<	<	0.008	0.008	0.008	0.003
Zinc	0.06	c	5.96E+02	0.081	0.081	0.076	0.076	0.076	0.04

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-1. Ambient Delaware River contaminant concentrations and loadings compared with daily Killcohook weir contaminant concentrations.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily Concentrations (mg/L) 20-Nov	21-Nov	22-Nov	23-Nov	24-Nov	25-Nov
PCBs	6.78E-06	a	6.92E-02	1.244E-05	1.244E-05	1.244E-05	1.34E-05	1.34E-05	1.34E-05
Aluminum	1.65	b	1.68E+04	0.008	0.008	0.008	0.020	0.020	0.020
Antimony	0.004	a	4.08E+01	<	<	<	<	<	<
Arsenic	0.01	b	1.02E+02	<	<	<	<	<	<
Barium	0.03975	a	4.05E+02	0.098	0.098	0.098	0.093	0.093	0.093
Beryllium	0.001	ND	1.02E+01	<	<	<	<	<	<
Cadmium	0.001	ND	1.02E+01	<	<	<	<	<	<
Calcium	105.5	a	1.08E+06	124	124	124	77.9	77.9	77.9
Chromium	0.004375	a	4.46E+01	0.001	0.001	0.001	0.001	0.001	0.001
Cobalt	0.004	a	4.08E+01	<	<	<	<	<	<
Copper	**0.01**	c	1.18E+02	0.001	0.001	0.001	0.002	0.002	0.002
Cyanide	**0.0025**	ND	2.55E+01	<	<	<	<	<	<
Iron	1.86	b	1.90E+04	0.284	0.284	0.284	1.083	1.083	1.083
Lead	0.01	c	1.40E+02	0.011	0.011	0.011	0.008	0.008	0.008
Magnesium	54.5275	a	5.56E+05	124.	124.	124.	93.67	93.67	93.67
Manganese	0.1	b	1.02E+03	7.289	7.289	7.289	7.109	7.109	7.109
Mercury	6.80E-06	c	6.94E-02	0.0005	0.0005	0.0005	0.0003	0.0003	0.0003
Nickel	0.00625	a	6.38E+01	0.008	0.008	0.008	0.019	0.019	0.019
Potassium	21.55	a	2.20E+05	27	27	27	26.7	26.7	26.7
Selenium	0.004	a	4.08E+01	0.029	0.029	0.029	0.03	0.03	0.03
Silver	0.001125	a	1.15E+01	0.001	0.001	0.001	0.001	0.001	0.001
Sodium	338.9	a	3.46E+06	605	605	605	621	621	621
Thallium	0.01625	a	1.66E+02	0.026	0.026	0.026	<	<	<
Vanadium	0.01225	a	1.25E+02	0.003	0.003	0.003	<	<	<
Zinc	0.06	c	5.96E+02	0.04	0.04	0.04	0.085	0.085	0.085

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-1. Ambient Delaware River contaminant concentrations and loadings compared with daily Killcohook weir contaminant concentrations.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily Concentrations (mg/L) 26-Nov	27-Nov	28-Nov	29-Nov	30-Nov	1-Dec
PCBs	6.78E-06	a	6.92E-02	1.34E-05	1.34E-05	1.34E-05	1.34E-05	7.807E-06	7.807E-06
Aluminum	1.65	b	1.68E+04	0.020	0.020	0.020	0.020	0.54	0.54
Antimony	0.004	a	4.08E+01	<	<	<	<	0.01	0.01
Arsenic	0.01	b	1.02E+02	<	<	<	<	<	<
Barium	0.03975	a	4.05E+02	0.093	0.093	0.093	0.093	0.112	0.112
Beryllium	0.001	ND	1.02E+01	<	<	<	<	<	<
Cadmium	0.001	ND	1.02E+01	<	<	<	<	<	<
Calcium	105.5	a	1.08E+06	77.9	77.9	77.9	77.9	79.40	79.40
Chromium	0.004375	a	4.46E+01	0.001	0.001	0.001	0.001	0.004	0.004
Cobalt	0.004	a	4.08E+01	<	<	<	<	0.002	0.002
Copper	0.01	c	1.18E+02	0.002	0.002	0.002	0.002	0.018	0.018
Cyanide	**0.0025**	ND	2.55E+01	<	<	<	<	<	<
Iron	1.86	b	1.90E+04	1.083	1.083	1.083	1.083	4.182	4.182
Lead	0.01	c	1.40E+02	0.008	0.008	0.008	0.008	<	<
Magnesium	54.5275	a	5.56E+05	93.67	93.67	93.67	93.67	98.540	98.540
Manganese	0.1	b	1.02E+03	7.109	7.109	7.109	7.109	8.144	8.144
Mercury	6.80E-06	c	6.94E-02	0.0003	0.0003	0.0003	0.0003	<	<
Nickel	0.00625	a	6.38E+01	0.019	0.019	0.019	0.019	0.021	0.021
Potassium	21.55	a	2.20E+05	26.7	26.7	26.7	26.7	31.96	31.96
Selenium	0.004	a	4.08E+01	0.03	0.03	0.03	0.03	0.00	0.00
Silver	0.001125	a	1.15E+01	0.001	0.001	0.001	0.001	<	<
Sodium	338.9	a	3.46E+06	621	621	621	621	651.00	651.00
Thallium	0.01625	a	1.66E+02	<	<	<	<	<	<
Vanadium	0.01225	a	1.25E+02	<	<	<	<	0.006	0.006
Zinc	0.06	c	5.96E+02	0.085	0.085	0.085	0.085	0.123	0.123

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-1. Ambient Delaware River contaminant concentrations and loadings compared with daily Killcohook weir contaminant concentrations.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily Concentrations (mg/L) 2-Dec	3-Dec	4-Dec	5-Dec	6-Dec	7-Dec
PCBs	6.78E-06	a	6.92E-02	7.807E-06	7.807E-06	7.807E-06	7.807E-06	7.807E-06	7.807E-06
Aluminum	1.65	b	1.68E+04	0.54	0.54	0.54	0.54	0.54	0.54
Antimony	0.004	a	4.08E+01	0.01	0.01	0.01	0.01	0.01	0.01
Arsenic	0.01	b	1.02E+02	<	<	<	<	<	<
Barium	0.03975	a	4.05E+02	0.112	0.112	0.112	0.112	0.112	0.112
Beryllium	0.001	ND	1.02E+01	<	<	<	<	<	<
Cadmium	0.001	ND	1.02E+01	<	<	<	<	<	<
Calcium	105.5	a	1.08E+06	79.40	79.40	79.40	79.40	79.40	79.40
Chromium	0.004375	a	4.46E+01	0.004	0.004	0.004	0.004	0.004	0.004
Cobalt	0.004	a	4.08E+01	0.002	0.002	0.002	0.002	0.002	0.002
Copper	0.01	c	1.18E+02	0.018	0.018	0.018	0.018	0.018	0.018
Cyanide	**0.0025**	ND	2.55E+01	<	<	<	<	<	<
Iron	1.86	b	1.90E+04	4.182	4.182	4.182	4.182	4.182	4.182
Lead	0.01	c	1.40E+02	<	<	<	<	<	<
Magnesium	54.5275	a	5.56E+05	98.540	98.540	98.540	98.540	98.540	98.540
Manganese	0.1	b	1.02E+03	8.144	8.144	8.144	8.144	8.144	8.144
Mercury	6.80E-06	c	6.94E-02	<	<	<	<	<	<
Nickel	0.00625	a	6.38E+01	0.021	0.021	0.021	0.021	0.021	0.021
Potassium	21.55	a	2.20E+05	31.96	31.96	31.96	31.96	31.96	31.96
Selenium	0.004	a	4.08E+01	0.00	0.00	0.00	0.00	0.00	0.00
Silver	0.001125	a	1.15E+01	<	<	<	<	<	<
Sodium	338.9	a	3.46E+06	651.00	651.00	651.00	651.00	651.00	651.00
Thallium	0.01625	a	1.66E+02	<	<	<	<	<	<
Vanadium	0.01225	a	1.25E+02	0.006	0.006	0.006	0.006	0.006	0.006
Zinc	0.06	c	5.96E+02	0.123	0.123	0.123	0.123	0.123	0.123

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-1. Ambient Delaware River contaminant concentrations and loadings compared with daily Killcohook weir contaminant concentrations.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily Concentrations (mg/L) 8-Dec	9-Dec	10-Dec	11-Dec	12-Dec	13-Dec
PCBs	6.78E-06	a	6.92E-02	7.807E-06	7.807E-06	7.807E-06	7.807E-06	7.807E-06	7.807E-06
Aluminum	1.65	b	1.68E+04	0.54	0.54	0.54	0.54	0.54	0.54
Antimony	0.004	a	4.08E+01	0.01	0.01	0.01	0.01	0.01	0.01
Arsenic	0.01	b	1.02E+02	<	<	<	<	<	<
Barium	0.03975	a	4.05E+02	0.112	0.112	0.112	0.112	0.112	0.112
Beryllium	0.001	ND	1.02E+01	<	<	<	<	<	<
Cadmium	0.001	ND	1.02E+01	<	<	<	<	<	<
Calcium	105.5	a	1.08E+06	79.40	79.40	79.40	79.40	79.40	79.40
Chromium	0.004375	a	4.46E+01	0.004	0.004	0.004	0.004	0.004	0.004
Cobalt	0.004	a	4.08E+01	0.002	0.002	0.002	0.002	0.002	0.002
Copper	0.01	c	1.18E+02	0.018	0.018	0.018	0.018	0.018	0.018
Cyanide	**0.0025**	ND	2.55E+01	<	<	<	<	<	<
Iron	1.86	b	1.90E+04	4.182	4.182	4.182	4.182	4.182	4.182
Lead	0.01	c	1.40E+02	<	<	<	<	<	<
Magnesium	54.5275	a	5.56E+05	98.540	98.540	98.540	98.540	98.540	98.540
Manganese	0.1	b	1.02E+03	8.144	8.144	8.144	8.144	8.144	8.144
Mercury	6.80E-06	c	6.94E-02	<	<	<	<	<	<
Nickel	0.00625	a	6.38E+01	0.021	0.021	0.021	0.021	0.021	0.021
Potassium	21.55	a	2.20E+05	31.96	31.96	31.96	31.96	31.96	31.96
Selenium	0.004	a	4.08E+01	0.00	0.00	0.00	0.00	0.00	0.00
Silver	0.001125	a	1.15E+01	<	<	<	<	<	<
Sodium	338.9	a	3.46E+06	651.00	651.00	651.00	651.00	651.00	651.00
Thallium	0.01625	a	1.66E+02	<	<	<	<	<	<
Vanadium	0.01225	a	1.25E+02	0.006	0.006	0.006	0.006	0.006	0.006
Zinc	0.06	c	5.96E+02	0.123	0.123	0.123	0.123	0.123	0.123

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-2. Ambient Delaware River contaminant concentrations and loadings compared with daily Killcohook weir loadings.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily Weir Loading (in kg/day) 21-Oct	22-Oct	23-Oct	24-Oct	25-Oct	26-Oct
PCBs	6.78E-06	a	6.92E-02	0.0006954	0.0005302	0.0005041	0.0005674	0.0004548	0.0001044
Aluminum	1.65	b	1.68E+04	80.246974	6.1377959	5.8352737	6.5687776	5.2649134	20.109641
Antimony	0.004	a	4.08E+01						
Arsenic	0.01	b	1.02E+02						
Barium	0.03975	a	4.05E+02	3.0772295	2.5428011	2.4174705	2.7213507	2.1811784	2.371534
Beryllium	0.001	ND	1.02E+01						
Cadmium	0.001	ND	1.02E+01	0.089628	0.0292276	0.027787	0.0312799	0.025071	0.0241993
Calcium	105.5	a	1.08E+06	2154.0606	2335.2852	2220.1827	2499.2635	2003.1742	1875.4478
Chromium	0.004375	a	4.46E+01	0.3585122					0.0241993
Cobalt	0.004	a	4.08E+01	0.2091321	0.146138	0.1389351	0.1563995	0.1253551	
Copper	0.01	c	1.18E+02	1.2249166	0.0876828	0.0833611	0.0938397	0.075213	0.5807838
Cyanide	**0.0025**	ND	2.55E+01		0.2338208	0.2222961	0.2502391	0.2005681	0.145196
Iron	1.86	b	1.90E+04	276.35313	26.217157	24.924955	28.058064	22.488702	64.539604
Lead	0.01	c	1.40E+02	0.4481402	0.2045932	0.1945091	0.2189593	0.1754971	0.4355879
Magnesium	54.5275	a	5.56E+05	4349.0514	4861.4266	4621.8146	5202.7846	4170.0621	3619.7353
Manganese	0.1	b	1.02E+03	241.39819	185.0107	175.89182	198.00172	158.69953	135.12904
Mercury	6.80E-06	c	6.94E-02	0.014938	0.0058455	0.0055574	0.006256	0.0050142	
Nickel	0.00625	a	6.38E+01	1.1352885	0.5553244	0.5279533	0.594318	0.4763493	0.3871892
Potassium	21.55	a	2.20E+05	1496.7883	1665.9732	1583.86	1782.9539	1429.0479	1226.9059
Selenium	0.004	a	4.08E+01	1.1054125	1.2275592	1.1670547	1.3137555	1.0529827	1.040571
Silver	0.001125	a	1.15E+01	0.059752	0.0584552	0.055574	0.0625598	0.050142	0.0241993
Sodium	338.9	a	3.46E+06	20285.814	38025.107	36150.91	40695.141	32617.392	26328.867
Thallium	0.01625	a	1.66E+02	1.3145446	0.7014624	0.6668884	0.7507174	0.6017044	0.3629899
Vanadium	0.01225	a	1.25E+02	0.4182642					0.145196
Zinc	0.06	c	5.96E+02	8.7536721	2.9227599	2.7787018	3.1279893	2.5071016	2.8555206

< - not detected

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b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-2. Ambient Delaware River contaminant concentrations and loadings compared with daily Killcohook weir loadings.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily Weir Loading (in kg/day) 27-Oct	28-Oct	29-Oct	30-Oct	31-Oct	1-Nov
PCBs	6.78E-06	a	6.92E-02	0.0001005	0.0001103	8.545E-05	8.69E-05	8.731E-05	7.865E-05
Aluminum	1.65	b	1.68E+04	19.364933	21.253389	2.9179152	2.9672436	2.9812885	2.6856604
Antimony	0.004	a	4.08E+01						
Arsenic	0.01	b	1.02E+02						
Barium	0.03975	a	4.05E+02	2.2837105	2.5064165	2.8137039	2.8612706	2.8748139	2.5897439
Beryllium	0.001	ND	1.02E+01						
Cadmium	0.001	ND	1.02E+01	0.0233032	0.0255757				
Calcium	105.5	a	1.08E+06	1805.9956	1982.1151	2188.4364	2225.4327	2235.9664	2014.2453
Chromium	0.004375	a	4.46E+01	0.0233032	0.0255757	0.0781584	0.0794797	0.0798559	0.0719373
Cobalt	0.004	a	4.08E+01						
Copper	0.01	c	1.18E+02	0.559276	0.6138163	0.5210563	0.5298649	0.532373	0.4795822
Cyanide	**0.0025**	ND	2.55E+01	0.139819	0.1534541				
Iron	1.86	b	1.90E+04	62.149551	68.210335	42.544245	43.263472	43.468252	39.157887
Lead	0.01	c	1.40E+02	0.419457	0.4603622	0.3907922	0.3973987	0.3992797	0.3596867
Magnesium	54.5275	a	5.56E+05	3485.688	3825.61	4191.6373	4262.4985	4282.6742	3857.9991
Manganese	0.1	b	1.02E+03	130.12489	142.81459	202.53458	205.9585	206.93337	186.4136
Mercury	6.80E-06	c	6.94E-02			0.0130264	0.0132466	0.0133093	0.0119896
Nickel	0.00625	a	6.38E+01	0.3728507	0.4092109	0.4428978	0.4503852	0.452517	0.4076449
Potassium	21.55	a	2.20E+05	1181.4707	1296.6869	1456.3523	1480.9725	1487.9824	1340.4323
Selenium	0.004	a	4.08E+01	1.0020363	1.0997542	1.9279082	1.9605003	1.9697799	1.7744542
Silver	0.001125	a	1.15E+01	0.0233032	0.0255757	0.0521056	0.0529865	0.0532373	0.0479582
Sodium	338.9	a	3.46E+06	25353.847	27826.338	42804.774	43528.404	43734.438	39397.678
Thallium	0.01625	a	1.66E+02	0.3495475	0.3836352	1.2765879	1.2981691	1.3043137	1.1749764
Vanadium	0.01225	a	1.25E+02	0.139819	0.1534541	0.1042113	0.105973	0.1064746	0.0959164
Zinc	0.06	c	5.96E+02	2.7497739	3.0179301	1.3026407	1.3246623	1.3309324	1.1989555

< - not detected

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b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-2. Ambient Delaware River contaminant concentrations and loadings compared with daily Killcohook weir loadings.

Analyte	Ambient Delaware River Concentration		Ambient Delaware River Loading	Daily Weir Loading (in kg/day)					
	mg/L		mg/day	2-Nov	3-Nov	4-Nov	5-Nov	6-Nov	7-Nov
PCBs	6.78E-06	a	6.92E-02	0.0001069	6.5E-05	0.0001062	0	5.229E-06	9.712E-05
Aluminum	1.65	b	1.68E+04	22.879069	13.910881	22.726202	0	0.0909922	1.689885
Antimony	0.004	a	4.08E+01						
Arsenic	0.01	b	1.02E+02						
Barium	0.03975	a	4.05E+02				0	0.1260891	2.3416978
Beryllium	0.001	ND	1.02E+01						
Cadmium	0.001	ND	1.02E+01	0.023346	0.0141948	0.02319	0	0.0012999	0.0241412
Calcium	105.5	a	1.08E+06	2918.2486	1774.3471	2898.7502	0	116.98992	2172.7093
Chromium	0.004375	a	4.46E+01	0.070038	0.0425843	0.06957			
Cobalt	0.004	a	4.08E+01				0	0.0051996	0.0965649
Copper	0.01	c	1.18E+02	0.2101139	0.127753	0.20871	0	0.0194983	0.3621182
Cyanide	**0.0025**	ND	2.55E+01						
Iron	1.86	b	1.90E+04	92.893688	56.481018	92.273018	0	0.9879149	18.347323
Lead	0.01	c	1.40E+02	0.3034979	0.1845321	0.30147	0	0.0129989	0.2414121
Magnesium	54.5275	a	5.56E+05	4225.6239	2569.2546	4197.3903	0	176.13482	3271.1345
Manganese	0.1	b	1.02E+03	145.44551	88.43346	144.47371	0	10.525193	195.47141
Mercury	6.80E-06	c	6.94E-02				0	0.0006499	0.0120706
Nickel	0.00625	a	6.38E+01	0.3268438	0.1987269	0.32466	0	0.0285975	0.5311067
Potassium	21.55	a	2.20E+05	1237.3374	752.32318	1229.0701	0	61.354714	1139.4653
Selenium	0.004	a	4.08E+01	1.1206074	0.6813493	1.1131201	0	0.0545953	1.013931
Silver	0.001125	a	1.15E+01	0.023346	0.0141948	0.02319	0	0.0025998	0.0482824
Sodium	338.9	a	3.46E+06	26054.123	15841.371	25880.042	0	103.99104	1931.2971
Thallium	0.01625	a	1.66E+02	0.8871476	0.5394015	0.8812201	0	0.0363969	0.675954
Vanadium	0.01225	a	1.25E+02	0.1400759	0.0851687	0.13914			
Zinc	0.06	c	5.96E+02	2.2645609	1.3768934	2.2494302	0	0.1182898	2.1968505

< - not detected

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c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-2. Ambient Delaware River contaminant concentrations and loadings compared with daily Killcohook weir loadings.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily Weir Loading (in kg/day) 8-Nov	9-Nov	10-Nov	11-Nov	12-Nov	13-Nov
PCBs	6.78E-06	a	6.92E-02	7.083E-05	0.0001008	0.0001089	9.86E-05	7.035E-05	9.899E-05
Aluminum	1.65	b	1.68E+04	1.232355	7.1885947	7.7679472	7.0331587	1.1885442	1.6724145
Antimony	0.004	a	4.08E+01						
Arsenic	0.01	b	1.02E+02						
Barium	0.03975	a	4.05E+02	1.7076919	11.090975	11.984833	10.851159	1.5425786	2.1705805
Beryllium	0.001	ND	1.02E+01						
Cadmium	0.001	ND	1.02E+01	0.0176051	0.1198099	0.1294658	0.1172193		
Calcium	105.5	a	1.08E+06	1584.4564	6777.8179	7324.0645	6631.2639	1025.4355	1442.9023
Chromium	0.004375	a	4.46E+01						
Cobalt	0.004	a	4.08E+01	0.0704203	0.5134711	0.5548534	0.5023685	0.0632204	0.0889582
Copper	**0.01**	c	1.18E+02	0.2640761	1.7286859	1.8680063	1.6913072	0.1896613	0.2668747
Cyanide	**0.0025**	ND	2.55E+01						
Iron	1.86	b	1.90E+04	13.379854	107.96585	116.66717	105.63135	14.401615	20.264682
Lead	0.01	c	1.40E+02	0.1760507	0.8557851	0.9247556	0.8372808	0.1137968	0.1601248
Magnesium	54.5275	a	5.56E+05	2385.4872	10390.943	11228.383	10166.263	1304.8698	1836.0976
Manganese	0.1	b	1.02E+03	142.54826	828.39997	895.16344	810.48781	103.68151	145.89148
Mercury	6.80E-06	c	6.94E-02	0.0088025					
Nickel	0.00625	a	6.38E+01	0.3873116	1.8484958	1.9974721	1.8085265	0.2275936	0.3202496
Potassium	21.55	a	2.20E+05	830.95937	2995.2478	3236.6447	2930.4828	412.19724	580.00758
Selenium	0.004	a	4.08E+01	0.739413	3.0808263	3.3291202	3.0142109	0.3413904	0.4803744
Silver	0.001125	a	1.15E+01	0.0352101	0.1369256	0.1479609	0.1339649	0.0252882	0.0355833
Sodium	338.9	a	3.46E+06	1408.4057	52134.428	56336.112	51007.146	6590.0982	9273.0046
Thallium	0.01625	a	1.66E+02	0.492942	3.0808263	3.3291202	3.0142109	0.2528817	0.3558329
Vanadium	0.01225	a	1.25E+02						
Zinc	0.06	c	5.96E+02	1.6020615	9.9099913	10.70867	9.6957117	1.0241711	1.4411231

< - not detected

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Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-2. Ambient Delaware River contaminant concentrations and loadings compared with daily Killcohook weir loadings.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily Weir Loading (in kg/day) 14-Nov	15-Nov	16-Nov	17-Nov	18-Nov	19-Nov
PCBs	6.78E-06	a	6.92E-02	0.0001494	0.0001538	0.0001057	0.0001075	0.0001131	0.0003846
Aluminum	1.65	b	1.68E+04	2.5242907	2.5984669				0.2472785
Antimony	0.004	a	4.08E+01						
Arsenic	0.01	b	1.02E+02						
Barium	0.03975	a	4.05E+02	3.2762071	3.3724784	2.933159	2.9811784	3.137165	3.0291611
Beryllium	0.001	ND	1.02E+01						
Cadmium	0.001	ND	1.02E+01						
Calcium	105.5	a	1.08E+06	2177.8721	2241.8688	2455.0541	2495.2463	2625.8071	3832.8161
Chromium	0.004375	a	4.46E+01			0.0586632	0.0596236	0.0627433	0.0309098
Cobalt	0.004	a	4.08E+01	0.1342708	0.1382163				
Copper	0.01	c	1.18E+02	0.4028124	0.414649	0.0879948	0.0894354	0.0941149	0.0309098
Cyanide	**0.0025**	ND	2.55E+01						
Iron	1.86	b	1.90E+04	30.586885	31.485679	32.059428	32.58428	34.289213	8.7783853
Lead	0.01	c	1.40E+02	0.2416874	0.2487894	0.2639843	0.2683061	0.2823448	0.3400079
Magnesium	54.5275	a	5.56E+05	2771.349	2852.785	3079.817	3130.2374	3294.0232	3832.8161
Manganese	0.1	b	1.02E+03	220.20409	226.67478	247.64662	251.7009	264.87084	225.30159
Mercury	6.80E-06	c	6.94E-02						0.0154549
Nickel	0.00625	a	6.38E+01	0.4833748	0.4975788	0.0879948	0.0894354	0.0941149	0.2472785
Potassium	21.55	a	2.20E+05	875.44551	901.17045	859.4156	873.48528	919.18934	834.5648
Selenium	0.004	a	4.08E+01	0.7250622	0.7463682				0.8963844
Silver	0.001125	a	1.15E+01	0.0537083	0.0552865				0.0309098
Sodium	338.9	a	3.46E+06	13996.387	14407.67	19886.818	20212.39	21269.979	18700.433
Thallium	0.01625	a	1.66E+02	0.5370831	0.5528653	1.2025952	1.2222832	1.2862376	0.803655
Vanadium	0.01225	a	1.25E+02			0.2346527	0.2384943	0.2509732	0.0927294
Zinc	0.06	c	5.96E+02	2.1751867	2.2391045	2.2292009	2.2656956	2.3842454	1.2363923

< - not detected

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c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-2. Ambient Delaware River contaminant concentrations and loadings compared with daily Killcohook weir loadings.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily Weir Loading (in kg/day) 20-Nov	21-Nov	22-Nov	23-Nov	24-Nov	25-Nov
PCBs	6.78E-06	a	6.92E-02	0.0003701	0.0003342	0.0003119	0.0003505	0.0003427	0.0003405
Aluminum	1.65	b	1.68E+04	0.237907	0.2148822	0.2005192	0.5232584	0.5116971	0.5083938
Antimony	0.004	a	4.08E+01						
Arsenic	0.01	b	1.02E+02						
Barium	0.03975	a	4.05E+02	2.9143611	2.6323068	2.4563601	2.4331518	2.3793915	2.3640314
Beryllium	0.001	ND	1.02E+01						
Cadmium	0.001	ND	1.02E+01						
Calcium	105.5	a	1.08E+06	3687.559	3330.674	3108.0475	2038.0916	1993.0602	1980.194
Chromium	0.004375	a	4.46E+01	0.0297384	0.0268603	0.0250649	0.0261629	0.0255849	0.0254197
Cobalt	0.004	a	4.08E+01						
Copper	0.01	c	1.18E+02	0.0297384	0.0268603	0.0250649	0.0523258	0.0511697	0.0508394
Cyanide	**0.0025**	ND	2.55E+01						
Iron	1.86	b	1.90E+04	8.4456996	7.6283178	7.1184314	28.334445	27.708397	27.529527
Lead	0.01	c	1.40E+02	0.3271222	0.295463	0.2757139	0.2093034	0.2046788	0.2033575
Magnesium	54.5275	a	5.56E+05	3687.559	3330.674	3108.0475	2450.6809	2396.5333	2381.0626
Manganese	0.1	b	1.02E+03	216.76304	195.78454	182.69805	185.99221	181.88273	180.70859
Mercury	6.80E-06	c	6.94E-02	0.0148692	0.0134301	0.0125324	0.0078489	0.0076755	0.0076259
Nickel	0.00625	a	6.38E+01	0.237907	0.2148822	0.2005192	0.4970955	0.4861122	0.4829742
Potassium	21.55	a	2.20E+05	802.93623	725.2274	676.75228	698.55002	683.11561	678.70578
Selenium	0.004	a	4.08E+01	0.862413	0.7789479	0.7268821	0.7848877	0.7675456	0.7625908
Silver	0.001125	a	1.15E+01	0.0297384	0.0268603	0.0250649	0.0261629	0.0255849	0.0254197
Sodium	338.9	a	3.46E+06	17991.719	16250.466	15164.264	16247.175	15888.195	15785.629
Thallium	0.01625	a	1.66E+02	0.7731979	0.6983671	0.6516874			
Vanadium	0.01225	a	1.25E+02	0.0892151	0.0805808	0.0751947			
Zinc	0.06	c	5.96E+02	1.1895352	1.074411	1.002596	2.2238484	2.1747126	2.1606738

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-2. Ambient Delaware River contaminant concentrations and loadings compared with daily Killcohook weir loadings.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily Weir Loading (in kg/day) 26-Nov	27-Nov	28-Nov	29-Nov	30-Nov	1-Dec
PCBs	6.78E-06	a	6.92E-02	0.0003647	0.0003156	0.000338	0.0003459	0.0001546	0.0001789
Aluminum	1.65	b	1.68E+04	0.5444849	0.4712629	0.5047236	0.5164684	10.690952	12.373955
Antimony	0.004	a	4.08E+01					0.1979806	0.2291473
Arsenic	0.01	b	1.02E+02						
Barium	0.03975	a	4.05E+02	2.5318546	2.1913726	2.3469646	2.4015783	2.2173826	2.5664499
Beryllium	0.001	ND	1.02E+01						
Cadmium	0.001	ND	1.02E+01						
Calcium	105.5	a	1.08E+06	2120.7685	1835.5691	1965.8983	2011.6446	1571.9659	1819.4297
Chromium	0.004375	a	4.46E+01	0.0272242	0.0235631	0.0252362	0.0258234	0.0791922	0.0916589
Cobalt	0.004	a	4.08E+01					0.0395961	0.0458295
Copper	0.01	c	1.18E+02	0.0544485	0.0471263	0.0504724	0.0516468	0.3563651	0.4124652
Cyanide	**0.0025**	ND	2.55E+01						
Iron	1.86	b	1.90E+04	29.483855	25.518887	27.330781	27.966766	82.795482	95.829407
Lead	0.01	c	1.40E+02	0.2177939	0.1885052	0.2018894	0.2065874		
Magnesium	54.5275	a	5.56E+05	2550.0948	2207.1599	2363.8728	2418.8799	1950.9007	2258.0176
Manganese	0.1	b	1.02E+03	193.53714	167.51041	179.40399	183.57871	161.23539	186.61757
Mercury	6.80E-06	c	6.94E-02	0.0081673	0.0070689	0.0075709	0.007747		
Nickel	0.00625	a	6.38E+01	0.5172606	0.4476998	0.4794874	0.490645	0.4157592	0.4812094
Potassium	21.55	a	2.20E+05	726.88728	629.136	673.80597	689.48537	632.74596	732.35482
Selenium	0.004	a	4.08E+01	0.8167273	0.7068944	0.7570854	0.7747027	0	0
Silver	0.001125	a	1.15E+01	0.0272242	0.0235631	0.0252362	0.0258234		
Sodium	338.9	a	3.46E+06	16906.255	14632.714	15671.667	16036.345	12888.536	14917.49
Thallium	0.01625	a	1.66E+02						
Vanadium	0.01225	a	1.25E+02					0.1187884	0.1374884
Zinc	0.06	c	5.96E+02	2.3140606	2.0028674	2.1450752	2.1949909	2.4351612	2.818512

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-2. Ambient Delaware River contaminant concentrations and loadings compared with daily Killcohook weir loadings.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily Weir Loading (in kg/day) 2-Dec	3-Dec	4-Dec	5-Dec	6-Dec	7-Dec
PCBs	6.78E-06	a	6.92E-02	0.0001846	0.0001869	0.0002186	0.0002323	0.0002024	0.0002061
Aluminum	1.65	b	1.68E+04	12.767041	12.927249	15.120603	16.066983	14.000803	14.258456
Antimony	0.004	a	4.08E+01	0.2364267	0.2393935	0.2800112	0.2975367	0.2592741	0.2640455
Arsenic	0.01	b	1.02E+02						
Barium	0.03975	a	4.05E+02	2.6479789	2.6812071	3.1361251	3.3324112	2.9038703	2.9573094
Beryllium	0.001	ND	1.02E+01						
Cadmium	0.001	ND	1.02E+01						
Calcium	105.5	a	1.08E+06	1877.2279	1900.7843	2223.2887	2362.4415	2058.6366	2096.5211
Chromium	0.004375	a	4.46E+01	0.0945707	0.0957574	0.1120045	0.1190147	0.1037097	0.1056182
Cobalt	0.004	a	4.08E+01	0.0472853	0.0478787	0.0560022	0.0595073	0.0518548	0.0528091
Copper	0.01	c	1.18E+02	0.425568	0.4309083	0.5040201	0.5355661	0.4666934	0.4752819
Cyanide	**0.0025**	ND	2.55E+01						
Iron	1.86	b	1.90E+04	98.873641	100.11436	117.10067	124.42985	108.42844	110.42382
Lead	0.01	c	1.40E+02						
Magnesium	54.5275	a	5.56E+05	2329.7486	2358.9835	2759.23	2931.9268	2554.8873	2601.9042
Manganese	0.1	b	1.02E+03	192.54589	194.96206	228.0411	242.3139	211.15285	215.03864
Mercury	6.80E-06	c	6.94E-02						
Nickel	0.00625	a	6.38E+01	0.496496	0.5027263	0.5880235	0.6248271	0.5444757	0.5544955
Potassium	21.55	a	2.20E+05	755.61969	765.1016	894.91569	950.92735	828.64012	843.88937
Selenium	0.004	a	4.08E+01	0	0	0	0	0	0
Silver	0.001125	a	1.15E+01						
Sodium	338.9	a	3.46E+06	15391.377	15584.516	18228.727	19369.64	16878.746	17189.361
Thallium	0.01625	a	1.66E+02						
Vanadium	0.01225	a	1.25E+02	0.141856	0.1436361	0.1680067	0.178522	0.1555645	0.1584273
Zinc	0.06	c	5.96E+02	2.9080483	2.9445399	3.4441374	3.6597016	3.1890718	3.2477595

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-2. Ambient Delaware River contaminant concentrations and loadings compared with daily Killcohook weir loadings.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily Weir Loading (in kg/day) 8-Dec	9-Dec	10-Dec	11-Dec	12-Dec	13-Dec
PCBs	6.78E-06	a	6.92E-02	0.0002083	0.0002187	0.0002037	0.0001974	0.000193	0.0001157
Aluminum	1.65	b	1.68E+04	14.405451	15.128861	14.086687	13.657266	13.351715	8.0052073
Antimony	0.004	a	4.08E+01	0.2667676	0.2801641	0.2608646	0.2529123	0.247254	0.1482446
Arsenic	0.01	b	1.02E+02						
Barium	0.03975	a	4.05E+02	2.9877972	3.1378379	2.9216833	2.8326181	2.7692447	1.6603393
Beryllium	0.001	ND	1.02E+01						
Cadmium	0.001	ND	1.02E+01						
Calcium	105.5	a	1.08E+06	2118.1348	2224.5029	2071.2648	2008.1239	1963.1967	1177.062
Chromium	0.004375	a	4.46E+01	0.106707	0.1120656	0.1043458	0.1011649	0.0989016	0.0592978
Cobalt	0.004	a	4.08E+01	0.0533535	0.0560328	0.0521729	0.0505825	0.0494508	0.0296489
Copper	0.01	c	1.18E+02	0.4801817	0.5042954	0.4695562	0.4552422	0.4450572	0.2668402
Cyanide	**0.0025**	ND	2.55E+01						
Iron	1.86	b	1.90E+04	111.56221	117.16462	109.09357	105.76793	103.40162	61.995883
Lead	0.01	c	1.40E+02						
Magnesium	54.5275	a	5.56E+05	2628.728	2760.737	2570.5596	2492.1981	2436.4408	1460.8021
Manganese	0.1	b	1.02E+03	217.25554	228.16564	212.44812	205.9718	201.36365	120.73039
Mercury	6.80E-06	c	6.94E-02						
Nickel	0.00625	a	6.38E+01	0.560212	0.5883446	0.5478156	0.5311159	0.5192334	0.3113136
Potassium	21.55	a	2.20E+05	852.58926	895.40445	833.72321	808.3078	790.22375	473.78968
Selenium	0.004	a	4.08E+01	0	0	0	0	0	0
Silver	0.001125	a	1.15E+01						
Sodium	338.9	a	3.46E+06	17366.571	18238.683	16982.284	16464.592	16096.235	9650.7222
Thallium	0.01625	a	1.66E+02						
Vanadium	0.01225	a	1.25E+02	0.1600606	0.1680985	0.1565187	0.1517474	0.1483524	0.0889467
Zinc	0.06	c	5.96E+02	3.2812415	3.4460184	3.2086344	3.1108216	3.0412241	1.8234083

< - not detected

a - River data *obtained from Background samples collected during the Killcohook study.*

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-3. Ambient Delaware River contaminant concentrations and loadings compared with daily River loadings downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily River Loading (in kg/day) 21-Oct	22-Oct	23-Oct	24-Oct	25-Oct	26-Oct
PCBs	6.78E-06	a	6.92E-02	6.99E-02	6.97E-02	6.97E-02	6.97E-02	6.96E-02	6.93E-02
Aluminum	1.65	b	1.68E+04	1.69E+04	1.68E+04	1.68E+04	1.68E+04	1.68E+04	1.69E+04
Antimony	0.004	a	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01
Arsenic	0.01	b	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02
Barium	0.03975	a	4.05E+02	4.09E+02	4.08E+02	4.08E+02	4.08E+02	4.08E+02	4.08E+02
Beryllium	0.001	ND	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01
Cadmium	0.001	ND	1.02E+01	1.03E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01
Calcium	105.5	a	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06
Chromium	0.004375	a	4.46E+01	4.50E+01	4.46E+01	4.46E+01	4.46E+01	4.46E+01	4.46E+01
Cobalt	0.004	a	4.08E+01	4.10E+01	4.09E+01	4.09E+01	4.10E+01	4.09E+01	4.08E+01
Copper	0.01	c	1.18E+02	1.19E+02	1.18E+02	1.18E+02	1.18E+02	1.18E+02	1.18E+02
Cyanide	**0.0025**	ND	2.55E+01	2.55E+01	2.57E+01	2.57E+01	2.58E+01	2.57E+01	2.56E+01
Iron	1.86	b	1.90E+04	1.92E+04	1.90E+04	1.90E+04	1.90E+04	1.90E+04	1.90E+04
Lead	0.01	c	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02
Magnesium	54.5275	a	5.56E+05	5.61E+05	5.61E+05	5.61E+05	5.61E+05	5.60E+05	5.60E+05
Manganese	0.1	b	1.02E+03	1.26E+03	1.21E+03	1.20E+03	1.22E+03	1.18E+03	1.16E+03
Mercury	6.80E-06	c	6.94E-02	8.43E-02	7.52E-02	7.49E-02	7.56E-02	7.44E-02	6.94E-02
Nickel	0.00625	a	6.38E+01	6.49E+01	6.43E+01	6.43E+01	6.43E+01	6.42E+01	6.41E+01
Potassium	*21.55*	a	2.20E+05	2.21E+05	2.21E+05	2.21E+05	2.22E+05	2.21E+05	2.21E+05
Selenium	0.004	a	4.08E+01	4.19E+01	4.20E+01	4.20E+01	4.21E+01	4.19E+01	4.18E+01
Silver	0.001125	a	1.15E+01	1.15E+01	1.15E+01	1.15E+01	1.15E+01	1.15E+01	1.15E+01
Sodium	338.9	a	3.46E+06	3.48E+06	3.49E+06	3.49E+06	3.50E+06	3.49E+06	3.48E+06
Thallium	0.01625	a	1.66E+02	1.67E+02	1.66E+02	1.66E+02	1.67E+02	1.66E+02	1.66E+02
Vanadium	0.01225	a	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02
Zinc	0.06	c	5.96E+02	6.05E+02	5.99E+02	5.99E+02	5.99E+02	5.99E+02	5.99E+02

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-3. Ambient Delaware River contaminant concentrations and loadings compared with daily River loadings downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily River Loading (in kg/day) 27-Oct	28-Oct	29-Oct	30-Oct	31-Oct	1-Nov
PCBs	6.78E-06	a	6.92E-02	6.93E-02	6.93E-02	6.93E-02	6.93E-02	6.93E-02	6.93E-02
Aluminum	1.65	b	1.68E+04	1.68E+04	1.69E+04	1.68E+04	1.68E+04	1.68E+04	1.68E+04
Antimony	0.004	a	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01
Arsenic	0.01	b	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02
Barium	0.03975	a	4.05E+02	4.08E+02	4.08E+02	4.08E+02	4.08E+02	4.08E+02	4.08E+02
Beryllium	0.001	ND	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01
Cadmium	0.001	ND	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01
Calcium	105.5	a	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06
Chromium	0.004375	a	4.46E+01	4.46E+01	4.47E+01	4.47E+01	4.47E+01	4.47E+01	4.47E+01
Cobalt	0.004	a	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01
Copper	0.01	c	1.18E+02	1.18E+02	1.18E+02	1.18E+02	1.18E+02	1.18E+02	1.18E+02
Cyanide	**0.0025**	ND	2.55E+01	2.56E+01	2.57E+01	2.55E+01	2.55E+01	2.55E+01	2.55E+01
Iron	1.86	b	1.90E+04	1.90E+04	1.90E+04	1.90E+04	1.90E+04	1.90E+04	1.90E+04
Lead	0.01	c	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02
Magnesium	54.5275	a	5.56E+05	5.60E+05	5.60E+05	5.60E+05	5.60E+05	5.60E+05	5.60E+05
Manganese	0.1	b	1.02E+03	1.15E+03	1.16E+03	1.22E+03	1.23E+03	1.23E+03	1.21E+03
Mercury	6.80E-06	c	6.94E-02	6.94E-02	6.94E-02	8.24E-02	8.26E-02	8.27E-02	8.13E-02
Nickel	0.00625	a	6.38E+01	6.41E+01	6.42E+01	6.42E+01	6.42E+01	6.42E+01	6.42E+01
Potassium	21.55	a	2.20E+05	2.21E+05	2.21E+05	2.21E+05	2.21E+05	2.21E+05	2.21E+05
Selenium	0.004	a	4.08E+01	4.18E+01	4.19E+01	4.27E+01	4.28E+01	4.28E+01	4.26E+01
Silver	0.001125	a	1.15E+01	1.15E+01	1.15E+01	1.15E+01	1.15E+01	1.15E+01	1.15E+01
Sodium	338.9	a	3.46E+06	3.48E+06	3.48E+06	3.50E+06	3.50E+06	3.50E+06	3.50E+06
Thallium	0.01625	a	1.66E+02	1.66E+02	1.66E+02	1.67E+02	1.67E+02	1.67E+02	1.67E+02
Vanadium	0.01225	a	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02
Zinc	0.06	c	5.96E+02	5.99E+02	5.99E+02	5.97E+02	5.98E+02	5.98E+02	5.97E+02

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-3. Ambient Delaware River contaminant concentrations and loadings compared with daily River loadings downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily River Loading (in kg/day) 2-Nov	3-Nov	4-Nov	5-Nov	6-Nov	7-Nov
PCBs	6.78E-06	a	6.92E-02	6.93E-02	6.92E-02	6.93E-02	6.92E-02	6.92E-02	6.93E-02
Aluminum	1.65	b	1.68E+04	1.69E+04	1.68E+04	1.69E+04	1.68E+04	1.68E+04	1.68E+04
Antimony	0.004	a	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01
Arsenic	0.01	b	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02
Barium	0.03975	a	4.05E+02	4.05E+02	4.05E+02	4.05E+02	4.05E+02	4.06E+02	4.08E+02
Beryllium	0.001	ND	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01
Cadmium	0.001	ND	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01
Calcium	*105.5*	a	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06
Chromium	0.004375	a	4.46E+01	4.47E+01	4.47E+01	4.47E+01	4.46E+01	4.46E+01	4.46E+01
Cobalt	0.004	a	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.09E+01
Copper	**0.01**	c	1.18E+02	1.18E+02	1.18E+02	1.18E+02	1.18E+02	1.18E+02	1.18E+02
Cyanide	**0.0025**	ND	2.55E+01	2.55E+01	2.55E+01	2.55E+01	2.55E+01	2.55E+01	2.55E+01
Iron	1.86	b	1.90E+04	1.91E+04	1.90E+04	1.91E+04	1.90E+04	1.90E+04	1.90E+04
Lead	0.01	c	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02
Magnesium	54.5275	a	5.56E+05	5.60E+05	5.59E+05	5.60E+05	5.56E+05	5.56E+05	5.59E+05
Manganese	0.1	b	1.02E+03	1.17E+03	1.11E+03	1.16E+03	1.02E+03	1.03E+03	1.22E+03
Mercury	*6.80E-06*	c	*6.94E-02*	*6.94E-02*	*6.94E-02*	*6.94E-02*	*6.94E-02*	*7.00E-02*	*8.14E-02*
Nickel	0.00625	a	6.38E+01	6.41E+01	6.39E+01	6.41E+01	6.38E+01	6.38E+01	6.43E+01
Potassium	21.55	a	2.20E+05	2.21E+05	2.21E+05	2.21E+05	2.20E+05	2.20E+05	2.21E+05
Selenium	0.004	a	4.08E+01	4.19E+01	4.15E+01	4.19E+01	4.08E+01	4.09E+01	4.18E+01
Silver	0.001125	a	1.15E+01	1.15E+01	1.15E+01	1.15E+01	1.15E+01	1.15E+01	1.15E+01
Sodium	338.9	a	3.46E+06	3.48E+06	3.47E+06	3.48E+06	3.46E+06	3.46E+06	3.46E+06
Thallium	0.01625	a	1.66E+02	1.67E+02	1.66E+02	1.67E+02	1.66E+02	1.66E+02	1.66E+02
Vanadium	0.01225	a	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02
Zinc	0.06	c	5.96E+02	5.98E+02	5.98E+02	5.98E+02	5.96E+02	5.96E+02	5.98E+02

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-3. Ambient Delaware River contaminant concentrations and loadings compared with daily River loadings downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily River Loading (in kg/day) 8-Nov	9-Nov	10-Nov	11-Nov	12-Nov	13-Nov
PCBs	6.78E-06	a	6.92E-02	6.92E-02	6.93E-02	6.93E-02	6.93E-02	6.92E-02	6.93E-02
Aluminum	1.65	b	1.68E+04	1.68E+04	1.68E+04	1.68E+04	1.68E+04	1.68E+04	1.68E+04
Antimony	0.004	a	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01
Arsenic	0.01	b	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02
Barium	0.03975	a	4.05E+02	4.07E+02	4.17E+02	4.17E+02	4.16E+02	4.07E+02	4.08E+02
Beryllium	0.001	ND	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01
Cadmium	0.001	ND	1.02E+01	1.02E+01	1.03E+01	1.03E+01	1.03E+01	1.02E+01	1.02E+01
Calcium	105.5	a	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06
Chromium	0.004375	a	4.46E+01	4.46E+01	4.46E+01	4.46E+01	4.46E+01	4.46E+01	4.46E+01
Cobalt	0.004	a	4.08E+01	4.09E+01	4.13E+01	4.14E+01	4.13E+01	4.09E+01	4.09E+01
Copper	0.01	c	1.18E+02	1.18E+02	1.19E+02	1.19E+02	1.19E+02	1.18E+02	1.18E+02
Cyanide	**0.0025**	ND	2.55E+01	2.55E+01	2.55E+01	2.55E+01	2.55E+01	2.55E+01	2.55E+01
Iron	1.86	b	1.90E+04	1.90E+04	1.91E+04	1.91E+04	1.91E+04	1.90E+04	1.90E+04
Lead	0.01	c	1.40E+02	1.40E+02	1.41E+02	1.41E+02	1.41E+02	1.40E+02	1.40E+02
Magnesium	54.5275	a	5.56E+05	5.59E+05	5.67E+05	5.67E+05	5.66E+05	5.57E+05	5.58E+05
Manganese	0.1	b	1.02E+03	1.16E+03	1.85E+03	1.92E+03	1.83E+03	1.12E+03	1.17E+03
Mercury	6.80E-06	c	6.94E-02	7.82E-02	6.94E-02	6.94E-02	6.94E-02	6.94E-02	6.94E-02
Nickel	0.00625	a	6.38E+01	6.41E+01	6.56E+01	6.57E+01	6.56E+01	6.40E+01	6.41E+01
Potassium	21.55	a	2.20E+05	2.21E+05	2.23E+05	2.23E+05	2.23E+05	2.20E+05	2.20E+05
Selenium	0.004	a	4.08E+01	4.15E+01	4.39E+01	4.41E+01	4.38E+01	4.11E+01	4.13E+01
Silver	0.001125	a	1.15E+01	1.15E+01	1.16E+01	1.16E+01	1.16E+01	1.15E+01	1.15E+01
Sodium	338.9	a	3.46E+06	3.46E+06	3.51E+06	3.51E+06	3.51E+06	3.46E+06	3.47E+06
Thallium	0.01625	a	1.66E+02	1.66E+02	1.69E+02	1.69E+02	1.69E+02	1.66E+02	1.66E+02
Vanadium	0.01225	a	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02
Zinc	0.06	c	5.96E+02	5.98E+02	6.06E+02	6.07E+02	6.06E+02	5.97E+02	5.98E+02

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-3. Ambient Delaware River contaminant concentrations and loadings compared with daily River loadings downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily River Loading (in kg/day) 14-Nov	15-Nov	16-Nov	17-Nov	18-Nov	19-Nov
PCBs	6.78E-06	a	6.92E-02	6.93E-02	6.93E-02	6.93E-02	6.93E-02	6.93E-02	6.96E-02
Aluminum	1.65	b	1.68E+04	1.68E+04	1.68E+04	1.68E+04	1.68E+04	1.68E+04	1.68E+04
Antimony	0.004	a	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01
Arsenic	0.01	b	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02
Barium	0.03975	a	4.05E+02	4.09E+02	4.09E+02	4.08E+02	4.08E+02	4.09E+02	4.08E+02
Beryllium	0.001	ND	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01
Cadmium	0.001	ND	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01
Calcium	105.5	a	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06
Chromium	0.004375	a	4.46E+01	4.46E+01	4.46E+01	4.47E+01	4.47E+01	4.47E+01	4.47E+01
Cobalt	0.004	a	4.08E+01	4.09E+01	4.09E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01
Copper	0.01	c	1.18E+02	1.18E+02	1.18E+02	1.18E+02	1.18E+02	1.18E+02	1.18E+02
Cyanide	**0.0025**	ND	2.55E+01	2.55E+01	2.55E+01	2.55E+01	2.55E+01	2.55E+01	2.55E+01
Iron	1.86	b	1.90E+04	1.90E+04	1.90E+04	1.90E+04	1.90E+04	1.90E+04	1.90E+04
Lead	0.01	c	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02
Magnesium	54.5275	a	5.56E+05	5.59E+05	5.59E+05	5.59E+05	5.59E+05	5.59E+05	5.60E+05
Manganese	0.1	b	1.02E+03	1.24E+03	1.25E+03	1.27E+03	1.27E+03	1.28E+03	1.25E+03
Mercury	6.80E-06	c	6.94E-02	6.94E-02	6.94E-02	6.94E-02	6.94E-02	6.94E-02	8.48E-02
Nickel	0.00625	a	6.38E+01	6.42E+01	6.42E+01	6.38E+01	6.38E+01	6.38E+01	6.40E+01
Potassium	21.55	a	2.20E+05	2.21E+05	2.21E+05	2.21E+05	2.21E+05	2.21E+05	2.21E+05
Selenium	0.004	a	4.08E+01	4.15E+01	4.15E+01	4.08E+01	4.08E+01	4.08E+01	4.17E+01
Silver	0.001125	a	1.15E+01	1.15E+01	1.15E+01	1.15E+01	1.15E+01	1.15E+01	1.15E+01
Sodium	338.9	a	3.46E+06	3.47E+06	3.47E+06	3.48E+06	3.48E+06	3.48E+06	3.48E+06
Thallium	0.01625	a	1.66E+02	1.66E+02	1.66E+02	1.67E+02	1.67E+02	1.67E+02	1.67E+02
Vanadium	0.01225	a	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02
Zinc	0.06	c	5.96E+02	5.98E+02	5.98E+02	5.98E+02	5.98E+02	5.99E+02	5.97E+02

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-3. Ambient Delaware River contaminant concentrations and loadings compared with daily River loadings downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily River Loading (in kg/day) 20-Nov	21-Nov	22-Nov	23-Nov	24-Nov	25-Nov
PCBs	6.78E-06	a	6.92E-02	6.95E-02	6.95E-02	6.95E-02	6.95E-02	6.95E-02	6.95E-02
Aluminum	1.65	b	1.68E+04	1.68E+04	1.68E+04	1.68E+04	1.68E+04	1.68E+04	1.68E+04
Antimony	0.004	a	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01
Arsenic	0.01	b	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02
Barium	0.03975	a	4.05E+02	4.08E+02	4.08E+02	4.08E+02	4.08E+02	4.08E+02	4.08E+02
Beryllium	0.001	ND	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01
Cadmium	0.001	ND	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01
Calcium	105.5	a	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06
Chromium	0.004375	a	4.46E+01	4.47E+01	4.47E+01	4.47E+01	4.47E+01	4.47E+01	4.47E+01
Cobalt	0.004	a	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01
Copper	0.01	c	1.18E+02	1.18E+02	1.18E+02	1.18E+02	1.18E+02	1.18E+02	1.18E+02
Cyanide	**0.0025**	ND	2.55E+01	2.55E+01	2.55E+01	2.55E+01	2.55E+01	2.55E+01	2.55E+01
Iron	1.86	b	1.90E+04	1.90E+04	1.90E+04	1.90E+04	1.90E+04	1.90E+04	1.90E+04
Lead	0.01	c	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02
Magnesium	54.5275	a	5.56E+05	5.60E+05	5.60E+05	5.59E+05	5.59E+05	5.59E+05	5.59E+05
Manganese	0.1	b	1.02E+03	1.24E+03	1.22E+03	1.20E+03	1.21E+03	1.20E+03	1.20E+03
Mercury	6.80E-06	c	6.94E-02	8.42E-02	8.28E-02	8.19E-02	7.72E-02	7.70E-02	7.70E-02
Nickel	0.00625	a	6.38E+01	6.40E+01	6.40E+01	6.40E+01	6.42E+01	6.42E+01	6.42E+01
Potassium	21.55	a	2.20E+05	2.21E+05	2.21E+05	2.20E+05	2.21E+05	2.20E+05	2.20E+05
Selenium	0.004	a	4.08E+01	4.17E+01	4.16E+01	4.15E+01	4.16E+01	4.16E+01	4.16E+01
Silver	0.001125	a	1.15E+01	1.15E+01	1.15E+01	1.15E+01	1.15E+01	1.15E+01	1.15E+01
Sodium	338.9	a	3.46E+06	3.47E+06	3.47E+06	3.47E+06	3.47E+06	3.47E+06	3.47E+06
Thallium	0.01625	a	1.66E+02	1.67E+02	1.66E+02	1.66E+02	1.66E+02	1.66E+02	1.66E+02
Vanadium	0.01225	a	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02
Zinc	0.06	c	5.96E+02	5.97E+02	5.97E+02	5.97E+02	5.98E+02	5.98E+02	5.98E+02

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-3. Ambient Delaware River contaminant concentrations and loadings compared with daily River loadings downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily River Loading (in kg/day) 26-Nov	27-Nov	28-Nov	29-Nov	30-Nov	1-Dec
PCBs	6.78E-06	a	6.92E-02	6.95E-02	6.95E-02	6.95E-02	6.95E-02	6.93E-02	6.94E-02
Aluminum	1.65	b	1.68E+04	1.68E+04	1.68E+04	1.68E+04	1.68E+04	1.68E+04	1.68E+04
Antimony	0.004	a	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.10E+01	4.10E+01
Arsenic	0.01	b	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02
Barium	0.03975	a	4.05E+02	4.08E+02	4.08E+02	4.08E+02	4.08E+02	4.08E+02	4.08E+02
Beryllium	0.001	ND	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01
Cadmium	0.001	ND	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01
Calcium	105.5	a	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06
Chromium	0.004375	a	4.46E+01	4.47E+01	4.46E+01	4.47E+01	4.47E+01	4.47E+01	4.47E+01
Cobalt	0.004	a	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01
Copper	0.01	c	1.18E+02	1.18E+02	1.18E+02	1.18E+02	1.18E+02	1.18E+02	1.18E+02
Cyanide	**0.0025**	ND	2.55E+01	2.55E+01	2.55E+01	2.55E+01	2.55E+01	2.55E+01	2.55E+01
Iron	1.86	b	1.90E+04	1.90E+04	1.90E+04	1.90E+04	1.90E+04	1.91E+04	1.91E+04
Lead	0.01	c	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02
Magnesium	54.5275	a	5.56E+05	5.59E+05	5.58E+05	5.59E+05	5.59E+05	5.58E+05	5.58E+05
Manganese	0.1	b	1.02E+03	1.21E+03	1.19E+03	1.20E+03	1.20E+03	1.18E+03	1.21E+03
Mercury	6.80E-06	c	6.94E-02	7.75E-02	7.64E-02	7.69E-02	7.71E-02	6.94E-02	6.94E-02
Nickel	0.00625	a	6.38E+01	6.43E+01	6.42E+01	6.42E+01	6.42E+01	6.42E+01	6.42E+01
Potassium	21.55	a	2.20E+05	2.21E+05	2.20E+05	2.20E+05	2.20E+05	2.20E+05	2.21E+05
Selenium	0.004	a	4.08E+01	4.16E+01	4.15E+01	4.16E+01	4.16E+01	4.08E+01	4.08E+01
Silver	0.001125	a	1.15E+01	1.15E+01	1.15E+01	1.15E+01	1.15E+01	1.15E+01	1.15E+01
Sodium	338.9	a	3.46E+06	3.47E+06	3.47E+06	3.47E+06	3.47E+06	3.47E+06	3.47E+06
Thallium	0.01625	a	1.66E+02	1.66E+02	1.66E+02	1.66E+02	1.66E+02	1.66E+02	1.66E+02
Vanadium	0.01225	a	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02
Zinc	0.06	c	5.96E+02	5.99E+02	5.98E+02	5.98E+02	5.98E+02	5.99E+02	5.99E+02

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-3. Ambient Delaware River contaminant concentrations and loadings compared with daily River loadings downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration		Ambient Delaware River Loading	Daily River Loading (in kg/day)					
	mg/L		mg/day	2-Dec	3-Dec	4-Dec	5-Dec	6-Dec	7-Dec
PCBs	6.78E-06	a	6.92E-02	6.94E-02	6.94E-02	6.94E-02	6.94E-02	6.94E-02	6.94E-02
Aluminum	1.65	b	1.68E+04	1.68E+04	1.68E+04	1.68E+04	1.68E+04	1.68E+04	1.68E+04
Antimony	0.004	a	4.08E+01	4.10E+01	4.10E+01	4.11E+01	4.11E+01	4.11E+01	4.11E+01
Arsenic	0.01	b	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02
Barium	0.03975	a	4.05E+02	4.08E+02	4.08E+02	4.09E+02	4.09E+02	4.08E+02	4.08E+02
Beryllium	0.001	ND	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01
Cadmium	0.001	ND	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01
Calcium	105.5	a	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06
Chromium	0.004375	a	4.46E+01	4.47E+01	4.47E+01	4.47E+01	4.47E+01	4.47E+01	4.47E+01
Cobalt	0.004	a	4.08E+01	4.08E+01	4.08E+01	4.09E+01	4.09E+01	4.09E+01	4.09E+01
Copper	0.01	c	1.18E+02	1.18E+02	1.18E+02	1.18E+02	1.18E+02	1.18E+02	1.18E+02
Cyanide	**0.0025**	ND	2.55E+01	2.55E+01	2.55E+01	2.55E+01	2.55E+01	2.55E+01	2.55E+01
Iron	1.86	b	1.90E+04	1.91E+04	1.91E+04	1.91E+04	1.91E+04	1.91E+04	1.91E+04
Lead	0.01	c	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02
Magnesium	54.5275	a	5.56E+05	5.59E+05	5.59E+05	5.59E+05	5.59E+05	5.59E+05	5.59E+05
Manganese	0.1	b	1.02E+03	1.21E+03	1.21E+03	1.25E+03	1.26E+03	1.23E+03	1.24E+03
Mercury	6.80E-06	c	6.94E-02	6.94E-02	6.94E-02	6.94E-02	6.94E-02	6.94E-02	6.94E-02
Nickel	0.00625	a	6.38E+01	6.42E+01	6.43E+01	6.43E+01	6.44E+01	6.43E+01	6.43E+01
Potassium	21.55	a	2.20E+05	2.21E+05	2.21E+05	2.21E+05	2.21E+05	2.21E+05	2.21E+05
Selenium	0.004	a	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01
Silver	0.001125	a	1.15E+01	1.15E+01	1.15E+01	1.15E+01	1.15E+01	1.15E+01	1.15E+01
Sodium	338.9	a	3.46E+06	3.47E+06	3.47E+06	3.48E+06	3.48E+06	3.47E+06	3.47E+06
Thallium	0.01625	a	1.66E+02	1.66E+02	1.66E+02	1.66E+02	1.66E+02	1.66E+02	1.66E+02
Vanadium	0.01225	a	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02
Zinc	0.06	c	5.96E+02	5.99E+02	5.99E+02	6.00E+02	6.00E+02	5.99E+02	5.99E+02

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined *ambient river concentrations exceed chronic water quality criteria.*

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-3. Ambient Delaware River contaminant concentrations and loadings compared with daily River loadings downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration		Ambient Delaware River Loading	Daily River Loading (in kg/day)					
	mg/L		mg/day	8-Dec	9-Dec	10-Dec	11-Dec	12-Dec	13-Dec
PCBs	6.78E-06	a	6.92E-02	6.94E-02	6.94E-02	6.94E-02	6.94E-02	6.94E-02	6.93E-02
Aluminum	1.65	b	1.68E+04	1.68E+04	1.68E+04	1.68E+04	1.68E+04	1.68E+04	1.68E+04
Antimony	0.004	a	4.08E+01	4.11E+01	4.11E+01	4.11E+01	4.11E+01	4.10E+01	4.09E+01
Arsenic	0.01	b	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02	1.02E+02
Barium	0.03975	a	4.05E+02	4.08E+02	4.09E+02	4.08E+02	4.08E+02	4.08E+02	4.07E+02
Beryllium	0.001	ND	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01
Cadmium	0.001	ND	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01	1.02E+01
Calcium	105.5	a	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06	1.08E+06
Chromium	0.004375	a	4.46E+01	4.47E+01	4.47E+01	4.47E+01	4.47E+01	4.47E+01	4.47E+01
Cobalt	0.004	a	4.08E+01	4.09E+01	4.09E+01	4.09E+01	4.09E+01	4.08E+01	4.08E+01
Copper	0.01	c	1.18E+02	1.18E+02	1.18E+02	1.18E+02	1.18E+02	1.18E+02	1.18E+02
Cyanide	**0.0025**	ND	2.55E+01	2.55E+01	2.55E+01	2.55E+01	2.55E+01	2.55E+01	2.55E+01
Iron	1.86	b	1.90E+04	1.91E+04	1.91E+04	1.91E+04	1.91E+04	1.91E+04	1.90E+04
Lead	0.01	c	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02	1.40E+02
Magnesium	54.5275	a	5.56E+05	5.59E+05	5.59E+05	5.59E+05	5.59E+05	5.59E+05	5.58E+05
Manganese	0.1	b	1.02E+03	1.24E+03	1.25E+03	1.23E+03	1.23E+03	1.22E+03	1.14E+03
Mercury	6.80E-06	c	6.94E-02	6.94E-02	6.94E-02	6.94E-02	6.94E-02	6.94E-02	6.94E-02
Nickel	0.00625	a	6.38E+01	6.43E+01	6.43E+01	6.43E+01	6.43E+01	6.43E+01	6.41E+01
Potassium	21.55	a	2.20E+05	2.21E+05	2.21E+05	2.21E+05	2.21E+05	2.21E+05	2.20E+05
Selenium	0.004	a	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01	4.08E+01
Silver	0.001125	a	1.15E+01	1.15E+01	1.15E+01	1.15E+01	1.15E+01	1.15E+01	1.15E+01
Sodium	338.9	a	3.46E+06	3.47E+06	3.48E+06	3.47E+06	3.47E+06	3.47E+06	3.47E+06
Thallium	0.01625	a	1.66E+02	1.66E+02	1.66E+02	1.66E+02	1.66E+02	1.66E+02	1.66E+02
Vanadium	0.01225	a	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02	1.25E+02
Zinc	0.06	c	5.96E+02	5.99E+02	6.00E+02	5.99E+02	5.99E+02	5.99E+02	5.98E+02

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-4. Ambient Delaware River contaminant concentrations and loadings compared with daily River concentrations downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily River Concentrations (in mg/L) 21-Oct	22-Oct	23-Oct	24-Oct	25-Oct	26-Oct
PCBs	6.78E-06	a	6.92E-02	6.85E-06	6.83E-06	6.83E-06	6.84E-06	6.83E-06	6.79E-06
Aluminum	1.65	b	1.68E+04	1.66	1.65	1.65	1.65	1.65	1.65
Antimony	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Arsenic	0.01	b	1.02E+02	0.01	0.01	0.01	0.01	0.01	0.01
Barium	0.03975	a	4.05E+02	0.04005	0.04000	0.03999	0.04002	0.03996	0.03998
Beryllium	0.001	ND	1.02E+01	0.001	0.001	0.001	0.001	0.001	0.001
Cadmium	0.001	ND	1.02E+01	0.001	0.001	0.001	0.001	0.001	0.001
Calcium	105.5	a	1.08E+06	105.7	105.7	105.7	105.7	105.7	105.7
Chromium	0.004375	a	4.46E+01	0.00441	0.00438	0.00438	0.00438	0.00438	0.00438
Cobalt	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Copper	0.01	c	1.18E+02	0.01	0.01	0.01	0.01	0.01	0.01
Cyanide	**0.0025**	ND	2.55E+01	0.00250	0.00252	0.00252	0.00252	0.00252	0.00251
Iron	1.86	b	1.90E+04	1.89	1.86	1.86	1.86	1.86	1.87
Lead	0.01	c	1.40E+02	0.01	0.01	0.01	0.01	0.01	0.01
Magnesium	54.5275	a	5.56E+05	54.95388	55.00411	54.98062	55.03758	54.93633	54.88238
Manganese	0.1	b	1.02E+03	0.12	0.12	0.12	0.12	0.12	0.11
Mercury	6.80E-06	c	6.94E-02	8.26E-06	7.37E-06	7.34E-06	7.41E-06	7.29E-06	6.80E-06
Nickel	0.00625	a	6.38E+01	0.00636	0.00630	0.00630	0.00631	0.00630	0.00629
Potassium	21.55	a	2.20E+05	21.70	21.71	21.71	21.72	21.69	21.67
Selenium	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Silver	0.001125	a	1.15E+01	0.001131	0.001131	0.001130	0.001131	0.001130	0.001127
Sodium	338.9	a	3.46E+06	340.9	342.6	342.4	342.9	342.1	341.5
Thallium	0.01625	a	1.66E+02	0.01638	0.01632	0.01632	0.01632	0.01631	0.01629
Vanadium	0.01225	a	1.25E+02	0.01229	0.01225	0.01225	0.01225	0.01225	0.01226
Zinc	0.06	c	5.96E+02	0.06	0.06	0.06	0.06	0.06	0.06

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-4. Ambient Delaware River contaminant concentrations and loadings compared with daily River concentrations downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily River Concentrations (in mg/L) 27-Oct	28-Oct	29-Oct	30-Oct	31-Oct	1-Nov
PCBs	6.78E-06	a	6.92E-02	6.79E-06	6.79E-06	6.79E-06	6.79E-06	6.79E-06	6.79E-06
Aluminum	1.65	b	1.68E+04	1.65	1.65	1.65	1.65	1.65	1.65
Antimony	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Arsenic	0.01	b	1.02E+02	0.01	0.01	0.01	0.01	0.01	0.01
Barium	0.03975	a	4.05E+02	0.03997	0.04000	0.04003	0.04003	0.04003	0.04000
Beryllium	0.001	ND	1.02E+01	0.001	0.001	0.001	0.001	0.001	0.001
Cadmium	0.001	ND	1.02E+01	0.001	0.001	0.001	0.001	0.001	0.001
Calcium	105.5	a	1.08E+06	105.7	105.7	105.7	105.7	105.7	105.7
Chromium	0.004375	a	4.46E+01	0.00438	0.00438	0.00438	0.00438	0.00438	0.00438
Cobalt	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Copper	0.01	c	1.18E+02	0.01	0.01	0.01	0.01	0.01	0.01
Cyanide	**0.0025**	ND	2.55E+01	0.00251	0.00252	0.00250	0.00250	0.00250	0.00250
Iron	1.86	b	1.90E+04	1.87	1.87	1.86	1.86	1.86	1.86
Lead	0.01	c	1.40E+02	0.01	0.01	0.01	0.01	0.01	0.01
Magnesium	54.5275	a	5.56E+05	54.86923	54.90256	54.93844	54.94539	54.94737	54.90574
Manganese	0.1	b	1.02E+03	0.11	0.11	0.12	0.12	0.12	0.12
Mercury	6.80E-06	c	6.94E-02	6.80E-06	6.80E-06	8.08E-06	8.10E-06	8.10E-06	7.98E-06
Nickel	0.00625	a	6.38E+01	0.00629	0.00629	0.00629	0.00629	0.00629	0.00629
Potassium	21.55	a	2.20E+05	21.67	21.68	21.69	21.70	21.70	21.68
Selenium	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Silver	0.001125	a	1.15E+01	0.001127	0.001128	0.001130	0.001130	0.001130	0.001130
Sodium	338.9	a	3.46E+06	341.4	341.6	343.1	343.2	343.2	342.8
Thallium	0.01625	a	1.66E+02	0.01628	0.01629	0.01638	0.01638	0.01638	0.01637
Vanadium	0.01225	a	1.25E+02	0.01226	0.01227	0.01226	0.01226	0.01226	0.01226
Zinc	0.06	c	5.96E+02	0.06	0.06	0.06	0.06	0.06	0.06

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-4. Ambient Delaware River contaminant concentrations and loadings compared with daily River concentrations downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration		Ambient Delaware River Loading	Daily River Concentrations (in mg/L)					
	mg/L		mg/day	2-Nov	3-Nov	4-Nov	5-Nov	6-Nov	7-Nov
PCBs	6.78E-06	a	6.92E-02	6.79E-06	6.79E-06	6.79E-06	6.78E-06	6.78E-06	6.79E-06
Aluminum	1.65	b	1.68E+04	1.65	1.65	1.65	1.65	1.65	1.65
Antimony	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Arsenic	0.01	b	1.02E+02	0.01	0.01	0.01	0.01	0.01	0.01
Barium	0.03975	a	4.05E+02	0.03975	0.03975	0.03975	0.03975	0.03976	0.03998
Beryllium	0.001	ND	1.02E+01	0.001	0.001	0.001	0.001	0.001	0.001
Cadmium	0.001	ND	1.02E+01	0.001	0.001	0.001	0.001	0.001	0.001
Calcium	105.5	a	1.08E+06	105.8	105.7	105.8	105.5	105.5	105.7
Chromium	0.004375	a	4.46E+01	0.00438	0.00438	0.00438	0.00438	0.00438	0.00438
Cobalt	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Copper	0.01	c	1.18E+02	0.01	0.01	0.01	0.01	0.01	0.01
Cyanide	**0.0025**	ND	2.55E+01	0.00250	0.00250	0.00250	0.00250	0.00250	0.00250
Iron	1.86	b	1.90E+04	1.87	1.87	1.87	1.86	1.86	1.86
Lead	0.01	c	1.40E+02	0.01	0.01	0.01	0.01	0.01	0.01
Magnesium	54.5275	a	5.56E+05	54.94178	54.77939	54.93901	54.52750	54.54477	54.84820
Manganese	0.1	b	1.02E+03	0.11	0.11	0.11	0.10	0.10	0.12
Mercury	6.80E-06	c	6.94E-02	6.80E-06	6.80E-06	6.80E-06	6.80E-06	6.86E-06	7.98E-06
Nickel	0.00625	a	6.38E+01	0.00628	0.00627	0.00628	0.00625	0.00625	0.00630
Potassium	21.55	a	2.20E+05	21.67	21.62	21.67	21.55	21.56	21.66
Selenium	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Silver	0.001125	a	1.15E+01	0.001127	0.001126	0.001127	0.001125	0.001125	0.001130
Sodium	338.9	a	3.46E+06	341.5	340.5	341.4	338.9	338.9	339.1
Thallium	0.01625	a	1.66E+02	0.01634	0.01630	0.01634	0.01625	0.01625	0.01632
Vanadium	0.01225	a	1.25E+02	0.01226	0.01226	0.01226	0.01225	0.01225	0.01225
Zinc	0.06	c	5.96E+02	0.06	0.06	0.06	0.06	0.06	0.06

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-4. Ambient Delaware River contaminant concentrations and loadings compared with daily River concentrations downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily River Concentrations (in mg/L) 8-Nov	9-Nov	10-Nov	11-Nov	12-Nov	13-Nov
PCBs	6.78E-06	a	6.92E-02	6.79E-06	6.79E-06	6.79E-06	6.79E-06	6.79E-06	6.79E-06
Aluminum	1.65	b	1.68E+04	1.65	1.65	1.65	1.65	1.65	1.65
Antimony	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Arsenic	0.01	b	1.02E+02	0.01	0.01	0.01	0.01	0.01	0.01
Barium	0.03975	a	4.05E+02	0.03992	0.04084	0.04092	0.04081	0.03990	0.03996
Beryllium	0.001	ND	1.02E+01	0.001	0.001	0.001	0.001	0.001	0.001
Cadmium	0.001	ND	1.02E+01	0.001	0.001	0.001	0.001	0.001	0.001
Calcium	105.5	a	1.08E+06	105.7	106.2	106.2	106.2	105.6	105.6
Chromium	0.004375	a	4.46E+01	0.00438	0.00438	0.00438	0.00438	0.00438	0.00438
Cobalt	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Copper	0.01	c	1.18E+02	0.01	0.01	0.01	0.01	0.01	0.01
Cyanide	**0.0025**	ND	2.55E+01	0.00250	0.00250	0.00250	0.00250	0.00250	0.00250
Iron	1.86	b	1.90E+04	1.86	1.87	1.87	1.87	1.86	1.86
Lead	0.01	c	1.40E+02	0.01	0.01	0.01	0.01	0.01	0.01
Magnesium	54.5275	a	5.56E+05	54.76137	55.54622	55.62832	55.52419	54.65543	54.70751
Manganese	0.1	b	1.02E+03	0.11	0.18	0.19	0.18	0.11	0.11
Mercury	6.80E-06	c	6.94E-02	7.66E-06	6.80E-06	6.80E-06	6.80E-06	6.80E-06	6.80E-06
Nickel	0.00625	a	6.38E+01	0.00629	0.00643	0.00645	0.00643	0.00627	0.00628
Potassium	21.55	a	2.20E+05	21.63	21.84	21.87	21.84	21.59	21.61
Selenium	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Silver	0.001125	a	1.15E+01	0.001128	0.001138	0.001140	0.001138	0.001127	0.001128
Sodium	338.9	a	3.46E+06	339.0	344.0	344.4	343.9	339.5	339.8
Thallium	0.01625	a	1.66E+02	0.01630	0.01655	0.01658	0.01655	0.01627	0.01628
Vanadium	0.01225	a	1.25E+02	0.01225	0.01225	0.01225	0.01225	0.01225	0.01225
Zinc	0.06	c	5.96E+02	0.06	0.06	0.06	0.06	0.06	0.06

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-4. Ambient Delaware River contaminant concentrations and loadings compared with daily River concentrations downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration		Ambient Delaware River Loading	Daily River Concentrations (in mg/L)					
	mg/L		mg/day	14-Nov	15-Nov	16-Nov	17-Nov	18-Nov	19-Nov
PCBs	6.78E-06	a	6.92E-02	6.80E-06	6.80E-06	6.79E-06	6.79E-06	6.79E-06	6.82E-06
Aluminum	1.65	b	1.68E+04	1.65	1.65	1.65	1.65	1.65	1.65
Antimony	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Arsenic	0.01	b	1.02E+02	0.01	0.01	0.01	0.01	0.01	0.01
Barium	0.03975	a	4.05E+02	0.04007	0.04008	0.04004	0.04004	0.04006	0.04005
Beryllium	0.001	ND	1.02E+01	0.001	0.001	0.001	0.001	0.001	0.001
Cadmium	0.001	ND	1.02E+01	0.001	0.001	0.001	0.001	0.001	0.001
Calcium	105.5	a	1.08E+06	105.7	105.7	105.7	105.7	105.8	105.9
Chromium	0.004375	a	4.46E+01	0.00438	0.00438	0.00438	0.00438	0.00438	0.00438
Cobalt	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Copper	0.01	c	1.18E+02	0.01	0.01	0.01	0.01	0.01	0.01
Cyanide	**0.0025**	ND	2.55E+01	0.00250	0.00250	0.00250	0.00250	0.00250	0.00250
Iron	1.86	b	1.90E+04	1.86	1.86	1.86	1.86	1.86	1.86
Lead	0.01	c	1.40E+02	0.01	0.01	0.01	0.01	0.01	0.01
Magnesium	54.5275	a	5.56E+05	54.79920	54.80718	54.82944	54.83439	54.85044	54.90327
Manganese	0.1	b	1.02E+03	0.12	0.12	0.12	0.12	0.13	0.12
Mercury	6.80E-06	c	6.94E-02	6.80E-06	6.80E-06	6.80E-06	6.80E-06	6.80E-06	8.32E-06
Nickel	0.00625	a	6.38E+01	0.00630	0.00630	0.00626	0.00626	0.00626	0.00627
Potassium	21.55	a	2.20E+05	21.64	21.64	21.63	21.64	21.64	21.63
Selenium	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Silver	0.001125	a	1.15E+01	0.001130	0.001130	0.001125	0.001125	0.001125	0.001128
Sodium	338.9	a	3.46E+06	340.3	340.3	340.8	340.9	341.0	340.7
Thallium	0.01625	a	1.66E+02	0.01630	0.01630	0.01637	0.01637	0.01638	0.01633
Vanadium	0.01225	a	1.25E+02	0.01225	0.01225	0.01227	0.01227	0.01227	0.01226
Zinc	0.06	c	5.96E+02	0.06	0.06	0.06	0.06	0.06	0.06

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-4. Ambient Delaware River contaminant concentrations and loadings compared with daily River concentrations downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration		Ambient Delaware River Loading	Daily River Concentrations (in mg/L)					
	mg/L		mg/day	20-Nov	21-Nov	22-Nov	23-Nov	24-Nov	25-Nov
PCBs	6.78E-06	a	6.92E-02	6.82E-06	6.82E-06	6.81E-06	6.82E-06	6.82E-06	6.82E-06
Aluminum	1.65	b	1.68E+04	1.65	1.65	1.65	1.65	1.65	1.65
Antimony	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Arsenic	0.01	b	1.02E+02	0.01	0.01	0.01	0.01	0.01	0.01
Barium	0.03975	a	4.05E+02	0.04004	0.04001	0.03999	0.03999	0.03998	0.03998
Beryllium	0.001	ND	1.02E+01	0.001	0.001	0.001	0.001	0.001	0.001
Cadmium	0.001	ND	1.02E+01	0.001	0.001	0.001	0.001	0.001	0.001
Calcium	105.5	a	1.08E+06	105.9	105.8	105.8	105.7	105.7	105.7
Chromium	0.004375	a	4.46E+01	0.00438	0.00438	0.00438	0.00438	0.00438	0.00438
Cobalt	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Copper	0.01	c	1.18E+02	0.01	0.01	0.01	0.01	0.01	0.01
Cyanide	**0.0025**	ND	2.55E+01	0.00250	0.00250	0.00250	0.00250	0.00250	0.00250
Iron	1.86	b	1.90E+04	1.86	1.86	1.86	1.86	1.86	1.86
Lead	0.01	c	1.40E+02	0.01	0.01	0.01	0.01	0.01	0.01
Magnesium	54.5275	a	5.56E+05	54.88903	54.85404	54.83221	54.76776	54.76245	54.76094
Manganese	0.1	b	1.02E+03	0.12	0.12	0.12	0.12	0.12	0.12
Mercury	6.80E-06	c	6.94E-02	8.26E-06	8.12E-06	8.03E-06	7.57E-06	7.55E-06	7.55E-06
Nickel	0.00625	a	6.38E+01	0.00627	0.00627	0.00627	0.00630	0.00630	0.00630
Potassium	21.55	a	2.20E+05	21.63	21.62	21.62	21.62	21.62	21.62
Selenium	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Silver	0.001125	a	1.15E+01	0.001128	0.001128	0.001127	0.001128	0.001128	0.001127
Sodium	338.9	a	3.46E+06	340.7	340.5	340.4	340.5	340.5	340.4
Thallium	0.01625	a	1.66E+02	0.01633	0.01632	0.01631	0.01625	0.01625	0.01625
Vanadium	0.01225	a	1.25E+02	0.01226	0.01226	0.01226	0.01225	0.01225	0.01225
Zinc	0.06	c	5.96E+02	0.06	0.06	0.06	0.06	0.06	0.06

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-4. Ambient Delaware River contaminant concentrations and loadings compared with daily River concentrations downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration		Ambient Delaware River Loading	Daily River Concentrations (in mg/L)					
	mg/L		*mg/day*	*26-Nov*	*27-Nov*	*28-Nov*	*29-Nov*	*30-Nov*	*1-Dec*
PCBs	6.78E-06	a	6.92E-02	6.82E-06	6.81E-06	6.82E-06	6.82E-06	6.80E-06	6.80E-06
Aluminum	1.65	b	1.68E+04	1.65	1.65	1.65	1.65	1.65	1.65
Antimony	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Arsenic	0.01	b	1.02E+02	0.01	0.01	0.01	0.01	0.01	0.01
Barium	0.03975	a	4.05E+02	0.04000	0.03996	0.03998	0.03999	0.03997	0.04000
Beryllium	0.001	ND	1.02E+01	0.001	0.001	0.001	0.001	0.001	0.001
Cadmium	0.001	ND	1.02E+01	0.001	0.001	0.001	0.001	0.001	0.001
Calcium	105.5	a	1.08E+06	105.7	105.7	105.7	105.7	105.7	105.7
Chromium	0.004375	a	4.46E+01	0.00438	0.00438	0.00438	0.00438	0.00438	0.00438
Cobalt	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Copper	***0.01***	c	1.18E+02	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*	*0.01*
Cyanide	**0.0025**	ND	2.55E+01	0.00250	0.00250	0.00250	0.00250	0.00250	0.00250
Iron	1.86	b	1.90E+04	1.86	1.86	1.86	1.86	1.87	1.87
Lead	0.01	c	1.40E+02	0.01	0.01	0.01	0.01	0.01	0.01
Magnesium	54.5275	a	5.56E+05	54.77751	54.74389	54.75925	54.76465	54.71876	54.74887
Manganese	0.1	b	1.02E+03	0.12	0.12	0.12	0.12	0.12	0.12
Mercury	6.80E-06	c	6.94E-02	7.60E-06	7.49E-06	7.54E-06	7.56E-06	6.80E-06	6.80E-06
Nickel	0.00625	a	6.38E+01	0.00630	0.00629	0.00630	0.00630	0.00629	0.00630
Potassium	21.55	a	2.20E+05	21.62	21.61	21.62	21.62	21.61	21.62
Selenium	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Silver	0.001125	a	1.15E+01	0.001128	0.001127	0.001127	0.001128	0.001125	0.001125
Sodium	338.9	a	3.46E+06	340.6	340.3	340.4	340.5	340.2	340.4
Thallium	0.01625	a	1.66E+02	0.01625	0.01625	0.01625	0.01625	0.01625	0.01625
Vanadium	0.01225	a	1.25E+02	0.01225	0.01225	0.01225	0.01225	0.01226	0.01226
Zinc	0.06	c	5.96E+02	0.06	0.06	0.06	0.06	0.06	0.06

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-4. Ambient Delaware River contaminant concentrations and loadings compared with daily River concentrations downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily River Concentrations (in mg/L) 2-Dec	3-Dec	4-Dec	5-Dec	6-Dec	7-Dec
PCBs	6.78E-06	a	6.92E-02	6.80E-06	6.80E-06	6.80E-06	6.81E-06	6.80E-06	6.80E-06
Aluminum	1.65	b	1.68E+04	1.65	1.65	1.65	1.65	1.65	1.65
Antimony	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Arsenic	0.01	b	1.02E+02	0.01	0.01	0.01	0.01	0.01	0.01
Barium	0.03975	a	4.05E+02	0.04001	0.04001	0.04006	0.04008	0.04003	0.04004
Beryllium	0.001	ND	1.02E+01	0.001	0.001	0.001	0.001	0.001	0.001
Cadmium	0.001	ND	1.02E+01	0.001	0.001	0.001	0.001	0.001	0.001
Calcium	105.5	a	1.08E+06	105.7	105.7	105.7	105.7	105.7	105.7
Chromium	0.004375	a	4.46E+01	0.00438	0.00438	0.00439	0.00439	0.00439	0.00439
Cobalt	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Copper	0.01	c	1.18E+02	0.01	0.01	0.01	0.01	0.01	0.01
Cyanide	**0.0025**	ND	2.55E+01	0.00250	0.00250	0.00250	0.00250	0.00250	0.00250
Iron	1.86	b	1.90E+04	1.87	1.87	1.87	1.87	1.87	1.87
Lead	0.01	c	1.40E+02	0.01	0.01	0.01	0.01	0.01	0.01
Magnesium	54.5275	a	5.56E+05	54.75591	54.75877	54.79801	54.81494	54.77798	54.78259
Manganese	0.1	b	1.02E+03	0.12	0.12	0.12	0.12	0.12	0.12
Mercury	6.80E-06	c	6.94E-02	6.80E-06	6.80E-06	6.80E-06	6.80E-06	6.80E-06	6.80E-06
Nickel	0.00625	a	6.38E+01	0.00630	0.00630	0.00631	0.00631	0.00630	0.00630
Potassium	21.55	a	2.20E+05	21.62	21.63	21.64	21.64	21.63	21.63
Selenium	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Silver	0.001125	a	1.15E+01	0.001125	0.001125	0.001125	0.001125	0.001125	0.001125
Sodium	338.9	a	3.46E+06	340.4	340.4	340.7	340.8	340.6	340.6
Thallium	0.01625	a	1.66E+02	0.01625	0.01625	0.01625	0.01625	0.01625	0.01625
Vanadium	0.01225	a	1.25E+02	0.01226	0.01226	0.01227	0.01227	0.01227	0.01227
Zinc	0.06	c	5.96E+02	0.06	0.06	0.06	0.06	0.06	0.06

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-4. Ambient Delaware River contaminant concentrations and loadings compared with daily River concentrations downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Daily River Concentrations (in mg/L) 8-Dec	9-Dec	10-Dec	11-Dec	12-Dec	13-Dec
PCBs	6.78E-06	a	6.92E-02	6.80E-06	6.80E-06	6.80E-06	6.80E-06	6.80E-06	6.79E-06
Aluminum	1.65	b	1.68E+04	1.65	1.65	1.65	1.65	1.65	1.65
Antimony	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Arsenic	0.01	b	1.02E+02	0.01	0.01	0.01	0.01	0.01	0.01
Barium	0.03975	a	4.05E+02	0.04004	0.04006	0.04004	0.04003	0.04002	0.03991
Beryllium	0.001	ND	1.02E+01	0.001	0.001	0.001	0.001	0.001	0.001
Cadmium	0.001	ND	1.02E+01	0.001	0.001	0.001	0.001	0.001	0.001
Calcium	105.5	a	1.08E+06	105.7	105.7	105.7	105.7	105.7	105.6
Chromium	0.004375	a	4.46E+01	0.00439	0.00439	0.00439	0.00438	0.00438	0.00438
Cobalt	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Copper	0.01	c	1.18E+02	0.01	0.01	0.01	0.01	0.01	0.01
Cyanide	**0.0025**	ND	2.55E+01	0.00250	0.00250	0.00250	0.00250	0.00250	0.00250
Iron	1.86	b	1.90E+04	1.87	1.87	1.87	1.87	1.87	1.87
Lead	0.01	c	1.40E+02	0.01	0.01	0.01	0.01	0.01	0.01
Magnesium	54.5275	a	5.56E+05	54.78522	54.79816	54.77952	54.77183	54.76637	54.67072
Manganese	0.1	b	1.02E+03	0.12	0.12	0.12	0.12	0.12	0.11
Mercury	6.80E-06	c	6.94E-02	6.80E-06	6.80E-06	6.80E-06	6.80E-06	6.80E-06	6.80E-06
Nickel	0.00625	a	6.38E+01	0.00630	0.00631	0.00630	0.00630	0.00630	0.00628
Potassium	21.55	a	2.20E+05	21.63	21.64	21.63	21.63	21.63	21.60
Selenium	0.004	a	4.08E+01	0.004	0.004	0.004	0.004	0.004	0.004
Silver	0.001125	a	1.15E+01	0.001125	0.001125	0.001125	0.001125	0.001125	0.001125
Sodium	338.9	a	3.46E+06	340.6	340.7	340.6	340.5	340.5	339.8
Thallium	0.01625	a	1.66E+02	0.01625	0.01625	0.01625	0.01625	0.01625	0.01625
Vanadium	0.01225	a	1.25E+02	0.01227	0.01227	0.01227	0.01226	0.01226	0.01226
Zinc	0.06	c	5.96E+02	0.06	0.06	0.06	0.06	0.06	0.06

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-5. Ambient Delaware River contaminant concentrations and loadings compared with the daily percent change in River concentration downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Percent Increase in River Concentration 21-Oct	22-Oct	23-Oct	24-Oct	25-Oct	26-Oct
PCBs	6.78E-06	a	6.92E-02	1.01%	0.77%	0.73%	0.82%	0.66%	0.15%
Aluminum	1.65	b	1.68E+04	0.48%	0.04%	0.03%	0.04%	0.03%	0.12%
Antimony	0.004	a	4.08E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Arsenic	0.01	b	1.02E+02	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Barium	0.03975	a	4.05E+02	0.76%	0.63%	0.60%	0.67%	0.54%	0.58%
Beryllium	0.001	ND	1.02E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cadmium	0.001	ND	1.02E+01	0.88%	0.29%	0.27%	0.31%	0.25%	0.24%
Calcium	105.5	a	1.08E+06	0.20%	0.22%	0.21%	0.23%	0.19%	0.17%
Chromium	0.004375	a	4.46E+01	0.80%	0.00%	0.00%	0.00%	0.00%	0.05%
Cobalt	0.004	a	4.08E+01	0.51%	0.36%	0.34%	0.38%	0.31%	0.00%
Copper	**0.01**	c	1.18E+02	1.04%	0.07%	0.07%	0.08%	0.06%	0.49%
Cyanide	**0.0025**	ND	2.55E+01	0.00%	0.92%	0.87%	0.98%	0.79%	0.57%
Iron	1.86	b	1.90E+04	1.46%	0.14%	0.13%	0.15%	0.12%	0.34%
Lead	0.01	c	1.40E+02	0.32%	0.15%	0.14%	0.16%	0.13%	0.31%
Magnesium	54.5275	a	5.56E+05	0.78%	0.87%	0.83%	0.94%	0.75%	0.65%
Manganese	0.1	b	1.02E+03	23.67%	18.14%	17.24%	19.41%	15.56%	13.25%
Mercury	6.80E-06	c	6.94E-02	21.54%	8.43%	8.01%	9.02%	7.23%	0.00%
Nickel	0.00625	a	6.38E+01	1.78%	0.87%	0.83%	0.93%	0.75%	0.61%
Potassium	21.55	a	2.20E+05	0.68%	0.76%	0.72%	0.81%	0.65%	0.56%
Selenium	0.004	a	4.08E+01	2.71%	3.01%	2.86%	3.22%	2.58%	2.55%
Silver	0.001125	a	1.15E+01	0.52%	0.51%	0.48%	0.55%	0.44%	0.21%
Sodium	338.9	a	3.46E+06	0.59%	1.10%	1.05%	1.18%	0.94%	0.76%
Thallium	0.01625	a	1.66E+02	0.79%	0.42%	0.40%	0.45%	0.36%	0.22%
Vanadium	0.01225	a	1.25E+02	0.33%	0.00%	0.00%	0.00%	0.00%	0.12%
Zinc	0.06	c	5.96E+02	1.47%	0.49%	0.47%	0.52%	0.42%	0.48%

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-5. Ambient Delaware River contaminant concentrations and loadings compared with the daily percent change in River concentration downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration		Ambient Delaware River Loading	Percent Increase in River Concentration					
	mg/L		mg/day	27-Oct	28-Oct	29-Oct	30-Oct	31-Oct	1-Nov
PCBs	6.78E-06	a	6.92E-02	0.15%	0.16%	0.12%	0.13%	0.13%	0.11%
Aluminum	1.65	b	1.68E+04	0.12%	0.13%	0.02%	0.02%	0.02%	0.02%
Antimony	0.004	a	4.08E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Arsenic	0.01	b	1.02E+02	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Barium	0.03975	a	4.05E+02	0.56%	0.62%	0.69%	0.71%	0.71%	0.64%
Beryllium	0.001	ND	1.02E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cadmium	0.001	ND	1.02E+01	0.23%	0.25%	0.00%	0.00%	0.00%	0.00%
Calcium	105.5	a	1.08E+06	0.17%	0.18%	0.20%	0.21%	0.21%	0.19%
Chromium	0.004375	a	4.46E+01	0.05%	0.06%	0.18%	0.18%	0.18%	0.16%
Cobalt	0.004	a	4.08E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Copper	0.01	c	1.18E+02	0.48%	0.52%	0.44%	0.45%	0.45%	0.41%
Cyanide	**0.0025**	ND	2.55E+01	0.55%	0.60%	0.00%	0.00%	0.00%	0.00%
Iron	1.86	b	1.90E+04	0.33%	0.36%	0.22%	0.23%	0.23%	0.21%
Lead	0.01	c	1.40E+02	0.30%	0.33%	0.28%	0.28%	0.29%	0.26%
Magnesium	54.5275	a	5.56E+05	0.63%	0.69%	0.75%	0.77%	0.77%	0.69%
Manganese	0.1	b	1.02E+03	12.76%	14.00%	19.86%	20.19%	20.29%	18.28%
Mercury	6.80E-06	c	6.94E-02	0.00%	0.00%	18.78%	19.10%	19.19%	17.29%
Nickel	0.00625	a	6.38E+01	0.58%	0.64%	0.69%	0.71%	0.71%	0.64%
Potassium	21.55	a	2.20E+05	0.54%	0.59%	0.66%	0.67%	0.68%	0.61%
Selenium	0.004	a	4.08E+01	2.46%	2.70%	4.73%	4.81%	4.83%	4.35%
Silver	0.001125	a	1.15E+01	0.20%	0.22%	0.45%	0.46%	0.46%	0.42%
Sodium	338.9	a	3.46E+06	0.73%	0.80%	1.24%	1.26%	1.27%	1.14%
Thallium	0.01625	a	1.66E+02	0.21%	0.23%	0.77%	0.78%	0.79%	0.71%
Vanadium	0.01225	a	1.25E+02	0.11%	0.12%	0.08%	0.08%	0.09%	0.08%
Zinc	0.06	c	5.96E+02	0.46%	0.51%	0.22%	0.22%	0.22%	0.20%

< - not detected

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c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-5. Ambient Delaware River contaminant concentrations and loadings compared with the daily percent change in River concentration downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Percent Increase in River Concentration 2-Nov	3-Nov	4-Nov	5-Nov	6-Nov	7-Nov
PCBs	6.78E-06	a	6.92E-02	0.15%	0.09%	0.15%	0.00%	0.01%	0.14%
Aluminum	*1.65*	*b*	*1.68E+04*	*0.14%*	*0.08%*	*0.14%*	*0.00%*	*0.00%*	*0.01%*
Antimony	0.004	a	4.08E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Arsenic	0.01	b	1.02E+02	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Barium	0.03975	a	4.05E+02	0.00%	0.00%	0.00%	0.00%	0.03%	0.58%
Beryllium	0.001	ND	1.02E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cadmium	0.001	ND	1.02E+01	0.23%	0.14%	0.23%	0.00%	0.01%	0.24%
Calcium	105.5	a	1.08E+06	0.27%	0.16%	0.27%	0.00%	0.01%	0.20%
Chromium	0.004375	a	4.46E+01	0.16%	0.10%	0.16%	0.00%	0.00%	0.00%
Cobalt	0.004	a	4.08E+01	0.00%	0.00%	0.00%	0.00%	0.01%	0.24%
Copper	0.01	c	1.18E+02	0.18%	0.11%	0.18%	0.00%	0.02%	0.31%
Cyanide	**0.0025**	ND	2.55E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Iron	1.86	b	1.90E+04	0.49%	0.30%	0.49%	0.00%	0.01%	0.10%
Lead	0.01	c	1.40E+02	0.22%	0.13%	0.22%	0.00%	0.01%	0.17%
Magnesium	54.5275	a	5.56E+05	0.76%	0.46%	0.75%	0.00%	0.03%	0.59%
Manganese	0.1	b	1.02E+03	14.26%	8.67%	14.16%	0.00%	1.03%	19.16%
Mercury	6.80E-06	c	6.94E-02	0.00%	0.00%	0.00%	0.00%	0.94%	17.40%
Nickel	0.00625	a	6.38E+01	0.51%	0.31%	0.51%	0.00%	0.04%	0.83%
Potassium	21.55	a	2.20E+05	0.56%	0.34%	0.56%	0.00%	0.03%	0.52%
Selenium	0.004	a	4.08E+01	2.75%	1.67%	2.73%	0.00%	0.13%	2.49%
Silver	0.001125	a	1.15E+01	0.20%	0.12%	0.20%	0.00%	0.02%	0.42%
Sodium	338.9	a	3.46E+06	0.75%	0.46%	0.75%	0.00%	0.00%	0.06%
Thallium	0.01625	a	1.66E+02	0.54%	0.33%	0.53%	0.00%	0.02%	0.41%
Vanadium	0.01225	a	1.25E+02	0.11%	0.07%	0.11%	0.00%	0.00%	0.00%
Zinc	0.06	c	5.96E+02	0.38%	0.23%	0.38%	0.00%	0.02%	0.37%

< - not detected

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b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-5. Ambient Delaware River contaminant concentrations and loadings compared with the daily percent change in River concentration downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Percent Increase in River Concentration 8-Nov	9-Nov	10-Nov	11-Nov	12-Nov	13-Nov
PCBs	6.78E-06	a	6.92E-02	0.10%	0.15%	0.16%	0.14%	0.10%	0.14%
Aluminum	1.65	b	1.68E+04	0.01%	0.04%	0.05%	0.04%	0.01%	0.01%
Antimony	0.004	a	4.08E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Arsenic	0.01	b	1.02E+02	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Barium	0.03975	a	4.05E+02	0.42%	2.74%	2.96%	2.68%	0.38%	0.54%
Beryllium	0.001	ND	1.02E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cadmium	0.001	ND	1.02E+01	0.17%	1.17%	1.27%	1.15%	0.00%	0.00%
Calcium	105.5	a	1.08E+06	0.15%	0.63%	0.68%	0.62%	0.10%	0.13%
Chromium	0.004375	a	4.46E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cobalt	0.004	a	4.08E+01	0.17%	1.26%	1.36%	1.23%	0.15%	0.22%
Copper	0.01	c	1.18E+02	0.22%	1.47%	1.59%	1.44%	0.16%	0.23%
Cyanide	**0.0025**	ND	2.55E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Iron	1.86	b	1.90E+04	0.07%	0.57%	0.61%	0.56%	0.08%	0.11%
Lead	0.01	c	1.40E+02	0.13%	0.61%	0.66%	0.60%	0.08%	0.11%
Magnesium	54.5275	a	5.56E+05	0.43%	1.87%	2.02%	1.83%	0.23%	0.33%
Manganese	0.1	b	1.02E+03	13.98%	81.22%	87.76%	79.46%	10.16%	14.30%
Mercury	6.80E-06	c	6.94E-02	12.69%	0.00%	0.00%	0.00%	0.00%	0.00%
Nickel	0.00625	a	6.38E+01	0.61%	2.90%	3.13%	2.84%	0.36%	0.50%
Potassium	21.55	a	2.20E+05	0.38%	1.36%	1.47%	1.33%	0.19%	0.26%
Selenium	0.004	a	4.08E+01	1.81%	7.55%	8.16%	7.39%	0.84%	1.18%
Silver	0.001125	a	1.15E+01	0.31%	1.19%	1.29%	1.17%	0.22%	0.31%
Sodium	338.9	a	3.46E+06	0.04%	1.51%	1.63%	1.48%	0.19%	0.27%
Thallium	0.01625	a	1.66E+02	0.30%	1.86%	2.01%	1.82%	0.15%	0.21%
Vanadium	0.01225	a	1.25E+02	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Zinc	0.06	c	5.96E+02	0.27%	1.66%	1.80%	1.63%	0.17%	0.24%

< - not detected

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b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-5. Ambient Delaware River contaminant concentrations and loadings compared with the daily percent change in River concentration downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Percent Increase in River Concentration 14-Nov	15-Nov	16-Nov	17-Nov	18-Nov	19-Nov
PCBs	6.78E-06	a	6.92E-02	0.22%	0.22%	0.15%	0.16%	0.16%	0.56%
Aluminum	1.65	b	1.68E+04	0.01%	0.02%	0.00%	0.00%	0.00%	0.00%
Antimony	0.004	a	4.08E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Arsenic	0.01	b	1.02E+02	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Barium	0.03975	a	4.05E+02	0.81%	0.83%	0.72%	0.74%	0.77%	0.75%
Beryllium	0.001	ND	1.02E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cadmium	0.001	ND	1.02E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Calcium	105.5	a	1.08E+06	0.20%	0.21%	0.23%	0.23%	0.24%	0.36%
Chromium	0.004375	a	4.46E+01	0.00%	0.00%	0.13%	0.13%	0.14%	0.07%
Cobalt	0.004	a	4.08E+01	0.33%	0.34%	0.00%	0.00%	0.00%	0.00%
Copper	0.01	c	1.18E+02	0.34%	0.35%	0.07%	0.08%	0.08%	0.03%
Cyanide	**0.0025**	ND	2.55E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Iron	1.86	b	1.90E+04	0.16%	0.17%	0.17%	0.17%	0.18%	0.05%
Lead	0.01	c	1.40E+02	0.17%	0.18%	0.19%	0.19%	0.20%	0.24%
Magnesium	54.5275	a	5.56E+05	0.50%	0.51%	0.55%	0.56%	0.59%	0.69%
Manganese	0.1	b	1.02E+03	21.59%	22.22%	24.28%	24.68%	25.97%	22.09%
Mercury	6.80E-06	c	6.94E-02	0.00%	0.00%	0.00%	0.00%	0.00%	22.28%
Nickel	0.00625	a	6.38E+01	0.76%	0.78%	0.14%	0.14%	0.15%	0.39%
Potassium	21.55	a	2.20E+05	0.40%	0.41%	0.39%	0.40%	0.42%	0.38%
Selenium	0.004	a	4.08E+01	1.78%	1.83%	0.00%	0.00%	0.00%	2.20%
Silver	0.001125	a	1.15E+01	0.47%	0.48%	0.00%	0.00%	0.00%	0.27%
Sodium	338.9	a	3.46E+06	0.40%	0.42%	0.58%	0.58%	0.62%	0.54%
Thallium	0.01625	a	1.66E+02	0.32%	0.33%	0.73%	0.74%	0.78%	0.48%
Vanadium	0.01225	a	1.25E+02	0.00%	0.00%	0.19%	0.19%	0.20%	0.07%
Zinc	0.06	c	5.96E+02	0.36%	0.38%	0.37%	0.38%	0.40%	0.21%

< - not detected

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c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-5. Ambient Delaware River contaminant concentrations and loadings compared with the daily percent change in River concentration downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Percent Increase in River Concentration 20-Nov	21-Nov	22-Nov	23-Nov	24-Nov	25-Nov
PCBs	6.78E-06	a	6.92E-02	0.53%	0.48%	0.45%	0.51%	0.50%	0.49%
Aluminum	1.65	b	1.68E+04	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Antimony	0.004	a	4.08E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Arsenic	0.01	b	1.02E+02	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Barium	0.03975	a	4.05E+02	0.72%	0.65%	0.61%	0.60%	0.59%	0.58%
Beryllium	0.001	ND	1.02E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cadmium	0.001	ND	1.02E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Calcium	105.5	a	1.08E+06	0.34%	0.31%	0.29%	0.19%	0.19%	0.18%
Chromium	0.004375	a	4.46E+01	0.07%	0.06%	0.06%	0.06%	0.06%	0.06%
Cobalt	0.004	a	4.08E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Copper	0.01	c	1.18E+02	0.03%	0.02%	0.02%	0.04%	0.04%	0.04%
Cyanide	**0.0025**	ND	2.55E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Iron	1.86	b	1.90E+04	0.04%	0.04%	0.04%	0.15%	0.15%	0.15%
Lead	0.01	c	1.40E+02	0.23%	0.21%	0.20%	0.15%	0.15%	0.15%
Magnesium	54.5275	a	5.56E+05	0.66%	0.60%	0.56%	0.44%	0.43%	0.43%
Manganese	0.1	b	1.02E+03	21.25%	19.19%	17.91%	18.23%	17.83%	17.72%
Mercury	6.80E-06	c	6.94E-02	21.44%	19.36%	18.07%	11.32%	11.07%	10.99%
Nickel	0.00625	a	6.38E+01	0.37%	0.34%	0.31%	0.78%	0.76%	0.76%
Potassium	21.55	a	2.20E+05	0.37%	0.33%	0.31%	0.32%	0.31%	0.31%
Selenium	0.004	a	4.08E+01	2.11%	1.91%	1.78%	1.92%	1.88%	1.87%
Silver	0.001125	a	1.15E+01	0.26%	0.23%	0.22%	0.23%	0.22%	0.22%
Sodium	338.9	a	3.46E+06	0.52%	0.47%	0.44%	0.47%	0.46%	0.46%
Thallium	0.01625	a	1.66E+02	0.47%	0.42%	0.39%	0.00%	0.00%	0.00%
Vanadium	0.01225	a	1.25E+02	0.07%	0.06%	0.06%	0.00%	0.00%	0.00%
Zinc	0.06	c	5.96E+02	0.20%	0.18%	0.17%	0.37%	0.36%	0.36%

< - not detected

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c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-5. Ambient Delaware River contaminant concentrations and loadings compared with the daily percent change in River concentration downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Percent Increase in River Concentration 26-Nov	27-Nov	28-Nov	29-Nov	30-Nov	1-Dec
PCBs	6.78E-06	a	6.92E-02	0.53%	0.46%	0.49%	0.50%	0.22%	0.26%
Aluminum	1.65	b	1.68E+04	0.00%	0.00%	0.00%	0.00%	0.06%	0.07%
Antimony	0.004	a	4.08E+01	0.00%	0.00%	0.00%	0.00%	0.49%	0.56%
Arsenic	0.01	b	1.02E+02	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Barium	0.03975	a	4.05E+02	0.62%	0.54%	0.58%	0.59%	0.55%	0.63%
Beryllium	0.001	ND	1.02E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cadmium	0.001	ND	1.02E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Calcium	105.5	a	1.08E+06	0.20%	0.17%	0.18%	0.19%	0.15%	0.17%
Chromium	0.004375	a	4.46E+01	0.06%	0.05%	0.06%	0.06%	0.18%	0.21%
Cobalt	0.004	a	4.08E+01	0.00%	0.00%	0.00%	0.00%	0.10%	0.11%
Copper	0.01	c	1.18E+02	0.05%	0.04%	0.04%	0.04%	0.30%	0.35%
Cyanide	**0.0025**	ND	2.55E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Iron	1.86	b	1.90E+04	0.16%	0.13%	0.14%	0.15%	0.44%	0.51%
Lead	0.01	c	1.40E+02	0.16%	0.13%	0.14%	0.15%	0.00%	0.00%
Magnesium	54.5275	a	5.56E+05	0.46%	0.40%	0.43%	0.43%	0.35%	0.41%
Manganese	0.1	b	1.02E+03	18.97%	16.42%	17.59%	18.00%	15.81%	18.30%
Mercury	6.80E-06	c	6.94E-02	11.78%	10.19%	10.92%	11.17%	0.00%	0.00%
Nickel	0.00625	a	6.38E+01	0.81%	0.70%	0.75%	0.77%	0.65%	0.75%
Potassium	21.55	a	2.20E+05	0.33%	0.29%	0.31%	0.31%	0.29%	0.33%
Selenium	0.004	a	4.08E+01	2.00%	1.73%	1.86%	1.90%	0.00%	0.00%
Silver	0.001125	a	1.15E+01	0.24%	0.21%	0.22%	0.23%	0.00%	0.00%
Sodium	338.9	a	3.46E+06	0.49%	0.42%	0.45%	0.46%	0.37%	0.43%
Thallium	0.01625	a	1.66E+02	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Vanadium	0.01225	a	1.25E+02	0.00%	0.00%	0.00%	0.00%	0.10%	0.11%
Zinc	0.06	c	5.96E+02	0.39%	0.34%	0.36%	0.37%	0.41%	0.47%

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-5. Ambient Delaware River contaminant concentrations and loadings compared with the daily percent change in River concentration downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Percent Increase in River Concentration 2-Dec	3-Dec	4-Dec	5-Dec	6-Dec	7-Dec
PCBs	6.78E-06	a	6.92E-02	0.27%	0.27%	0.32%	0.34%	0.29%	0.30%
Aluminum	1.65	b	1.68E+04	0.08%	0.08%	0.09%	0.10%	0.08%	0.08%
Antimony	0.004	a	4.08E+01	0.58%	0.59%	0.69%	0.73%	0.64%	0,65%
Arsenic	0.01	b	1.02E+02	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Barium	0.03975	a	4.05E+02	0.65%	0.66%	0.77%	0.82%	0.72%	0.73%
Beryllium	0.001	ND	1.02E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cadmium	0.001	ND	1.02E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Calcium	105.5	a	1.08E+06	0.17%	0.18%	0.21%	0.22%	0.19%	0.19%
Chromium	0.004375	a	4.46E+01	0.21%	0.21%	0.25%	0.27%	0.23%	0.24%
Cobalt	0.004	a	4.08E+01	0.12%	0.12%	0.14%	0.15%	0.13%	0.13%
Copper	0.01	c	1.18E+02	0.36%	0.37%	0.43%	0.46%	0.40%	0.40%
Cyanide	**0.0025**	ND	2.55E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Iron	1.86	b	1.90E+04	0.52%	0.53%	0.62%	0.66%	0.57%	0.58%
Lead	0.01	c	1.40E+02	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Magnesium	54.5275	a	5.56E+05	0.42%	0.42%	0.50%	0.53%	0.46%	0.47%
Manganese	0.1	b	1.02E+03	18.88%	19.11%	22.36%	23.76%	20.70%	21.08%
Mercury	6.80E-06	c	6.94E-02	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Nickel	0.00625	a	6.38E+01	0.78%	0.79%	0.92%	0.98%	0.85%	0.87%
Potassium	21.55	a	2.20E+05	0.34%	0.35%	0.41%	0.43%	0.38%	0.38%
Selenium	0.004	a	4.08E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Silver	0.001125	a	1.15E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Sodium	338.9	a	3.46E+06	0.45%	0.45%	0.53%	0.56%	0.49%	0.50%
Thallium	0.01625	a	1.66E+02	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Vanadium	0.01225	a	1.25E+02	0.11%	0.11%	0.13%	0.14%	0.12%	0.13%
Zinc	0.06	c	5.96E+02	0.49%	0.49%	0.58%	0.61%	0.53%	0.54%

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

Table D-5. Ambient Delaware River contaminant concentrations and loadings compared with the daily percent change in River concentration downstream of the Killcohook weir.

Analyte	Ambient Delaware River Concentration mg/L		Ambient Delaware River Loading mg/day	Percent Increase in River Concentration 8-Dec	9-Dec	10-Dec	11-Dec	12-Dec	13-Dec
PCBs	6.78E-06	a	6.92E-02	0.30%	0.32%	0.29%	0.29%	0.28%	0.17%
Aluminum	1.65	b	1.68E+04	0.09%	0.09%	0.08%	0.08%	0.08%	0.05%
Antimony	0.004	a	4.08E+01	0.65%	0.69%	0.64%	0.62%	0.61%	0.36%
Arsenic	0.01	b	1.02E+02	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Barium	0.03975	a	4.05E+02	0.74%	0.77%	0.72%	0.70%	0.68%	0.41%
Beryllium	0.001	ND	1.02E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cadmium	0.001	ND	1.02E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Calcium	105.5	a	1.08E+06	0.20%	0.21%	0.19%	0.19%	0.18%	0.11%
Chromium	0.004375	a	4.46E+01	0.24%	0.25%	0.23%	0.23%	0.22%	0.13%
Cobalt	0.004	a	4.08E+01	0.13%	0.14%	0.13%	0.12%	0.12%	0.07%
Copper	0.01	c	1.18E+02	0.41%	0.43%	0.40%	0.39%	0.38%	0.23%
Cyanide	**0.0025**	ND	2.55E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Iron	1.86	b	1.90E+04	0.59%	0.62%	0.58%	0.56%	0.55%	0.33%
Lead	0.01	c	1.40E+02	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Magnesium	54.5275	a	5.56E+05	0.47%	0.50%	0.46%	0.45%	0.44%	0.26%
Manganese	0.1	b	1.02E+03	21.30%	22.37%	20.83%	20.19%	19.74%	11.84%
Mercury	6.80E-06	c	6.94E-02	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Nickel	0.00625	a	6.38E+01	0.88%	0.92%	0.86%	0.83%	0.81%	0.49%
Potassium	21.55	a	2.20E+05	0.39%	0.41%	0.38%	0.37%	0.36%	0.22%
Selenium	0.004	a	4.08E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Silver	0.001125	a	1.15E+01	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Sodium	338.9	a	3.46E+06	0.50%	0.53%	0.49%	0.48%	0.47%	0.28%
Thallium	0.01625	a	1.66E+02	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Vanadium	0.01225	a	1.25E+02	0.13%	0.13%	0.13%	0.12%	0.12%	0.07%
Zinc	0.06	c	5.96E+02	0.55%	0.58%	0.54%	0.52%	0.51%	0.31%

< - not detected

a - River data obtained from Background samples collected during the Killcohook study.

b - River data obtained from the USEPA STORET database.

c - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).

Underlined ambient river concentrations exceed chronic water quality criteria.

BOLD ambient river concentrations exceed acute water quality criteria.

APPENDIX E

DREDGING LOG

Summary of Dredge Pumping rate for the Killcohook CDF 1999 monitoring and loading study						
Dredge Used: Week Marine's Ozark						
	Pumping hours					
Date	**Hour**	**Minutes**	**Total minutes**	**Cubic yards dredged**	**Cubic Yards of slurry/day cy x 3 (75% water)**	**Liters of Slurry Pumped per day cy x 764.5**
12-Oct-99	4	0	240	9278	27834	21,279,093
13-Oct-99	10	5	605	28233	112932	86,336,514
14-Oct-99	15	30	930	41745	166980	127,656,210
15-Oct-99	21	30	1290	58333	233332	178,382,314
16-Oct-99	19	5	1145	38867	155468	118,855,286
17-Oct-99	15	35	935	30000	120000	91,740,000
18-Oct-99	17		1020	36740	146960	112,350,920
19-Oct-99					0	0
20-Oct-99	20	15	1215	42854	171416	131,047,532
21-Oct-99	21	25	1285	42766	171064	130,778,428
22-Oct-99	18	40	1120	35400	141600	108,253,200
23-Oct-99	12	40	760	23567	94268	72,067,886
24-Oct-99	9	50	590	18664	74656	57,074,512
25-Oct-99	20	55	1255	40049	160196	122,469,842
26-Oct-99	14	45	885	30150	120600	92,198,700
27-Oct-99	20	10	1210	43313	173252	132,451,154
28-Oct-99	15	40	940	32063	128252	98,048,654
29-Oct-99	0	0	0	0	0	0
30-Oct-99	0	0	0	0	0	0
31-Oct-99	6	55	415	9500	38000	29,051,000
01-Nov-99	20	25	1225	37067	148268	113,350,886
02-Nov-99	18	45	1125	33933	135732	103,767,114
03-Nov-99	18	40	1120	27445	109780	83,926,810
04-Nov-99	22	5	1325	40460	161840	123,726,680
05-Nov-99	12	10	730	14887	59548	45,524,446
06-Nov-99	21	10	1270	44175	176700	135,087,150
07-Nov-99	21	10	1270	45157	180628	138,090,106
08-Nov-99	22	15	1335	47123	188492	144,102,134
09-Nov-99	21	55	1315	44720	178880	136,753,760
10-Nov-99	20	45	1245	40071	160284	122,537,118
11-Nov-99	14		840	22035	88140	67,383,030
12-Nov-99	1	30	90	1250	5000	3,822,500
					Total Slurry Pumped	2,928,112,979

Table D-2. Daily cumulative river loadings downstream of the Pedricktown North CDF discharge. Dates in bold indicate sample dates.

Parameter	DRBC Water Quality Standards Freshwater Acute		Freshwater Chronic		Ambient Delaware River Concentration		Ambient Delaware River Loading	16-Nov	17-Nov	18-Nov	19-Nov	20-Nov	21-Nov	22-Nov	23-Nov	24-Nov
Total Metals	mg/L		mg/L		mg/L		mg/day									
Aluminum	0.75		0.09		1.65	c	1.69E+10	1.69E+10	1.69E+10	1.69E+10	1.69E+10	1.69E+10	1.69E+10	1.69E+10	1.69E+10	1.69E+10
Antimony					0.04	d	4.20E+08									
Arsenic	0.36		0.19		0.01	c										
Barium					0.05	d	4.91E+08	4.92E+08	4.92E+08	4.92E+08	4.92E+08	4.92E+08	4.92E+08	4.92E+08	4.91E+08	4.92E+08
Beryllium																
Cadmium	0.02	a	0.001	a	0.01	d	1.43E+08	1.43E+08	1.43E+08	1.43E+08	1.43E+08	1.43E+08	1.43E+08	1.43E+08	1.43E+08	1.43E+08
Calcium					60.35	d	6.18E+11	6.18E+11	6.18E+11	6.18E+11	6.18E+11	6.19E+11	6.19E+11	6.18E+11	6.18E+11	6.18E+11
Chromium	0.016	b	0.011	b	0.03	c	2.79E+08			2.79E+08	2.79E+08	2.79E+08	2.79E+08			
Cobalt																
Copper	0.06	a	0.01	a	0.01	e	1.18E+08									
Cyanide	0.02		0.01													
Iron					1.86	c	1.91E+10	1.91E+10	1.91E+10	1.91E+10	1.91E+10	1.91E+10	1.91E+10	1.91E+10	1.91E+10	1.91E+10
Lead	0.05		0.02		0.01	e	1.40E+08									
Magnesium					86.98	d	8.90E+11	8.91E+11	8.91E+11	8.91E+11	8.90E+11	8.91E+11	8.91E+11	8.91E+11	8.90E+11	8.91E+11
Manganese					0.10	c	1.02E+09	1.05E+09	1.05E+09	1.05E+09	1.04E+09	1.12E+09	1.09E+09	1.05E+09	1.04E+09	1.08E+09
Mercury	0.0024		0.000012		6.80E-06	e	6.96E+04									
Nickel	4.36	a	0.12	a	0.01	d	1.07E+08	1.08E+08	1.08E+08	1.08E+08	1.08E+08	1.08E+08	1.08E+08	1.08E+08	1.08E+08	1.08E+08
Potassium					26.20	d	2.68E+11	2.68E+11	2.68E+11	2.68E+11	2.68E+11	2.68E+11	2.68E+11	2.68E+11	2.68E+11	2.68E+11
Selenium	0.02		0.01		0.005	d	4.63E+07									
Silver	0.04	a			0.003	c	3.07E+07									
Sodium					798.50	d	8.17E+12	8.17E+12	8.17E+12	8.17E+12	8.17E+12	8.18E+12	8.17E+12	8.17E+12	8.17E+12	8.17E+12
Thallium																
Vanadium					0.03	d	2.87E+08									
Zinc	0.36	a	0.08	a	0.06	e	5.98E+08	5.99E+08	5.99E+08	5.99E+08	5.99E+08	6.01E+08	6.00E+08	5.99E+08	5.99E+08	6.00E+08
Dissolved Metals																
Aluminum	0.75		0.09		0.52	d	5.32E+09	5.32E+09	5.32E+09	5.32E+09	5.32E+09	5.32E+09	5.32E+09	5.32E+09	5.32E+09	5.32E+09
Antimony								4.12E+04	3.05E+04							
Arsenic	0.36		0.19													
Barium					0.04	d	3.66E+08	3.66E+08	3.66E+08	3.66E+08	3.66E+08	3.67E+08	3.67E+08	3.66E+08	3.66E+08	3.66E+08
Beryllium																
Cadmium	0.02	a	0.001	a	0.01	d	9.72E+07	6.59E+03	4.87E+03							
Calcium					51.35	d	5.26E+11	5.26E+11	5.26E+11	5.26E+11	5.26E+11	5.27E+11	5.26E+11	5.26E+11	5.26E+11	5.26E+11
Chromium	0.016	b	0.011	b	0.01	d	9.21E+07									
Cobalt																
Copper	0.06	a	0.01	a	0.002	e	2.01E+07	2.01E+07	2.01E+07	2.02E+07	2.02E+07	2.06E+07	2.04E+07	2.01E+07	2.01E+07	2.01E+07
Iron					0.56	d	5.72E+09	5.73E+09	5.73E+09	5.73E+09	5.73E+09	5.73E+09	5.73E+09	5.73E+09	5.72E+09	5.73E+09
Lead	0.05		0.02		3.5E-05	e	3.58E+05									
Magnesium					93.35	d	9.56E+11	9.56E+11	9.56E+11	9.56E+11	9.56E+11	9.56E+11	9.56E+11	9.56E+11	9.56E+11	9.56E+11
Manganese								2.53E+07	2.56E+07	2.93E+07	1.92E+07	1.02E+08	6.23E+07	3.03E+07	2.04E+07	6.02E+07
Mercury	0.0024		0.000012													
Nickel	4.36	a	0.12	a	0.01	d	6.48E+07	6.50E+07	6.50E+07	6.50E+07	6.49E+07	6.54E+07	6.52E+07	6.50E+07	6.50E+07	6.52E+07
Potassium					26.50	d	2.71E+11	2.71E+11	2.71E+11	2.71E+11	2.71E+11	2.71E+11	2.71E+11	2.71E+11	2.71E+11	2.71E+11
Selenium	0.02		0.01		0.003	d	2.89E+07									
Silver	0.04	a			0.01	d	9.21E+07									
Sodium					650.25	d	6.66E+12	6.66E+12	6.66E+12	6.66E+12	6.66E+12	6.66E+12	6.66E+12	6.66E+12	6.66E+12	6.66E+12
Thallium																
Vanadium																
Zinc	0.36	a	0.08	a	0.003	e	3.16E+07	3.25E+07	3.25E+07	3.23E+07	3.20E+07	3.40E+07	3.30E+07	3.24E+07	3.21E+07	3.32E+07

a - Hardness dependant water quality criteria are based on a guideline-designated hardness of 74 mg/L for
b - Chromium IV criteria are given since they were below the hardness-dependant chromium III criteria. chronic criteria and a measured hardness of 377 mg/L.
c - River data obtained from the USEPA STORET database.
d - River data obtained from Background samples collected during the Pedricktown study.
e - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).
f - PCBs are based on a dry weather river loading of 7.03 g/day (DRBC 1998; wet weather is 40.88 g/day); t
Underlined ambient river concentrations exceed chronic water quality criteria. the loadings are in mg and the concentrations are given in mg/L.

Table D-2. Daily cumulative river loadings downstream of the Pedricktown North CDF discharge. Dates in bold indicate sample dates.

Parameter	DRBC Water Quality Standards Freshwater Acute		Freshwater Chronic		Ambient Delaware River Concentration		Ambient Delaware River Loading	Cumulative River Loadings 29-Oct	30-Oct	31-Oct	1-Nov	2-Nov	3-Nov	4-Nov	5-Nov	6-Nov	7-Nov	8-Nov	9-Nov	10-Nov	11-Nov	12-Nov	13-Nov	14-Nov	15-Nov
Total Metals	mg/L		mg/L		mg/L		mg/day																	
Aluminum	0.75		0.09		1.65	c	1.69E+10	1.69E+10	1.69E+10	1.69E+10	1.69E+10	1.69E+10	1.69E+10	1.69E+10	1.69E+10	1.69E+10	1.69E+10	1.69E+10	1.69E+10	1.69E+10	1.69E+10	1.69E+10	1.69E+10	1.69E+10	1.69E+10
Antimony					0.04	d	4.20E+08																	
Arsenic	0.36		0.19		0.01	c																		
Barium					0.05	d	4.91E+08	4.92E+08	4.92E+08	4.92E+08	4.93E+08	4.93E+08	4.93E+08	4.94E+08	4.94E+08	4.93E+08	4.93E+08	4.94E+08	4.94E+08	4.93E+08	4.93E+08	4.93E+08	4.92E+08	4.92E+08	4.92E+08
Beryllium																								
Cadmium	0.02	a	0.001	a	0.01	d	1.43E+08	1.43E+08	1.43E+08	1.43E+08														1.43E+08
Calcium					60.35	d	6.18E+11	6.22E+11	6.22E+11	6.22E+11	6.21E+11	6.22E+11	6.22E+11	6.21E+11	6.20E+11	6.20E+11	6.19E+11	6.20E+11	6.20E+11	6.19E+11	6.19E+11	6.19E+11	6.19E+11	6.19E+11	6.18E+11
Chromium	0.016	b	0.011	b	0.03	c	2.79E+08	2.79E+08	2.79E+08	2.79E+08														
Cobalt																								
Copper	0.06	a	0.01	a	0.01	e	1.18E+08	1.18E+08	1.18E+08	1.18E+08	1.18E+08	1.18E+08	1.18E+08											
Cyanide	0.02		0.01																					
Iron					1.86	c	1.91E+10	1.91E+10	1.91E+10	1.91E+10	1.91E+10	1.91E+10	1.91E+10	1.91E+10	1.91E+10	1.91E+10	1.91E+10	1.91E+10	1.91E+10	1.91E+10	1.91E+10	1.91E+10	1.91E+10	1.91E+10	1.91E+10
Lead	0.05		0.02		0.01	e	1.40E+08																	
Magnesium					86.98	d	8.90E+11	8.93E+11	8.93E+11	8.93E+11	8.92E+11	8.93E+11	8.93E+11	8.92E+11	8.92E+11	8.91E+11	8.91E+11	8.92E+11	8.92E+11	8.91E+11	8.91E+11	8.91E+11	8.91E+11	8.91E+11	8.91E+11
Manganese					0.10	c	1.02E+09	1.15E+09	1.16E+09	1.17E+09	1.15E+09	1.17E+09	1.16E+09	1.24E+09	1.22E+09	1.15E+09	1.14E+09	1.19E+09	1.17E+09	1.14E+09	1.12E+09	1.11E+09	1.08E+09	1.08E+09	1.06E+09
Mercury	0.0024		0.000012		6.80E-06	e	6.96E+04																	
Nickel	4.36	a	0.12	a	0.01	d	1.07E+08	1.09E+08	1.09E+08	1.09E+08	1.09E+08	1.09E+08	1.09E+08	1.09E+08	1.09E+08	1.08E+08	1.08E+08	1.08E+08	1.08E+08	1.08E+08	1.08E+08	1.08E+08	1.08E+08	1.08E+08	1.08E+08
Potassium					26.20	d	2.68E+11	2.69E+11	2.69E+11	2.69E+11	2.69E+11	2.69E+11	2.69E+11	2.69E+11	2.69E+11	2.68E+11	2.68E+11	2.68E+11	2.68E+11	2.68E+11	2.68E+11	2.68E+11	2.68E+11	2.68E+11	2.68E+11
Selenium	0.02		0.01		0.005	d	4.63E+07											5.98E+03	7.51E+03	6.54E+03	8.85E+03	9.35E+03	8.53E+03	6.06E+03	
Silver	0.04	a			0.003	c	3.07E+07																	
Sodium					798.50	d	8.17E+12	8.18E+12	8.18E+12	8.18E+12	8.19E+12	8.19E+12	8.19E+12	8.18E+12	8.18E+12	8.18E+12	8.18E+12	8.18E+12	8.18E+12	8.18E+12	8.18E+12	8.18E+12	8.18E+12	8.18E+12	8.17E+12
Thallium																								
Vanadium					0.03	d	2.87E+08																	
Zinc	0.36	a	0.08	a	0.06	e	5.98E+08	6.12E+08	6.13E+08	6.13E+08	6.09E+08	6.11E+08	6.10E+08	6.05E+08	6.04E+08	6.02E+08	6.02E+08	6.02E+08	6.01E+08	6.01E+08	6.02E+08	6.02E+08	6.01E+08	6.00E+08	6.00E+08
Dissolved Metals																								
Aluminum	0.75		0.09		0.52	d	5.32E+09	5.33E+09	5.33E+09	5.33E+09	5.33E+09	5.33E+09	5.33E+09	5.34E+09	5.33E+09	5.33E+09	5.33E+09	5.34E+09	5.34E+09	5.33E+09	5.33E+09	5.33E+09	5.33E+09	5.33E+09	5.32E+09
Antimony																								6.83E+04
Arsenic	0.36		0.19																					
Barium					0.04	d	3.66E+08	3.66E+08	3.67E+08	3.67E+08	3.67E+08	3.67E+08	3.67E+08	3.68E+08	3.68E+08	3.67E+08	3.67E+08	3.68E+08	3.68E+08	3.68E+08	3.67E+08	3.67E+08	3.67E+08	3.67E+08	3.66E+08
Beryllium																								
Cadmium	0.02	a	0.001	a	0.01	d	9.72E+07	9.74E+07	9.74E+07	9.74E+07														1.09E+04
Calcium					51.35	d	5.26E+11	5.29E+11	5.29E+11	5.29E+11	5.29E+11	5.30E+11	5.30E+11	5.29E+11	5.28E+11	5.27E+11	5.27E+11	5.28E+11	5.27E+11	5.27E+11	5.27E+11	5.27E+11	5.27E+11	5.27E+11	5.26E+11
Chromium	0.016	b	0.011	b	0.01	d	9.21E+07														2.21E+04	2.34E+04	2.13E+04	1.52E+04	
Cobalt																								
Copper	0.06	a	0.01	a	0.002	e	2.01E+07	2.05E+07	2.05E+07	2.05E+07	2.03E+07	2.03E+07	2.03E+07	2.10E+07	2.09E+07	2.06E+07	2.06E+07	2.03E+07	2.02E+07	2.02E+07					2.01E+07
Iron					0.56	d	5.72E+09	5.73E+09	5.73E+09	5.73E+09	5.73E+09	5.73E+09	5.73E+09	5.74E+09	5.74E+09	5.73E+09	5.73E+09	5.75E+09	5.75E+09	5.74E+09	5.74E+09	5.73E+09	5.73E+09	5.73E+09	5.73E+09
Lead	0.05		0.02		3.5E-05	e	3.58E+05																	
Magnesium					93.35	d	9.56E+11	9.57E+11	9.57E+11	9.57E+11	9.58E+11	9.58E+11	9.58E+11	9.58E+11	9.57E+11	9.57E+11	9.57E+11	9.57E+11	9.57E+11	9.57E+11	9.57E+11	9.57E+11	9.56E+11	9.56E+11	9.56E+11
Manganese								9.24E+07	9.91E+07	1.01E+08	1.24E+08	1.51E+08	1.38E+08	2.07E+08	1.87E+08	1.24E+08	1.16E+08	1.57E+08	1.37E+08	1.11E+08	9.25E+07	8.43E+07	5.99E+07	5.40E+07	3.41E+07
Mercury	0.0024		0.000012																					
Nickel	4.36	a	0.12	a	0.01	d	6.48E+07	6.59E+07	6.60E+07	6.61E+07	6.60E+07	6.63E+07	6.61E+07	6.63E+07	6.62E+07	6.57E+07	6.56E+07	6.59E+07	6.58E+07	6.56E+07	6.54E+07	6.54E+07	6.52E+07	6.52E+07	6.51E+07
Potassium					26.50	d	2.71E+11	2.72E+11	2.72E+11	2.72E+11	2.72E+11	2.72E+11	2.72E+11	2.72E+11	2.72E+11	2.71E+11	2.71E+11	2.72E+11	2.71E+11	2.71E+11	2.71E+11	2.71E+11	2.71E+11	2.71E+11	2.71E+11
Selenium	0.02		0.01		0.003	d	2.89E+07																	
Silver	0.04	a			0.01	d	9.21E+07																	
Sodium					650.25	d	6.66E+12	6.66E+12	6.66E+12	6.66E+12	6.67E+12	6.67E+12	6.67E+12	6.66E+12	6.66E+12	6.66E+12	6.66E+12	6.66E+12	6.66E+12	6.66E+12	6.66E+12	6.66E+12	6.66E+12	6.66E+12	6.66E+12
Thallium																								
Vanadium								1.63E+05	1.75E+05	1.79E+05														
Zinc	0.36	a	0.08	a	0.003	e	3.16E+07	4.37E+07	4.45E+07	4.48E+07	4.10E+07	4.31E+07	4.21E+07	3.82E+07	3.76E+07	3.56E+07	3.53E+07	3.52E+07	3.48E+07	3.42E+07	3.53E+07	3.49E+07	3.40E+07	3.37E+07	3.28E+07

a - Hardness dependant water quality criteria are based on a guideline-designated hardness of 74 mg/L for chronic criteria and a measured hardness of 377 mg/L.
b - Chromium IV criteria are given since they were below the hardness-dependant chromium III criteria.
c - River data obtained from the USEPA STORET database.
d - River data obtained from Background samples collected during the Pedricktown study.
e - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).
f - PCBs are based on a dry weather river loading of 7.03 g/day (DRBC 1998; wet weather is 40.88 g/day); the loadings are in mg and the concentrations are given in mg/L.
Underlined ambient river concentrations exceed chronic water quality criteria.

Table D-3. Daily river concentrations downstream of the Pedricktown North CDF discharge. Dates in bold indicate sample dates, the number below date is the discharge flow, the number below that is the cumulative downstream flow.

Parameter	DRBC Water Quality Standards Freshwater Acute		Freshwater Chronic		Ambient Delaware River Concentration		Ambient Delaware River Loading	**29-Oct** 2.33E+07 1.03E+10	30-Oct 2.50E+07 1.03E+10	31-Oct 2.56E+07 1.03E+10	1-Nov 2.52E+07 1.03E+10	**2-Nov** 3.08E+07 1.03E+10	3-Nov 2.81E+07 1.03E+10	4-Nov 2.65E+07 1.03E+10	**5-Nov** 2.41E+07 1.03E+10	6-Nov 1.60E+07 1.03E+10	7-Nov 1.49E+07 1.03E+10	8-Nov 1.88E+07 1.03E+10	**9-Nov** 1.64E+07 1.03E+10	10-Nov 1.33E+07 1.02E+10	11-Nov 1.40E+07 1.02E+10	**12-Nov** 1.28E+07 1.02E+10
Total Metals	mg/L		mg/L		mg/L		mg/day															
Aluminum	0.75		0.09		1.65	c	1.69E+10	1.64	1.64	1.64	1.64	1.64	1.64	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65
Antimony					0.04	d	4.20E+08															
Arsenic	0.36		0.19		0.01	c																
Barium					0.05	d	4.91E+08	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048
Beryllium																						
Cadmium	0.02	a	0.001	a	0.01	d	1.43E+08	0.014	0.014	0.014												
Calcium					60.35	d	6.18E+11	60.61	60.63	60.64	60.54	60.59	60.57	60.48	60.47	60.43	60.42	60.45	60.44	60.42	60.42	60.42
Chromium	0.016	b	0.011	b	0.03	c	2.79E+08	0.03	0.03	0.03												
Cobalt																						
Copper	0.06	a	0.01	a	0.01	e	1.18E+08	0.01	0.01	0.01	0.01	0.01	0.01									
Cyanide	0.02		0.01																			
Iron					1.86	c	1.91E+10	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86
Lead	0.05		0.02		0.01	e	1.40E+08															
Magnesium					86.98	d	8.90E+11	87.01	87.02	87.02	86.97	86.97	86.97	86.94	86.95	86.96	86.96	86.96	86.96	86.97	86.96	86.97
Manganese					0.10	c	1.02E+09	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.12	0.11	0.11	0.12	0.11	0.11	0.11	0.11
Mercury	0.0024		0.000012		6.80E-06	e	6.96E+04															
Nickel	4.36	a	0.12	a	0.01	d	1.07E+08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Potassium					26.20	d	2.68E+11	26.18	26.18	26.18	26.17	26.17	26.17	26.17	26.17	26.18	26.18	26.18	26.18	26.19	26.19	26.19
Selenium	0.02		0.01		0.005	d	4.63E+07															
Silver	0.04	a			0.003	c	3.07E+07															
Sodium					798.50	d	8.17E+12	797.43	797.36	797.33	798.20	798.14	798.17	797.57	797.66	797.94	797.98	797.88	797.96	798.06	797.90	797.95
Thallium																						
Vanadium					0.03	d	2.87E+08															
Zinc	0.36	a	0.08	a	0.06	e	5.98E+08	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Dissolved Metals																						
Aluminum	0.75		0.09		0.52	d	5.32E+09	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52
Antimony																						
Arsenic	0.36		0.19																			
Barium					0.04	d	3.66E+08	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Beryllium																						
Cadmium	0.02	a	0.001	a	0.01	d	9.72E+07	0.01	0.01	0.01												
Calcium					51.35	d	5.26E+11	51.55	51.57	51.57	51.58	51.64	51.61	51.52	51.50	51.45	51.45	51.46	51.45	51.43	51.44	51.43
Chromium	0.016	b	0.011	b	0.01	d	9.21E+07															
Cobalt																						
Copper	0.06	a	0.01	a	0.002	e	2.01E+07	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002		
Iron					0.56	d	5.72E+09	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
Lead	0.05		0.02		3.5E-05	e	3.58E+05															
Magnesium					93.35	d	9.56E+11	93.30	93.29	93.29	93.34	93.34	93.34	93.31	93.32	93.33	93.33	93.32	93.33	93.33	93.33	93.33
Manganese														0.02	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.01
Mercury	0.0024		0.000012																			
Nickel	4.36	a	0.12	a	0.01	d	6.48E+07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Potassium					26.50	d	2.71E+11	26.47	26.47	26.47	26.48	26.47	26.47	26.47	26.47	26.48	26.48	26.48	26.48	26.48	26.49	26.49
Selenium	0.02		0.01		0.003	d	2.89E+07															
Silver	0.04	a			0.01	d	9.21E+07															
Sodium					650.25	d	6.66E+12	649.42	649.36	649.34	649.58	649.44	649.51	649.46	649.53	649.77	649.80	649.82	649.88	649.95	649.94	649.97
Thallium																						
Vanadium																						
Zinc	0.36	a	0.08	a	0.003	e	3.16E+07	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003

a - Hardness dependant water quality criteria are based on a guideline-designated hardness of 74 mg/L for chronic criteria and a measured hardness of 377 mg/L.
b - Chromium IV criteria are given since they were below the hardness-dependant chromium III criteria.
c - River data obtained from the USEPA STORET database.
d - River data obtained from Background samples collected during the Pedricktown study.
e - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).
f - PCBs are based on a dry weather river loading of 7.03 g/day (DRBC 1998; wet weather is 40.88 g/day); the loadings are in mg and the concentrations are given in mg/L.
Underlined ambient river concentrations exceed chronic water quality criteria.

Table D-3. Daily river concentrations downstream of the Pedricktown North CDF discharge. Dates in bold indicate sample dates, the number below date is the discharge flow, the number below that is the cumulative downstream flow.

	DRBC Water Quality Standards				Ambient		Ambient	13-Nov	14-Nov	15-Nov	**16-Nov**	17-Nov	18-Nov	**19-Nov**	20-Nov	21-Nov	22-Nov	23-Nov	**24-Nov**
	Freshwater		Freshwater		Delaware River		Delaware River	9.09E+06	8.20E+06	4.94E+06	3.65E+06	3.71E+06	3.38E+06	2.22E+06	1.18E+07	7.19E+06	2.48E+06	1.67E+06	4.93E+06
Parameter	Acute		Chronic		Concentration		Loading	1.02E+10	1.02E+10	1.02E+10	1.02E+10	1.02E+10	1.02E+10	1.02E+10	1.02E+10	1.02E+10	1.02E+10	1.02E+10	1.02E+10
Total Metals	mg/L		mg/L		mg/L		mg/day												
Aluminum	0.75		0.09		1.65	c	1.69E+10	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65
Antimony					0.04	d	4.20E+08												
Arsenic	0.36		0.19		0.01	c													
Barium					0.05	d	4.91E+08	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048
Beryllium																			
Cadmium	0.02	a	0.001	a	0.01	d	1.43E+08			0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
Calcium					60.35	d	6.18E+11	60.40	60.39	60.37	60.37	60.37	60.37	60.36	60.42	60.39	60.37	60.36	60.39
Chromium	0.016	b	0.011	b	0.03	c	2.79E+08						0.027	0.027	0.027	0.027			
Cobalt																			
Copper	0.06	a	0.01	a	0.01	e	1.18E+08												
Cyanide	0.02		0.01																
Iron					1.86	c	1.91E+10	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86
Lead	0.05		0.02		0.01	e	1.40E+08												
Magnesium					86.98	d	8.90E+11	86.97	86.97	86.97	86.97	86.97	86.97	86.97	86.97	86.97	86.98	86.98	86.98
Manganese					0.10	c	1.02E+09	0.11	0.11	0.10	0.10	0.10	0.10	0.10	0.11	0.11	0.10	0.10	0.11
Mercury	0.0024		0.000012		6.80E-06	e	6.96E+04												
Nickel	4.36	a	0.12	a	0.01	d	1.07E+08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Potassium					26.20	d	2.68E+11	26.19	26.19	26.20	26.20	26.20	26.20	26.20	26.19	26.19	26.20	26.20	26.19
Selenium	0.02		0.01		0.005	d	4.63E+07												
Silver	0.04	a			0.003	c	3.07E+07												
Sodium					798.50	d	8.17E+12	798.11	798.15	798.22	798.29	798.29	798.30	798.37	797.82	798.09	798.36	798.41	798.22
Thallium																			
Vanadium					0.03	d	2.87E+08												
Zinc	0.36	a	0.08	a	0.06	e	5.98E+08	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Dissolved Metals																			
Aluminum	0.75		0.09		0.52	d	5.32E+09	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52
Antimony																			
Arsenic	0.36		0.19																
Barium					0.04	d	3.66E+08	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Beryllium																			
Cadmium	0.02	a	0.001	a	0.01	d	9.72E+07												
Calcium					51.35	d	5.26E+11	51.41	51.40	51.38	51.37	51.37	51.37	51.36	51.42	51.39	51.37	51.36	51.39
Chromium	0.016	b	0.011	b	0.01	d	9.21E+07												
Cobalt																			
Copper	0.06	a	0.01	a	0.002	e	2.01E+07			0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Iron					0.56	d	5.72E+09	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
Lead	0.05		0.02		3.5E-05	e	3.58E+05												
Magnesium					93.35	d	9.56E+11	93.34	93.34	93.35	93.35	93.35	93.35	93.35	93.34	93.34	93.35	93.35	93.35
Manganese								0.01	0.01	0.003	0.002	0.003	0.003	0.002	0.01	0.01	0.00	0.00	0.01
Mercury	0.0024		0.000012																
Nickel	4.36	a	0.12	a	0.01	d	6.48E+07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Potassium					26.50	d	2.71E+11	26.49	26.49	26.50	26.50	26.50	26.50	26.50	26.49	26.49	26.50	26.50	26.50
Selenium	0.02		0.01		0.003	d	2.89E+07												
Silver	0.04	a			0.01	d	9.21E+07												
Sodium					650.25	d	6.66E+12	650.05	650.07	650.05	650.10	650.10	650.12	650.16	649.78	649.96	650.15	650.18	650.05
Thallium																			
Vanadium																			
Zinc	0.36	a	0.08	a	0.003	e	3.16E+07	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003

a - Hardness dependant water quality criteria are based on a guideline-designated hardness of 74 mg/L for chronic criteria and a measured hardness of 377 mg/L.
b - Chromium IV criteria are given since they were below the hardness-dependant chromium III criteria.
c - River data obtained from the USEPA STORET database.
d - River data obtained from Background samples collected during the Pedricktown study.
e - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).
f - PCBs are based on a dry weather river loading of 7.03 g/day (DRBC 1998; wet weather is 40.88 g/day); the loadings are in mg and the concentrations are given in mg/L.
Underlined ambient river concentrations exceed chronic water quality criteria.

Table D-1. Daily Pedricktown North CDF discharge loadings. Dates in bold indicate sample dates.

Parameter	DRBC Water Quality Standards Freshwater Acute		Freshwater Chronic		Ambient Delaware River Concentration		Ambient Delaware River Loading	Daily Pedricktown Discharge Loadings 29-Oct	30-Oct	31-Oct	1-Nov	2-Nov	3-Nov	4-Nov	5-Nov	6-Nov	7-Nov	8-Nov	9-Nov	10-Nov	11-Nov	12-Nov	13-Nov	14-Nov	15-Nov
Total Metals	mg/L		mg/L		mg/L		mg/day																	
Aluminum	0.75		0.09		1.65	c	1.69E+10	1.75E+07	1.88E+07	1.92E+07	1.86E+07	2.27E+07	2.07E+07	2.35E+07	2.13E+07	1.42E+07	1.32E+07	1.71E+07	1.49E+07	1.21E+07	1.04E+07	9.46E+06	6.73E+06	6.07E+06	1.88E+06
Antimony					0.04	d	4.20E+08																		
Arsenic	0.36		0.19		0.01	c																			
Barium					0.05	d	4.91E+08	8.40E+05	9.01E+05	9.22E+05	1.24E+06	1.51E+06	1.38E+06	2.71E+06	2.45E+06	1.63E+06	1.52E+06	2.69E+06	2.34E+06	1.90E+06	1.47E+06	1.34E+06	9.55E+05	8.61E+05	4.55E+05
Beryllium																									1.98E+04
Cadmium	0.02	a	0.001	a	0.01	d	1.43E+08	9.33E+04	1.00E+05	1.02E+05															
Calcium					60.35	d	6.18E+11	4.08E+09	4.38E+09	4.48E+09	3.50E+09	4.28E+09	3.91E+09	2.95E+09	2.67E+09	1.78E+09	1.66E+09	2.20E+09	1.91E+09	1.55E+09	1.61E+09	1.47E+09	1.05E+09	9.43E+08	5.48E+08
Chromium	0.016	b	0.011	b	0.03	c	2.79E+08	7.00E+04	7.51E+04	7.69E+04															
Cobalt																									
Copper	0.06	a	0.01	a	0.01	e	1.18E+08	3.03E+05	3.25E+05	3.33E+05	3.78E+05	4.62E+05	4.21E+05													
Cyanide	0.02		0.01																						
Iron					1.86	c	1.91E+10	1.49E+07	1.60E+07	1.63E+07	1.96E+07	2.39E+07	2.18E+07	3.56E+07	3.22E+07	2.14E+07	2.00E+07	3.14E+07	2.73E+07	2.22E+07	1.59E+07	1.45E+07	1.03E+07	9.26E+06	4.15E+06
Lead	0.05		0.02		0.01	e	1.40E+08																		
Magnesium					86.98	d	8.90E+11	2.43E+09	2.60E+09	2.66E+09	2.18E+09	2.66E+09	2.43E+09	1.99E+09	1.80E+09	1.20E+09	1.12E+09	1.50E+09	1.31E+09	1.06E+09	1.11E+09	1.01E+09	7.19E+08	6.48E+08	3.99E+08
Manganese					0.10	c	1.02E+09	1.32E+08	1.42E+08	1.45E+08	1.23E+08	1.50E+08	1.37E+08	2.15E+08	1.94E+08	1.29E+08	1.21E+08	1.71E+08	1.49E+08	1.21E+08	9.49E+07	8.65E+07	6.15E+07	5.54E+07	3.68E+07
Mercury	0.0024		0.000012		6.80E-06	e	6.96E+04																		
Nickel	4.36	a	0.12	a	0.01	d	1.07E+08	1.47E+06	1.58E+06	1.61E+06	1.29E+06	1.57E+06	1.43E+06	1.49E+06	1.35E+06	8.96E+05	8.37E+05	1.01E+06	8.83E+05	7.17E+05	7.86E+05	7.16E+05	5.09E+05	4.59E+05	2.77E+05
Potassium					26.20	d	2.68E+11	4.53E+08	4.86E+08	4.97E+08	3.96E+08	4.83E+08	4.41E+08	4.09E+08	3.71E+08	2.46E+08	2.30E+08	2.84E+08	2.47E+08	2.00E+08	2.43E+08	2.21E+08	1.57E+08	1.42E+08	9.83E+07
Selenium	0.02		0.01		0.005	d	4.63E+07											2.25E+04	1.96E+04	1.59E+04	2.81E+04	2.56E+04	1.82E+04	1.64E+04	
Silver	0.04	a			0.003	c	3.07E+07																		
Sodium					798.50	d	8.17E+12	7.70E+09	8.26E+09	8.45E+09	1.71E+10	2.09E+10	1.91E+10	1.17E+10	1.06E+10	7.04E+09	6.58E+09	8.68E+09	7.56E+09	6.13E+09	5.07E+09	4.62E+09	3.28E+09	2.96E+09	1.10E+09
Thallium																									
Vanadium					0.03	d	2.87E+08																		
Zinc	0.36	a	0.08	a	0.06	e	5.98E+08	1.35E+07	1.45E+07	1.48E+07	1.04E+07	1.27E+07	1.16E+07	6.82E+06	6.19E+06	4.11E+06	3.84E+06	3.61E+06	3.14E+06	2.55E+06	3.75E+06	3.41E+06	2.43E+06	2.19E+06	1.30E+06
Dissolved Metals																									
Aluminum	0.75		0.09		0.52	d	5.32E+09	6.88E+06	7.38E+06	7.56E+06	4.18E+06	5.11E+06	4.66E+06	1.27E+07	1.16E+07	7.68E+06	7.17E+06	1.68E+07	1.46E+07	1.19E+07	9.21E+06	8.39E+06	5.97E+06	5.38E+06	6.22E+05
Antimony																									1.24E+05
Arsenic	0.36		0.19																						
Barium					0.04	d	3.66E+08	5.60E+05	6.01E+05	6.15E+05	1.13E+06	1.39E+06	1.26E+06	2.55E+06	2.31E+06	1.54E+06	1.43E+06	2.50E+06	2.18E+06	1.77E+06	1.42E+06	1.29E+06	9.19E+05	8.28E+05	4.15E+05
Beryllium																									1.98E+04
Cadmium	0.02	a	0.001	a	0.01	d	9.72E+07	1.17E+05	1.25E+05	1.28E+05															
Calcium					51.35	d	5.26E+11	3.27E+09	3.50E+09	3.59E+09	3.71E+09	4.53E+09	4.13E+09	3.11E+09	2.82E+09	1.87E+09	1.75E+09	2.14E+09	1.86E+09	1.51E+09	1.61E+09	1.47E+09	1.05E+09	9.43E+08	5.78E+08
Chromium	0.016	b	0.011	b	0.01	d	9.21E+07														7.02E+04	6.39E+04	4.55E+04	4.10E+04	
Cobalt																									1.48E+04
Copper	0.06	a	0.01	a	0.002	e	2.01E+07	4.20E+05	4.50E+05	4.61E+05	2.02E+05	2.46E+05	2.25E+05	9.29E+05	8.42E+05	5.60E+05	5.23E+05	2.07E+05	1.80E+05	1.46E+05					
Iron					0.56	d	5.72E+09	7.12E+06	7.63E+06	7.81E+06	3.40E+06	4.16E+06	3.79E+06	1.58E+07	1.43E+07	9.53E+06	8.91E+06	2.85E+07	2.49E+07	2.02E+07	1.07E+07	9.75E+06	6.93E+06	6.25E+06	1.41E+06
Lead	0.05		0.02		3.5E-05	e	3.58E+05																		
Magnesium					93.35	d	9.56E+11	1.62E+09	1.74E+09	1.78E+09	2.30E+09	2.81E+09	2.56E+09	2.11E+09	1.91E+09	1.27E+09	1.19E+09	1.46E+09	1.27E+09	1.03E+09	1.09E+09	9.96E+08	7.08E+08	6.39E+08	4.17E+08
Manganese								9.24E+07	9.91E+07	1.01E+08	1.24E+08	1.51E+08	1.38E+08	2.07E+08	1.87E+08	1.24E+08	1.16E+08	1.57E+08	1.37E+08	1.11E+08	9.25E+07	8.43E+07	5.99E+07	5.40E+07	3.41E+07
Mercury	0.0024		0.000012																						
Nickel	4.36	a	0.12	a	0.01	d	6.48E+07	1.12E+06	1.20E+06	1.23E+06	1.18E+06	1.45E+06	1.32E+06	1.46E+06	1.32E+06	8.80E+05	8.22E+05	1.07E+06	9.32E+05	7.57E+05	6.17E+05	5.63E+05	4.00E+05	3.61E+05	2.91E+05
Potassium					26.50	d	2.71E+11	2.92E+08	3.13E+08	3.20E+08	4.16E+08	5.08E+08	4.64E+08	4.06E+08	3.68E+08	2.45E+08	2.29E+08	2.63E+08	2.29E+08	1.86E+08	2.43E+08	2.21E+08	1.57E+08	1.42E+08	8.65E+07
Selenium	0.02		0.01		0.003	d	2.89E+07																		
Silver	0.04	a			0.01	d	9.21E+07																		
Sodium					650.25	d	6.66E+12	6.67E+09	7.16E+09	7.33E+09	9.55E+09	1.17E+10	1.06E+10	9.13E+09	8.28E+09	5.50E+09	5.14E+09	7.85E+09	6.84E+09	5.55E+09	5.94E+09	5.41E+09	3.85E+09	3.47E+09	1.15E+09
Thallium																									
Vanadium								1.63E+05	1.75E+05	1.79E+05															
Zinc	0.36	a	0.08	a	0.003	e	3.16E+07	1.21E+07	1.30E+07	1.33E+07	9.45E+06	1.15E+07	1.05E+07	6.66E+06	6.04E+06	4.02E+06	3.75E+06	3.64E+06	3.17E+06	2.57E+06	3.69E+06	3.36E+06	2.39E+06	2.16E+06	1.23E+06

a - Hardness dependant water quality criteria are based on a guideline-designated hardness of 74 mg/L for chronic criteria and a measured hardness of 377 mg/L.
b - Chromium IV criteria are given since they were below the hardness-dependant chromium III criteria.
c - River data obtained from the USEPA STORET database.
d - River data obtained from Background samples collected during the Pedricktown study.
e - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).
f - PCBs are based on a dry weather river loading of 7.03 g/day (DRBC 1998; wet weather is 40.88 g/day); the loadings are in mg and the concentrations are given in mg/L.
Underlined ambient river concentrations exceed chronic water quality criteria.

Table D-1. Daily Pedricktown North CDF discharge loadings. Dates in bold indicate sample dates.

Parameter	DRBC Water Quality Standards Freshwater Acute		Freshwater Chronic		Ambient Delaware River Concentration		Ambient Delaware River Loading	16-Nov	17-Nov	18-Nov	19-Nov	20-Nov	21-Nov	22-Nov	23-Nov	24-Nov
Total Metals	mg/L		mg/L		mg/L		mg/day									
Aluminum	0.75		0.09		1.65	c	1.69E+10	1.39E+06	1.41E+06	7.24E+05	4.74E+05	2.52E+06	1.54E+06	7.15E+05	4.82E+05	1.42E+06
Antimony					0.04	d	4.20E+08									
Arsenic	0.36		0.19		0.01	c										
Barium					0.05	d	4.91E+08	3.36E+05	3.41E+05	2.84E+05	1.86E+05	9.88E+05	6.04E+05	1.86E+05	1.25E+05	3.70E+05
Beryllium																
Cadmium	0.02	a	0.001	a	0.01	d	1.43E+08	1.46E+04	1.48E+04	1.35E+04	8.86E+03	4.71E+04	2.88E+04	1.24E+04	8.37E+03	2.47E+04
Calcium					60.35	d	6.18E+11	4.06E+08	4.12E+08	3.99E+08	2.61E+08	1.39E+09	8.48E+08	3.40E+08	2.29E+08	6.76E+08
Chromium	0.016	b	0.011	b	0.03	c	2.79E+08			3.38E+04	2.22E+04	1.18E+05	7.19E+04			
Cobalt																
Copper	0.06	a	0.01	a	0.01	e	1.18E+08									
Cyanide	0.02		0.01													
Iron					1.86	c	1.91E+10	3.07E+06	3.11E+06	2.22E+06	1.45E+06	7.72E+06	4.72E+06	1.81E+06	1.22E+06	3.59E+06
Lead	0.05		0.02		0.01	e	1.40E+08									
Magnesium					86.98	d	8.90E+11	2.95E+08	3.00E+08	2.93E+08	1.92E+08	1.02E+09	6.23E+08	2.41E+08	1.62E+08	4.79E+08
Manganese					0.10	c	1.02E+09	2.72E+07	2.76E+07	2.93E+07	1.92E+07	1.02E+08	6.23E+07	2.86E+07	1.92E+07	5.67E+07
Mercury	0.0024		0.000012		6.80E-06	e	6.96E+04									
Nickel	4.36	a	0.12	a	0.01	d	1.07E+08	2.05E+05	2.08E+05	2.10E+05	1.37E+05	7.30E+05	4.46E+05	1.76E+05	1.19E+05	3.50E+05
Potassium					26.20	d	2.68E+11	7.27E+07	7.38E+07	5.75E+07	3.77E+07	2.00E+08	1.22E+08	3.85E+07	2.59E+07	7.65E+07
Selenium	0.02		0.01		0.005	d	4.63E+07									
Silver	0.04	a			0.003	c	3.07E+07									
Sodium					798.50	d	8.17E+12	8.11E+08	8.23E+08	7.04E+08	4.61E+08	2.45E+09	1.50E+09	5.64E+08	3.80E+08	1.12E+09
Thallium																
Vanadium					0.03	d	2.87E+08									
Zinc	0.36	a	0.08	a	0.06	e	5.98E+08	9.65E+05	9.79E+05	7.31E+05	4.79E+05	2.54E+06	1.55E+06	8.67E+05	5.84E+05	1.72E+06
Dissolved Metals																
Aluminum	0.75		0.09		0.52	d	5.32E+09	4.60E+05	4.67E+05	3.35E+05	2.19E+05	1.16E+06	7.12E+05	3.35E+05	2.26E+05	6.66E+05
Antimony								9.14E+04	9.27E+04							
Arsenic	0.36		0.19													
Barium					0.04	d	3.66E+08	3.07E+05	3.11E+05	2.78E+05	1.82E+05	9.65E+05	5.90E+05	1.86E+05	1.25E+05	3.70E+05
Beryllium																
Cadmium	0.02	a	0.001	a	0.01	d	9.72E+07	1.46E+04	1.48E+04							
Calcium					51.35	d	5.26E+11	4.28E+08	4.34E+08	3.82E+08	2.50E+08	1.33E+09	8.12E+08	3.33E+08	2.24E+08	6.61E+08
Chromium	0.016	b	0.011	b	0.01	d	9.21E+07									
Cobalt																
Copper	0.06	a	0.01	a	0.002	e	2.01E+07	1.10E+04	1.11E+04	1.56E+05	1.02E+05	5.41E+05	3.31E+05	1.74E+04	1.17E+04	3.45E+04
Iron					0.56	d	5.72E+09	1.04E+06	1.06E+06	9.61E+05	6.29E+05	3.34E+06	2.04E+06	7.25E+05	4.89E+05	1.44E+06
Lead	0.05		0.02		3.5E-05	e	3.58E+05									
Magnesium					93.35	d	9.56E+11	3.08E+08	3.13E+08	2.82E+08	1.85E+08	9.81E+08	6.00E+08	2.36E+08	1.59E+08	4.69E+08
Manganese								2.53E+07	2.56E+07	2.93E+07	1.92E+07	1.02E+08	6.23E+07	3.03E+07	2.04E+07	6.02E+07
Mercury	0.0024		0.000012													
Nickel	4.36	a	0.12	a	0.01	d	6.48E+07	2.16E+05	2.19E+05	1.73E+05	1.13E+05	6.00E+05	3.67E+05	1.94E+05	1.30E+05	3.85E+05
Potassium					26.50	d	2.71E+11	6.40E+07	6.49E+07	6.09E+07	3.99E+07	2.12E+08	1.29E+08	4.40E+07	2.96E+07	8.73E+07
Selenium	0.02		0.01		0.003	d	2.89E+07									
Silver	0.04	a			0.01	d	9.21E+07									
Sodium					650.25	d	6.66E+12	8.48E+08	8.60E+08	8.19E+08	5.36E+08	2.85E+09	1.74E+09	6.01E+08	4.05E+08	1.19E+09
Thallium																
Vanadium																
Zinc	0.36	a	0.08	a	0.003	e	3.16E+07	9.06E+05	9.19E+05	6.87E+05	4.50E+05	2.39E+06	1.46E+06	8.27E+05	5.57E+05	1.64E+06

a - Hardness dependant water quality criteria are based on a guideline-designated hardness of 74 mg/L for chronic criteria and a measured hardness of 377 mg/L.
b - Chromium IV criteria are given since they were below the hardness-dependant chromium III criteria.
c - River data obtained from the USEPA STORET database.
d - River data obtained from Background samples collected during the Pedricktown study.
e - River data obtained from the DRBC Toxics Advisory Committee (Fikslin 1999).
f - PCBs are based on a dry weather river loading of 7.03 g/day (DRBC 1998; wet weather is 40.88 g/day); tthe loadings are in mg and the concentrations are given in mg/L.
Underlined ambient river concentrations exceed chronic water quality criteria.

Table 3-11. PCB congeners detected in method blanks, Penns Beach background samples, Killcohook CDF weir samples, and discharge plume samples (concentrations shown in pg/L).

PCB Congeners	Method Blanks		Background Samples				Weir Samples											Discharge Plume Samples										
	MB 1	MB 2	21-Oct	28-Oct	04-Nov	11-Nov	21-Oct	25-Oct	28-Oct	01-Nov	04-Nov	08-Nov	11-Nov	15-Nov	18-Nov	22-Nov	29-Nov	06-Dec	21-Oct	25-Oct	28-Oct	01-Nov	04-Nov	08-Nov	11-Nov	15-Nov	18-Nov	22-Nov	29-Nov	06-Dec
8 Di	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	232	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
18 Tri	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	175	140	ND	ND	ND	275	ND	ND	ND	ND	ND	ND	ND
28 Tri	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	206	163	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
37 Tri	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	128	ND	ND	ND	ND	131
52 Tetra	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	201	201	ND	151	711	240	158	265	131	ND	148	138
49 Tetra	ND	ND	ND	ND	ND	ND	ND	784	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	137	ND	ND	268	155	ND	182	ND	ND	ND	ND
47 Tetra	ND	ND	ND	ND	ND	ND	ND	466	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
44 Tetra	ND	ND	ND	ND	ND	ND	ND	332	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	137	ND	ND	630	148	ND	161	ND	ND	ND	ND
42 Tetra	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
64 Tetra	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
74 Tetra	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	366	ND	ND	ND	ND	ND	ND	ND
70 Tetra	ND	518	ND	160	ND	326	404	370	ND	ND	ND	ND	ND	156	138	ND	147	496	230	ND	133	ND	ND	1630	ND	ND	147	ND	ND	ND
80 Tetra	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	193	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
66 Tetra	ND	153	ND	ND	ND	144	189	310	ND	ND	ND	ND	ND	ND	ND	ND	ND	135	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
60 Tetra	ND	ND	ND	ND	ND	ND	ND	146	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	403	ND	ND	ND	ND	ND	ND	ND
79 Tetra	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
78 Tetra	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
95 Penta	ND	778	161	400	185	572	588	682	174	ND	160	ND	270	224	190	354	916	338	209	196	133	177	3140	224	189	317	141	ND	141	159
91 Penta	ND	ND	ND	ND	ND	ND	ND	161	ND	ND	ND	ND	ND	ND	ND	ND	148	ND	ND	ND	ND	ND	483	ND	ND	ND	ND	ND	ND	ND
92 Penta	ND	312	ND	ND	ND	204	216	168	ND	ND	ND	ND	ND	ND	ND	ND	191	ND	ND	ND	ND	ND	687	ND	ND	ND	ND	ND	ND	ND
84/101 Penta	ND	1400	ND	376	ND	898	974	570	ND	ND	ND	ND	ND	252	ND	342	1060	500	ND	144	ND	ND	3530	ND	ND	259	ND	ND	ND	ND
99 Penta	ND	876	ND	246	ND	638	686	471	139	ND	ND	ND	192	196	129	232	740	328	ND	ND	ND	ND	2360	150	141	205	ND	ND	ND	ND
119 Penta	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
97 Penta	ND	684	ND	199	ND	462	468	229	ND	ND	ND	ND	ND	ND	ND	226	578	248	ND	ND	ND	ND	1800	ND	ND	ND	ND	ND	ND	ND
86 Penta	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	192	144	378	1270	546	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
87 Penta	ND	1590	ND	370	ND	1050	1060	329	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4150	ND	ND	143	ND	ND	ND	ND
120 Penta	ND	310	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	192	144	378	1270	546	ND	ND	ND	ND	880	ND	ND	ND	ND	ND	ND	ND
110 Penta	ND	2940	177	780	222	2040	2120	807	234	240	212	216	318	432	276	846	2460	1060	264	285	184	215	7430	283	277	401	187	143	181	206
82 Penta	ND	296	ND	ND	ND	181	179	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
123 Penta	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
118 Penta	ND	ND	ND	ND	ND	ND	ND	ND	162	169	129	173	192	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
114 Penta	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	159	180	ND	ND	ND	ND	161	ND	ND	ND	ND	ND
105/127 Penta	ND	258	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	143	ND	ND	ND	ND	ND	ND	ND
151 Hexa	ND	314	ND	ND	ND	240	262	221	ND	ND	ND	ND	ND	ND	ND	ND	191	ND	ND	ND	ND	ND	599	ND	ND	ND	ND	ND	ND	ND
149 Hexa	ND	1610	162	514	244	1160	1360	818	266	206	ND	202	ND	332	240	620	978	598	247	284	160	192	3120	274	248	380	ND	ND	196	197
146 Hexa	ND	242	ND	ND	ND	191	284	190	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	425	ND	ND	ND	ND	ND	ND	ND
153 Hexa	ND	1620	181	554	282	1260	1580	873	334	264	300	306	398	454	304	680	978	702	277	333	190	226	2840	355	306	485	210	142	234	260
168 Hexa	ND	752	ND	226	ND	490	612	225	ND	ND	ND	ND	ND	ND	ND	334	464	294	ND	ND	ND	ND	1410	ND	ND	ND	ND	ND	ND	ND
141 Hexa	ND	420	ND	130	ND	294	388	ND	ND	ND	ND	ND	ND	ND	ND	ND	184	176	ND	ND	ND	ND	595	ND	ND	ND	ND	ND	ND	ND
137 Hexa	ND	155	ND	ND	ND	ND	135	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	297	ND	ND	ND	ND	ND	ND	ND
138 Hexa	ND	1960	222	704	272	1480	1920	984	350	294	270	294	440	492	300	1130	1200	872	319	350	206	222	3560	357	326	471	208	ND	240	267
158 Hexa	ND	260	ND	ND	ND	184	ND	ND	ND	ND	ND	ND	ND	ND	ND	131	181	ND	ND	ND	ND	ND	505	ND	ND	ND	ND	ND	ND	ND
166 Hexa	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
128/167 Hexa	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	300	ND	ND	ND	ND	ND	ND	ND
156 Hexa	ND	126	ND	ND	ND	ND	142	ND	ND	ND	ND	ND	ND	ND	ND	192	ND	ND	ND	ND	ND	ND	191	ND	ND	ND	ND	ND	ND	ND
																163	ND	ND												

Table 3-11. (Continued)

	Method Blanks		Background Samples				Weir Samples												Discharge Plume Samples											
PCB Congeners	MB 1	MB 2	21-Oct	28-Oct	04-Nov	11-Nov	21-Oct	25-Oct	28-Oct	01-Nov	04-Nov	08-Nov	11-Nov	15-Nov	18-Nov	22-Nov	29-Nov	06-Dec	21-Oct	25-Oct	28-Oct	01-Nov	04-Nov	08-Nov	11-Nov	15-Nov	18-Nov	22-Nov	29-Nov	06-Dec
157 Hexa	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
[redacted]																														
179 Hepta	ND	ND	ND	ND	ND	127	208	203	ND	ND	ND	ND	ND	ND	ND	171	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
187 Hepta	ND	238	ND	260	174	250	526	469	208	173	260	160	252	ND	ND	512	ND	175	140	174	ND	ND	211	183	130	277	155	ND	141	125
183 Hepta	ND	ND	ND	ND	ND	ND	230	187	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
185 Hepta	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
174 Hepta	ND	196	ND	169	145	ND	398	357	136	ND	ND	ND	196	166	126	352	ND	ND	125	139	ND	ND	176	ND	ND	211	ND	ND	ND	ND
177 Hepta	ND	ND	ND	ND	ND	ND	220	214	ND	ND	ND	ND	ND	ND	ND	171	ND	ND	ND	ND	ND	ND	ND	ND	ND	131	ND	ND	ND	ND
171 Hepta	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
180 Hepta	ND	330	149	318	310	318	824	785	ND	238	496	282	412	358	274	648	200	278	240	275	188	183	285	306	195	484	351	ND	254	211
191 Hepta	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
170 Hepta	ND	ND	ND	ND	ND	ND	260	273	ND	ND	ND	ND	142	ND	ND	326	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
190 Hepta	ND	ND	ND	ND	ND	ND	260	ND	ND	ND	ND	ND	142	ND	ND	326	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
189 Hepta	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
200 Octa	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	143	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
198 Octa	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
201 Octa	ND	206	ND	338	304	197	844	ND	ND	220	516	268	356	298	208	1580	129	184	215	280	163	184	145	295	184	460	418	ND	274	193
196/203 Octa	ND	ND	ND	ND	ND	ND	360	293	ND	ND	ND	ND	ND	ND	ND	608	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
195 Octa	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
194 Octa	ND	ND	ND	ND	ND	ND	316	261	ND	ND	274	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	184	237	ND	ND	ND
205 Octa	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
208 Nona	ND	ND	ND	208	470	186	714	811	ND	218	ND	318	402	328	240	792	149	148	221	246	162	163	ND	315	212	413	151	ND	216	190
207 Nona	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
206 Nona	ND	ND	ND	326	890	292	1310	1470	ND	362	642	514	570	502	354	ND	ND	ND	377	403	266	279	ND	514	325	747	340	139	365	343
209 Deca	ND	ND	ND	694	1760	663	3240	3550	2310	896	1320	1290	1450	1200	820	1040	554	517	1240	878	718	746	188	2170	872	2410	611	656	808	1180
Sum of	0	18544	1052	6972	5258	13847	23277	18140	4313	3280	4579	4023	5888	5564	3605	12444	13395	7807	4537	4775	2370	2738	44311	5969	3852	8733	3140	1208	3198	3600

Shaded congeners are non-ortho coplanar.