APPENDIX IX

VOLUME I

TASK I
BERRYS CREEK STUDY

NATURE OF THE PROBLEM
FINAL REPORT

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CHAPTER 1

REPORT ORGANIZATION

As part of the remedial action/feasibility study (RI/FS) for the "Wood-Ridge Site" and "Berrys Creek Area" mercury contamination problem, Environmental Resources Management-Southeast, Inc. (ERM-Southeast) has been authorized to compile related literature and background data. This assignment was referred to as Task I of the RI/FS.

The following two volume report fulfills the requirements of Task I of the Berrys Creek Investigation. Task I includes a "Comprehensive Literature Search and Background Investigation" which is presented in two volumes. There is an appendix to Volume I. Volume I includes site related information described in the subtasks (1), (3) and (4) of the Task I Scope of Work, i.e.,

(1) Site Specific Literature Search and Background Investigation

(3) Site Description

(4) Nature of the Problem

Volume II includes all non-site related information identified in sub-task (2), General Literature Search, of the Task I Scope of Work.

Summarized in Volume I are all analytical data specific to the Berrys Creek area and Wood-Ridge site. To develop this analytical data base all reports containing analytical data from the study area were reviewed by ERM-Southeast and the "reliability" of this data was evaluated by a two-phase criteria developed by ERM-Southeast and approved by the Berrys Creek Technical Advisory Group (TAG).

Because of the high density of sample locations (252 for both maps) in the vicinity of the Wood-Ridge site and the large study area (approximately 21 square miles), the site specific data are separated onto two base maps; a small-scale map (scale 1 to 2,000) and a large-scale map (1 to 400). The small-scale and large-scale maps identify the areas of historic sampling. The REVELATION program was utilized to enter the data on IBM-PC hard discs. REVELATION was selected for its power of sorting and selecting data. Each item of data is sorted as a record in the data file of which 1,816 records were stored for the small-scale map sample stations and 1,769 records were stored for the large-scale map locations. It is possible to identify areas of contamination by sorting the data on computer to identify sample stations with specific levels of contaminants, i.e., sediment data with mercury concentrations of 10 ppm or greater, etc. Overlays were then prepared depicting areas of contamination on either the small- or large-scale maps. These overlays were then used with the small- or large-scale maps to describe the areas of contamination for the various media. The data files are maintained by ERM-Southeast in Brentwood, Tennessee. These files may be manipulated by request through ERM to evaluate any type of parameter or set of values.

The sample locations extracted from the scores of reports were either identified by maps or described as a distance from identifiable landmarks. The accuracy of the placement of the sample locations on the maps in Volume I is equal to the placement accuracy of sample locations in the original reports. In order to document permanent locations to each sample point UTM coordinates were plotted for each sample location. The accuracy of these coordinates are ±20 meters and ±4 meters for the

small- and large-scale maps, respectively. In addition to depicting the specific sample locations on various figures, a color-coded system was employed on a separate set of figures to better illustrate the levels and extent of contamination. Colored points are used to illustrate the ranges of concentration for various contaminants at specific sample locations, and the size of the colored points is not related to the size of the contaminated area.

The reader should bear in mind in reviewing Volume I that the data, although determined to be reliable, were located on the maps as accurately as possible. It is unlikely, however, that the same location would have been sampled twice for any one sample location. Obvious exceptions to this would be ground water wells, in-place samplers for air and surface water and very specifically identified locations. Thus, due to the inaccuracy in pinpointing original sample locations, any one colored dot may represent an area of over 1,200 square meters (the area enclosed by a circle of radius 20 meters, the accuracy of the sample locations) on the small-scale map. Correspondingly, the colored dots may correspond to an area of contamination of approximately 50 square meters on the large-scale map.

The sediment, soil, surface water, ground water and air data are discussed by three geographic areas:

1. The 40-acre Wood-Ridge site
2. Berrys Creek
3. All adjacent marshland

Biological data are discussed as a whole due to the mobility of most of the types of organisms and because the organisms were seldom collected from the site and are restricted to particular habitats, e.g., fish in the creeks, plants in the marshes.

CHAPTER 2

SUMMARY

ERM-Southeast, Inc. has conducted Task I, a comprehensive literature search and background investigation, as the initial task for the Remedial Investigation/Feasibility Study (RI/FS) scope of work. The purpose of Task I is to assess activities previously conducted or presently ongoing that address contamination specifically but not limited to mercury in the Berrys Creek area (Volume I). The Berrys Creek area includes the 40-acre Wood-Ridge site, Berrys Creek and the adjacent wetland areas. Also addressed in Task I is a general literature search (Volume II) which includes:

1. General nature of mercury in the environment.
2. Remedial investigations at related sites.
3. Analytical methodologies.
4. Models for estuary processes.

This summary does not include the general literature of Volume II. The primary problem in the Berrys Creek area is the large quantity of mercury located in the system which is primarily contained in the soils and sediments in and along Berrys Creek, in the marshlands and on the Wood-Ridge site. Although there is a large amount of data concerning mercury and other contaminants in the Berrys Creek area, there is a lack of continuity. It is therefore impossible to integrate the data in order to evaluate trends in movement, concentration and transformations of the contamination. This lack of continuity is due to gaps in sample time, location, parameters, methods, etc.

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A second problem for the Berrys Creek area is the uncertainty of the transformation or mobility of mercury and other contaminants due to present and future activities in the area and various remedial actions which are being considered. The evaluation of site specific data has yielded almost 4,000 separate data points which meet the reliability criteria. Approximately one-half of these data points are located on a large-scale while the other half are located on a small-scale map. The chemical contamination as described by these data are discussed as they pertain to the 40-acre site, Berrys Creek, the adjacent marshlands and the biological community of the area.

Data have been generated from the 40-acre site for the sample types: soil, sediment, surface water, ground water and air. Soil and sediment data from the site indicate that there are a number of heavy metals including mercury at high concentrations. Mercury is the most prominent contaminant and has been found at levels as high as 12 percent in site soils. Many of the analyses for other heavy metals have ranges which exceed typical New Jersey soil concentrations. Heavy metals which are found greater than model New Jersey soil mean levels include arsenic by a factor of 7, cadmium by a factor of 6, nickel by a factor of 2, lead by a factor of 30 and zinc by a factor of 60. No site soils were analyzed for organic compounds.

Contaminants of on-site surface water were reported primarily from one 1977 survey. Most analyses were for unfiltered samples. One filtered mercury sample found to contain a concentration of 0.6 ppb which is greater than the 0.2 ppb water quality criteria for mercury. Most of the heavy metals sampled in surface water were seldom detected

above the limit of detection with the exception of mercury and zinc. No organic compounds were analyzed in on-site surface water.

Mercury in air was analyzed during two surveys, both in 1978. The maximum concentration of mercury reported in air was 54 ug/m. A single sample was collected off-site which reported 0.0 mercury detected. No ambient air criteria are established for mercury.

A total of ten wells were sampled for ground water from the site. Most ground-water analyses for mercury were from unfiltered samples with values ranging from 0 to 3,770 ppb. Filtered samples ranged in concentration from 0.8 ppb to 8.8 ppb (drinking water quality criteria = 0.144 ppb). No arsenic was reported from filtered ground-water samples. The maximum mean arsenic value for any one well was 71 ppb (drinking water quality criteria = 0.022 ppb). Cadmium was not detected in unfiltered samples with a detection limit of 50 ppb. Filtered samples were detected to a maximum value of 13 ppb cadmium (drinking water quality criteria = 10 ppb). Lead was detected to a maximum of 3,000 ppb in unfiltered samples and was not detected in filtered samples (drinking water quality criteria = 50 ppb). Nickel was not detected in filtered or unfiltered samples. Zinc was found on many occasions to a maximum value of 25,200 ppb in unfiltered samples and 4,700 ppb in filtered samples. No organic contaminants were analyzed in ground water (drinking water quality criteria = 5,000 ppb).

A limited number of analyses were conducted for off-site soils. Mercury was detected to a maximum of 75 ppm in off-site soil with 22 analyses having a mean value of 15.6 ppm. Off-site arsenic soil concentrations ranged from 2 to 96.5 ppm with a mean value of 17.6. Off-site cadmium values ranged from a concentration of 0.5 to 71 ppm

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with a mean value of 7.2 ppm. Nickel concentration in off-site soils ranged from 9.8 to 700 ppm. Lead off-site soils values range from 37 to 1,470 ppm. Zinc off-site soils values ranged from 31 to 7,478 ppm. Chromium off-site soil samples ranged from 23 to 950 ppm. Copper off-site soil values ranged from 10.2 to 330 ppm. Iron off-site soil concentrations ranged from 8,675 to 32,700 ppm. All of the mean off-site heavy metal values were higher than the mean value for model New Jersey soils with the exception of iron. Organic compounds were analyzed in one sample. No criteria are established for organic compounds in soil. No off-site soil was sampled for organic compounds.

Sediment and surface water data are discussed specifically for Berrys Creek. The maximum value for mercury reported in Berrys Creek sediment was 89,162 ppm. The range of mercury values downstream of Paterson Plank Road was 1.4 to 117.9 ppm. Upstream of the Paterson Plank Road mercury concentration ranged from 26.5 to 89,162 ppm to go with a mean value of approximately 250 ppm. Maximum concentration was detected in 1977 at station 9 which is in Berrys Creek near the point of the original plant discharge. No conclusions can be made of temporal trends in mercury concentration, however, it appears that the vertical distribution of mercury is highest in the upper sediments, i.e., 0 to 4 inches. Other heavy metal contaminants were compared to recommended New Jersey sediment quality criteria. These criteria were developed in 1979 by the United States Geological Survey (USGS) and are not criteria utilized by the State of New Jersey. These criteria are discussed because they provide reference numbers for comparison of the site data. The mean value for arsenic was 12.4 ppm which is less than the 200 ppm recommended for New Jersey sediment. A mean value for cadmium was

131 ppm with one exceptionally high value of 882 ppm. The mean value is higher than the 5 ppm recommended for New Jersey sediments. The mean value for chromium is 727 ppm which is greater than the 200 ppm criteria recommended for New Jersey sediments. The mean value for copper is 380 ppm which is much lower than the 2,000 ppm recommended for New Jersey sediments. The mean value for nickel is 60.9 ppm which is less than the 2,000 ppm recommended for New Jersey sediments. The mean value for zinc is 3,130 ppm which is similar but less than the 5,000 ppm recommended for New Jersey sediments. The mean value for beryllium is far less than the 200 ppm recommended for New Jersey. No selenium was detected in Berrys Creek and silver concentration was extremely low. A single sample was analyzed for organic contaminants with the highest concentration of organic contaminant being flourene at 10 ppm.

Over 500 records exist for contaminants in the surface water of Berrys Creek, with a total of 86 values reported for filtered analyses of mercury. Of these 86 values a total of eight reported concentrations were greater than the 0.2 ppb water quality criteria to a maximum value of 4.0 ppb. None of the other heavy metals analyzed had reported records of filtered analyses and, therefore, were not compared to water quality criteria. None of the organic compounds analyzed exceeded water quality criteria, however, a number of values were reported above detection limit. The mean values for unfiltered heavy metals in Berrys Creek surface water were arsenic at 60.8 ppb, maximum of 905 ppb; cadmium at 6.3 ppb; chromium at 12.7 ppb; copper at 14.5 ppb; iron at 656 ppb; lead at 23.6 ppb; nickel at 19.6 ppb; zinc at 216 ppb with silver and beryllium not detected in 13 analyses each.

The only specific sample type discussed for the adjacent marshlands is sediments. Over 250 records of marsh sediment data are reported on the small-scale map. Almost 200 records are reported on the large-scale map. The range of mercury contamination in marsh sediments in the upper Berrys Creek area is from 0.6 ppm to 2,006 ppm. The range of mercury contaminations in the middle Berrys Creek area is from 0.3 ppm to 246 ppm and downstream of Route 3 bridge (lower Berrys Creek area) the range is from 0 to 62 ppm. A temporal trend indicated by marshland sediment mercury concentration is an apparent buildup in mercury concentration in the upper sediment layers, i.e., 0 to 6 inches from the period 1972 to 1977. No data exists to verify this trend after 1977. However, contaminants in marsh sediments were analyzed by Bergen Associates in 1978 for the Berrys Creek Center Environmental Impact Statement. All values reported for nine heavy metals by Bergen indicate that they are less than the New Jersey sediment quality criteria with the exception of chromium.

The resident biological community of the Berrys Creek area are discussed for fish, plants and other animals. Other animals include invertebrates, birds and mammals. The FDA (Food and Drug Administration) criteria for mercury in edible fish and shell fish is 1 ppm. Relatively few records are provided for edible fish portions, i.e., muscle, with the majority of records concerning killifish whole body samples. Whole body mercury level in killifish exceed the 1 ppm in areas adjacent to the site and for approximately one mile downstream. Other exceedances of 1 ppm in fish were reported the length of Berrys Creek to the Hackensack River, however, these records were for specific tissues, i.e., heart, brain, liver, etc. The maximum mercury level

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found in fish was 59 ppm in killifish heart; while the maximum whole body analyses was 3.3 ppm in killifish. Whole body killifish analyses for mercury indicate no change in mercury concentration from 1978 to 1983 at two locations with an apparent increase in concentration at station 32, Paterson Plank Road.

A total of seven plant species were analyzed for mercury concentration. Primary species analyzed were Phramites (common reed), Spartina. (cord grass) and Typha (cattail). The majority of plant tissue analyses were reported for distinct structures, i.e., stem, rhizome. leaf, etc. Plant tissue analyses exceeding 1 ppm were widespread throughout the Berrys Creek area with a maximum value of 13.46 ppm recorded from a spikerush at station 13 which is on the Hackensack River. The next highest value was 7.9 ppm from a cattail rhizome downstream of the tidal pool below the West Riser Ditch tidegate. Rhizome tissues typically indicated the greatest accumulation as compared to other plant parts. Mercury concentration in rhizome was apparently associated with mercury concentration in surrounding sediments, however, similar comparisons were not true for other specific tissues. Data for other biological species also indicate an accumulation of mercury is in the resident biological community. Invertebrates generally reported the highest concentrations of mercury with 51 percent of the records greater than 1 ppm to a maximum of 150 ppm in a whole snail tissue. Birds were also found to have high frequency of mercury levels with 43 percent greater than 1 ppm. Mammals were relatively low in exceeding 1 ppm with a total of 6 percent of the records.

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In addition to chemical contaminants non-hazardous matrix characteristics were investigated for the Berrys Creek area. These parameters include soil and sediment physical characteristics, water quality, biological resources, hydrology and hydraulics, wetlands, historical and archeological resources and air quality. Most data for these areas were reviewed from environmental impact statements of the area. Chapter 6 of this document, regional complications provides a discussion of the zoning, flood management and federal and state agency plans and activities for Berrys Creek, as well as major developmental proposals and the Hackensack Meadowlands area. Important federal and state agencies involvement include potential flood control in the area by the Corps of Engineers and other Superfund investigations by the New Jersey Department of Environmental Protection and the U.S. EPA. Major developmental activities are probably the single most important activity impacting Berrys Creek area. The Hackensack Meadowlands and Berrys Creek area are being developed at a rapid pace. Large tracts of land have been designated for potential development which may soon engulf many acres of wetlands. It appears important that the future development of the area be very conscientiously managed in order to evaluate the impacts of these activities.

CHAPTER 3

INTRODUCTION

3.1 PURPOSE

The purpose of Task I is to:

1. Assess all activities previously conducted or presently ongoing for the investigation of mercury and other contamination in the Berrys Creek ecosystem.
2. Conduct a comprehensive search of general and related literature.
3. Review existing and proposed regional plans.

3.2 OBJECTIVES

A number of objectives have been established for Task I. The primary objective is to review and organize all the site specific data such that it may be presented in a form that can be understood and utilized by all concerned parties. In this manner, the data gaps can be identified so that future assessments of the area can be modified accordingly. Furthermore, the data can then be utilized to evaluate temporal, spatial and vertical trends in the contamination thereby determining the degree and extent of contamination. The compilation of the data in this manner combined with a subsequent evaluation of the data would thus assist in the assessment of:

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1. The present status of contamination in the Berrys Creek ecosystem.
2. The evaluation of future impacts of the contamination which might occur as a result of development of the area.
3. Potential remedial action alternatives.
4. Design future sampling.

A second objective is to conduct a general literature review to provide a background of information which may be utilized to understand or identify:

1. The general nature of mercury in the environment.
2. The types and success of remedial actions which have been used at related sites.
3. The analytical methods acceptable for the analysis of mercury compounds in various media.
4. The extent to which existing and proposed regional plans may impact Berrys Creek and potential remedial actions and vice versa.
5. The mathematical models which are appropriate for estuary processes, specifically in Berrys Creek.

Thus the combined efforts of the Site Specific and General Literature reviews will provide information needed to determine the appropriate investigative studies and comprehensive sampling programs necessary to evaluate the remedial action alternatives.

corporation, as a wholly owned subsidiary for the purpose of acquiring the assets of Berk and operating the mercury processing plant. The operation of the plant under the ownership of WRCC/Velsicol was essentially the same as under Berk. In August 1960, following the sale of the Wood-Ridge plant and property, Berk filed Articles of Dissolution.

Subsequent to 1960, a portion of the tract, approximately 10 acres between Berrys Creek and the seven acre mercury plant site, was used as a dumping site. In addition to being used primarily for the disposal of demolition material and domestic solid waste, the dumping site also served as the disposal site for most of the mercury plant's industrial wastes, including its chemical wastes. In June 1967 WRCC/Velsicol subdivided the 40-acre tract into two parcels; the mercury plant site (seven acres) and the remaining property (33 acres which included the dumping areas). Title to the 33-acre parcel was transferred from WRCC to Velsicol, which retains ownership to this day of that part of the property (see Figure 3-1).

In February 1968, Ventron Corporation, a Massachusetts corporation, acquired the stock of WRCC (including title to the seven-acre plant site) from Velsicol. During these years WRCC/Ventron was one of the largest domestic processors/users of mercury. In making application to the U.S. Army Corps of Engineers for a permit, WRCC/Ventron reported that at that time, the plant was operating one shift a day, six days a week. Occasionally the plant sometimes operated for more than one shift a day, however, as stated before, the operation of the mercury plant in terms of products and processes remained essentially unchanged during the life of the plant.

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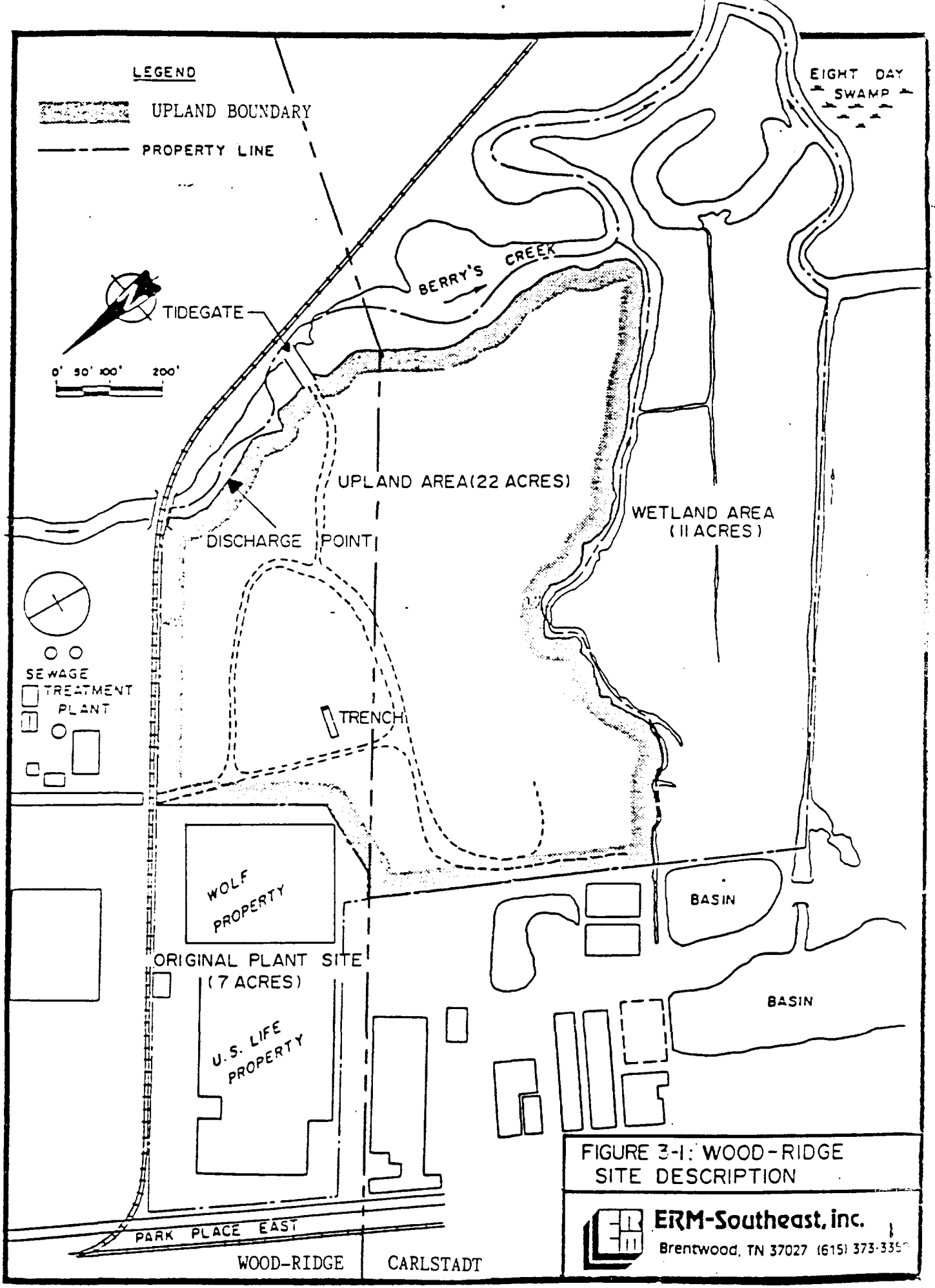

FIGURE 3-1: WOOD-RIDGE SITE DESCRIPTION

On May 20. 1974, Robert and Rita Wolf (Wolf) acquired the 7-acre piece of property from Ventron. In June 1974, the other assets of WRCC were merged into Ventron. Wolf proceeded to demolish the mercury plant, and in 1975 subdivided the seven acre property into two parcels. Title to one of the parcels was transferred to the U.S. Life Insurance Company (U.S. Life) pursuant to a sale and leaseback agreement with Wolf. Wolf retained title to the other parcel. A construction company owned by Wolf, Rovic Construction Company (Rovic), constructed a warehouse on each parcel.

Thus the present owners of the original forty acre Berk tract are:

U.S. Life:	Block 229, Lot 10A; Borough of Wood-Ridge (about 4 1/2 acres)
Wolf:	Block 229, Lot 10B; Borough of Wood-Ridge (about 2 1/2 acres)
Velsicol:	Block 229, Lot 8; Borough of Wood-Ridge and Block 146, Lot 3; Borough of Carlstadt (about 33 acres)

Regulatory involvement with the mercury processing plant began in the late 1950's when representatives of the New Jersey Department of Health (NJDOH), a predecessor to the Department of Environmental Protection (DEP), inspected the Berk plant and sampled its discharge. From the time of this first inspection through the 1960's, the NJDOH unsuccessfully sought either the elimination of the total industrial discharge or suitable treatment of the industrial discharge to acceptable levels prior to discharge into Berrys Creek. It is important to note that only a few samples were collected for mercury analysis during this time, and the results of these samples were reported as negative (i.e., the mercury concentration in the sample was below the limit of detection for the analytical method used). The main thrust of

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the NJDOH's activity with the plant concerned not mercury, but rather the excessive levels of more classical pollutants such as biochemical oxygen demand (BOD) and suspended solids (SS) for which analytical procedures were both well established and commonly used. During Berk's ownership, attempts were made to connect the industrial discharge into the Wood-Ridge sewerage collection system for treatment at the municipal treatment plant, which is located adjacent to the property. In November 1959, the Borough of Wood-Ridge advised Berk that its request to discharge industrial wastewaters into the municipal sewerage collection system was denied.

During the WRCC/Velsicol ownership of the mercury processing plant, the plant owners made ineffective attempts to treat the industrial wastewaters prior to their discharge into Berrys Creek. These attempts included additional studies by consultants to determine the pollutant characteristics of the industrial wastewater, treatment of some industrial wastewater in a pilot-scale plant, and segregation of some of the internal plant wastewater streams. None of these programs led to the construction of a treatment plant for the plant's wastewater.

In 1970, as a result of publicity generated by a number of mercury contamination and poisoning incidents, many governmental agencies inaugurated an intensive national investigation of mercury users in the United States. This effort was spearheaded by the newly formed U.S. Environmental Protection Agency (EPA) and over the course of the program, WRCC/Ventron came under increased scrutiny. Since at the time, it was thought that the major problem with Ventron's operation rested with its mercury discharge into the navigable waters of Berrys Creek and the Hackensack River, EPA (using its water pollution regulations) shouldered

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the major regulatory responsibility; the activities of the newly-created DEP regarding the plant were minimal. With the reduction in Ventron's water-borne mercury discharge and with the discovery in 1974-75 that the soils surrounding the plant were heavily contaminated with mercury, the major regulatory responsibility shifted back into the State's hands, and in particular to the DEP.

With the commitment of EPA and with improved analytical techniques, sampling and analysis of the WRCC/Ventron industrial wastewater for mercury was conducted. The results indicated that, at that time, the WRCC/Ventron plant was discharging from two to four pounds of mercury a day into Berrys Creek. In addition, the mercury concentration in sediment samples taken in the vicinity of the industrial wastewater discharge into Berrys Creek was reported to be greater than any previously recorded. EPA decided that the contaminated sediments would have to be removed, but such a decision should be deferred until a solution for the ongoing discharge could be carried out. The regulatory agencies directed WRCC/Ventron to reduce their mercury discharges. While general suggestions were offered, such as improving housekeeping procedures, EPA offered no specific suggestions and WRCC/Ventron cooperated and learned with the agencies by studying the problem and letting the pollution continue.

Meetings were held with WRCC/Ventron personnel at which time they were advised by EPA that mercury discharges would be limited to no more than 0.5 pounds of mercury a day after January 31, 1971 and that this limitation would be further reduced to 0.1 pounds of mercury a day by July 1, 1971. WRCC/Ventron initiated a two-phase industrial wastewater treatment plan which they claimed would achieve the required results.

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Phase I consisted of the segregation of known mercuric inplant wastewater streams from the non-mercuric streams, isolation of certain drains, and primary treatment of the mercuric wastewaters. Phase I was operational by February 1971.

Completion of this phase resulted in a reduction in the quantity of mercury being discharged, but brought to light a condition which came to be known as the "residual problem". Samples were taken at two locations described as the "treated effluent" and the "total effluent". The "treated effluent" was the discharge from the Phase I industrial wastewater treatment system. The "total effluent" was the combination of the treated effluent plus all other wastestreams (including stormwater, boiler blowdown and on-mercuric process wastewaters) which did not pass through the Phase I treatment system. The "total effluent" sample had a higher concentration of mercury than was present in the "treated effluent." It was speculated that residual mercury that had been deposited over years of untreated discharging was slowly being released into the effluent.

The discovery of the "residual problem" resulted in numerous meetings, discussions and correspondence between EPA, DEP and WRCC/Ventron from 1971 until the closing of the plant in 1974. Many avenues were explored in an effort to identify the source of the unexplained mercury in the total effluent and WRCC/Ventron initiated Phase II of its treatment plan (in March 1971). Phase II consisted of chemically treating all mercuric wastewaters, isolation of additional existing lines and drains, repiping, installation of recovery tanks, and treatment of settled sludge; this phase was completed in the fall of 1971. However, the "residual problem" continued and, as a result of the

improved treatment of the mercuric wastewaters, became even more pronounced. At the insistence of EPA, WRCC/Ventron initiated a number of additional programs in an effort to explain the "residual problem." Their sampling and reporting frequency was increased, checks of their sampling and analytical procedures were conducted, drain lines were dye tested, soil samples were taken, and other possible mercury sources were connected to the treatment system. WRCC/Ventron was directed by EPA to improve housekeeping procedures,, remove potential areas and conditions for mercury contamination, such as inadequate curbing, and institute and maintain a clean analytical laboratory.

Eventually, EPA officials became convinced that the "residual problem" resulted from the mercury contamination of the soil and groundwater beneath the plant; however, WRCC/Ventron resisted this opinion. Until the closing of the plant in 1974, analyses of both the total effluent and treated effluent continued to show an uncontrolled release of mercury into the plant discharge system.

At some time toward the end of this period, Ventron decided to sell the business and property of WRCC (the seven acre plot). This decision was not made known to either EPA or DEP until the plant was closed. On May 7, 1974, a DEP inspector found the plant abandoned with demolition equipment on site.

With the transfer of title to Wolf and the demolition of the mercury plant, the full extent and complexity of the contamination began to unfold. In June 1974, a discharge of oil caused by the demolition of the plant again brought the property under scrutiny by DEP and EPA.

Wolf's plan was to construct two warehouses on the property: Building No. 1 on the westerly side (U.S. Life parcel) and Building

No. 2 on the easterly side (Wolf parcel). The site of Building No. 2 was the location of most of the process operations at the old mercury plant.

The first set of what was to be an ever expanding series of soil samples by public agencies was collected and analyzed in July 1974. The results of these samples indicated that the soil contamination by mercury on the site of the proposed Building No. 2 overshadowed the contamination which existed on the Building No. 1 site. The concentration of mercury in the soil of the Building No. 1 site ranged from 185 to 3,215 ppm compared to a range of from 1,775 to 195,000 ppm at the site of Building No. 2 (195,000 ppm is equivalent to 19.5% by weight). Following review of these results, a meeting was held on August 16, 1974, attended by representatives of DEP, EPA and Wolf at which a "Memorandum of Understanding" was executed. The "Memorandum of Understanding" detailed the conditions, including additional soil sampling and soil removal, to be met prior to commencing construction of Building No. 1. In accordance with the "Memorandum of Understanding", no construction or field work was to be done on the site of Building No. 2 until additional soil samples were taken and evaluated. Construction of Building No. 1 began in September 1974.

During the latter half of 1974 and into 1975, a major effort was made to determine the feasibility of recovering the mercury from the soil of the Building No. 2 site and/or disposing of the contaminated soils in an acceptable fashion. Although it became obvious during this period that decontamination and removal were both impractical, DEP and EPA took the position that such removal was necessary. Thus, more than a dozen appropriate individuals and corporations in the mercury mining

and related industries were contacted in this regard. Many of these individuals/corporations requested, and were sent samples of the contaminated soils for test processing. Their responses were the same: recovery was not feasible. No one was interested in pursuing the project.

In January 1975, Wolf's engineer submitted a multi-phased proposal for the entombment of the contaminated soils followed by warehouse construction on the Building No. 2 site (this entombment proposal is similar to the request DEP has brought before the court for the entire 40-acre site). On February 28, 1975, EPA responded to this proposal in what has since been referred to as the "Scolnick letter." The "Scolnick letter" stated that certain portions of the proposal should be implemented immediately: that the property be covered with impervious paving; that all drainage from the property should be carried by drainage ditches constructed of water-impervious materials; that a monitoring program should be established; that semi-annual inspections should be conducted of all above-ground structures constructed to mitigate mercury pollution; and further, that all cracks in paving and drainage should be repaired within 14 days of their detection. Further, the letter said that the conditions and stipulations set forth in the agreement should appear in deeds executed in transference of ownership of proprietorship of the property involved and that such stipulations become a covenant running with the land and be recorded in the County Clerk's Office. Wolf took exception to those portions of the proposed agreement involving monitoring, the submission of reports, and deed restrictions. Negotiations concerning the agreement continued through 1975 to no avail. Construction of Building No. 2 began in late 1975. This construction incorporated some of the conditions contained in the

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"Scolnick letter" (e.g., paving). Wolf had been advised on many occasions by DEP that he would be proceeding at his own risk if he began construction of Building No. 2 prior to having an executed agreement with DEP and EPA.

During 1975, EPA determined that the Wolf matter was not within their legal jurisdiction and ceased their active involvement. In April 1976 the State of New Jersey sued Wolf and the insurance company to which Wolf had sold property to, and Ventron. Velsicol and Berk were brought into the action later. This case stayed in the court for a number of years and went through District, Appellate and finally the Supreme Court of the State of New Jersey before a cooperative agreement was formed between the indusries and the regulatory bodies to investigate Berrys Creek.

A number of sampling programs were initiated thereafter by the DEP, Hackensack Meadowlands Development Commission (HMDC), and other agencies. The pollution suit went to trial in 1978. The trial ended November 1978 and an Order of Judgment dated November 15, 1979 was issued. Monitoring continued and focused on more specific areas with studies initiated by Velsicol, Ventron, the DEP, HMDC and others. Velsicol and Ventron appealed the ruling in the pollution suit. The Appellate Court ruled on December 1981 upholding the original judgment and going beyond it on a few points. The State subsequently applied to the Corps of Engineers for a permit to dredge and fill the contaminated area in July 1981; and in September 1983 the DEP had the site placed on the National Priorities List.

Velsicol and Ventron (now Morton Thiokol) and their consultants along with the State of New Jersey have come to agreements upon a

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remedial investigation/feasibility study (RI/FS). The RI/FS will develop and evaluate remedial alternatives and identify the most cost-effective and environmentally sound remedial action to be taken at the "Wood-Ridge Site" and in the "Berrys Creek Area."

The first task in the RI/FS was to prepare a Comprehensive Literature Search and Background Investigation. Task I is an assessment of previous and ongoing investigative studies of the Wood-Ridge site and Berrys Creek area. It is from Subtasks 1 and 2 of Task I that the Nature of the Problem is described. The description is given in the summation of the temporal and spatial trends in mercury and other contaminants.

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CHAPTER 4

SITE DESCRIPTION REPORT

4.1 INTRODUCTION

The following chapter describes the regional location, zoning restrictions, natural areas, hydrology and geology of the Berrys Creek area and Wood-Ridge site. Reference items are available for more accurate description of specific zones as well as hydrology and geology. These items are available through Dr. Larry Schmidt, New Jersey Department of Environmental Protection, Mr. James R. Orr, ERM-Southeast or by ordering directly through the Hackensack Meadowlands Development Commission (HMDC) and United States Geologic Survey (U.S.G.S.). A copy of these items will be made available to the contractor.

4.2 REGIONAL LOCATION, ZONING RESTRICTIONS, NATURAL AREAS

The small scale map (Figure 4-1) is copied from the U.S.G.S. Weehawken quadrangle 7.5 minute series (Reference Item 1) in order to provide better orientation to the study area. The UTM system was utilized to pinpoint each sample station. These coordinates are given in Table 4-1 for the small scale map and Table 4-2 for the large scale map.

The Berrys Creek area lies within the Hackensack Meadowlands area with the exception of some of the headwaters and approximately 20 acres of the Wood-Ridge site in the Borough of Wood-Ridge. The 40-acre Wood-Ridge site is located in both the Borough of Wood-Ridge (20 acres) and Carlstadt (20 acres). The zoning restrictions and natural areas of the Meadowlands are, therefore, well described by the "Hackensack

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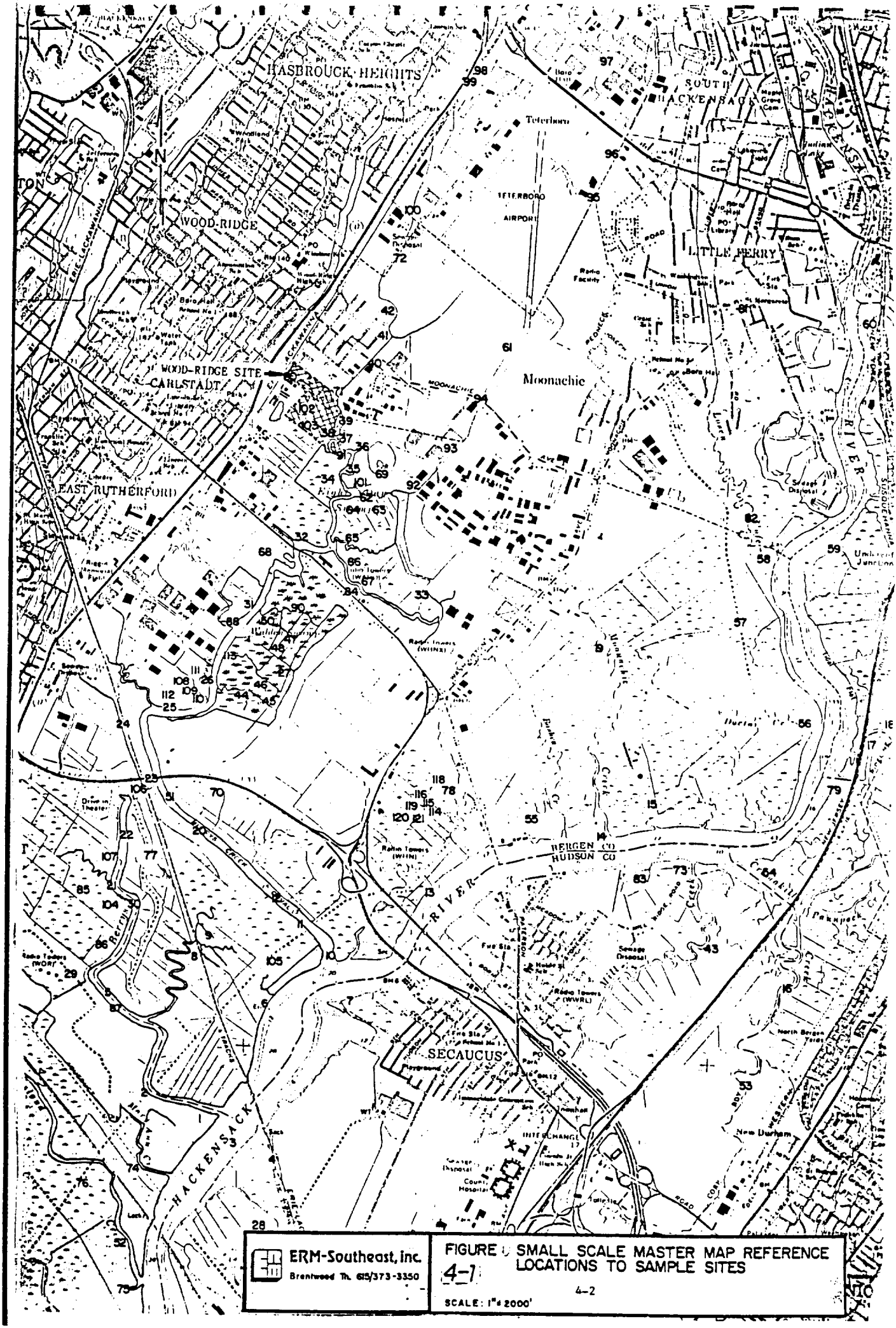

ERM-Southeast, Inc.
Brentwood Th. 615/373-3350

FIGURE 4-1 SMALL SCALE MASTER MAP REFERENCE LOCATIONS TO SAMPLE SITES

SCALE: 1" = 2000'

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TABLE 4-1

UTM COORDINATES TO SAMPLE LOCATIONS FROM
FIGURE 1: SMALL SCALE MASTER MAP

Station No.	North	East
1	4515238	577133
2	4515390	576657
3	4515076	577590
4	4514943	577667
5	4516200	576371
6	4516219	577571
7	4516285	578210
8	4516542	577028
9	4516743	577086
10	4516610	578057
11	4516819	577810
12	4517048	577600
13	4517181	578752
14	4517667	580048
15	4517971	580590
16	4516571	581514
17	4518543	582048
18	4518676	582190
19	4519200	579267
20	4517524	576980
21	4517076	576324
22	4517505	576428
23	4517943	576600
24	4518361	576371
25	4518514	576657
26	4518771	577000
27	4518848	577714
28	4514428	577628
29	4516371	576114
30	4516943	576514
31	4519400	577295
32	4519495	577619
33	4519543	578686
34	4520410	577848
35	4520486	578010
36	4520676	578067
37	4520733	577943
38	4520752	577800
39	4520857	577914
40	4521324	578105

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TABLE 4-1 (Cont'd.)

UTM COORDINATES TO SAMPLE LOCATIONS FROM
FIGURE 1: SMALL SCALE MASTER MAP

Station No.	North	East
81	4521876	580895
82	4520276	581010
83	4517371	580343
84	4519533	578067
85	4517028	576114
86	4516628	576324
87	4516105	576428
88	4519228	577143
89	4519162	577228
90	4519381	577657
91	4520895	577905
92	4520400	578495
93	4520695	578733
94	4521076	578924
95	4522705	579714
96	4523019	579857
97	4523781	579800
98	4523619	578800
99	4523533	578752
100	4522505	578333
101	4520390	578086
102	4520914	577628
103	4520800	577695
104	4516933	576428
105	4516610	577648
106	4517838	576465
107	4517276	576324
108	4518743	576771
109	4518667	576848
110	4518600	576914
111	4518848	576876
112	4518619	576676
113	4518969	577109
114	4517812	578797
115	4517844	578726
116	4517891	578680
118	4518047	578828
119	4517875	578648
120	4517781	578570
121	4517797	578680

TABLE 4-1 (Cont'd.)

UTM COORDINATES TO SAMPLE LOCATIONS FROM
FIGURE 1: SMALL SCALE MASTER MAP

Station No.	North	East
41	4521514	578210
42	4521724	578248
43	4516838	580943
44	4518648	577210
45	4518610	577448
46	4518781	577324
47	4519133	577610
48	4519057	577533
49	4519095	577352
50	4519267	577457
51	4517552	576733
52	4514238	576524
53	4515771	581200
54	4517476	581324
55	4517800	579514
56	4518667	581562
57	4519419	581010
58	4519952	581171
59	4520076	581657
60	4520800	581876
61	4521457	579105
62	4520276	578114
63	4520181	578219
64	4520171	578019
65	4519952	578010
66	4519790	578048
67	4519619	578171
68	4519790	577390
69	4520467	578228
70	4517886	577133
71	4521095	577867
72	4522152	578276
73	4517448	580657
74	4514819	576590
75	4513905	576619
76	4514667	576276
77	4517333	576619
78	4517990	578876
79	4518171	581781
80	4521200	577476

TABLE 4-2

UTM COORDINATES TO SAMPLE LOCATIONS FROM
FIGURE 2: LARGE SCALE MASTER MAP

Station #	North	East
1	4520870	577817
2	4519954	577561
3	4521182	577610
4	4521134	577584
5	4521161	577530
6	4521122	577603
7	4521118	577614
8	4521069	577710
9	4521027	577832
10	4521049	577866
11	4520958	577840
12	4520840	577924
13	4520892	577775
14	4520882	577786
15	4520874	577748
16	4520889	577679
17	4520847	577622
18	4520878	577504
19	4520798	577595
20	4520744	577670
21	4520694	577740
22	4520637	577782
23	4520752	577744
24	4520790	577698
25	4520988	577813
26	4521049	577798
27	4521061	577584
28	4520908	577504
29	4520462	577389
30	4520668	578015
31	4520930	577595
32	4521027	577584
33	4521076	577759
34	4521038	577649
35	4520992	577683
36	4521007	577721
37	4520935	577771
38	4520847	577760
39	4520797	578260
40	4520775	577704
41	4521213	577718

TABLE 4-2 (Cont'd.)

UTM COORDINATES TO SAMPLE LOCATIONS FROM
FIGURE 2: LARGE SCALE MASTER MAP

Station #	North	East
42	4520750	577851
43	4521080	577878
44	4521061	577885
46	4520904	577901
47	4520798	577740
48	4520904	577866
49	4520400	577855
50	4520820	577847
51	4520790	577836
52	4521309	578019
53	4521179	577912
54	4521145	577897
55	4521110	577866
56	4521011	577851
57	4520992	577901
58	4520977	577901
59	4520962	577905
60	4520943	577905
61	4520927	577905
62	4520904	577901
63	4520885	577896
64	4520874	577893
65	4520847	577889
66	4520836	577885
67	4520809	577874
68	4520737	577889
69	4520763	577908
70	4520748	577939
71	4520725	577923
72	4520710	577912
73	4520679	577916
74	4520641	577927
75	4520634	577961
76	4520573	577978
77	4520561	577967
78	4520542	577956
79	4520515	577933
80	4520492	577911
81	4520466	577892
82	4520435	577892

TABLE 4-2 (Cont'd.)

UTM COORDINATES TO SAMPLE LOCATIONS FROM
FIGURE 2: LARGE SCALE MASTER MAP

Station #	North	East
83	4520401	577918
84	4520347	577948
85	4520344	577989
86	4520309	577989
87	4520282	577948
88	4520282	577885
89	4520271	577852
90	4520244	577826
91	4520168	577844
92	4520114	577863
93	4520076	577863
94	4520046	577859
95	4520019	577841
96	4519885	577844
99	4521111	577730
100	4521122	577748
101	4520988	577563
102	4520946	577692
103	4520817	577737
104	4521237	577804
105	4520984	577774
106	4520973	577804
107	4521137	577578
108	4521118	577570
109	4520862	577796
110	4521160	577652
111	4521198	577574
112	4520943	577544
113	4520908	577721
114	4520927	577817
115	4521103	577687
116	4521042	577771
117	4521309	577504
118	4521054	577824

TABLE 4-2 (Cont'd.)

UTM COORDINATES TO SAMPLE LOCATIONS FROM
FIGURE 2: LARGE SCALE MASTER MAP

Station #	North	East
119	4520613	577836
120	4520543	577856
121	4520730	577621
122	4520461	577895
123	4520898	577945
124	4520906	578000
125	4519992	577828
126	4519969	577938
127	4519942	578016
128	4519942	578148
129	4519938	577883
130	4519898	577930
131	4519852	578109
132	4519898	577859
133	4519832	577926
134	4519809	578027
135	4519734	578039
136	4519703	577996
137	4519625	577984

Meadowlands District Official Zoning Map", revised 1978, Reference item 2. Reference item 3 is a copy of the "Hackensack Meadowlands Development Commission District Zoning Regulations", revised 1983. This regulations handbook contains all laws related to construction and protection of natural areas within the Meadowlands District. A large marshland preservation area, Sawmill Creek Wildlife Management Area lies south of the Berrys Creek area and does not directly contact Berrys Creek. The only marshland preservation area bordering Berrys Creek is the eastern portion of the Eight Day Swamp. The Berrys Creek Tidal Marsh or Walden Swamp also borders Berrys Creek but is owned by the Sports Complex. This marsh represents approximately 120 acres of natural area but is not zoned as a wildlife preserve. Many more acres of marsh border Berrys Creek but these areas are zoned for potential development or specially planned areas, i.e., Parkside residential. Berrys Creek Center, etc.

4.3 HYDROLOGY

Reference item 4 is a series of maps which define the flooding potential for the Berrys Creek area. The maps are Flood Insurance Rate Maps (FIRM) for the Hackensack Meadowlands District and give the boundary for 100 and 500 year floods. The boundary of the 100-year flood encompasses the majority of the Meadowlands area.

Two studies in the mid and late 1970's have evaluated mean tide range, both at the Route 3 Bridge. The HMDC studied tidal cycle during 1975 to report a tidal range of 5.8 and 5.9 feet during incoming and outgoing tide, respectively. In addition to tide data numerous hydraulic parameters were determined for use in the TAMS hydraulic model

including cross-sectional area of Berrys Creek, depth, velocity, etc. These data are available through the HMDC, ERM or TAMS, Inc. in New York City. The National Oceanographic and Atmospheric Administration (NOAA) evaluated tides from November 1973 to January 1975 and reported a tide range from -2.52 MSL (mean sea level) to 3.27 MSL (5.52 feet). Reportedly, an average rise of 0.6 feet has been observed in tidal elevations between 1929 and 1980. Additional tidal information is provided in Chapter 6, Regional Complications (formerly Volume II. Chapter D, Existing and Proposed Regional Plans).

4.4 GEOLOGY

The general geologic conditions in the area of the Wood-Ridge site consists of at least five separate natural deposits. Figure 4-2 depicts the soil types in a rather general way. The uppermost surficial materials consist of a fibrous meadowmat and organic silt. These organic deposits are only typically 2 1/2 to 4 feet in thickness and are extremely soft, wet and highly compressible. Underlying these thin surficial organic deposits is a gray, medium-grained sand which has a thickness in the range of 5 to 10 feet. A red-to-gray varved clay and silt is present below the gray sand and is composed of alternating 1/16 to 1/2 inch thick layers of fine sand, silt clay. silty clay and clayey silt. This material is very soft and moderately compressible and has been found to have a thickness of approximately 75 feet. Underlying the varved silt and clay deposit is a reddish-brown silty sand which a thickness of at least 30 feet. Beneath these unconsolidated deposits is the Brunswick Formation of Triassic age which consist of alternating beds of reddish-brown sandstone and mudstone. Reference item 5 is an

GEOLOGIC STRUCTURE OF THE HACKENSACK MEADOWS

Figure 4-2

ERM-Southeast, inc.
Brentwood Tn. 615/373-3350

atlas sheet of the Weehawken Quadrangle in northeast New Jersey which is accompanied by a geologic overlay of consolidated deposits in this area. This overlay depicts the distribution of consolidated bedrock in the area with the Brunswick Formation being shown as underlying the Wood-Ridge site and the Berrys Creek area. Based on test borings at the Wood-Ridge site, the depth to consolidated bedrock is greater than 120 feet.

CHAPTER 5

CHEMICAL CONTAMINATION

5.1. INTRODUCTION: CONTAMINANTS

Considerable data have been accumulated over approximately a 15-year period concerning the concentration of mercury and other contaminants in soils, sediments, water and biota in the Berrys Creek area. This "site specific" data base has been used to define problem areas and to gain insights into the extent of contamination as it presently exists. In order to determine the best remedial action for mitigating the contamination in the Berrys Creek area it is vital to understand the extent to which the various environmental compartments are contaminated. Therefore, the data are presented and discussed, in general, by sample type for mercury and the other specific contaminants, primarily heavy metals. Colored figures are used for generalized data presentation.

5.2 GENERAL DISCUSSION

The site specific data were accumulated from reports generated in the Berrys Creek area from the years 1972 through 1984. All data were reviewed through a two-phase evaluation criteria. Phase 1 involved a very cursory review of the compatibility of the data, i.e., whether or not sample locations were identifiable as well as sampling dates and sample types, etc. The Phase 2 evaluation criteria involved the evaluation of the sampling methodology and analytical methodology to determine if the data were acceptable by EPA sampling and analytical

methodology and thus "reliable." Table 5-1 summarizes the Phase 2 evaluation criteria by listing the approved, and acceptable analytical methods for mercury determination in various matrices. All reliable data passed Phase 1 criteria and then were analyzed by a method comparable to or identical to those listed in Table 5-1. These methods utilized to create reliable data are referenced in Chapter 1.2.C. "Inventory of Analytical Methodologies," Task I, Volume 2.

It must be understood that the colored figures are intended to present the general view of contamination and are not capable of depicting precise points and exact concentrations. The ranges of concentrations selected were based on the total range of concentrations for each sample type. The range of concentration and thus color represented at each specific location on each figure are the mean value of the various contaminants (mercury, zinc, lead, etc.) for any one station. For example on Figure 5-1, station 1 (confluence of Berrys Creek Creek and the Hackensack River), 15 data points from three different surveys were averaged to get a mean value of 7.7 ppm mercury thus the green dot indicates that mercury values range less than 10 ppm.

In addition to the colored display of ranges of contamination data in this chapter were sorted into various sample types (i.e., sediment, air, fish, etc.) by station. Locations of the stations from which data were collected are represented on two base maps (Figure 5-1 and Figure 5-2). Data collected from the station represented on Figures 5-1 and 5-2 are listed in Appendices 1 and 2, respectively. The sample types from stations presented on both base maps include analyses of soil, sediment, ground water, surface water, air, and biota. Biota is separated into three categories: fish, plants and other animal life.

TABLE 5-1

EVALUATION CRITERIA BASED UPON SAMPLING AND ANALYTICAL METHODOLOGIES

Parameter	Matrix	Approved and/or Acceptable Analytical Methods	Reference and Source	Interferences	Detection Limit
Total Hg	Water	Digestion & Cold Vapor	7470[1] or 245.1[2]	Sulfide, volatile organics, Cu & Cl_2	0.2 ug/l
Monomethyl Hg	Water	Extractions & GC/EC	Longbottom, etal[3]	Sulfide, sulfur, PCB	0.02 ug/l
Dimethyl Hg	Water	GC/MS	U.S. Testing Lab[4]	NA[5]	NA[5]
Total Hg	Soil/Sediment	digestion & cold vapor	7471[1] or 245.5[2]	sulfide, Cu, volatile organics and Cl_2	0.1 ug/gm
Monomethyl Hg	Soil/Sediment	extraction & GC/EC	Longbottom,etal[3]	sulfide, sulfur, PCBs	0.001 ug/g
Dimethyl Hg	Soil/Sediment	GC/MS	U.S. Testing Lab[4]	NA[5]	NA[5]
Total Hg	Tissue	digestion & cold vapor	7471[1] or 245.5[2]	sulfide, volatile organics, Cu & Cl_2	0.1 ug/gm
Monomethyl Hg	Tissue	extraction & GC/EC	Longbottom, etal[3]	sulfide, sulfur, PCBs	0.01 ug/g
Dimethyl Hg	Tissue	GC/MS	U.S. Testing Lab[4]	NA[5]	NA[5]

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TABLE 5-1 (Cont'd.)

EVALUATION CRITERIA BASED UPON SAMPLING AND ANALYTICAL METHODOLOGIES

Parameter	Matrix	Approved and/or Acceptable Analytical Methods	Reference and Source	Interferences	Detection Limit
Total Hg	Air	adsorption & cold vapor	NIOSH, (P&CAM 175)[6]	high particulate or water vapor loading & Cl_2	0.001 ug Hg
Monomethyl Hg	Air	adsorption & cold vapor	Braman & Johnson, 1974[7]	NA[5]	0.1 ng/m^3
Dimethyl Hg	Air	adsorption & cold vapor	Braman & Johnson, 1974[7]	NA[5]	0.1 ng/m^3
Organo (Alkyl) Mercury	Air	adsorption & cold vapor	NIOSH (S342)[8]	mercury vapor	0.004 mg/m^3

1 = Test Methods for Evaluating Solid Waste, SW-846, U.S. EPA, July 1982.
2 = Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, U.S. EPA, March 1983
3 = Longbottom, et al, Gas Chromatographic Determination of Methyl Mercury in Fish, Sediment, and Water, Journal of the AOAC, Vol. 56, No. 6, pp. 1297-1303.
4 = U.S. Testing Laboratory. Procedure is currently (April, 1985) in developmental stages.
5 = No information available.
6 = National Institute of Occupational Safety and Health: Analytical Methods, Vol. 5, Method P&CAM, 175 pp. 175-1 - 175-17.
7 = Braman and Johnson, Selective Absorption Tubes and Emission Technique for Determination of Ambient Forms of Mercury in Air, Environ. Sci. Technol., Vol 8, pp. 996-1003 (1974).
8 = National Institute of Occupational Safety and Health: Analytical Methods, Vol 6, Method S342 pp. S342-1 - S342-A8.

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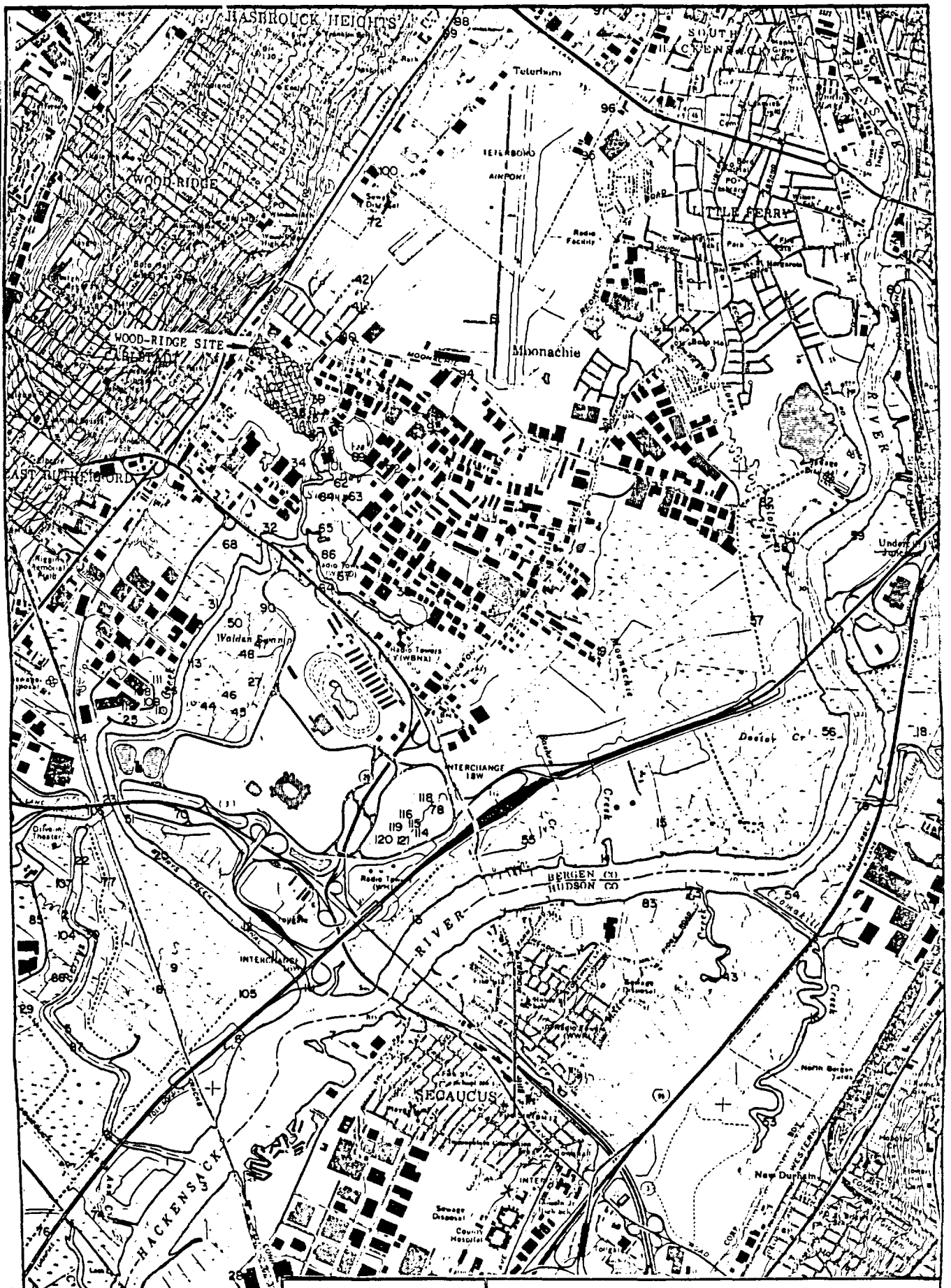

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FIGURE 5-1 SMALL SCALE MASTER MAP REFERENCE LOCATIONS TO SAMPLE SITES

SCALE: 1" = 2000'

829910053

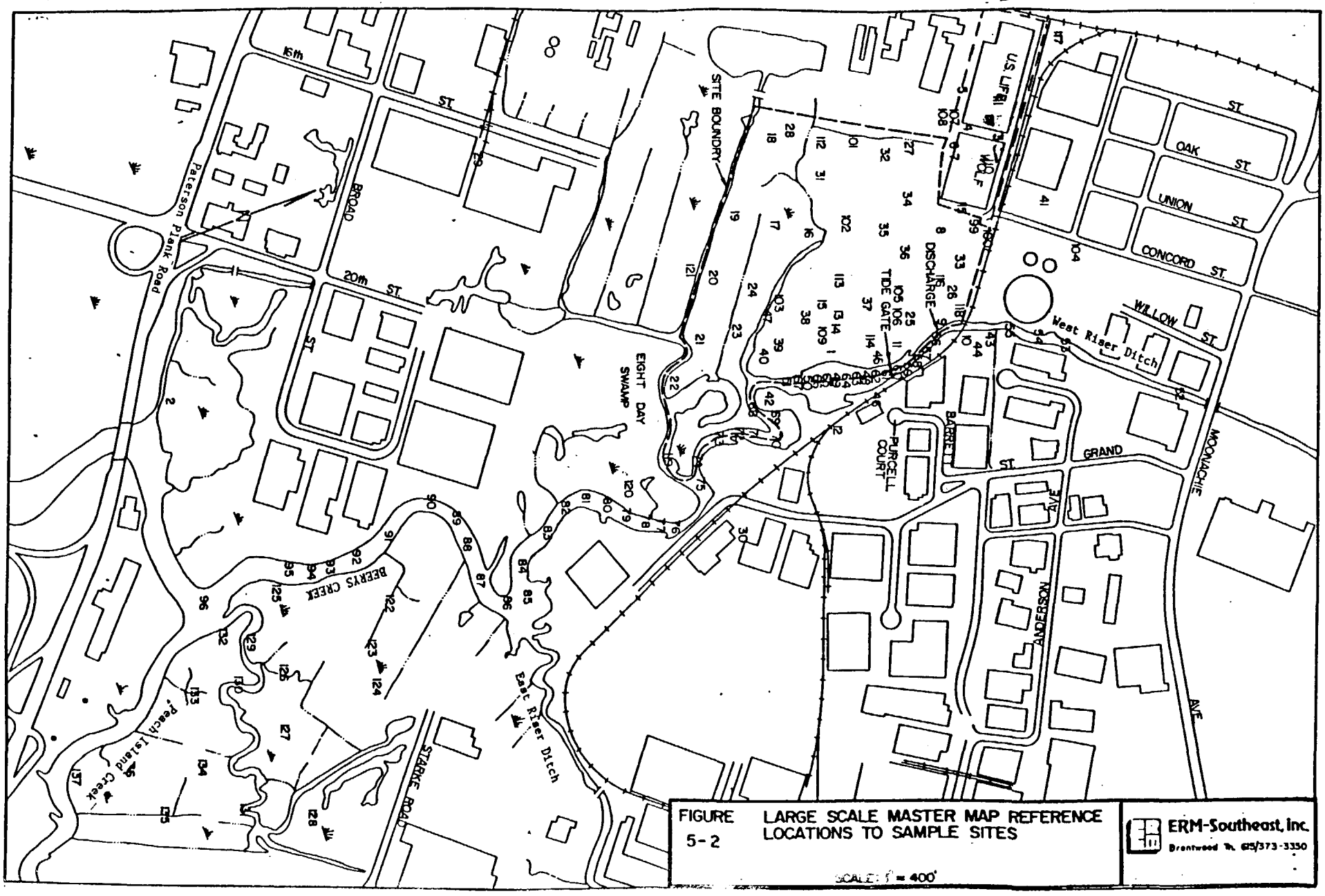

FIGURE 5-2 LARGE SCALE MASTER MAP REFERENCE LOCATIONS TO SAMPLE SITES

SCALE: 1" = 400'

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Brentwood Tn. 615/373-3350

829910054

The other animal types include mammals, birds and invertebrates. For any station all data records are listed by sample type and in chronologic order.

All site specific data were reviewed from reports and memoranda that are listed in Appendix 3a. Appendix 3b lists those reports and memoranda from which reliable data were selected and placed in a computerized data base. A total of four documents were not acceptable by the two-phase evaluation criteria. Studies by Gorman (1980) did not meet Phase 1 criteria of proper description of sample location; while Eccles 1980 reported water data by an atypical methodology which did not include QA/QC. Hutchinson 1977 and Meyerson 1984 did not meet the established criteria as Hutchinson reported all values in wet weight (all other sediment results are reported in dry weight) and Meyerson did not quantify mercury in terms which were comparable to other data. However, Hutchinson's data was reliable by all other criteria and are discussed to a limited extent.

The reliable data were sorted into data files by sample type and general site location (base map) and summarized in Appendices 4 through 22. The sample locations represented by each appendix are given in Table 5-2. Figures 5-3 through 5-22 illustrate the sample locations given in Table 5-2 for appendices 4 to 22. The Hutchinson Report, 1977 is separated from the other sediment data as Appendix 11b. This report is the only report which gives the sediment results on a wet weight basis but fills some important data gaps for upper West and East Riser Ditch sediment values.

A list of the appendices and number of records are given in Table 5-3. The "site specific" data are separated into two subchapters.

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TABLE 5-2

STATION LOCATIONS REPRESENTED BY EACH APPENDIX

Appendix	Stations
Appendix 4:	1-5, 7, 10, 12, 13, 18-27, 30, 32, 35, 36, 39, 40, 42-48, 50-68, 70, 72, 75, 78, 83-86, 90-100, 102, 103, 105, 109, 110, 113, 114-116
Appendix 5:	1, 2, 4, 7, 13, 18-20, 26, 27, 30, 35, 36, 39, 42, 43, 45-48, 50-68, 70, 75, 83, 84, 91, 102, 103, 105, 113
Appendix 6:	22, 51, 69, 77, 84, 108-112
Appendix 7:	1, 9, 11, 23, 26, 32, 37, 39, 60, 73, 76, 106, 107
Appendix 8:	1-3, 5-12, 14-17, 20-26, 31, 32, 36, 38, 40, 43, 71, 86, 87, 88, 100, 106
Appendix 9:	1, 3, 8, 10, 13, 20, 22, 23, 27, 29, 31, 32, 38, 40, 48, 74, 76-82, 105
Appendix 10:	2, 7, 9, 10, 13, 15, 16, 19, 20, 22, 26, 28, 29, 31, 33, 34, 36-39, 41, 43, 45, 48, 56, 58-60, 62, 83, 94, 104
Appendix 11a:	5-11, 23, 26, 32, 36, 38, 43-96, 119, 126, 129-131
Appendix 11b:	26, 35, 40, 68, 69, 71, 92, 99, 100, 101, 102, 103.
Appendix 12:	8, 10, 13-42, 120-137
Appendix 13:	1-12, 60, 119
Appendix 14:	7, 8, 47, 100, 112-117
Appendix 15:	7-10, 13, 14, 35, 36, 47, 99-111

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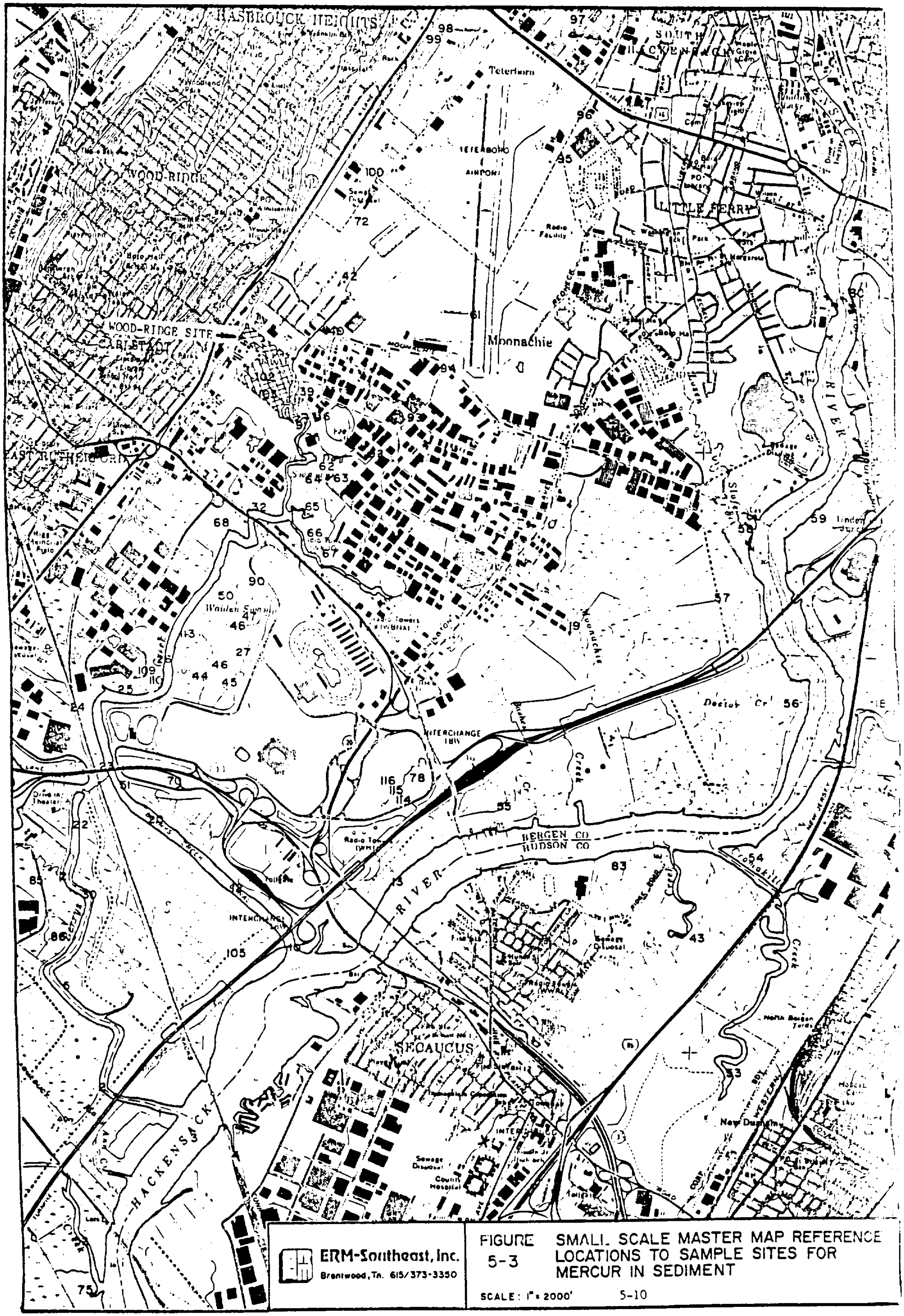
TABLE 5-2 (Cont'd.)

STATION LOCATIONS REPRESENTED BY EACH APPENDIX

Appendix	Stations
Appendix 16	1, 9, 10, 12, 20, 23, 25, 32, 50, 70, 105, 106, 113, 114, 118, 119, 120, 121.
Appendix 17	22, 77, 84.
Appendix 18	1, 9, 10, 11, 23, 26, 106, 107.
Appendix 19	5-11, 32, 61, 65, 68, 76, 85, 90, 96, 119.
Appendix 20	8, 10, 14, 15, 16, 28, 29, 30, 32-37, 39-42, 47, 84, 100, 103, 112-118, 145.
Appendix 21	3-11, 40, 65, 68, 76, 85, 90, 96, 119.
Appendix 22	7, 8, 47, 100, 112-117.

829910057



ERM-Southeast, Inc.
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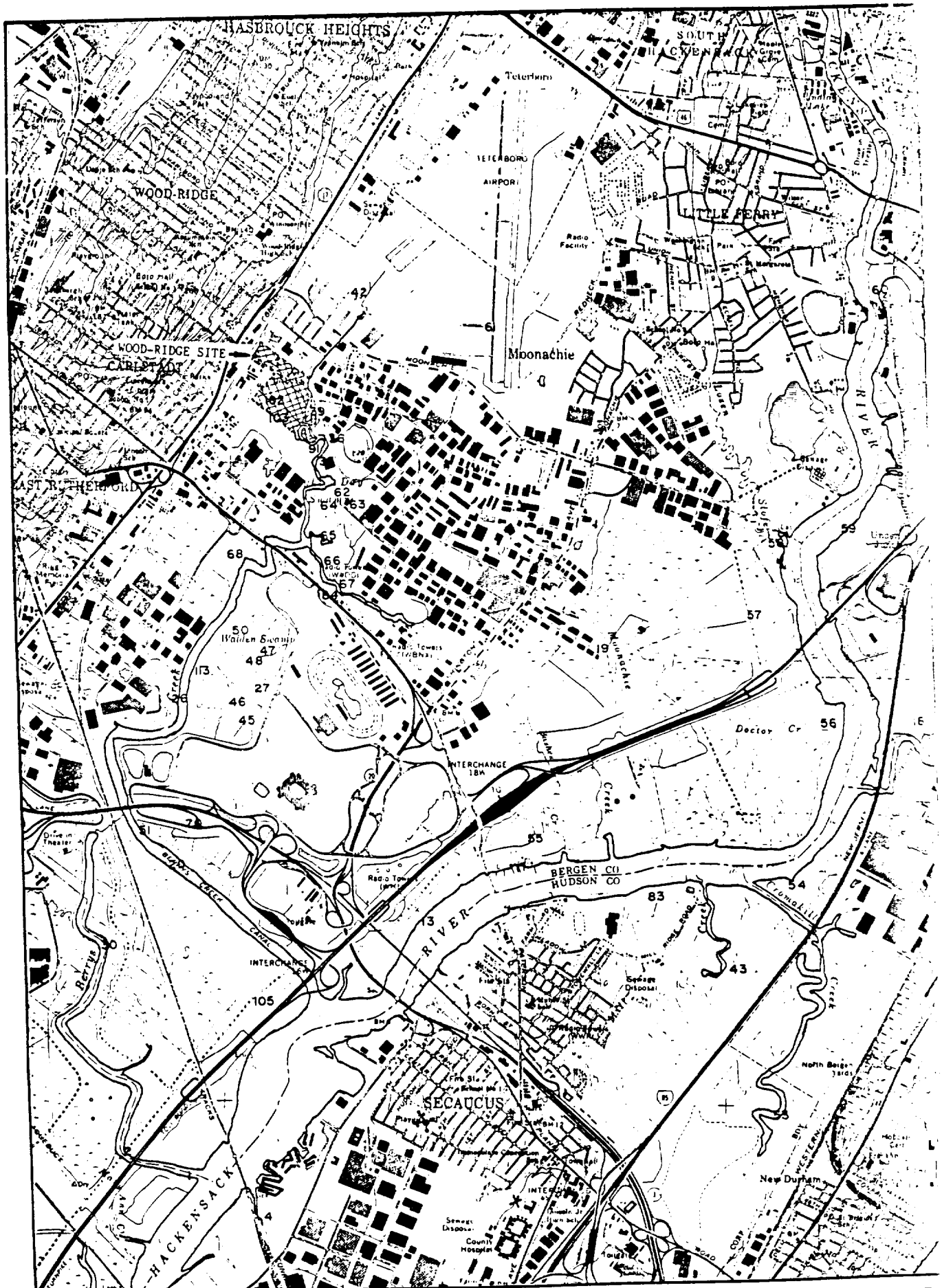
FIGURE 5-3 SMALL SCALE MASTER MAP REFERENCE LOCATIONS TO SAMPLE SITES FOR MERCUR IN SEDIMENT

SCALE: 1" = 2000'

5-10

829910058

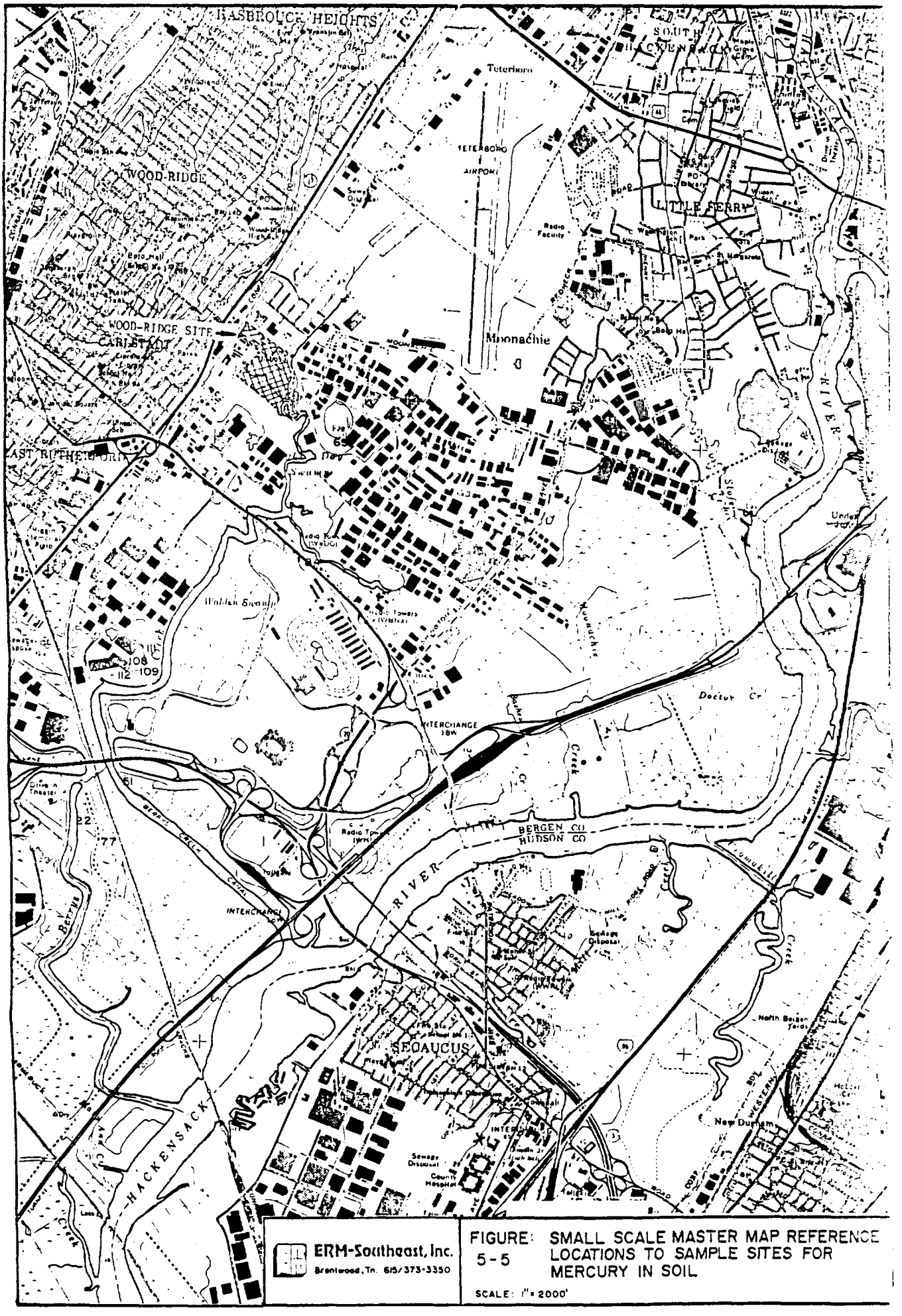


ERM-Southeast, Inc.
Brentwood, Th. 615/373-3380

FIGURE 5-4 SMALL SCALE MASTER MAP REFERENCE LOCATIONS TO SAMPLE SITES FOR MERCURY IN MARSH SEDIMENT

SCALE: 1" = 2000'

829910059



ERM-Southeast, Inc.
Brentwood, Tn. 615/373-3350

FIGURE: 5-5 SMALL SCALE MASTER MAP REFERENCE LOCATIONS TO SAMPLE SITES FOR MERCURY IN SOIL

SCALE: 1" = 2000'

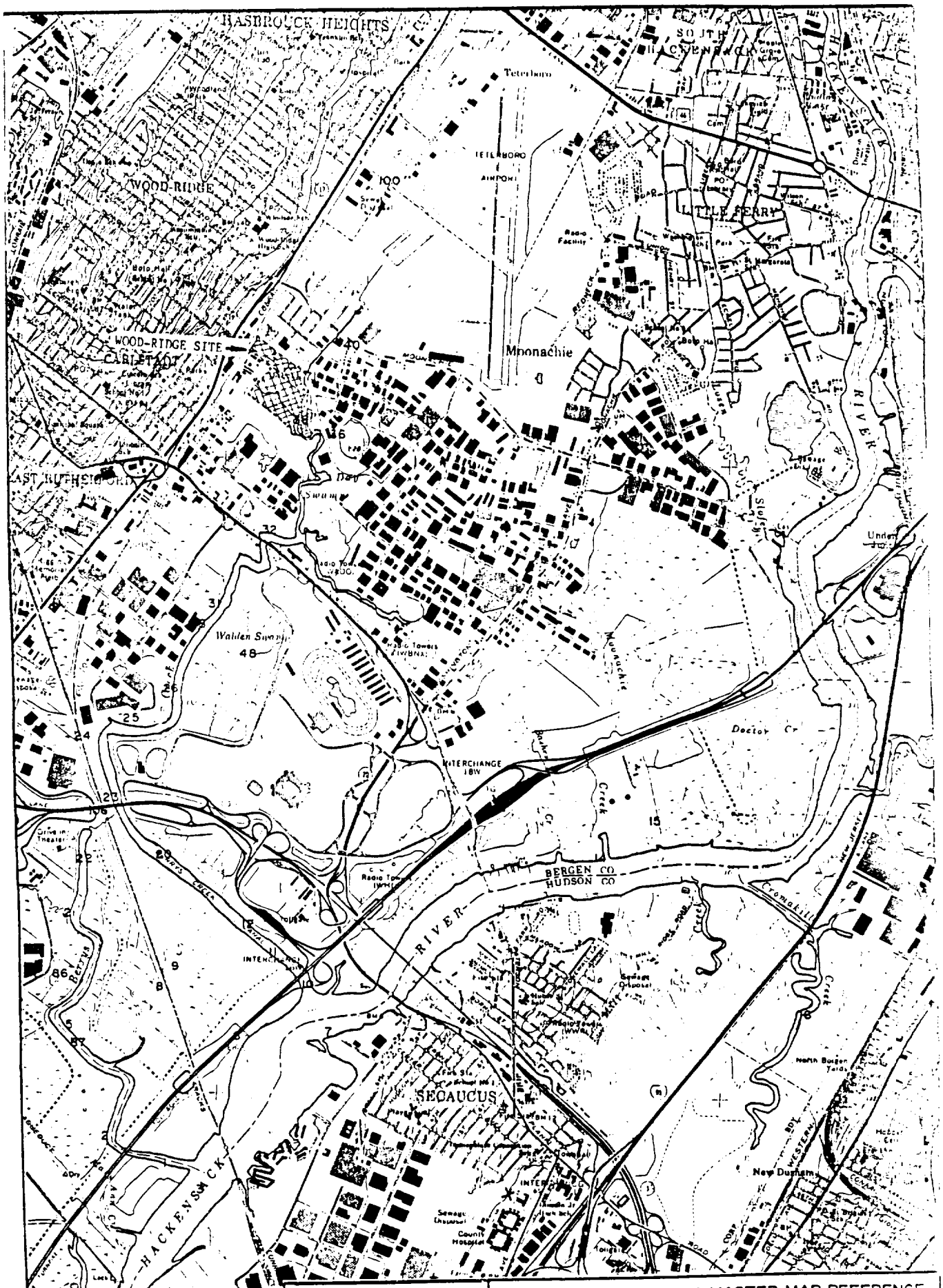
829910060

ERM-Southeast, Inc.
Brentwood, Tn. 615/373-3350

FIGURE: 5-6 SMALL SCALE MASTER MAP REFERENCE LOCATIONS TO SAMPLE SITES FOR MERCURY IN SURFACE WATER

SCALE: 1" = 2000'

829910061



ERM-Southeast, Inc.
Brentwood, Tn. 615/373-3350

FIGURE 5-7 SMALL SCALE MASTER MAP REFERENCE LOCATIONS TO SAMPLE SITES FOR MERCURY IN FISH

SCALE: 1" = 2000'

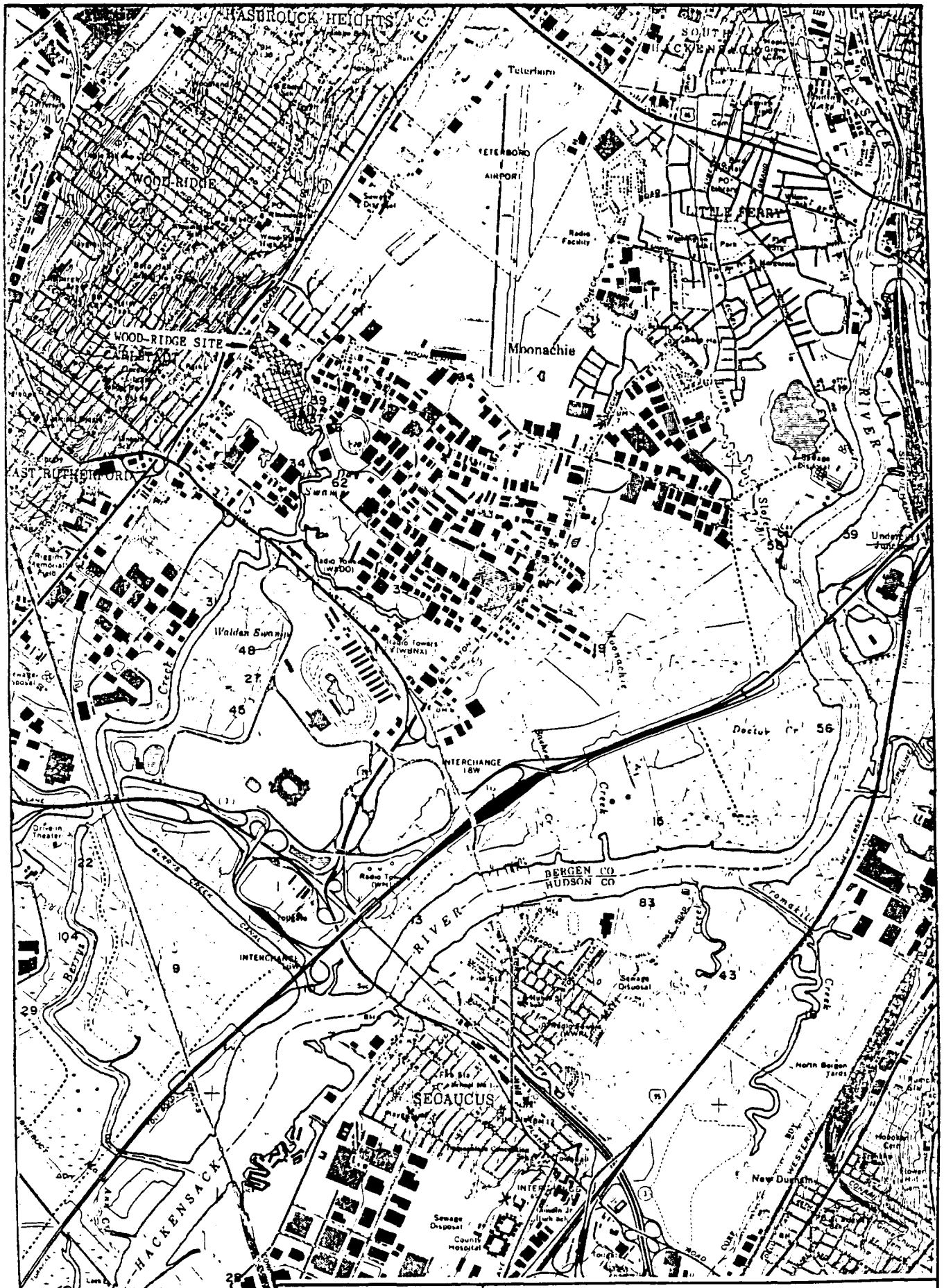
829910062

ERM-Southeast, Inc.
Brentwood, Tn. 615/373-3350

FIGURE: 5-8 SMALL SCALE MASTER MAP REFERENCE LOCATIONS TO SAMPLE SITES FOR MERCURY IN OTHER ANIMALS

SCALE: 1" = 2000'

829910063



ERM-Southeast, Inc.
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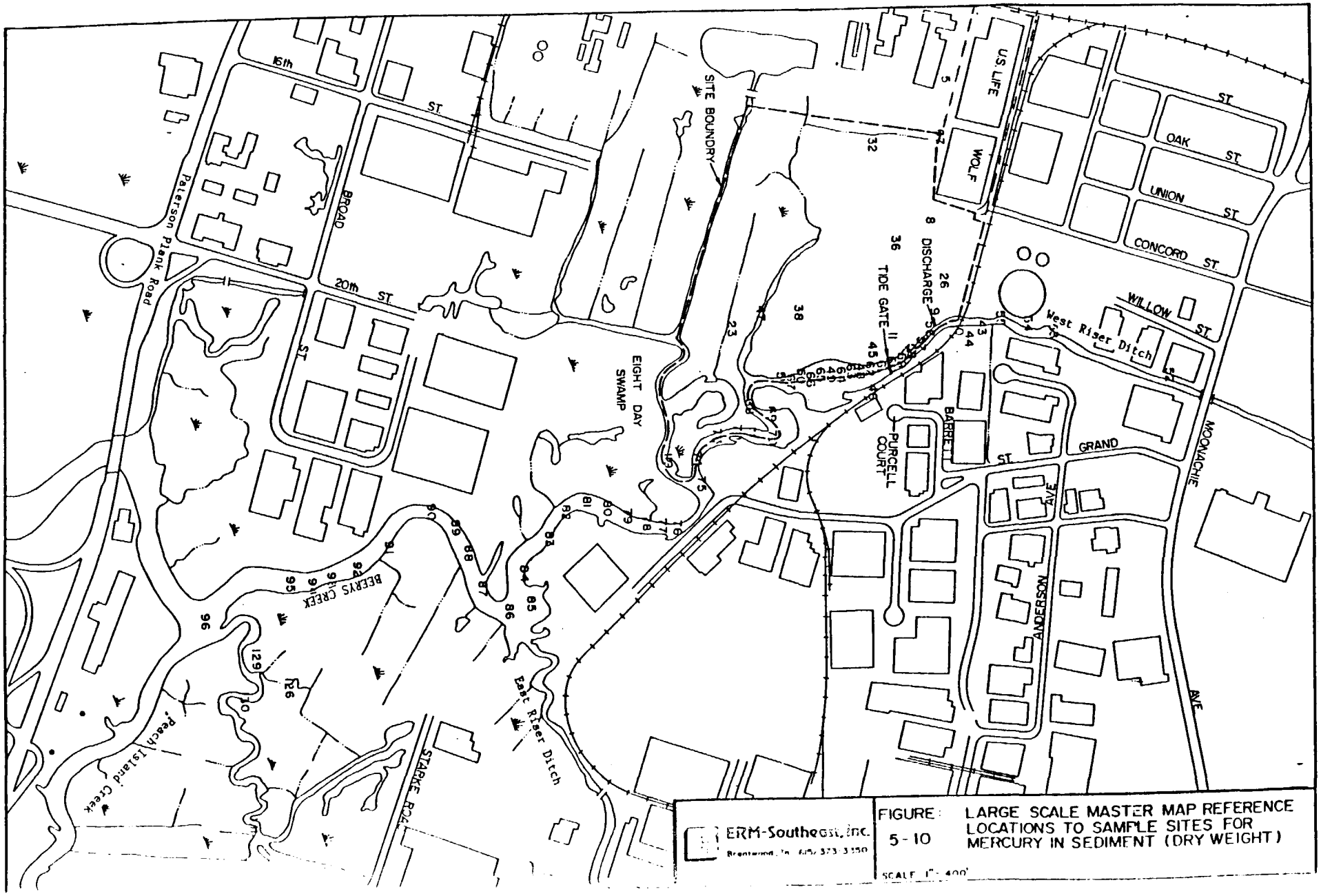
FIGURE: 5-9 SMALL SCALE MASTER MAP REFERENCE LOCATIONS TO SAMPLE SITES FOR MERCURY IN PLANTS

SCALE: 1" = 2000'

829910064

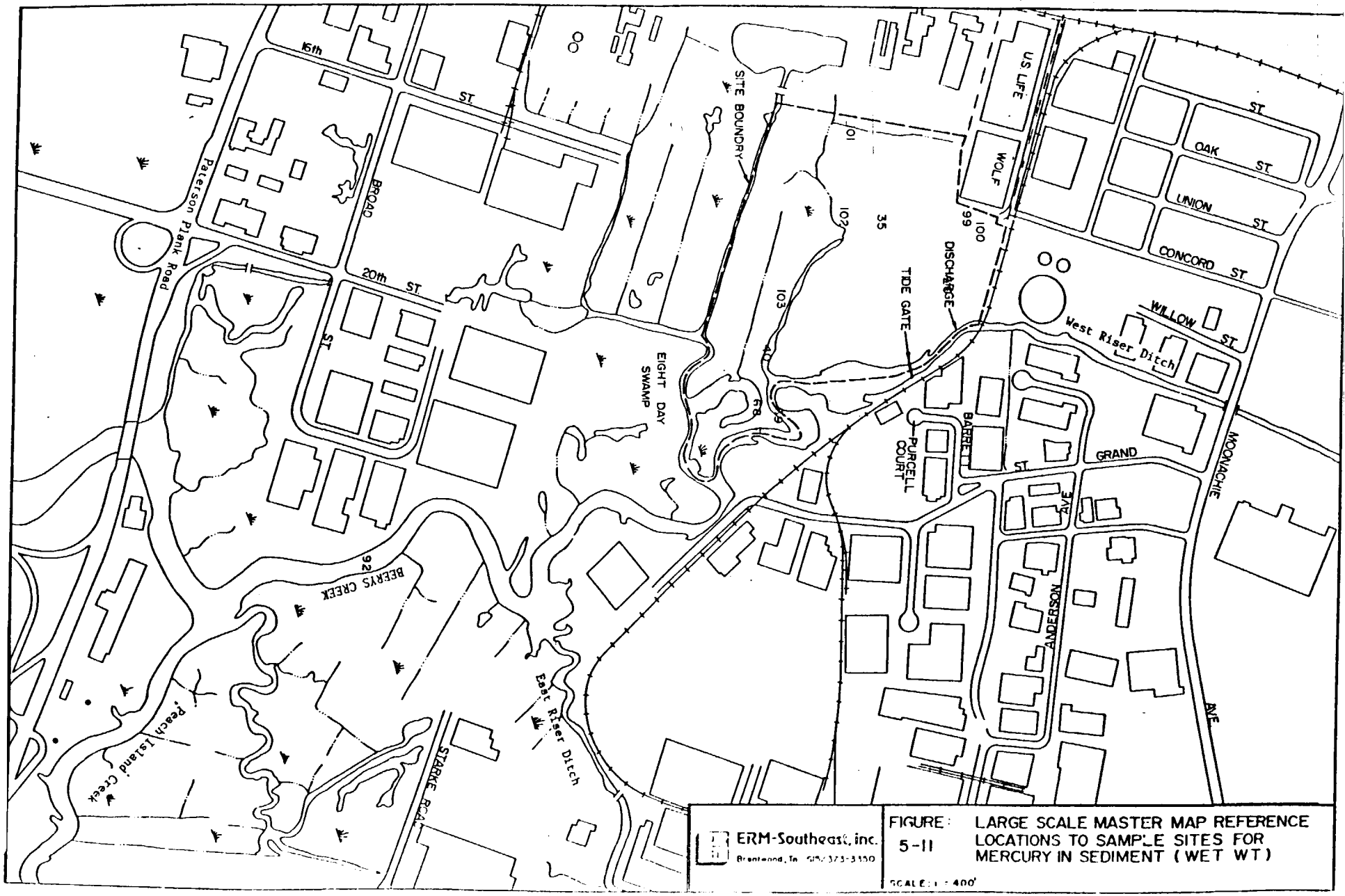
829910065



ERM-Southeast, Inc.
Brentwood, Tn 615/373-3350

FIGURE: 5-10 LARGE SCALE MASTER MAP REFERENCE LOCATIONS TO SAMPLE SITES FOR MERCURY IN SEDIMENT (DRY WEIGHT)

SCALE 1" = 400'

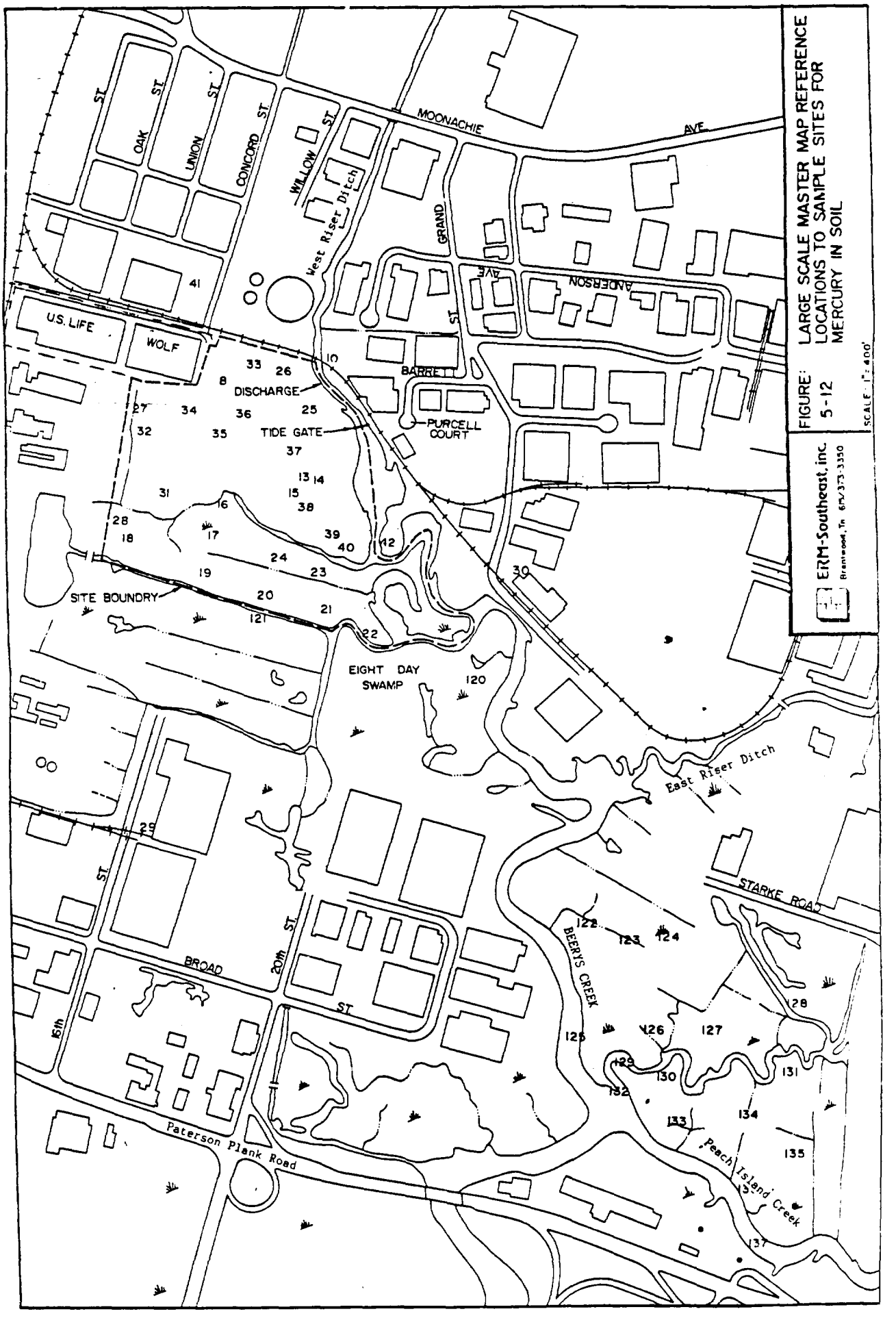


ERM-Southeast, inc.
Brentwood, Tn. 615/373-3150

FIGURE: 5-11 LARGE SCALE MASTER MAP REFERENCE LOCATIONS TO SAMPLE SITES FOR MERCURY IN SEDIMENT (WET WT)

SCALE: 1" = 400'

829910066


MOONACHIE AVE
OAK ST
UNION ST
CONCORD ST
WILLOW ST
West Riser Ditch
GRAND AVE
ANDERSON ST
U.S. LIFE
WOLF
BARRETT
PURCELL COURT
DISCHARGE
TIDE GATE
SITE BOUNDRY
EIGHT DAY SWAMP
East Riser Ditch
STARKE ROAD
BEERYS CREEK
BROAD ST
20th ST
15th ST
Paterson Plank Road
Peach Island Creek
FIGURE: 5-12
LARGE SCALE MASTER MAP REFERENCE LOCATIONS TO SAMPLE SITES FOR MERCURY IN SOIL
SCALE: 1" = 400'
ERM-Southeast, Inc.
Brentwood, Tn 615/373-3330

829910067

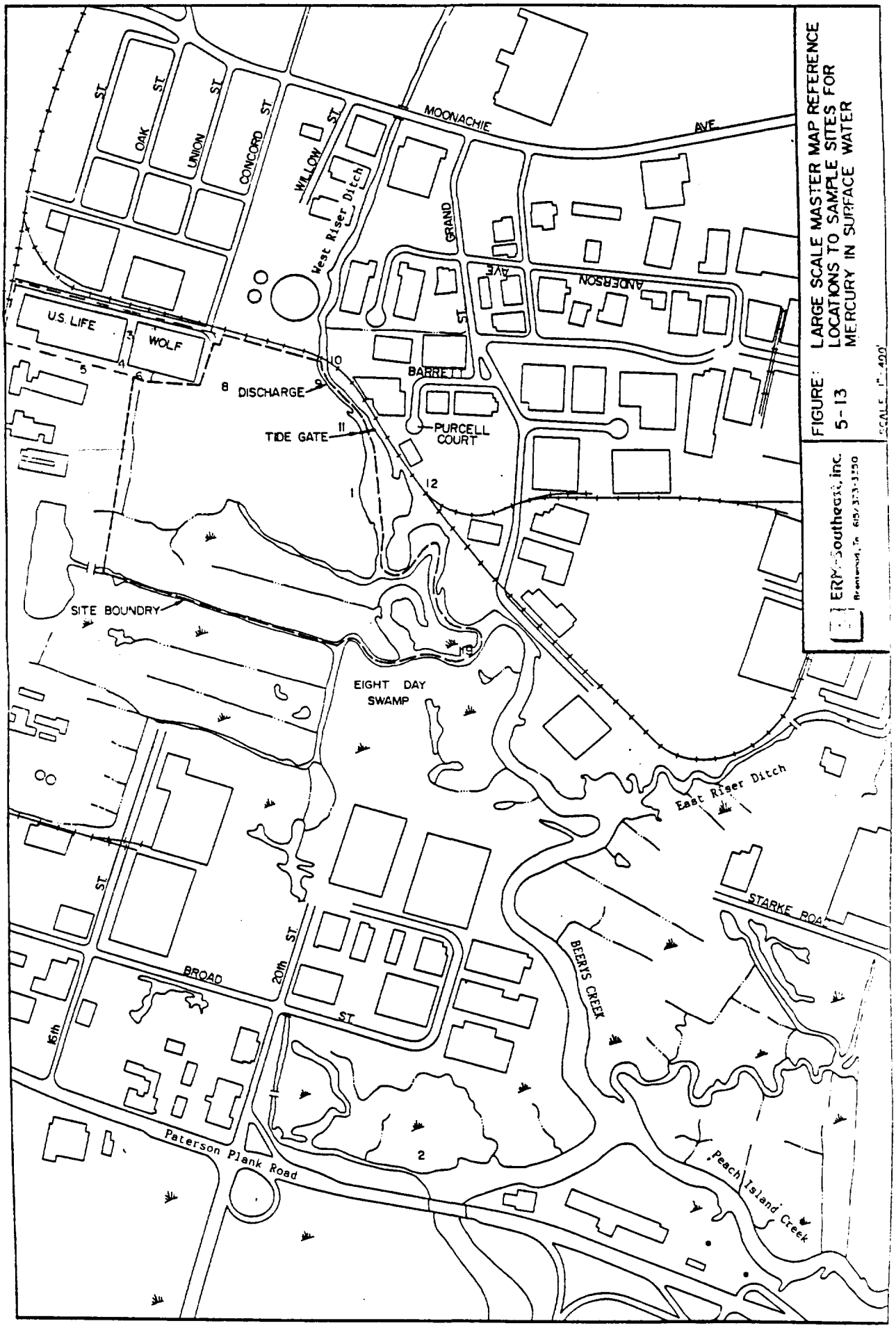


FIGURE: 5-13

LARGE SCALE MASTER MAP REFERENCE LOCATIONS TO SAMPLE SITES FOR MERCURY IN SURFACE WATER

SCALE: 1" = 400'

ERM-Southeast, Inc.
Brentwood, Tn 615/373-3250

829910068

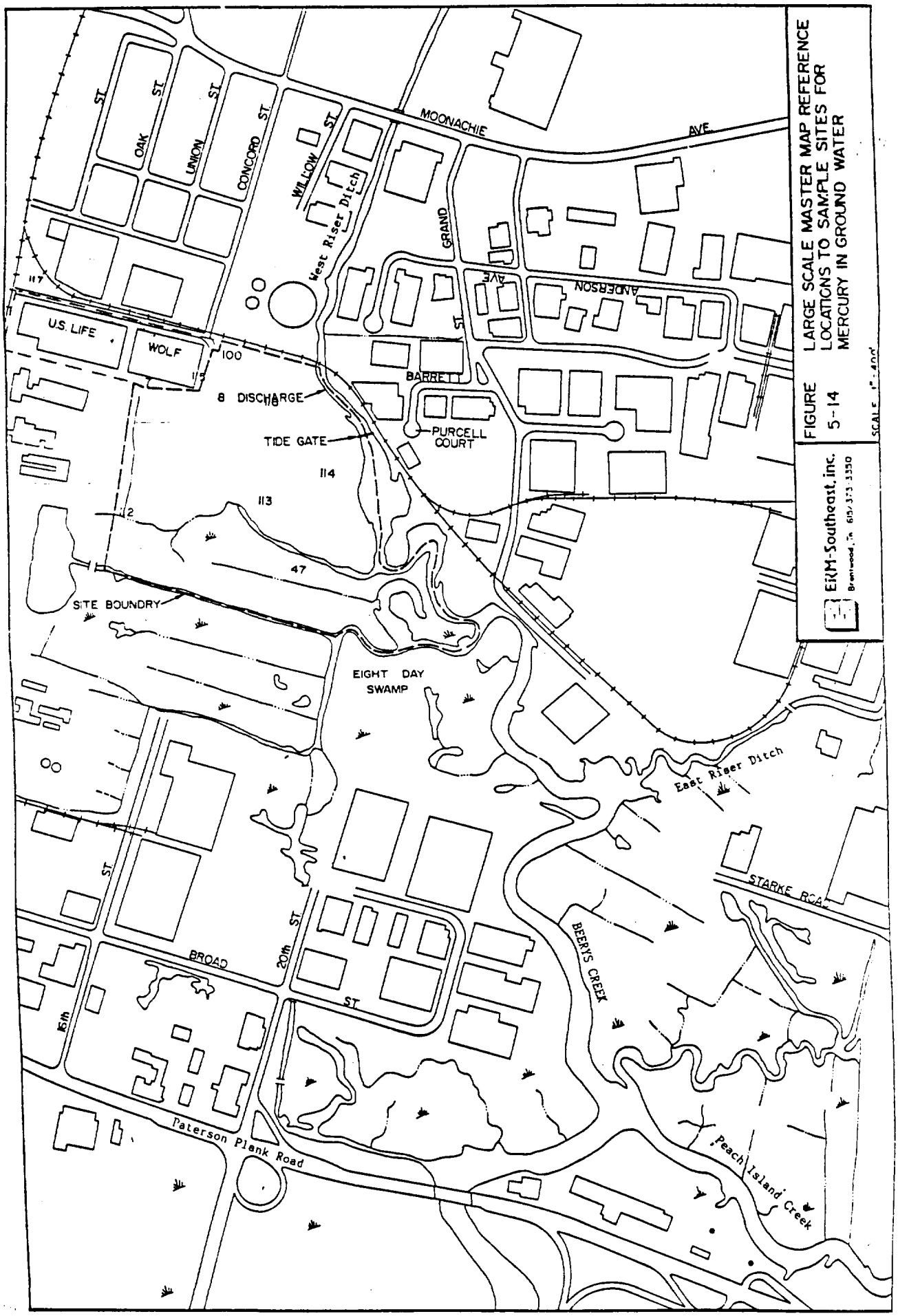


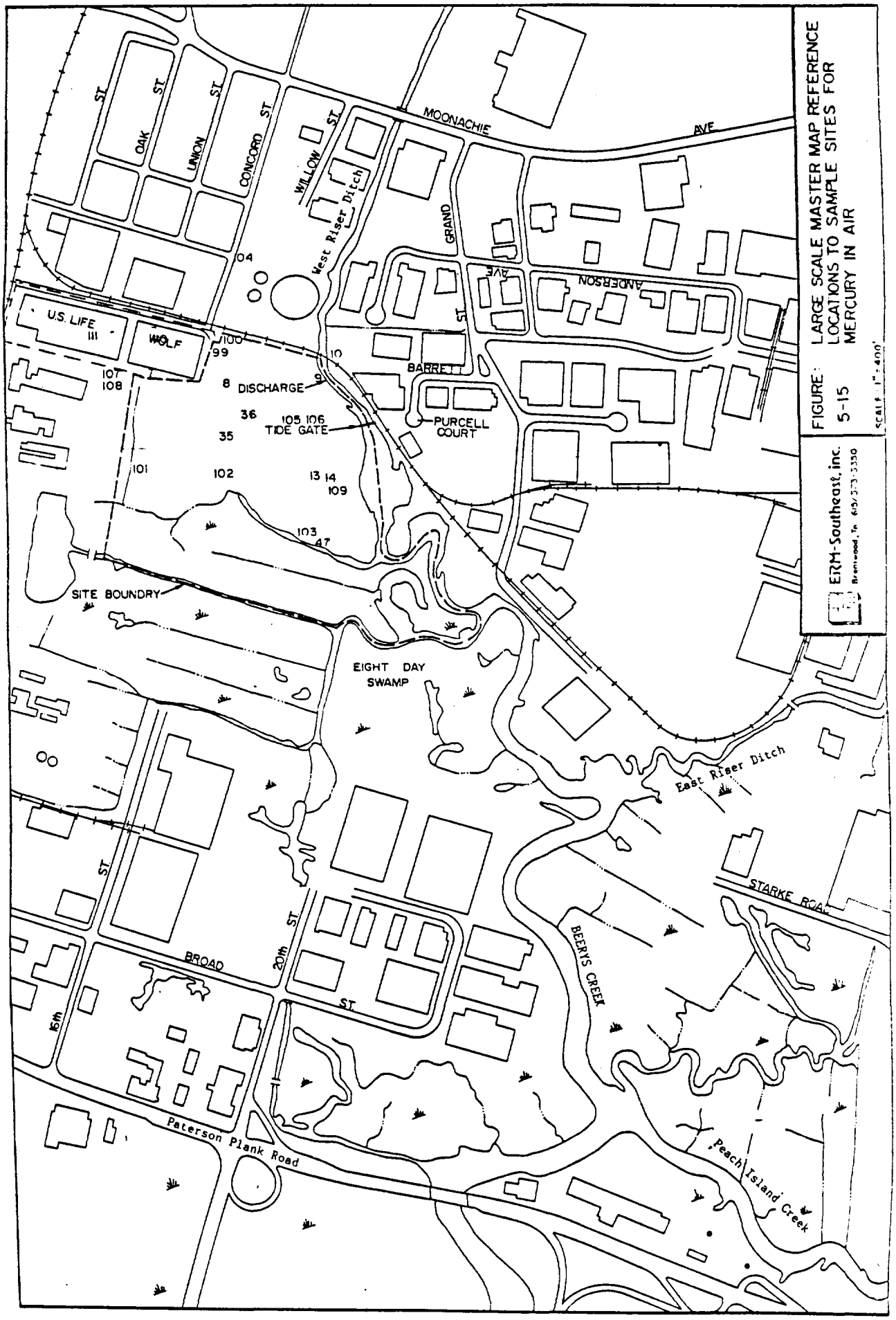
FIGURE 5-14

LARGE SCALE MASTER MAP REFERENCE LOCATIONS TO SAMPLE SITES FOR MERCURY IN GROUND WATER

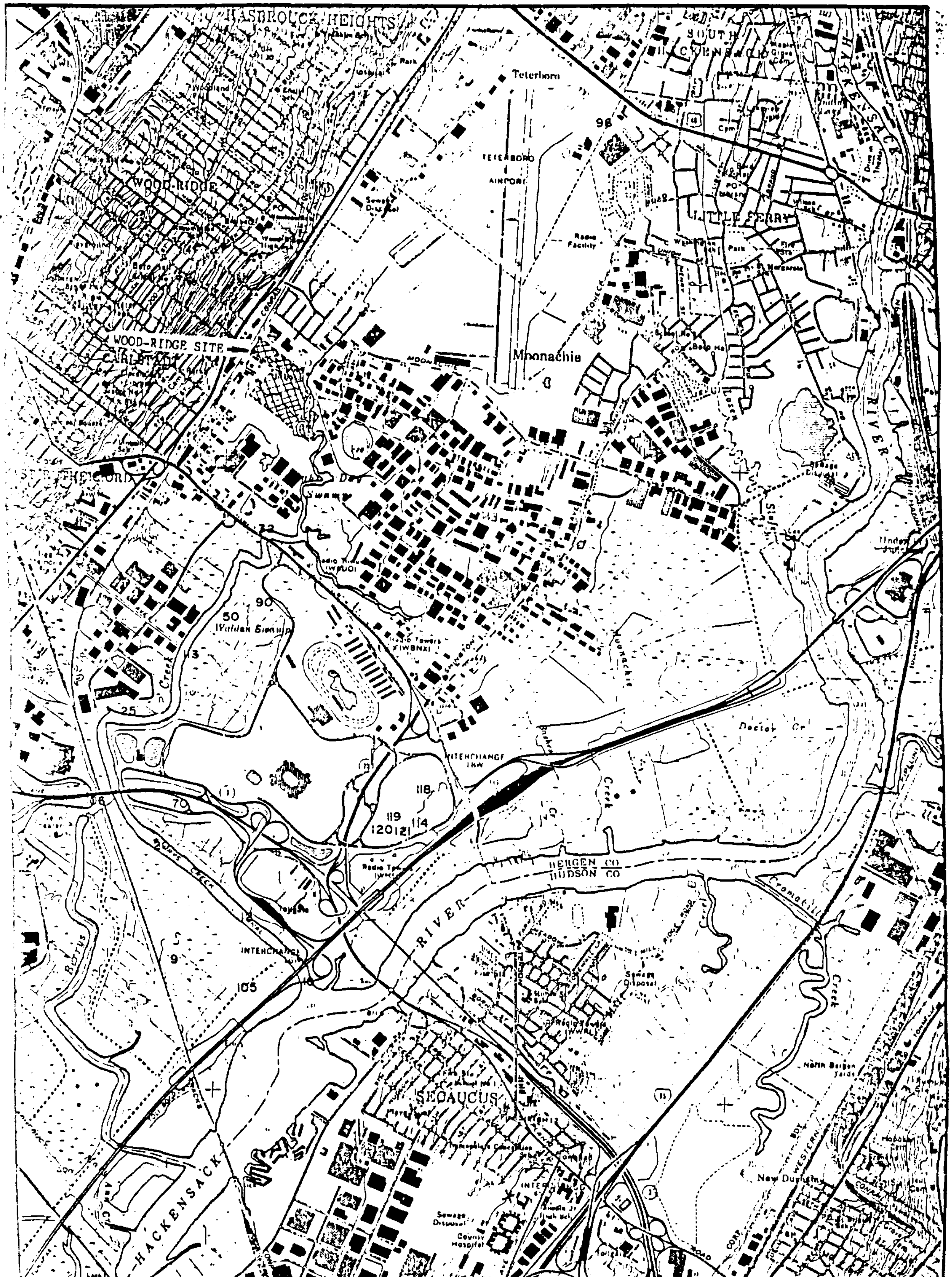
SCALE 1" = 400'

EKM-Southeast, inc.
Brentwood, Tn 615/373-3350

829910069


MOONACHIE AVE
OAK ST
UNION ST
CONCORD ST
WILLOW ST
West Riser Ditch
GRAND AVE
ANDERSON ST
U.S. LIFE
WOLF
BARRETT
PURCELL COURT
DISCHARGE
TIDE GATE
SITE BOUNDRY
EIGHT DAY SWAMP
East Riser Ditch
STARKE ROAD
BEERYS CREEK
BROAD ST
20th ST
15th ST
Paterson Plank Road
Peach Island Creek
FIGURE: 5-15
LARGE SCALE MASTER MAP REFERENCE LOCATIONS TO SAMPLE SITES FOR MERCURY IN AIR
SCALE: 1" = 400'
ERM-Southeast, Inc.

829910070

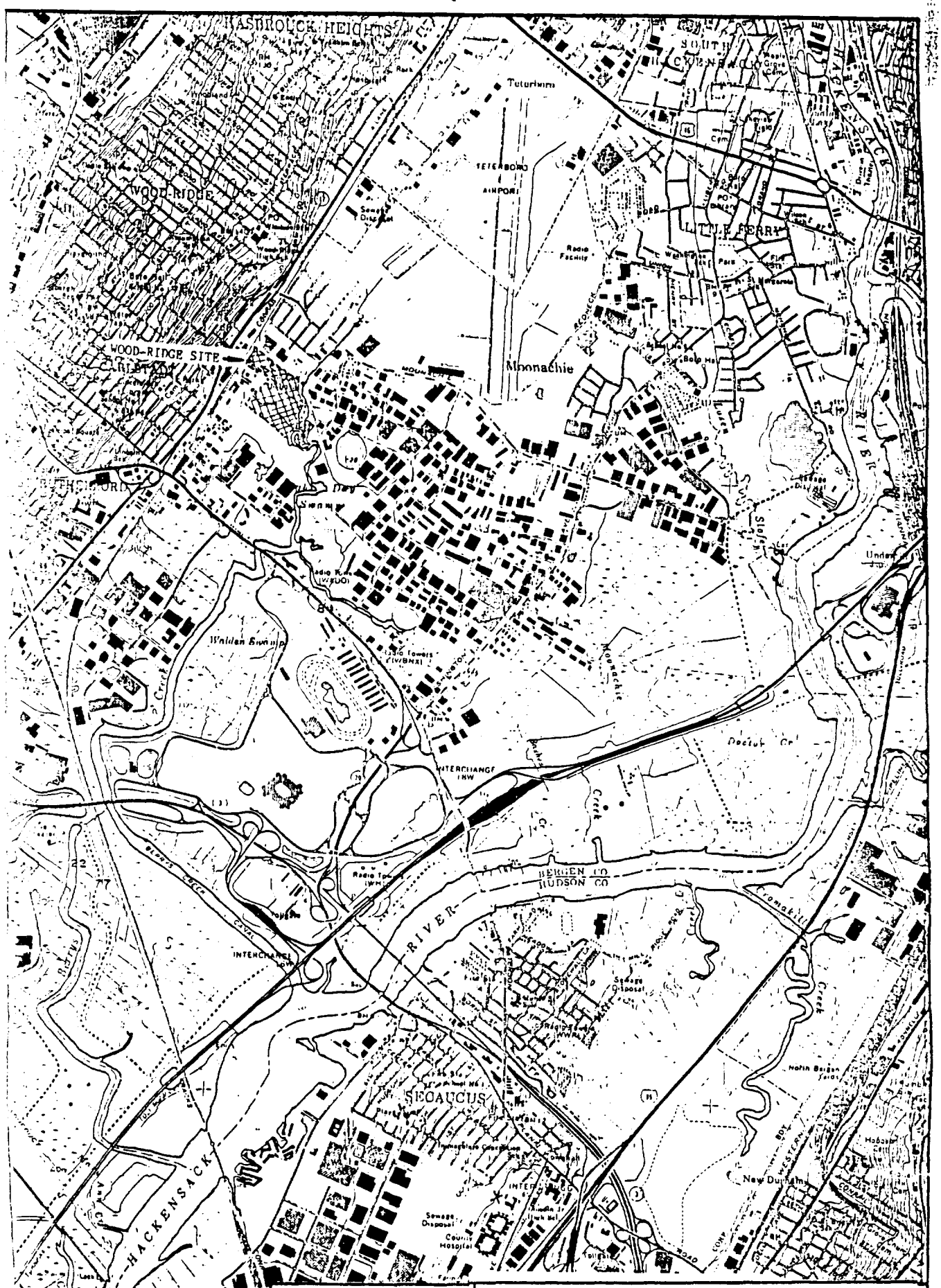


ERM-Southeast, Inc.
Brentwood, Tn. 615/373-3350

FIGURE: 5-16 SMALL SCALE MASTER MAP REFERENCE LOCATIONS TO SAMPLE SITES FOR POTENTIAL CONTAMINANTS SEDIMENT

SCALE: 1" = 2000'

829910071

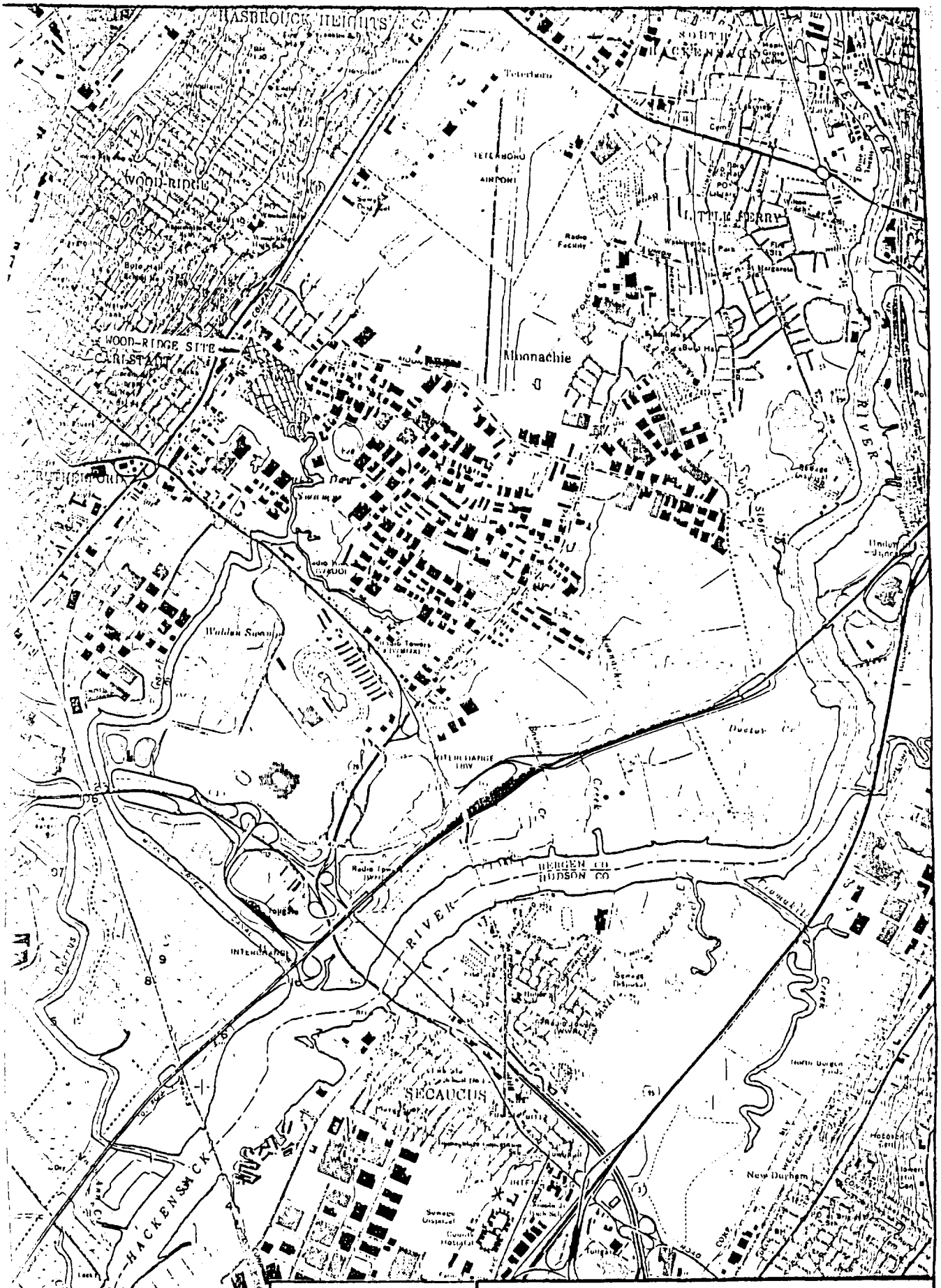


ERM-Southeast, Inc.
Brentwood, Tn. 615/373-3350

FIGURE: 5-17 SMALL SCALE MASTER MAP REFERENCE LOCATIONS TO SAMPLE SITES FOR POTENTIAL CONTAMINANTS SOIL

SCALE: 1" = 2000'

829910072



ERM-Southeast, Inc.
Brentwood, Th. 615/373-3350

FIGURE: 5-18 SMALL SCALE MASTER MAP REFERENCE LOCATIONS TO SAMPLE SITES FOR POTENTIAL CONTAMINANTS SURFACE WATER

SCALE: 1"=2000'

829910073

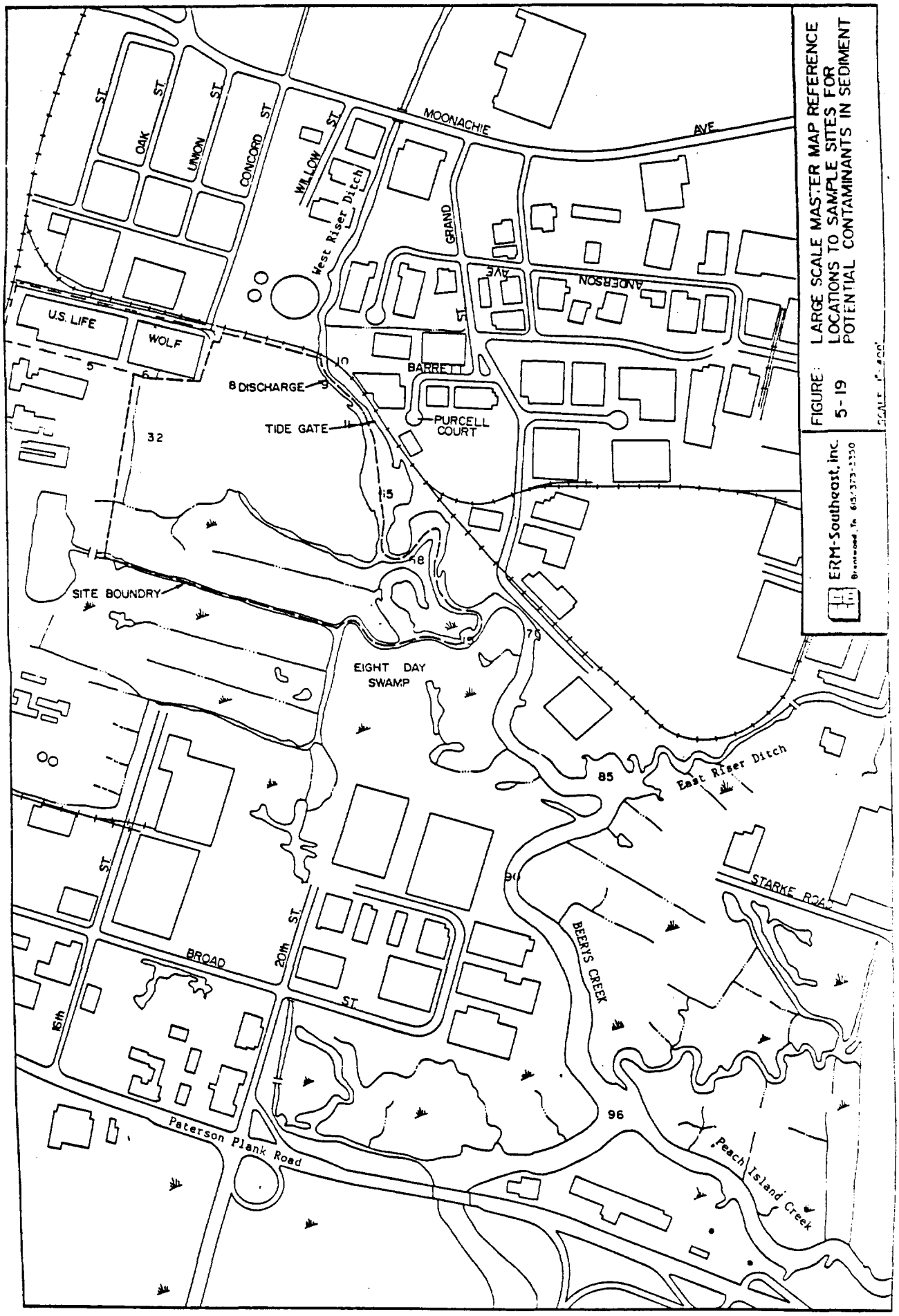


FIGURE: 5-19 LARGE SCALE MASTER MAP REFERENCE LOCATIONS TO SAMPLE SITES FOR POTENTIAL CONTAMINANTS IN SEDIMENT

ERM-Southeast, Inc.

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FIGURE 5-20 LARGE SCALE MASTER MAP REFERENCE LOCATIONS TO SAMPLE SITES FOR POTENTIAL CONTAMINANTS IN SOIL

ERM-Southeast, Inc.

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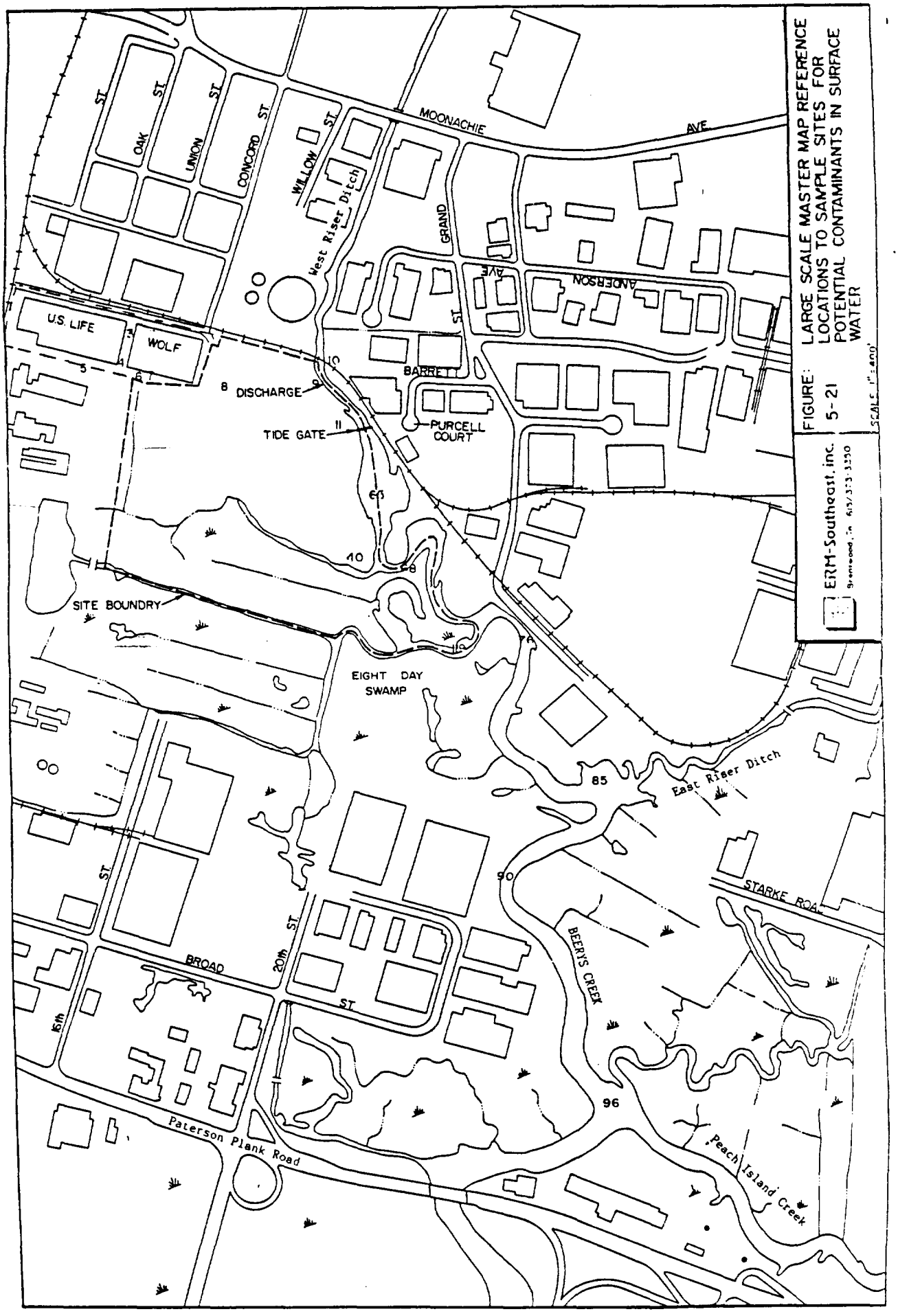

FIGURE: 5-21 LARGE SCALE MASTER MAP REFERENCE LOCATIONS TO SAMPLE SITES FOR POTENTIAL CONTAMINANTS IN SURFACE WATER

829910076

ERM-Southeast, Inc.
Brentwood, TN 615/373-3330

FIGURE: 5-22

LARGE SCALE MASTER MAP REFERENCE LOCATIONS TO SAMPLE SITES FOR POTENTIAL CONTAMINANTS IN GROUND WATER

SCALE: 1" = 400'

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TABLE 5-3

LISTING OF DATABASES: SORTED BY MAP
(SMALL SCALE = MAP 1 AND LARGE SCALE = MAP 2)
AND BY SAMPLE TYPE

Appendix No.	Description	No. of Records
4	Mercury in Channel Sediment - Small Scale Map	149
5	Mercury in Marsh Sediment - Small Scale Map	233
6	Mercury in Soil - Small Scale Map	17
7	Mercury in Surface Water - Small Scale Map	314
8	Mercury in Fish - Small Scale Map	126
9	Mercury in Other Animals - Small Scale Map	161
10	Mercury in Plants - Small Scale Map	314
11a	Mercury in Sediment (dry wt.) - Large Scale Map	246
11b	Mercury in Sediment (wet wt.) - Large Scale Map	49
12	Mercury in Soil - Large Scale Map	133
13	Mercury in Surface Water - Large Scale Map	21
14	Mercury in Ground Water - Large Scale Map	57
15	Mercury in Air - Large Scale Map	60
16	Potential Contaminants Sediment - Small Scale	313
17	Potential Contaminants Soil - Small Scale	52
18	Potential Contaminants Surface Water - Small Scale	71
19	Potential Contaminants Sediment - Large Scale	202
20	Potential Contaminants Soil - Large Scale	570
21	Potential Contaminants Surface Water - Large Scale	181
22	Potential Contaminants Ground Water - Large Scale	271

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Section 5.2 summarizes all contaminant data including mercury while Section 5.7 is a discussion of non-hazardous matrix characteristics, i.e., water quality, physical sediment characteristics, etc.. Table 5-4 summarizes the abbreviations utilized in the tables and appendices.

5.2.1 The Site

5.2.1.1 Soil and Sediment. In addition to mercury, analyses of other metals have been performed on soils and sediments. Other metals that have been analyzed are Arsenic (As), Cadmium (Cd), Chromium (Cr), Copper (Cu), Lead (Pb), Nickel (Ni) and Zinc (Zn). A total of 28 on-site soil samples have been analyzed for Hg, As, Cd, Ni, Pb and Zn. Fourteen sediment samples were analyzed for Hg, As, Cd, Pb, Ni and Zn, while seven sediment samples were analyzed for Cr and Cu. All metals in soil are discussed as averaged values for each site and are not corrected for differences in sample depths. By utilizing this approach (averaged values for individual sites) the concentration range for individual samples may be greater than that for sample stations.

Information has been developed concerning what metal's concentrations are typically found in model soil profiles of New Jersey. These values are utilized by the State of New Jersey in regulation of contaminated soil. These levels are an indication of background levels in New Jersey soil. Where no New Jersey soils data exist Ontario Canada soils (as the next best source provided by the State of New Jersey) for Cadmium (Cd), Chromium (Cr), Copper (Cu), Iron (Fe), Lead (Pb), Mercury (Hg), Nickel (Ni) and Zinc (Zn). A summary of these data is presented in Table 5-5. No information, however, is available concerning metal's concentrations that are typically found in New Jersey sediments.

TABLE 5-4

LIST OF ABBREVIATIONS

Acnid:	Acnida
Amer:	American American eel
Atri:	Atriplex
ave:	average
Aw:	AWARE, Inc.
B:	1 ft above casing bottom - JMA77 Ground Water Date only
B:	bottom
beetl:	beetle, ladybird
bk:	black
bld:	blood
BOwl:	barn owl
br:	brown
BrClCh4:	bromochloromethane (I.S.)
2BrlClprop:	2Bromolchloropropane (I.S.)
brn:	brain
brncl:	barnacle, acorn
C:	center
ch:	channel
$ChCl_3$:	Chloroform
chlben:	Chlorobenzene
cl:	clay
clay/silt:	clayey silt
clay, silt:	clay and silt
cltr:	cluster
comp:	composite
DiClbutan:	1,4-Dichlorobutane (I.S.)
DiCle:	1,2-Dichloroethane
ebenz:	ethylbenzene
EndoSul:	Endosulfan Sulfate
f:	fillet
feth:	feather
fil:	filtered
fl:	flower
Fluor:	Fluoroanthene
ft.st or fr:	fruit structure
GHern:	Green Heron
gw:	ground water
gall:	gallinule
gy:	gray
HMDC:	Hackensack Meadowlands Development Commission
Hept:	Heptachlor
Hepte:	Heptachlor epoxide

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TABLE 5-4 (Cont'd.)

LIST OF ABBREVIATIONS

Hg:	total mercury
hr:	hour
Ht:	High tide
Huch:	W. R. Hutchinson
i:	inch
I.S.:	Internal Standard
inflo:	inflorescence
inorg:	inorganic
invt:	invertebrate
JMA:	Jack McCormick and Associates
Killi:	Killifish
ky:	kidney
L:	left
lcr:	left, center, right
lf:	leaf
liv:	liver
Lt:	Low tide
mamm:	mammal
me Hg:	Methyl mercury
MeChl:	Methylene Chloride
mrat:	muskrat
mous:	mouse
mrshsed:	marshland sediment
mus:	muscle
musl:	mussell
m-xyl:	m-xylene
NJDEP:	New Jersey Department of Environmental Protection
NJMS:	New Jersey Marine Science Consortium
Napth:	Napthalene
Nrat:	Norway rat
org:	organic
o-xyl:	o-xylene
Phrag:	Phragmites
posm:	Oppossum
ppb:	parts per billion
ppm:	parts per million
p-xyl:	p-xylene
R:	right
rab:	rabbit
Rcoon:	Raccoon
riz:	rhizome
rmdr:	remainder

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TABLE 5-4 (Cont'd.)

LIST OF ABBREVIATIONS

s.s.:	suspended solid
SW:	surface water
sd:	sand
sed:	sediment
shl:	shell
shrmp:	shrimp
Spac:	*Spartina cyano.*
Spar:	*Spartina alt.*
spg:	spring
spidr:	spider
st:	silt
ste:	stem
Stop:	Dr. W. Stopford
summ:	summer
susp:	suspended
T:	top
T:	1-1.5 ft below surface - JMA 1977 Ground Water Data Only
TCle:	1,1,1-Trichlorethane
TPh:	Total Phenols
t-dce:	trans-1,2-dichloroethylene
tce:	Trichloroethylene
3Cl3Fle:	1,1,2 Trichlorotrifluoroethane
ttce:	1,1,2,2-tetrachloroethane
unf:	unfiltered
volatlorg:	volatile organics
w:	whole
Wdck:	Woodcock
Weh:	Wehran Engineering
Wh:	white (White Perch)
Wood:	Woodword and Clyde

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TABLE 5-5

SUMMARY OF METAL CONCENTRATIONS IN MODEL NEW JERSEY SOILS[1]

Metal	Mean (ppm)	Standard Deviation (ppm)	Range (ppm)
Arsenic[2]	6.27	2.67	1.1-16.7
Cadmium[1]	2.2	0.58	1.0-4.0
Chromium[1]	14.4	7.8	5.0-48.0
Copper[1]	14.7	11.2	0.5-53.6
Iron[1]	26,400	12,900	2,950-59,000
Lead[1]	22.0	25.0	1.0-180
Mercury[3]	0.3	---	0.1-0.4[4]
Nickel[1]	37.4	16.1	11.1-86.5
Selenium[3]	0.2	---	---
Silver[3]	0.05	---	0.1-5
Zinc[1]	53.1	30.0	4.5-168

[1] Data collected by Dr. Stephen Toth - Model Soil Profiles of New Jersey

[2] Frank. R., K. Ishida and P. Duda. 1976. Metals in Agricultural Soils of Ontario. Can. G. Soil Sci. 56(3):181-196.

[3] Lisk. D.G. 1972. Trace Metals in Soils, Plants, and Animals, Adv. Agron. 24:267-311.

[4] Shacklette. H.T., J.C. Hamilton. J.G. Boerngen and J.M.Bowles. 1971. Elemental Composition of Surficial Materials in the Conterminous United States. Geological Survey Professional Paper 574-D.

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The spatial distribution of arsenic, cadmium, lead, nickel and zinc in soils, marsh sediments and channel sediments are depicted in colored Figures 5-23 through 5-32. Each map contains the range of values for each of the three sample types. Sample types are indicated on each figure using the following code:

C = channel sediment

M = marsh sediment

S = soil

5.2.1.1.1 Mercury. Soils in the filled section of the Wood-Ridge site and wetlands of the southern 11 acres of the site are contaminated with mercury. Soils on the Wolf and U.S. Life property are "entombed" in concrete and asphalt but had been reported at high levels as this was the original location of the plant site. Twelve of the 27 samples obtained from the 33-acre area exceed 1,000 ppm with only two of 134 analyses less than 1.0 ppm. The maximum value was 123,000 ppm (Figure 5-33).

Summarized in Figure 5-34 are mercury concentrations in soils greater than 100 ppm on the large scale map with the specific values given in Table 5-6. A total of 47 records were processed for 21 stations for Table 5-6. The maximum value (123,000 ppm) was reported by JMA 1977 in an 18 to 24-inch section of a soil core at Station 37 which is near the Wolf building on the Wood-Ridge site. Soil values greater than 100 ppm are limited to the site with the exception of three samples from the banks of small tributaries at the confluence of Berrys Creek and Peach Island Creek (#126, #132 and #130).

Only 27 records from seven sampling locations (stations 8, 26, 35, 36, 38, 40, 45 large-scale map) are available for site sediments and

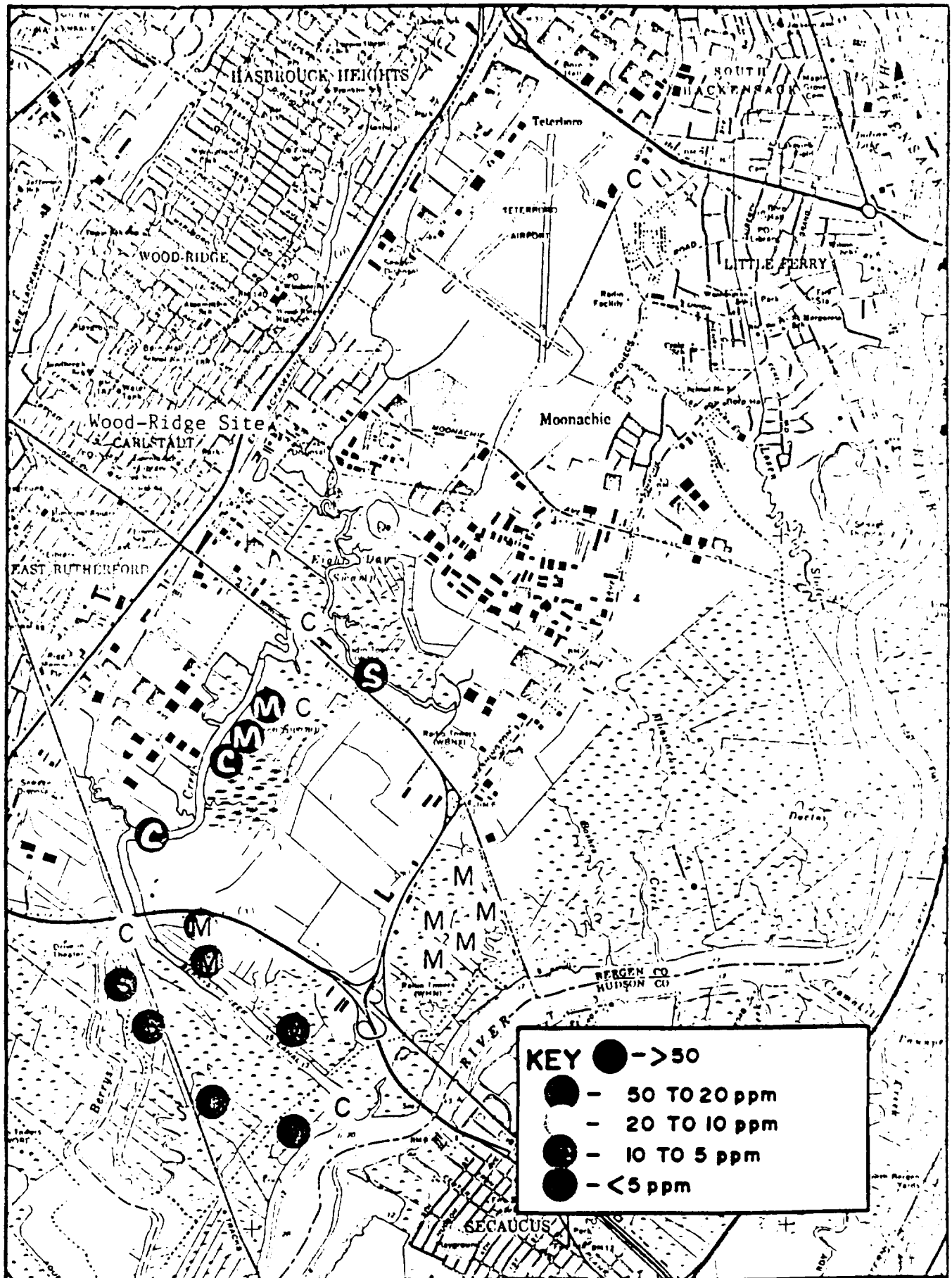

FIGURE 5-23
MEAN SOIL/SEDIMENT ARSENIC LEVEL
(LARGE SCALE MAP)

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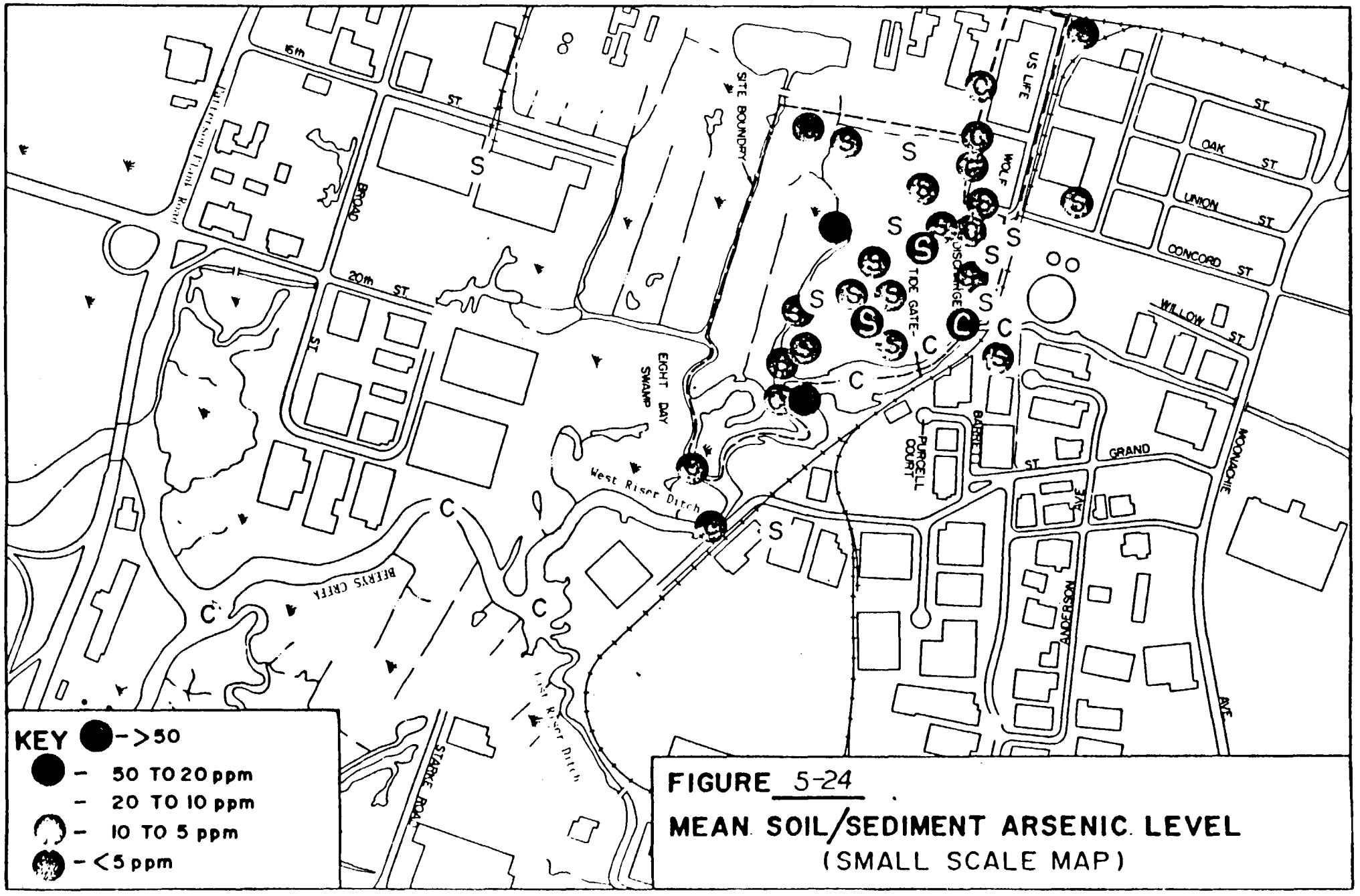

FIGURE 5-24

MEAN SOIL/SEDIMENT ARSENIC LEVEL
(SMALL SCALE MAP)

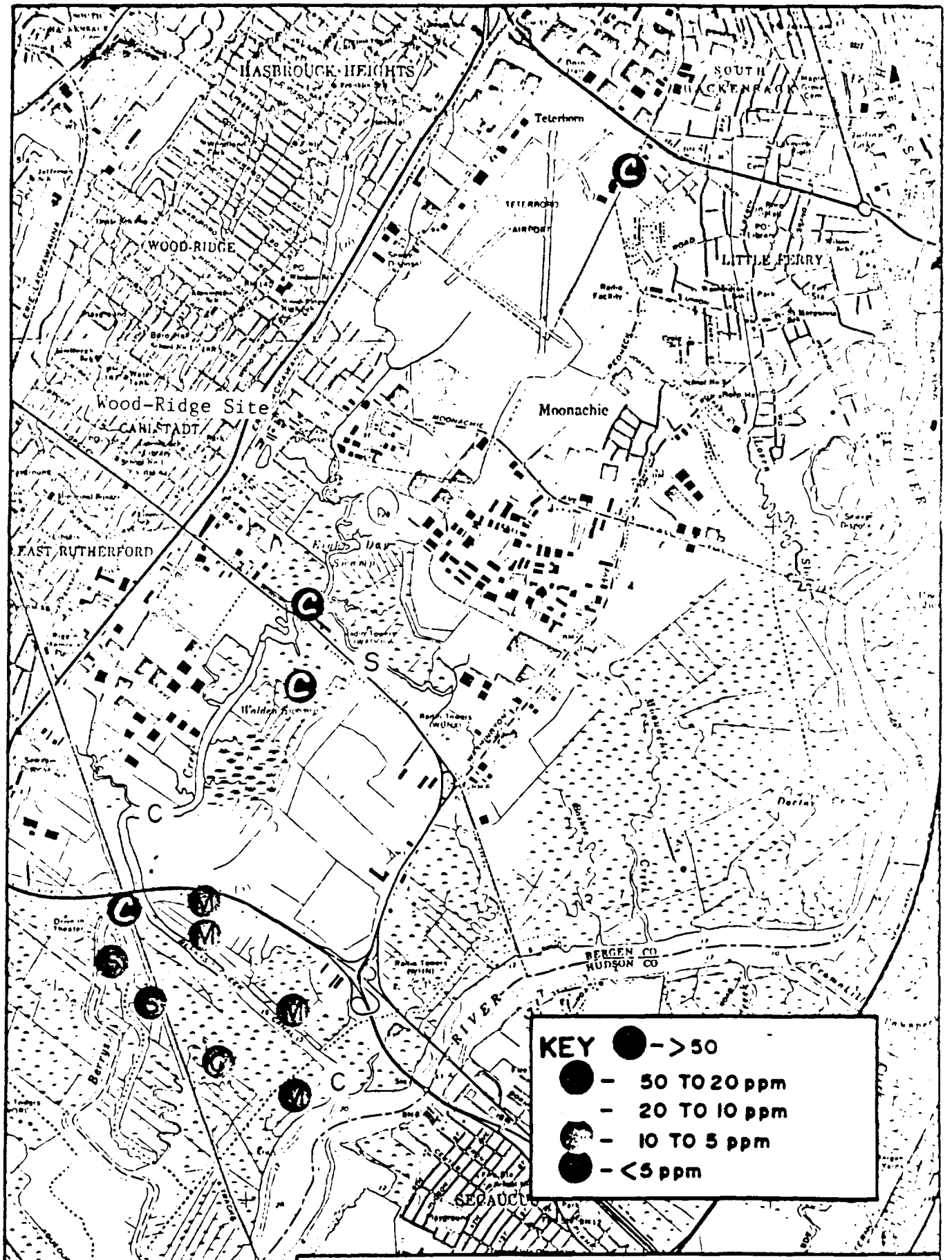

FIGURE 5-25

MEAN SOIL/SEDIMENT CADMIUM LEVEL
(LARGE SCALE MAP)

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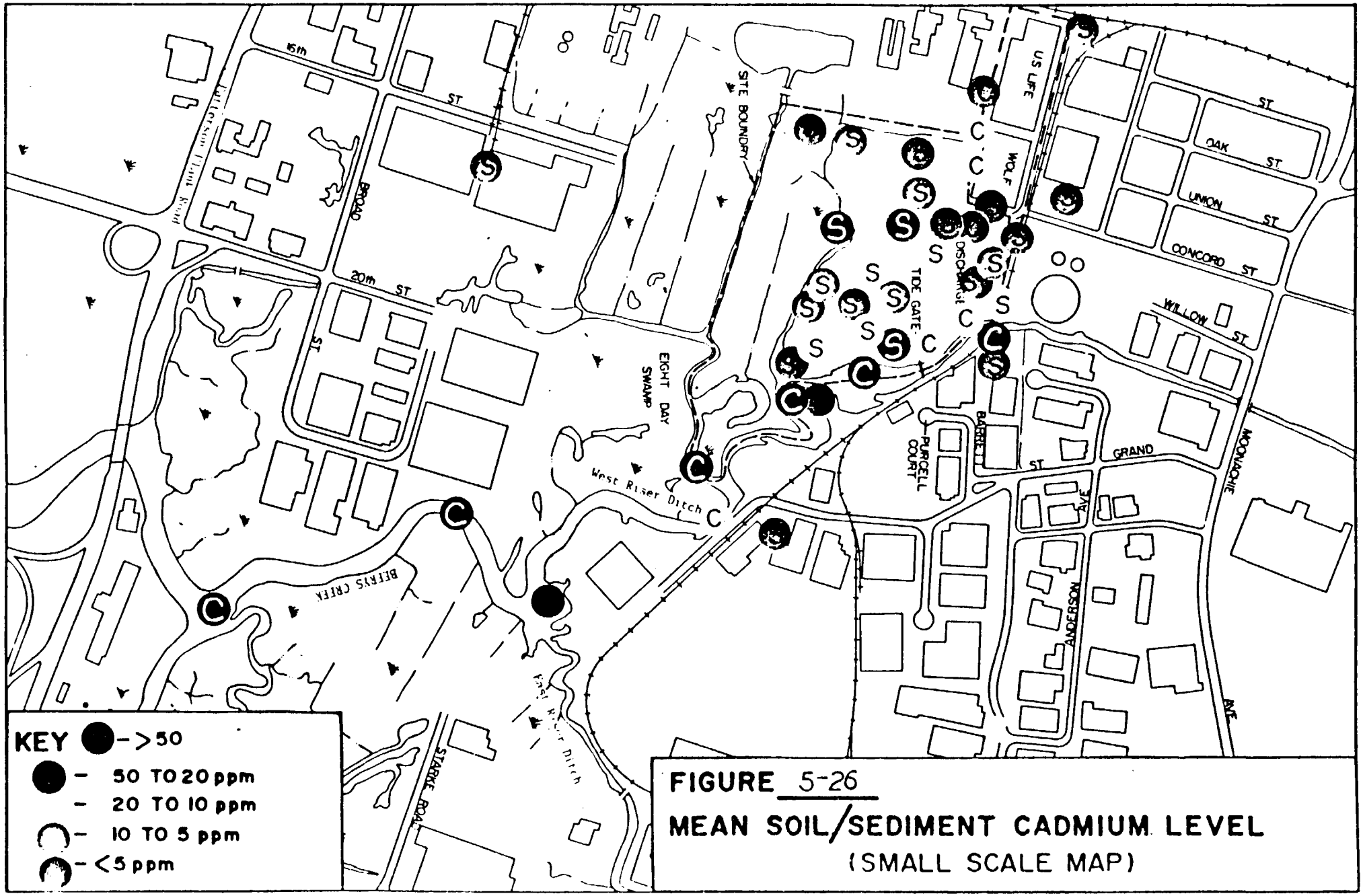

FIGURE 5-26

MEAN SOIL/SEDIMENT CADMIUM LEVEL

(SMALL SCALE MAP)

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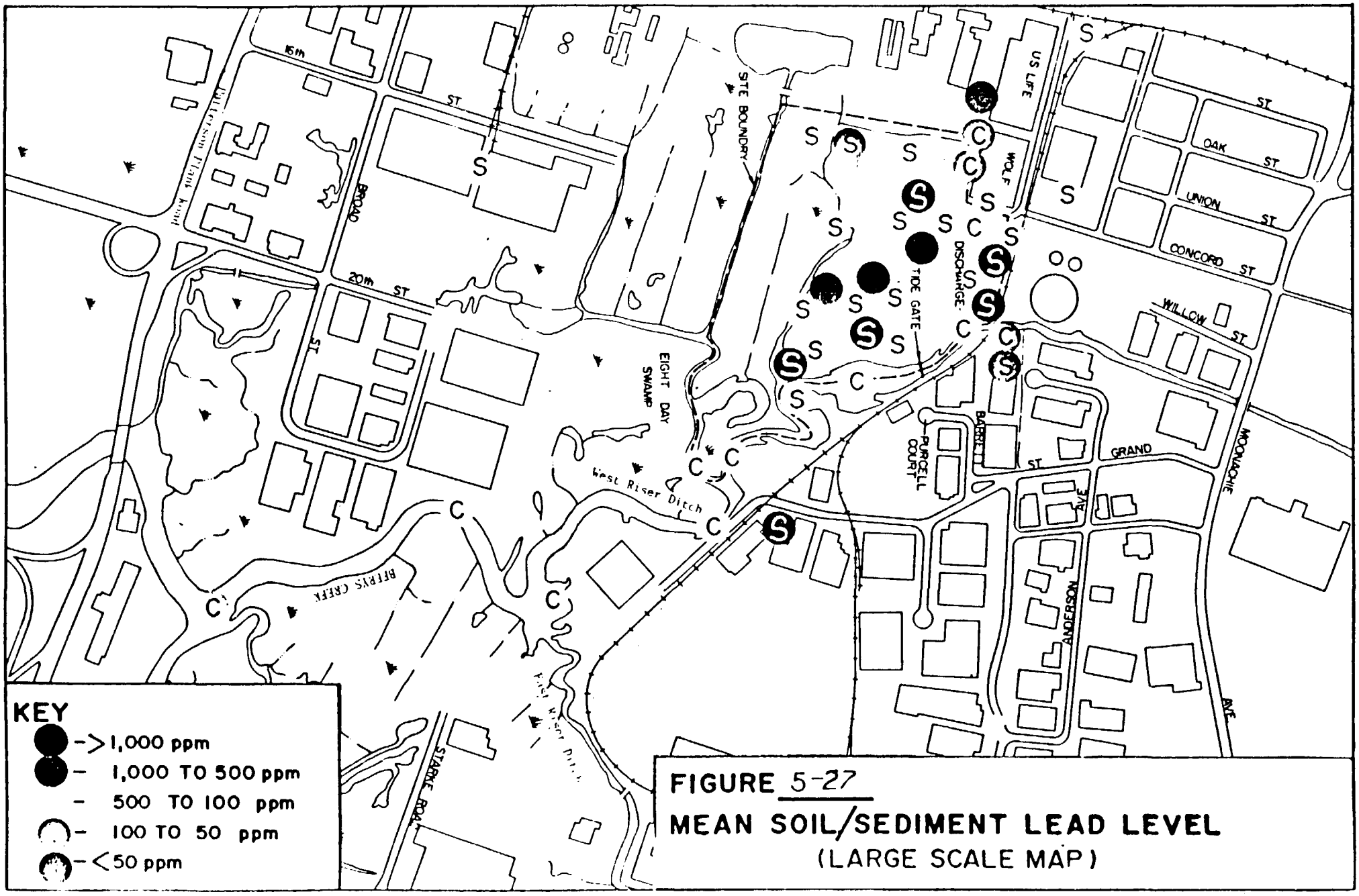

FIGURE 5-27
MEAN SOIL/SEDIMENT LEAD LEVEL
(LARGE SCALE MAP)

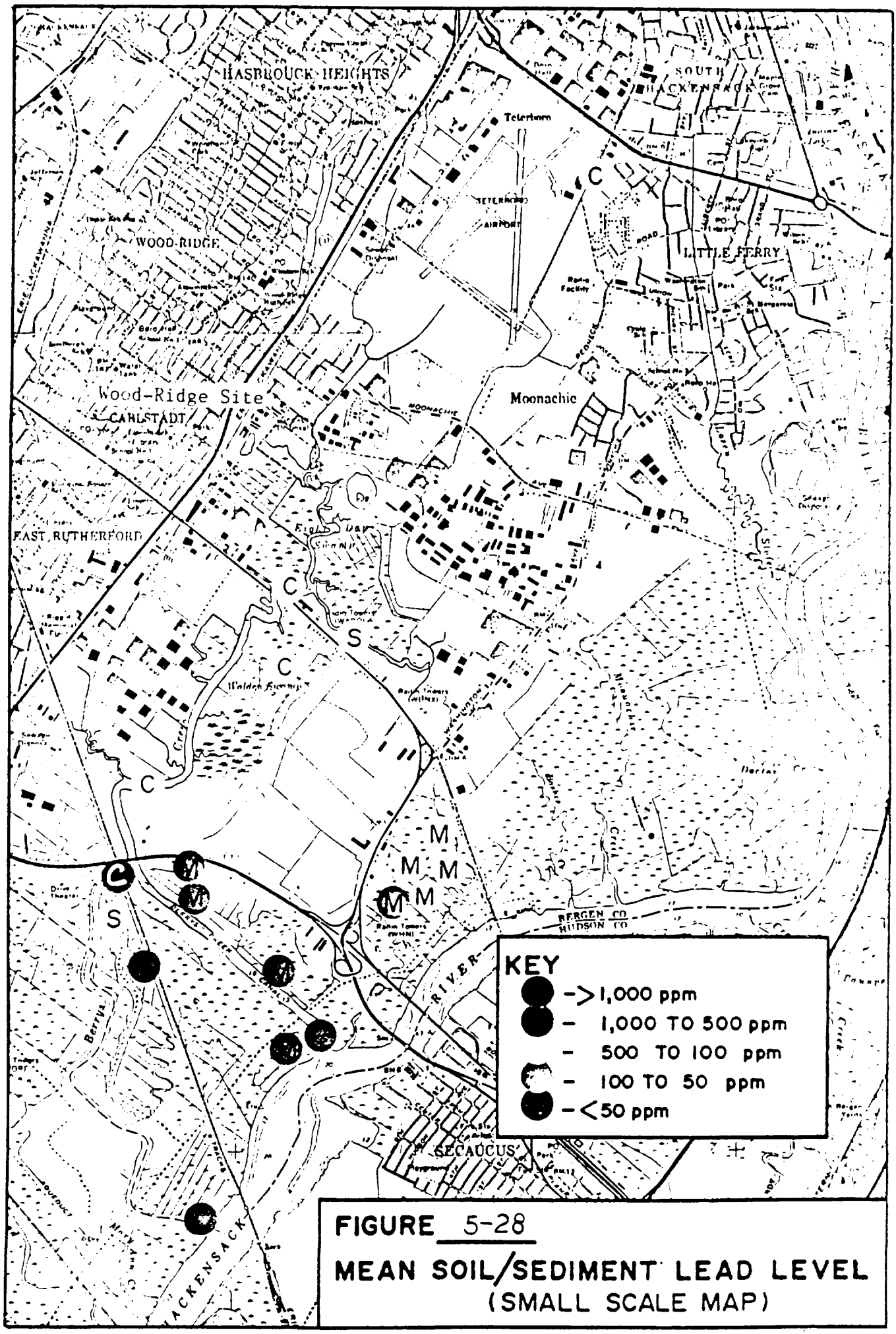

FIGURE 5-28

MEAN SOIL/SEDIMENT LEAD LEVEL
(SMALL SCALE MAP)

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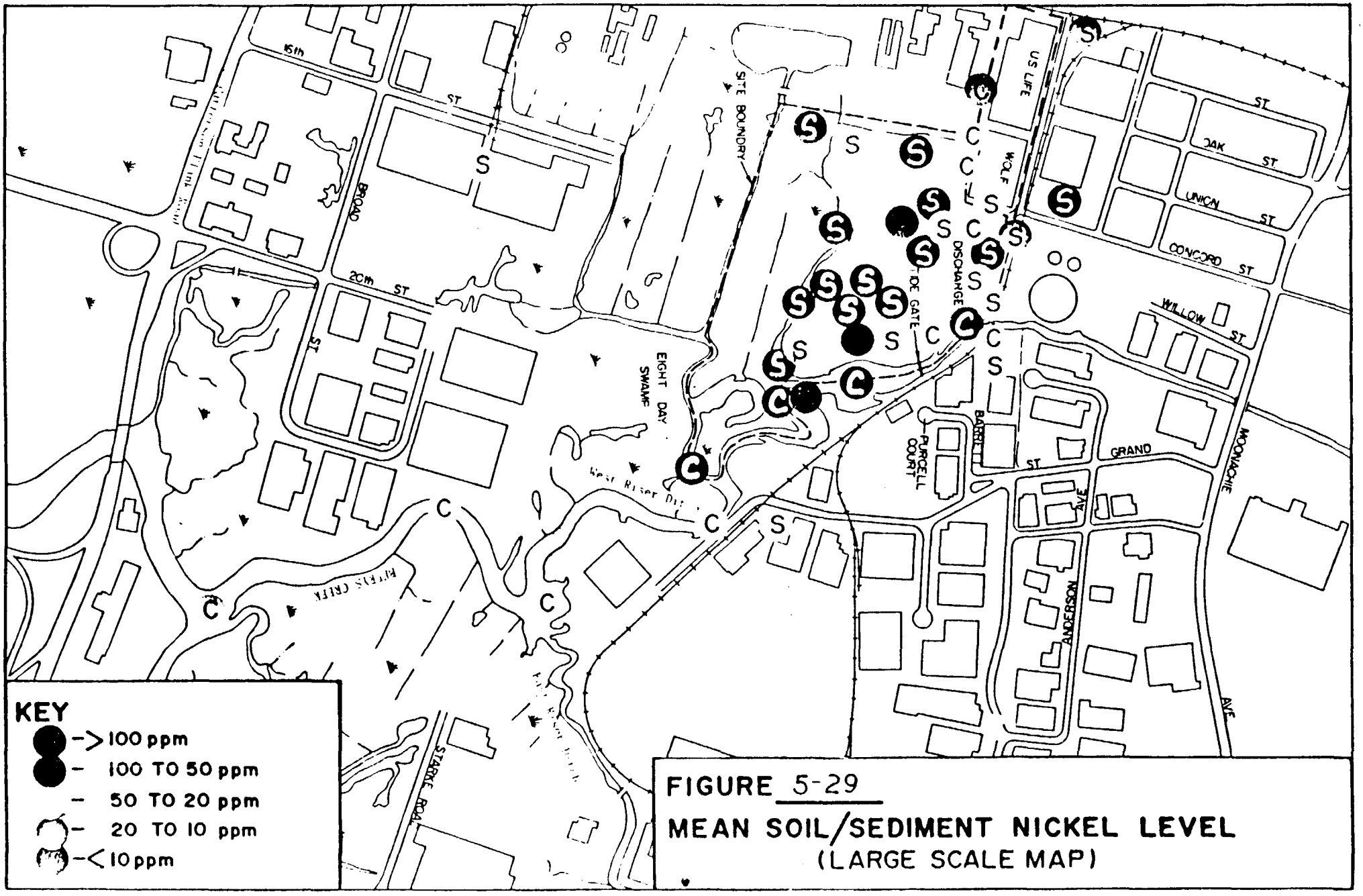

FIGURE 5-29

MEAN SOIL/SEDIMENT NICKEL LEVEL
(LARGE SCALE MAP)

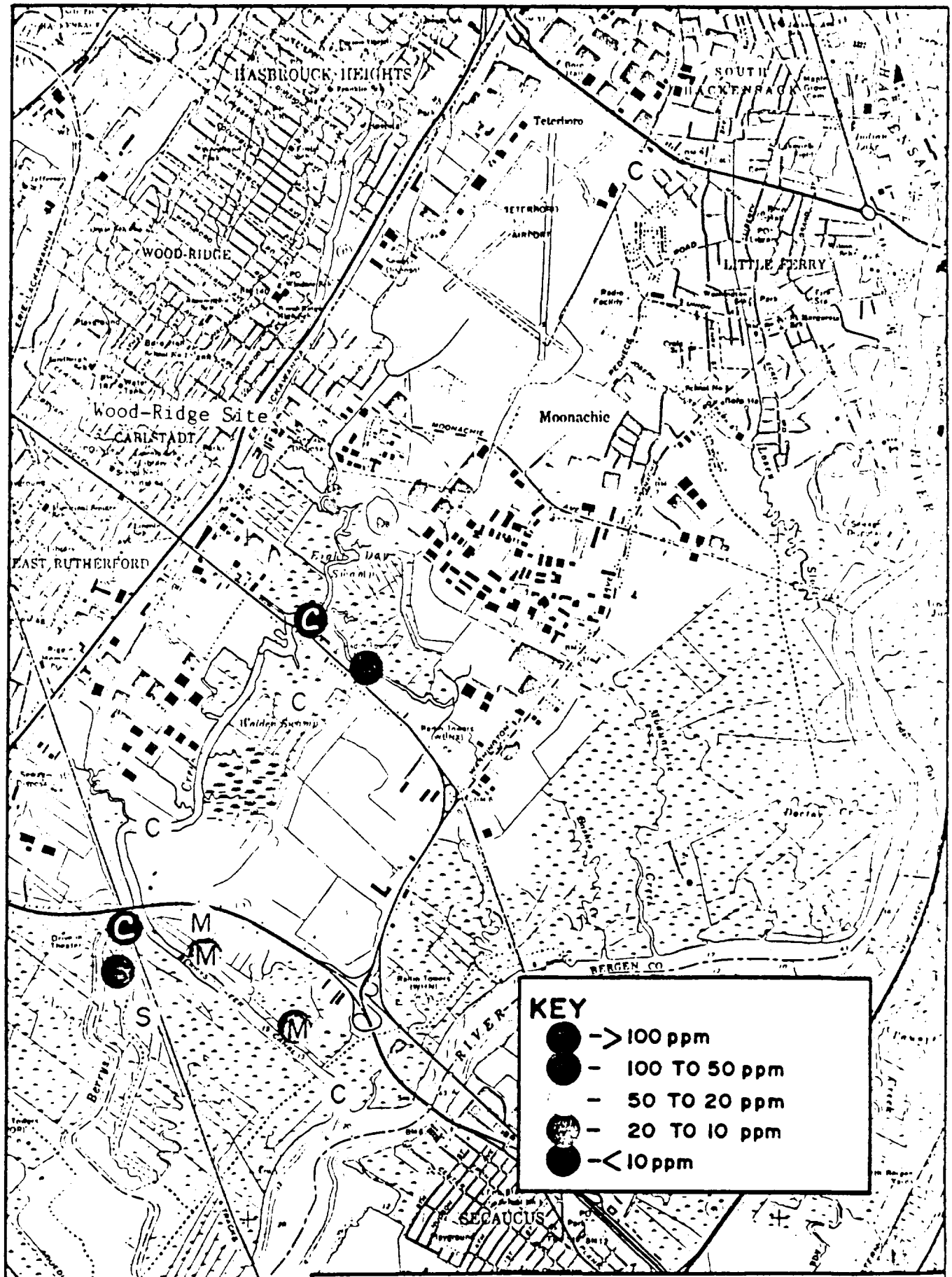

FIGURE 5-30

MEAN SOIL/SEDIMENT NICKEL LEVEL
(SMALL SCALE MAP)

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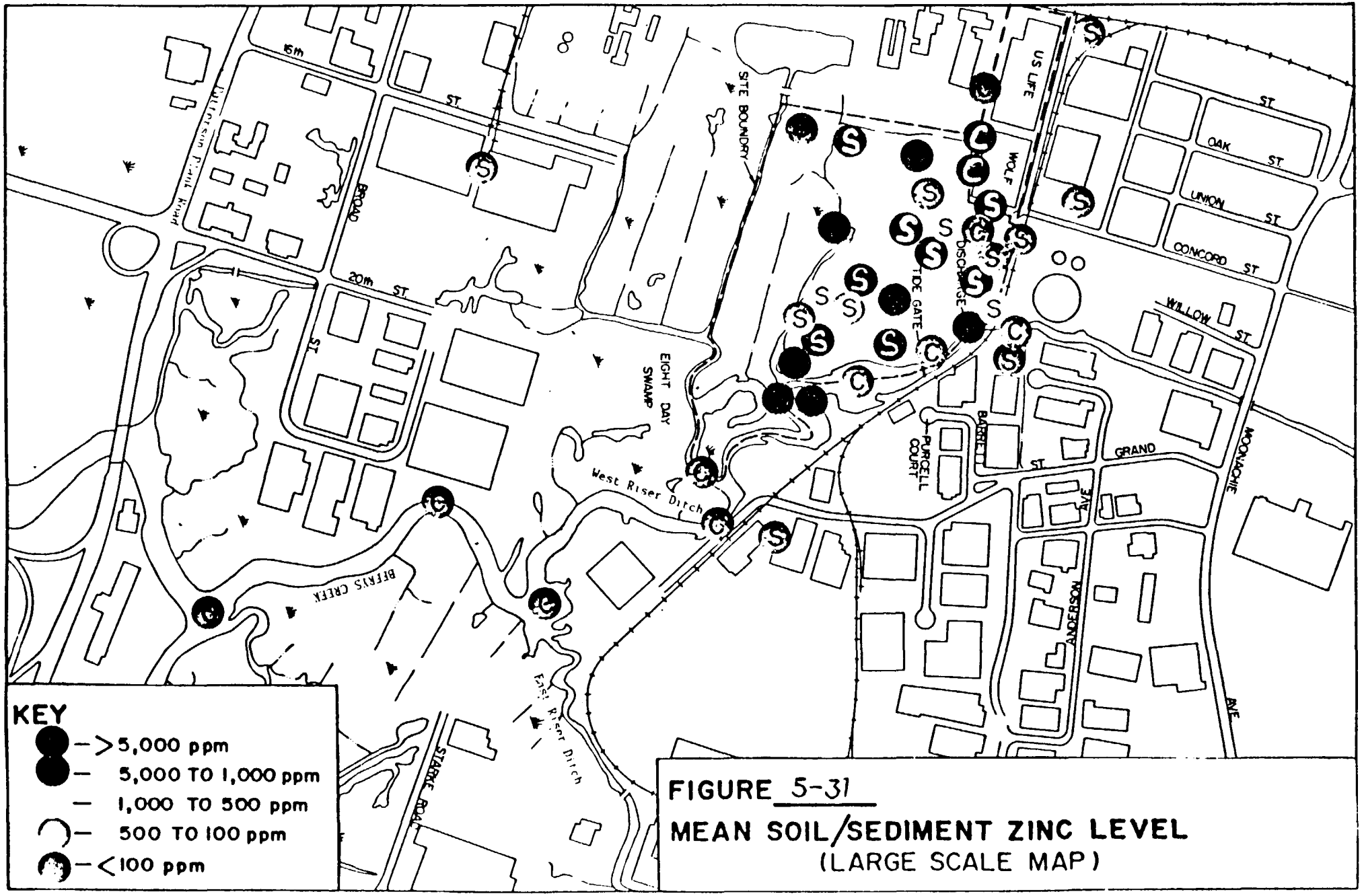

FIGURE 5-31
MEAN SOIL/SEDIMENT ZINC LEVEL
(LARGE SCALE MAP)

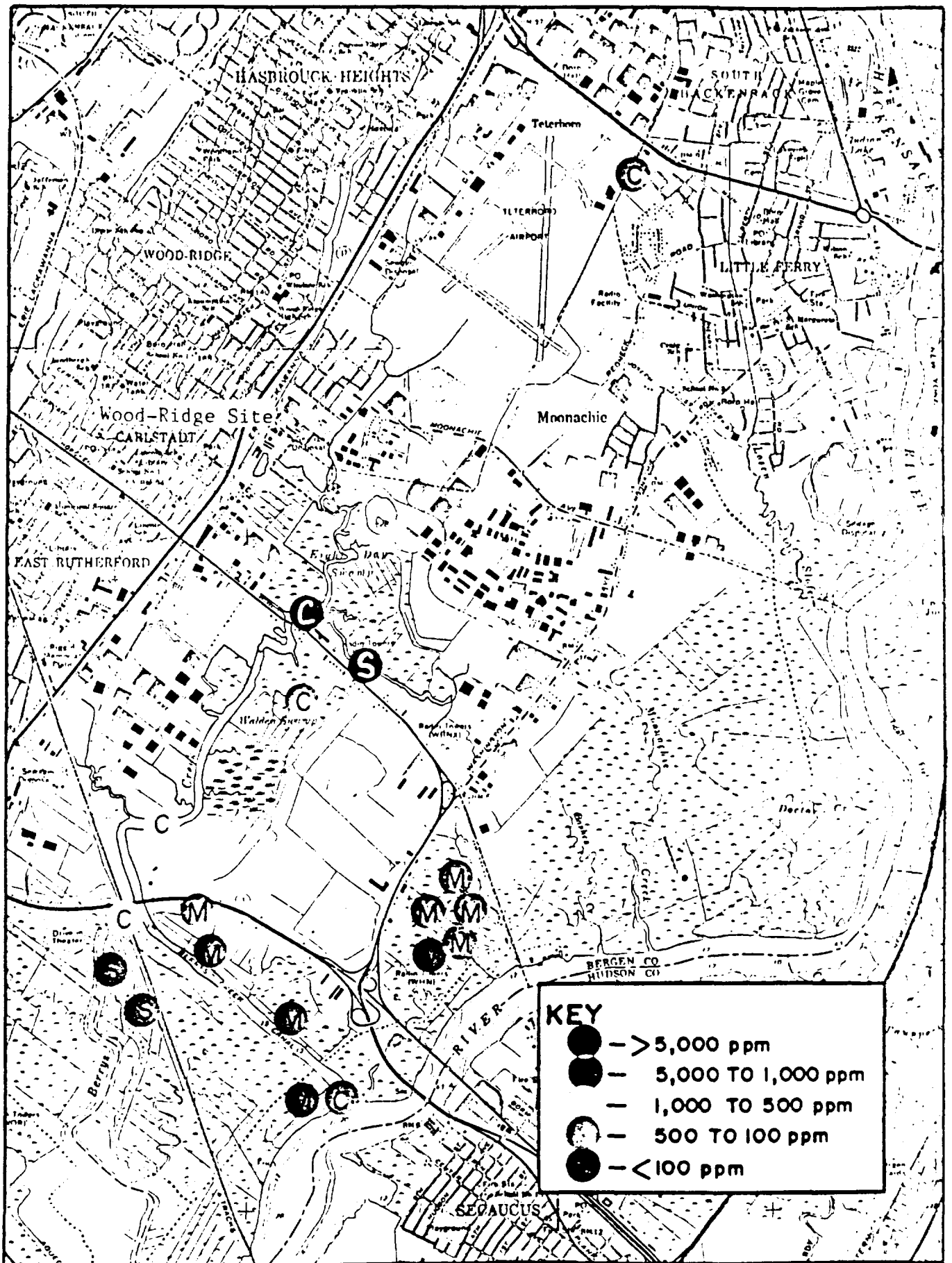

FIGURE 5-32

MEAN SOIL/SEDIMENT ZINC LEVEL
(SMALL SCALE MAP)

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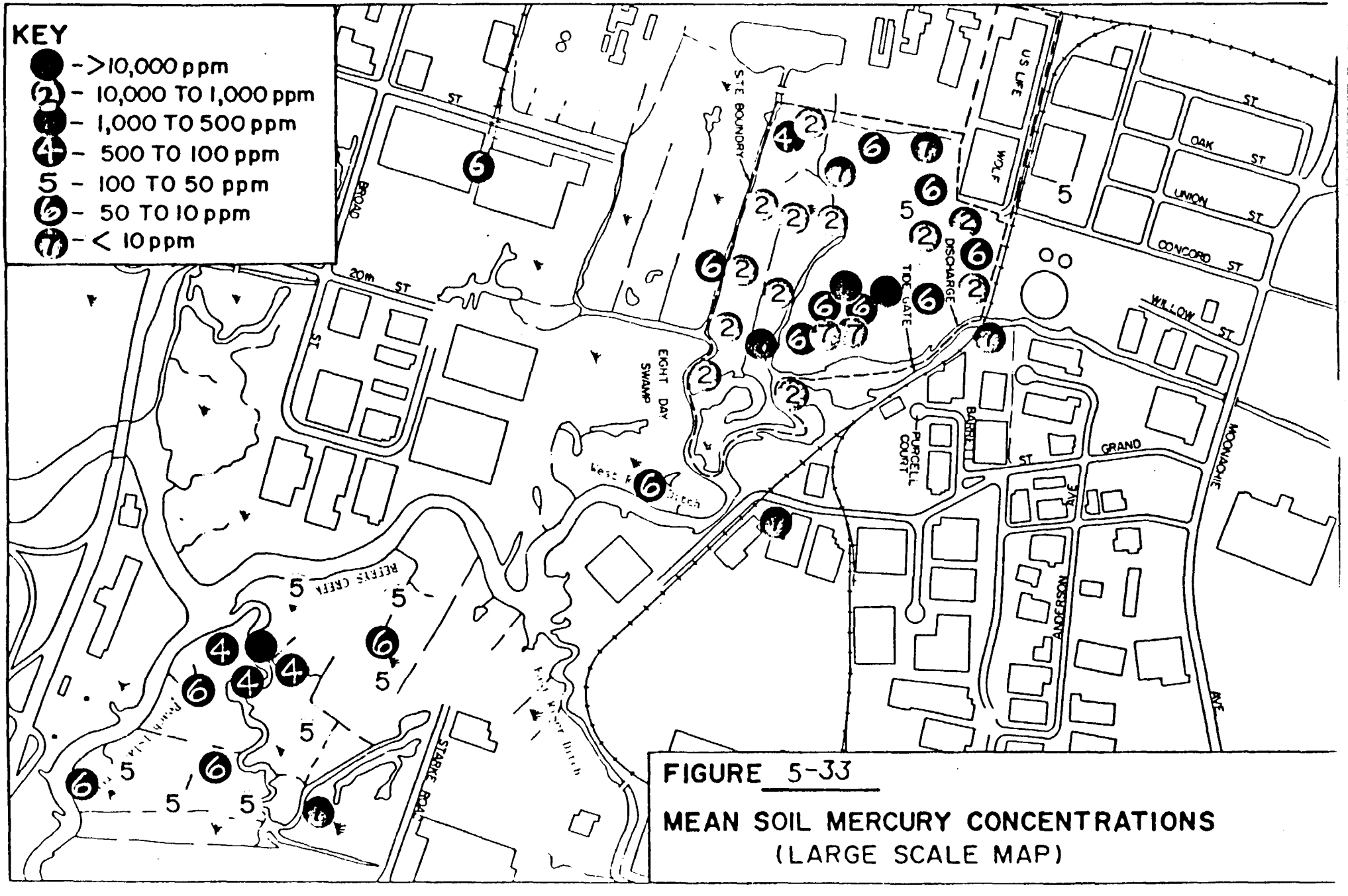

FIGURE 5-33

MEAN SOIL MERCURY CONCENTRATIONS
(LARGE SCALE MAP)

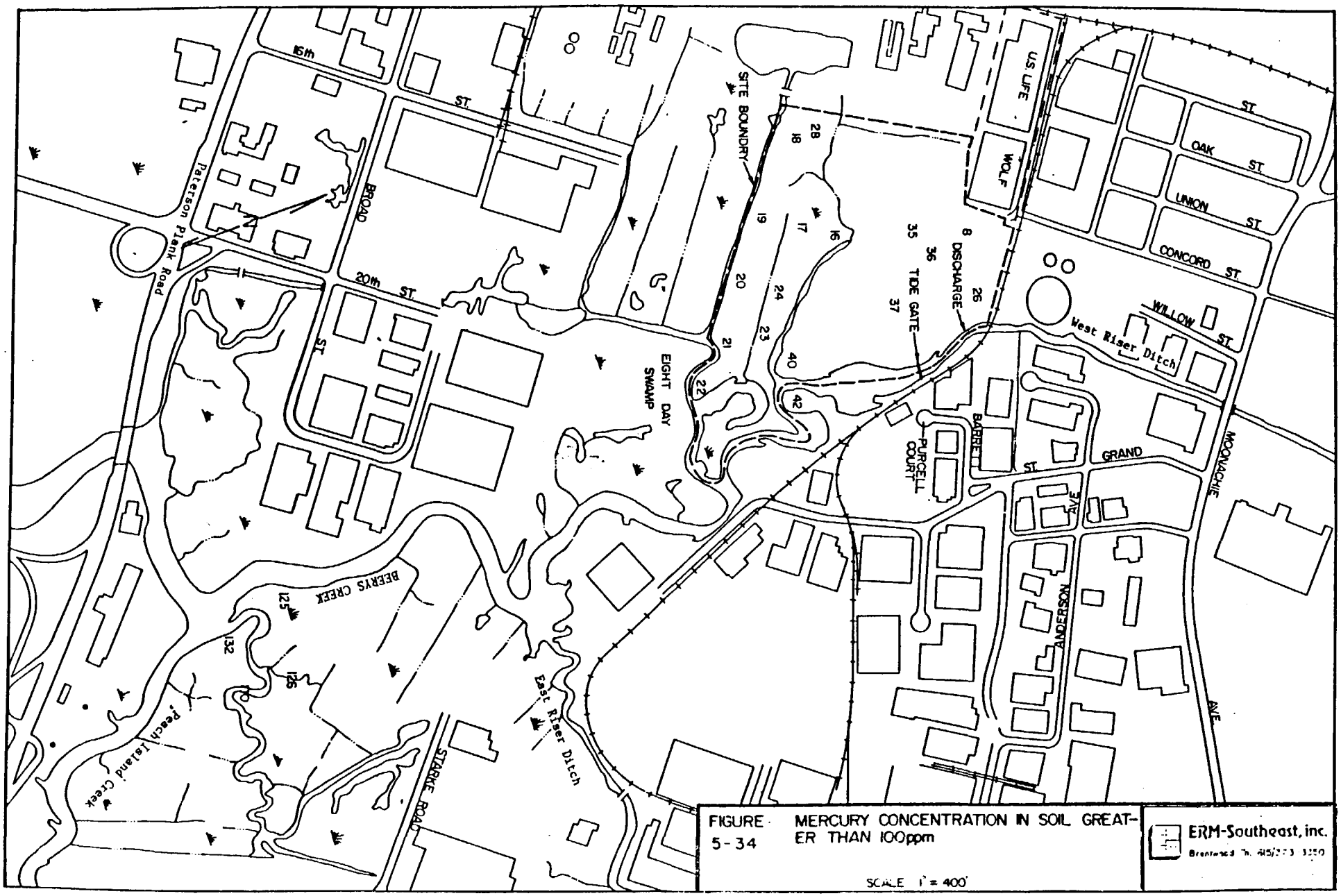

FIGURE 5-34 MERCURY CONCENTRATION IN SOIL GREATER THAN 100ppm

SCALE 1" = 400'

ERM-Southeast, inc.
Brentwood Tn. 615/373 3550

 LARGE-SCALE MAP - SOIL AND MERCURY CONCENTRATION GREATER THAN 100.0 ppm 16:09 27 SEP 1985

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2761	5	sed	Hg	882.00	ppm		6	77	0-3 inch	JMA 77
2762	5	sed	Hg	695.00	ppm		6	77	3-6inch	JMA 77
2766	6	sed	Hg	679.00	ppm		6	77	0-3inch	JMA 77
2767	6	sed	Hg	625.00	ppm		6	77	3-6inch	JMA 77
2768	6	sed	Hg	179.00	ppm		6	77	6-9inch	JMA 77
2779	8	sed	Hg	361.00	ppm		6	77	0-3inch	JMA 77
2780	8	sed	Hg	420.00	ppm		6	77	3-6inch	JMA 77
2781	8	sed	Hg	624.00	ppm		6	77	6-9inch	JMA 77
2782	8	sed	Hg	528.00	ppm		6	77	9-12inch	JMA 77
2796	9	sed	Hg	165.00	ppm		2	75	ng	JMA 77
2795	9	sed	Hg	700.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2791	9	sed	Hg	2825.00	ppm		6	77	0-3inch	JMA 77
2792	9	sed	Hg	39940.00	ppm		6	77	3-6inch	JMA 77
2793	9	sed	Hg	89162.00	ppm		6	77	6-9inch	JMA 77
2794	9	sed	Hg	66533.00	ppm		6	77	9-12inch	JMA 77
2805	10	sed	Hg	147.00	ppm		2	75	PONAR Grab	JMA 77
2804	10	sed	Hg	410.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2800	10	sed	Hg	993.00	ppm		6	77	0-3inch	JMA 77
2801	10	sed	Hg	307.00	ppm		6	77	3-6inch	JMA 77
2925	43	sed	Hg	150.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3120	44	mrsh sed	Hg	208.00	ppm			72	4-6 inch	JMA 76
2927	44	sed	Hg	420.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2926	44	sed	Hg	776.00	ppm		7	78	br.&bk.	Stop 78
2936	48	sed	Hg	110.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2934	48	sed	Total Hg	131.00	ppm		2	84	PONAR Grab	Bart 84
2939	49	sed	Hg	152.00	ppm		2	84	Lowtide 1	Weis 84
2941	49	sed	Hg	164.00	ppm		2	84	Lt 1	Weis 84
2943	49	sed	Hg	105.00	ppm		2	84	Lt 1	Weis 84
2946	49	sed	Hg	124.00	ppm		2	84	Lt 2	Weis 84
2948	49	sed	Hg	307.00	ppm		2	84	Lt 2	Weis 84
2951	49	sed	Hg	182.00	ppm		2	84	Lt 1	Weis 84
2952	49	sed	Hg	271.00	ppm		2	84	Lt 2	Weis 84
2955	49	sed	Hg	152.00	ppm		2	84	Lt 1	Weis 84
2956	49	sed	Hg	346.00	ppm		2	84	Lt 2	Weis 84
2957	49	sed	Hg	122.00	ppm		2	84	Lt 1	Weis 84
2959	49	sed	Hg	133.00	ppm		2	84	Lt 1	Weis 84
2965	49	sed	Hg	137.00	ppm		2	84	Lt 1	Weis 84
2968	49	sed	Hg	186.00	ppm		2	84	Lt 2	Weis 84
2970	49	sed	Hg	383.00	ppm		2	84	Lt 2	Weis 84
2971	49	sed	Hg	276.00	ppm		2	84	Lt 1	Weis 84
2972	49	sed	Hg	807.00	ppm		2	84	Lt 2	Weis 84
2973	49	sed	Hg	1142.00	ppm		2	84	Lt 1	Weis 84

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LARGE-SCALE MAP - SOIL AND MERCURY CONCENTRATION GREATER THAN 100.0 ppm

13:16:53 27 SEP 1985

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2974	49	sed	Hg	1392.00	ppm		2	84	Lt 2	Weis 84
2938	49	sed	Hg	570.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2937	49	sed	Total Hg	192.50	ppm		2	84	PONAR Grab	Bart 84
2977	50	sed	Hg	170.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2975	50	sed	Total Hg	576.00	ppm		2	84	PONAR Grab	Bart 84
2980	51	sed	Hg	220.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2978	51	sed	Total Hg	452.00	ppm		2	84	PONAR Grab	Bart 84
2983	54	sed	Hg	140.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2984	55	sed	Hg	171.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3176	56	sed	Hg	700.00	ppm		3	82	3-18inchinorganicH	Wood 82
3177	56	sed	Hg	1700.00	ppm		3	82	18-30inchinorganic	Wood 82
3178	56	sed	Hg	300.00	ppm		3	82	18-30inchorganic	Wood 82
2986	57	sed	Hg	370.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2987	58	sed	Hg	140.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2988	59	sed	Hg	230.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2990	60	sed	Hg	167.00	ppm		2	75	ng	JMA 77
2989	60	sed	Hg	120.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2992	60	sed	Hg	577.00	ppm		8	76	ng	JMA 77
7900	61	sed	Hg	1730.00	ppm		12	80	0-4 in	HMDC 80
2994	62	sed	Hg	140.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2995	63	sed	Hg	520.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2996	64	sed	Hg	130.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2997	65	sed	Hg	310.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3193	65	ch sed	Hg	349.26	ppm		10	81	west PONAR Grab	NJDEP 85
3194	65	ch sed	Hg	151.89	ppm		10	81	east PONAR Grab	NJDEP 85
2998	66	sed	Hg	200.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2999	67	sed	Hg	260.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3004	68	sed	Hg	490.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3005	69	sed	Hg	160.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3006	70	sed	Hg	240.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3007	71	sed	Hg	460.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3009	73	sed	Hg	120.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3010	74	sed	Hg	260.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3011	75	sed	Hg	240.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3211	76	sed	Hg	110.00	ppm		3	82	1-34inchinorganic	Wood 82
3215	76	ch sed	Hg	106.46	ppm		10	81	west PONAR Grab	NJDEP 85
3013	77	sed	Hg	350.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3016	80	sed	Hg	130.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3018	82	sed	Hg	320.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3019	83	sed	Hg	220.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3021	83	sed	Hg	4480.00	ppm		8	76	ng	JMA 77
3023	85	sed	Hg	150.00	ppm		4	80	top corePONAR Grab	Aw 80

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LARGE-SCALE MAP - SOIL AND MERCURY CONCENTRATION GREATER THAN 100.0 ppm

13:17:28 27 SEP 1985

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3222	85	ch sed	Hg	116.07	ppm		10	81	east PONAR Grab	NJDEP 85
3223	85	ch sed	Hg	118.47	ppm		10	81	center PONAR Grab	NJDEP 85
3027	87	sed	Hg	280.00	ppm		4	80	T.core PONAR Grab	Aw 80
3028	87	sed	Hg	280.00	ppm		4	80	center core PONAR	Aw 80
3228	88	sed	Hg	110.00	ppm		3	82	1-26inchinorganic	Wood 82
3234	90	ch sed	Hg	288.89	ppm		10	81	center PONAR Grab	NJDEP 85
3239	96	ch sed	Hg	108.33	ppm		10	81	center PONAR Grab	NJDEP 85
3240	96	ch sed	Hg	121.28	ppm		10	81	east PONAR Grab	NJDEP 85
3244	119	ch sed	Hg	128.47	ppm		10	81	west PONAR Grab	NJDEP 85
3246	119	ch sed	Hg	275.27	ppm		10	81	center PONAR Grab	NJDEP 85
3267	126	ch sed	Hg	128.00	ppm		9	83	composite	Crow 84
3271	129	ch sed	Hg	331.00	ppm		9	83	composite	Crow 84

96 Records Processed

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five of these records are reported on a wet weight basis and are thus not comparable with the majority of the data. The mean dry weight concentration at these points ranged from 5.5 ppm (station 26) to 483 ppm (station 8). The variation in mercury concentration with depth is only available at two stations: numbers 8 and 26. At station 8, the mercury concentration increases from 361 ppm (0.3 inches) to 420 ppm (3-6 inches) to 624 ppm (6-9 inches) before decreasing slightly to 528 ppm (9-12 inches). At station 26, the mercury concentration ranges from 19 ppm (0-2 inches) to 0 ppm (2-4 inches) to 7.4 ppm (4-6 inches). Sufficient data are not available to make any conclusions regarding the variation in mercury concentration with depth.

5.2.1.1.2 Arsenic. On-site soil and sediment concentrations ranged between 3.7 and 65.5 ppm for all sampling sites (averaged for each site) while single sample values ranged from 0.6 to 146 ppm. The mean arsenic concentration for all sampling sites (uncorrected for differences in sample depth) is 16.0 $\pm$ 17.2 ppm for 22 soil and three sediment sampling sites.

The mean on-site value is higher than the mean value, 6.27 ppm, measured in Ontario soils. The on-site range, however, is quite similar to the 1.1-126 ppm range measured in Ontario soils. The standard deviations of 17.2 is much larger than the 2.67 standard deviation noted for Ontario soils.

5.2.1.1.3 Cadmium. On-site soil and sediment concentrations ranged between 75 and 1.1 ppm for all sampling sites (averaged for each site) while single sample values ranged from 120 to 0.0. The mean cadmium concentration for sampling sites (uncorrected for differences in

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sample depth) is 13.0 ± 16.1 ppm for 22 soil and three sediment sampling sites.

The mean value, 13.0 ppm, is higher than the mean value 2.2 ppm measured in model New Jersey soils. The range of values measured is much greater, especially on the high side than the range for typical New Jersey soils. The 16.1 ppm standard deviation is also much greater than the standard deviation for model New Jersey soils even when the difference in mean values is considered.

5.2.1.1.4 Nickel. On-site soil and sediment concentrations range between 11.4 and 175 ppm for all sampling sites (averaged values) while single sample values ranged from 6.0 to 362 ppm. The mean nickel concentration for sampling sites (uncorrected for differences in sample depth) is 63.1 ± 36.0 ppm for 22 soil and three sediment sampling sites.

The mean value, 63.1 ppm is somewhat greater than the 37.2 ppm mean measured in the model New Jersey soils. The range of measured values is somewhat greater than the 11.1 to 86.5 ppm range observed in model New Jersey soils. Also, the 36.0 ppm standard deviation exceeds the deviation of the model soils.

5.2.1.1.5 Lead. On-site soil and sediment concentrations range between 45.2 and 4,657 ppm for all sampling sites (averaged values) while single sample values ranged from 6.0 to 14,300 ppm. The mean lead concentration for sampling sites (uncorrected for differences in sample depth) is 685 ± 1,030 ppm for 22 soil and three sediment sites.

The mean value, 685 ppm is very much greater than the 22.4 ppm mean value for model New Jersey soils. The 1,030 ppm standard deviation is only slightly larger than the standard deviation of the model soils when

the large difference in the means is considered. The range of lead concentrations very greatly exceeds the range of lead concentrations measured in the model soils. In fact, 65 of 107 samples exceed the maximum value, 180 ppm measured in the model New Jersey soils.

5.2.1.1.6 Zinc. On-site soil and sediment concentrations range between 108 and 27,000 ppm for all sampling sites (averaged values) while single sample values ranged from 28 and 28,800 ppm. The mean zinc concentration for sampling sites (uncorrected for differences in sample depth) is 3,200 ± 5,480 ppm for 22 soil and three sediment sampling sites.

The mean value. 3.200 ppm is very much greater than the mean value. 53.3 ppm measured in model New Jersey soils. The 5.480 ppm standard deviation is larger than the 30.0 ppm standard deviation calculated for the model soil even if the large difference between the means is taken into account. The range of zinc values measured on-site is much larger than the range measured in the model soils; with 91 of the 111 samples analyzed exceeding the maximum value measured in the model soils.

5.2.1.1.7 Organic Contaminants. No organic compounds were analyzed for in-site soils or sediment.

5.2.1.2 Surface Water. Surface water contaminants on-site were reported from two reports; JMA 1977 and AWARE 1979. AWARE reported three analyses at one station while JMA reported 120 analyses of six metals. For the JMA data mean values were calculated and reported herein for the three to 11 analyses reported of each metal per station (unfiltered) in a one-day period.

5.2.1.2.1 Mercury. A total of nine stations were sampled on the site reporting 11 analyses. Only one sample reported a filtered

value at 0.6 ppb. Unfiltered samples (JMA 1977 means) ranged from 0.5 ppb to 35.6 ppb.

5.2.1.2.2 Arsenic. JMA collected surface water samples on or adjacent to the 40-acre site. They collected and analyzed a total of 120 samples, five of these exceeded the detection limit, the remaining 115 did not. Concentrations ranged from <10 to 38 ppb.

5.2.1.2.3 Cadmium. JMA analyzed a total of 120 samples for cadmium; of these 26 had detectable levels of cadmium. These samples were collected in storm water ditches on or adjacent to the 40-acre site. It should be noted that 95 of these samples had a detection limit of 50 ppb. This limit is quite high relative to the concentrations of cadmium measured and may be a contributing factor in the high number of non-detections. No sample with the 50 ppb detection limit contained a detectable amount of cadmium, however, cadmium was detected in 23 of 25 samples with a detection limit of 3 ppb or less. The range of cadmium values is 0.6 to 20 ppb for individual sample and 1.2 to 13.5 ppb for the average value at sampling sites.

5.2.1.2.4 Lead. JMA collected and analyzed a total of 120 samples for lead. Of these only 14 samples had detectable levels of lead and 13 of these were from a single site. It should, however, be noted that 95 samples had a detection limit of 500 ppb and only one sample exceeded the 500 ppb detection limit. Lead values ranged from <10 to 800 ppb. The 800 ppb value is almost ten times higher than the next highest number. A 10 ppb detection limit was not exceeded at three sample sites. However, at a fourth site, 13 samples were collected and averaged 35.8 $\pm$ 25.3 ppb. Lead was detected in each of the 13 samples.

5.2.1.2.5 Nickel. JMA analyzed 120 samples for Ni. The sampling sites were located on or adjacent to the 40-acre site. Ten of the 120 samples had detectable levels of Ni. All ten samples were collected from a single sampling site over a 12-hour period. However, it must be noted that of the 95 samples with a 200 ppb detection limit and the 12 samples with a 100 ppb detection limit all values were less than the detection limit. Ten of 13 samples at a single sampling site had Ni concentrations reported as greater than the 0.1 ppb detection limit. The mean concentrations at this site is 10.1 $\pm$ 6.9 ppb. The range being <0.1 to 20 ppb.

5.2.1.2.6 Zinc. 120 samples collected from 13 sites were analyzed by JMA for zinc. These samples were collected on or adjacent to the 40-acre site. The range for sample sites is 29.2 to 228 ppb. with a mean of 121 $\pm$ 55.2 ppb. Individual samples ranged from 20 to 1,500 ppb. with a mean of 120 $\pm$ 142 ppb. The 1,500 ppb is 6.5 times the next highest value.

5.2.1.2.7 Organic contaminants. No organic contaminants are reported in surface water on the site.

5.2.1.3 Mercury in Air. Two air surveys were conducted for analysis of mercury, both during 1978. During July, 1978, Dr. W. Stopford collected air samples from 19 stations while EPA collected 8, 12, and 24-hour samples from two stations and 24-hour samples from one other station. The various EPA mercury values represent different days during August 1978. None of the stations were similar between surveys. Mercury was detected at concentrations greater than 1.0 ug/m^3 at ten of the 19 stations tested by EPA. A maximum concentration of 54 ug/m^3 was detected by Stopford who utilized Hopcalite (an absorbent) in his

sampling method. Stopford detected mercury at 35 ug/m^3 utilizing the "vapor" method, however, the probe was inserted in a barrel which apparently contained waste material including mercury. The major areas of contamination were within the central and northern areas of the Wood-Ridge site boundary. In addition, there were three points of mercury air contamination found on the U.S. Life and Wolf properties. These concentrations ranged from 0.38 ug/m^3 to 4.03 ug/m^3.

5.2.1.4 Ground Water. A total of ten wells have been sampled for metals. on the 40-acre site. All samples were collected and analyzed by JMA. Two wells are located on the Wolf property while the remaining eight wells are located on the 33-acre site.

Samples have been collected under several different conditions. On June 2, 1977 samples were collected from the top and bottom of the screened aquifer. These samples were analyzed unfiltered. All ten wells were analyzed for Hg, As, Cd, Pb, Ni and Zn. On June 6, 1977 samples were collected at high and low tide. These samples were analyzed unfiltered. Samples from all wells except 7 and 115 were analyzed for Hg, As, Cd, Pb, Ni and Zn. On July 13, 1977 filtered samples were analyzed. These samples were collected at high and low tide and analyzed for the above metals.

5.2.1.4.1 Mercury. The test data indicates several areas in which mercury contamination exists in the ground water. High levels of mercury were found on the northwest corner of the Wood-Ridge site boundary. The values range from 0.00 ppb to a high of 3,770 ppb (unfiltered samples) and are located adjacent to the Wolf properties on the eastern side. Mercury was detected in two of the ten wells from filtered samples, both of which are located on the Wolf site ranging

from 0.8 ppb to 8.8 ppb. The southwestern and eastern areas within the Wood-Ridge site boundary showed lower concentrations of mercury.

A total of 52 records are reported for ten ground-water stations by JMA in 1977. All sampling was conducted in June and July 1977. Both filtered and unfiltered samples were collected at both high and low tide, as well as unfiltered at the top (T) and bottom (B) of the water column in the well. Mercury was detected in all unfiltered samples with the exception of the high tide sample at Station 114. Station 114 and 112 were lowest in mercury while Station 116 (well 5) had the highest unfiltered mercury value with 3,770.0 ppb detected in the bottom sample. Typically (80%) the mercury values were greater during low tide versus high tide samples for unfiltered samples. Mercury was detected in filtered samples at Stations 115 and 7 at both high and low tide. however, higher concentrations were detected during high tide sampling. The single sampling event does not permit analysis of trends in the ground-water data.

The condition of the ground-water sampling wells were inspected by ERM personnel June 12, 1985. The eight wells constructed in June 1977 on the 33-acre Wood-Ridge site, were not found after an intensive effort to locate these wells. One of the three wells constructed by EPA on the 7-acre portion of the site (Wolf property) was located. This was the well that was originally designated WS and is south of the Wolf warehouse. This 4-inch diameter PVC well is in good condition and has a screw cap but was not locked. This well is station 7 on Figure 5-2. The other well outside the Wolf building (WE) is apparently destroyed. A third well on the Wolf property was originally constructed inside the warehouse. All attempts to contact responsible parties for information

concerning the existence and operation of a well established inside the Wolf building at the same time as the WS and WE wells failed to produce any meaningful information.

5.2.1.4.2 Arsenic. Arsenic was detected in several of the wells on unfiltered samples. However, arsenic was not detected in any samples that had been filtered. Due to the large number of less than 10 ppb reported, 25 of 36 values, for unfiltered samples no statistical calculations can be performed.

Two wells, 115 and 116, had arsenic values consistently above the detection limit. The mean value at well 115 was 71 ppb and the mean value at well 116 was 20 ppb. No other wells consistently exceed detection limits.

None of the filtered samples exceeded the 20 ppb detection limit.

5.2.1.4.3 Cadmium. Due to the use of flame AA the detection limit for cadmium in unfiltered samples was 50 ppb. No unfiltered samples exceeded this detection limit. Thirty-six samples were reported as below this 50 ppb value.

The detection limit for filtered samples was 3 ppb as GF/AA was used as the analytical method. Twelve of 20 samples were reported below the 3 ppb detection limit ranging from 3.0 to 13.0 ppb.

5.2.1.4.4 Lead. The unfiltered lead analyses had a 500 ppb detection limit. Only samples collected at well 116 are reported as exceeding this value. Three of four measurements at 116 exceeded the detection limit. These values are 1,400; 1,000 and 3,000 ppb. None of the 20 filtered samples exceeded the 10 ppb detection limit.

5.2.1.4.5 Nickel. None of the 36 unfiltered samples exceeded the 200 ppb detection limit established for nickel using flame AA. None

of the 20 filtered samples exceeded the 100 ppb detection limit established for nickel using GF/AA.

5.2.1.4.6 Zinc. The 36 unfiltered zinc samples ranged from 20 to 25,200 ppb with a mean and standard deviation of 2,610 ± 6,570 ppm. This mean value exceeds the background level of zinc found in this area.

The 20 filtered zinc samples ranged from 20 to 4,700 ppb with a mean and standard deviation of 470 ± 1,170. It is likely this mean also exceeds the background level for zinc in area ground water.

5.2.1.4.7 Organic Contaminants. No organic contaminants were analyzed in ground-water samples.

5.2.3 Off-Site Soils

Limited data exists defining metal contaminants, in addition to mercury, for off-site soils in the Berrys Creek area (Eight Day Swamp). The metals analyzed included Hg (14), As (9), Ba (1), Cd (9), Cr (3), Cu (3), Fe (2), Pb (9), Ni (9), Se (1), Ag (1) and Zn (8), where the number in parenthesis is the number of sample sites analyzed for the particular metal. (Soil concentrations discussed are not corrected for differences in sample depth or number of samples analyzed at an individual sampling site. Soil values were averaged for each sample site for this discussion.)

5.2.3.1 Mercury. Off-site soil values ranged from 0.0 ppm south of Route 3 bridge to 75.0 ppm across the street north of the original plant site. The average value for 22 analyses was 15.6 ppm. These values clearly exceed those given in Table 5-5, however, aerial fallout,

dust and other factors may have played a role in transporting mercury from the site.

5.2.3.2 Arsenic. Off-site soil concentrations range from 2.09 and 96.5 ppm between sampling sites and 0.5 to 148 ppm for a single sample from a sampling site. The mean arsenic concentration for individual sample sites is 17.6 ± 26.0 ppm for 15 soil sample sites.

The mean value is higher than the 6.27 ppm mean value measured in Ontario soils. However, the 0.5 to 148 ppm range is quite similar to the range measured in the Ontario soils. The standard deviation of 26.0 is much larger than the standard deviation calculated for Ontario soils.

5.2.3.3 Cadmium. Off-site soil concentrations range from 0.5 and 51 ppm between sampling sites and 0.3 to 71 ppm for a single sample from a sampling site. The mean cadmium concentration for individual sample sites is 7.2 ± 14.7 ppm.

The mean value is considerably higher than the 2.2 ppm mean measured in model New Jersey soils. The 14.7 ppm standard deviation is very much larger than the 0.58 ppm standard deviation calculated for model New Jersey soils. The range of cadmium concentration in off-site soils is similar to the range observed in New Jersey soils at low concentrations but much higher than observed at high concentrations.

5.2.3.4 Nickel. Off-site soil concentrations range from 9.8 and 700 ppm between sampling sites and 8 and 700 ppm for a single sample from a sampling site. The mean nickel concentration for individual sample sites is 106 ± 209 ppm.

The mean value and standard deviation are much higher than the 37.4 ± 16.1 ppm measured in model New Jersey soils. The range while similar

for low concentrations is much higher for off-site soils at high concentrations (i.e., 700 [off-site high] vs. 86.5 [model NJ high]).

5.2.3.5 Lead. Off-site soil concentrations range from 37 and 1,470 ppm between sampling sites and 5 to 1,470 ppm for a single sample from a sampling site. The mean lead concentration for individual sample sites is 326 ± 406 ppm.

The mean value and standard deviation for off-site soils are much higher than the 22.0 ± 25.0 reported for model New Jersey soils. The range for off-site soils is considerably higher for high concentrations than measured for model New Jersey soils.

5.2.3.6 Zinc. Off-site soil concentrations range from 31.7 to 7,478 ppm between sampling sites and 19 to 10.670 ppm for a single sample from a sampling site. The mean zinc concentration for individual sample sites is 924 ± 2,168.

The mean value and standard deviation are very much higher than the 53.1 ± 30.0 reported for model soils in New Jersey. The range of values measured in off-site soils while similar at low concentrations is much higher at high concentrations than 168 ppm maximum value reported for model New Jersey soils.

5.2.3.7 Chromium. Nine off-site soil samples were analyzed for chromium. The mean value was 240 ± 340. The range of values is 23.3 to 950 ppm for specific sample sites and 9 to 950 ppm for a single sample from a sampling site. The mean and standard deviation are both larger than the 14.4 ± 7.8ppm reported for model New Jersey soils. The range while similar at low concentrations is very much higher than the 48 ppm maximum in model New Jersey soils.

5.2.3.8 Copper. Seven off-site soil samples were analyzed for copper. The mean value was 64.3 ± 118. The range of values is 10.2 to 330 ppm for specific sample sites and 9 to 330 ppm for a single sample site. The mean and standard deviation are both larger than the 14.7 ± 11.2 ppm reported for model New Jersey soils. The range is somewhat higher in off-site soils at the low concentration range than model New Jersey soils (9 vs. 0.5) while the value at higher concentrations is much higher (330 vs. 53.6).

5.2.3.9 Iron. Six off-site soil samples were analyzed for iron. The mean value was 16,700 ± 8,600 ppm. The range of values is 8,675 to 32,700 ppm for specific sample sites and 8,000 to 48,100 ppm for a single sample from a sampling site. The mean and standard deviation are both slightly less than the 26,400 ± 12,900 calculated for model New Jersey soils. The range of iron in off-site soils is quite similar at high concentrations and somewhat higher at low concentrations when compared to model New Jersey soils.

5.2.3.10 Barium, Selenium and Silver. No information is currently available concerning the concentration of these metals typically observed in uncontaminated New Jersey soils. However, information does exist on levels measured in other soils and based on these data the single selenium and silver sample is well within the reported range and the single barium value is very much less than the reported mean.

5.2.3.11 Organic Contaminants. A single off-site soil sample for organic contaminants was collected between Paterson Plank Road and Peach Island Creek (station 84) by AWARE (1980). The soil sample indicated the presence of total polynuclear aromatics (PNA's) at 1 ppm, total

chlorinated pesticides at 1.31 ppm and total volatile organics at 1.97 ppm.

5.2.4 Berrys Creek

5.2.4.1 Sediment. Approximately fifty samples have been analyzed for metals in channel sediments. Twenty-five samples were collected between the East Riser Ditch tidegate and the Route 3 bridge by HMDC during 1980. The remaining samples were collected by various organizations at different times. A total of 36 samples have been collected in Berrys Creek while 14 samples have been collected in other channels, such as major channels through the marshlands and the channels of creeks near the 40-acre site. Sediment criteria developed by the USGS in 1979 for various heavy metals and organic contaminants for New Jersey are summarized in Table 5-7. It must be stressed that these are not criteria utilized by the State of New Jersey to establish sediment quality.

The 25 samples collected by HMDC (1980) were analyzed for Cd, Cr, Cu, Pb, Hg, Ni and Zn, however, only two of the 25 stations were accurately located and thus reported. The remainder of this particular study are discussed separately in general terms.

Throughout the following discussion, differences in sample depth or in the number of individual samples analyzed for a specific sample site are not considered in calculating the mean or standard deviation.

The 1980 HMDC data indicate the further upstream one goes from Route 3 the higher the concentration of heavy metals up to the West Riser Ditch tidegate. A significant gradient in concentration is observed at the mid-point between Paterson Plank Road and Route 3. The

TABLE 5-7

RECOMMENDED NEW JERSEY
SEDIMENT QUALITY CRITERIA
DEVELOPED BY THE USGS 1979

Compound	Sediment Quality (mg/kg)	Use	Basis for Selection
Arsenic	200	1	A
Beryllium	200	1	A
Cadmium	5	1	A
Chromium	200	1	A
Copper	2,000	1	A
Iron	NL		
Lead, dissolved	500	1	A
Nickel	2,000	1	A
Selenium	20	1	A
Zinc	5,000	1	A
Mercury	20	2	A
Aldrin	20	1	A
DDT	20	1	A
Dieldrin	20	1	A
Endrin	20	1	A
Heptachlor	20	1	A
Heptachlor Epoxide	20	1	A

1 - Recommended limits have not been established; limit set to arbitrarily flag no more than the upper 15 to 20 percent of values nationwide.
2 - Potable drinking water, based on aesthetic considerations.

NL - not listed

A - U.S.G.S, Quality of Water Branch

From: Water Resources Data for New Jersey, U.S.G.S. (1979).

mean zinc concentration upstream of this line is six times the downstream mean, the upstream Cu mean is 2 1/2 times the downstream mean, the Ni mean is only 1 1/2 times the downstream mean, the upstream Cr mean is almost five times the downstream mean and the upstream Cd mean is 3 1/2 times the downstream. The one other observation concerning spatial distribution is that there exists a wide variation in metals values between adjacent stations. This difference can be several hundred times within 1,000 linear feet.

5.2.4.1.1 Mercury. The distribution of mercury in the sediments of Berrys Creek indicates that the source of the mercury contamination was the Wood-Ridge site. There is a significant mercury concentration gradient in Berrys Creek as one moves upstream from the Hackensack River. Figures 5-35 and 5-36 indicate the concentration of mercury in channel sediments in the area on the small-scale and large-scale maps, respectively. Concentrations of mercury in channel sediments are relatively low in the section of Berrys Creek downstream of Paterson Plank Road, ranging from 1.4 to 117.9 ppm with the 117.9 value a high point ten times the highest value (NJDEP 1983) reported in channel sediment Berrys Creek Creek. Upstream of the Paterson Plank Road bridge the mercury levels are significantly and consistently higher than the downstream levels; whereas marsh sediments are at similar concentrations upstream and downstream of Paterson Plank Road. Consistently high mercury levels have been reported in Berrys Creek upstream of the confluence with the East Riser Ditch. These levels range from 26.5 to 4,480 ppm, with typical levels of about 250 ppm reported. Levels of mercury contamination are reported for several hundred feet upstream of the tide gate up to 776 ppm between the

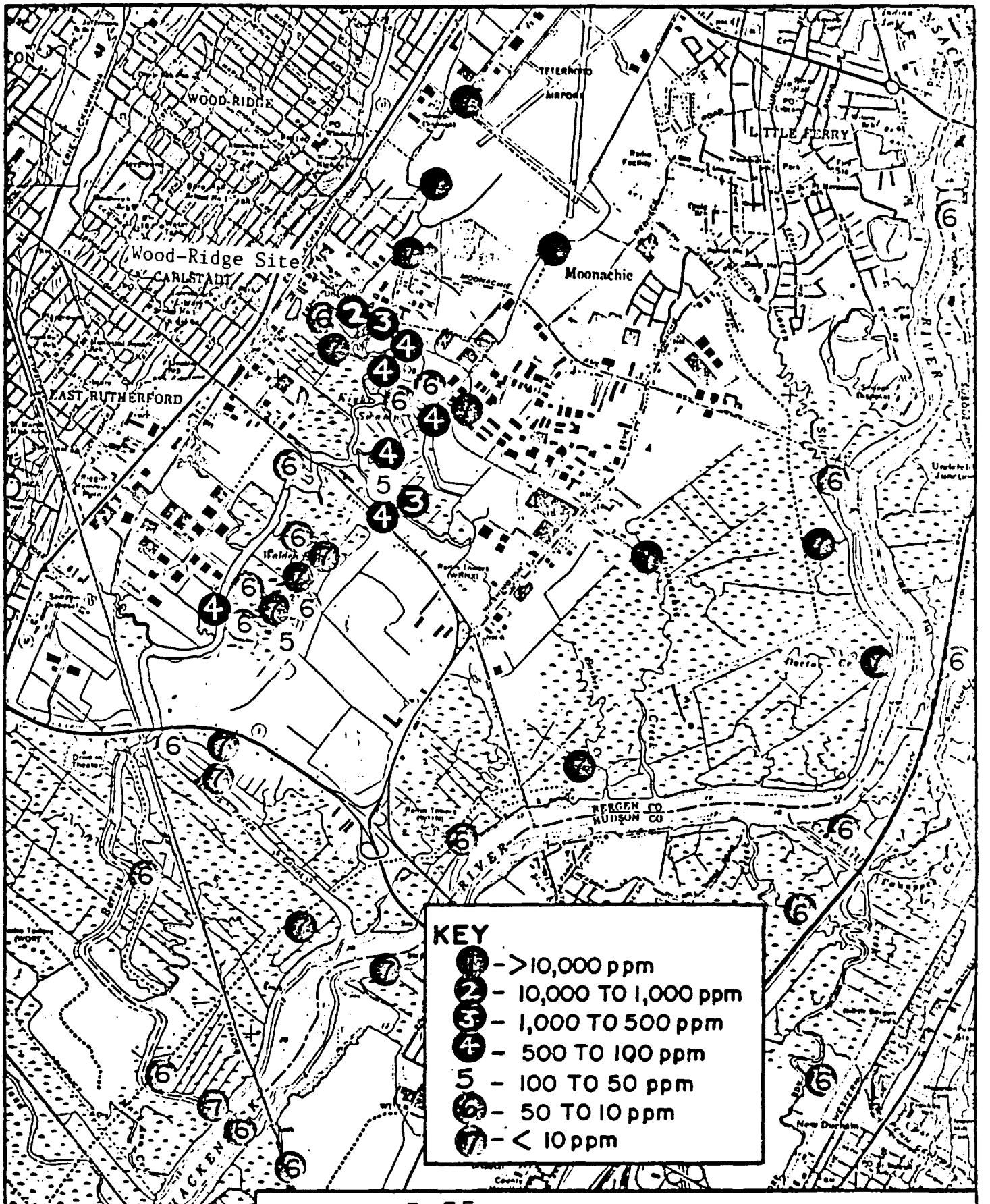


FIGURE 5-35

MEAN SEDIMENT MERCURY CONCENTRATIONS
(SMALL SCALE MAP)

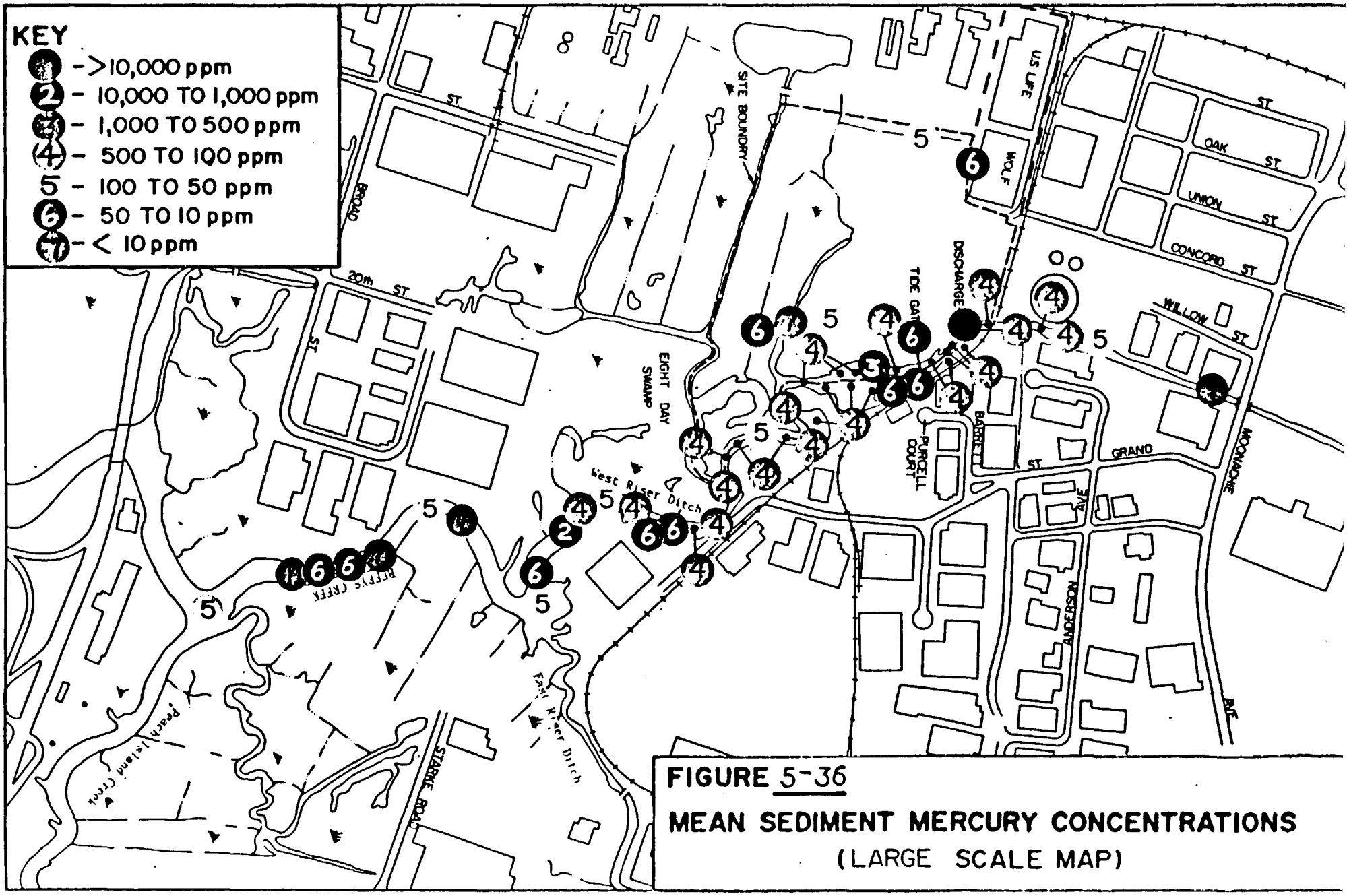


FIGURE 5-36

MEAN SEDIMENT MERCURY CONCENTRATIONS

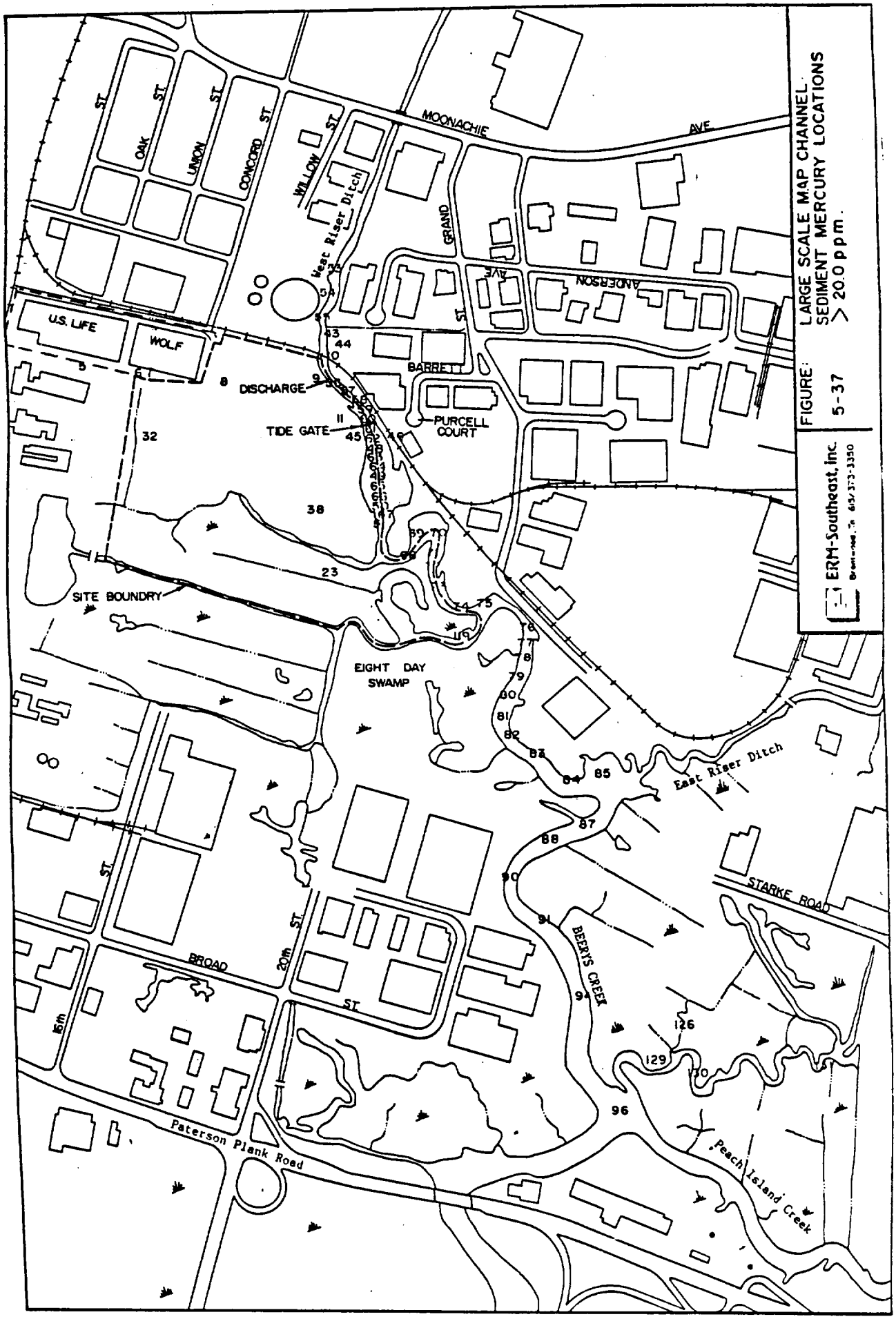
(LARGE SCALE MAP)

original discharge and the Wood-Ridge sewage treatment plant discharge. Based on both wet weight and dry weight data mercury contaminated sediments do not extend upstream of the Moonachie Ave. Bridge.

Sediment data are primarily available on a dry weight basis with a total of 373 records available. The location of 224 of these records is indicated on the large-scale map, while 149 of these records are located on the small-scale map. In addition, 13 records for wet-weight analyses are indicated on the large-scale map and 31 records on the small-scale.

The large-scale map data are discussed first. A total of 75 stations are represented in the mercury sediment data, with numerous stations reporting single samples. Figure 5-37 illustrates those stations where sediment data exceed the 20 ppm value developed by the USGS for New Jersey sediment. The corresponding values are given in Table 5-8. A total of 165 of the 246 records indicate values greater than 20 ppm. Figure 5-38 of the small-scale map sediment data indicate that 39 of the 149 records indicate exceedance of the 20 ppm value and are given in Table 5-9.

Data is reported from three or more surveys for seven stations. However, comparability is difficult as both core sampling and grab sampling is reported at numerous stations. The grab samples were collected with a similar apparatus (PONAR dredge) in two studies, i.e., AWARE 1980 and NJDEP in 1981. The PONAR dredge can be utilized to collect a grab sample from 1 to approximately 6 inches depending upon firmness of the sediment. Another problem with data compatibility is that sampling of the channel sediments was only conducted at the same station a maximum of three times. The high degree of variability in sample results from a particular station suggests that even though


MOONACHIE AVE.
OAK ST.
UNION ST.
CONCORD ST.
WILLOW ST.
West Riser Ditch
GRAND AVE.
ANDERSON ST.
U.S. LIFE
WOLF
DISCHARGE
TIDE GATE
BARRETT
PURCELL COURT
SITE BOUNDRY
EIGHT DAY SWAMP
East Riser Ditch
STARKE ROAD
BEERYS CREEK
BROAD ST.
20th ST.
15th ST.
Paterson Plank Road
Peach Island Creek
FIGURE: 5-37
LARGE SCALE MAP CHANNEL SEDIMENT MERCURY LOCATIONS > 20.0 ppm.
ERM-Southeast, Inc.

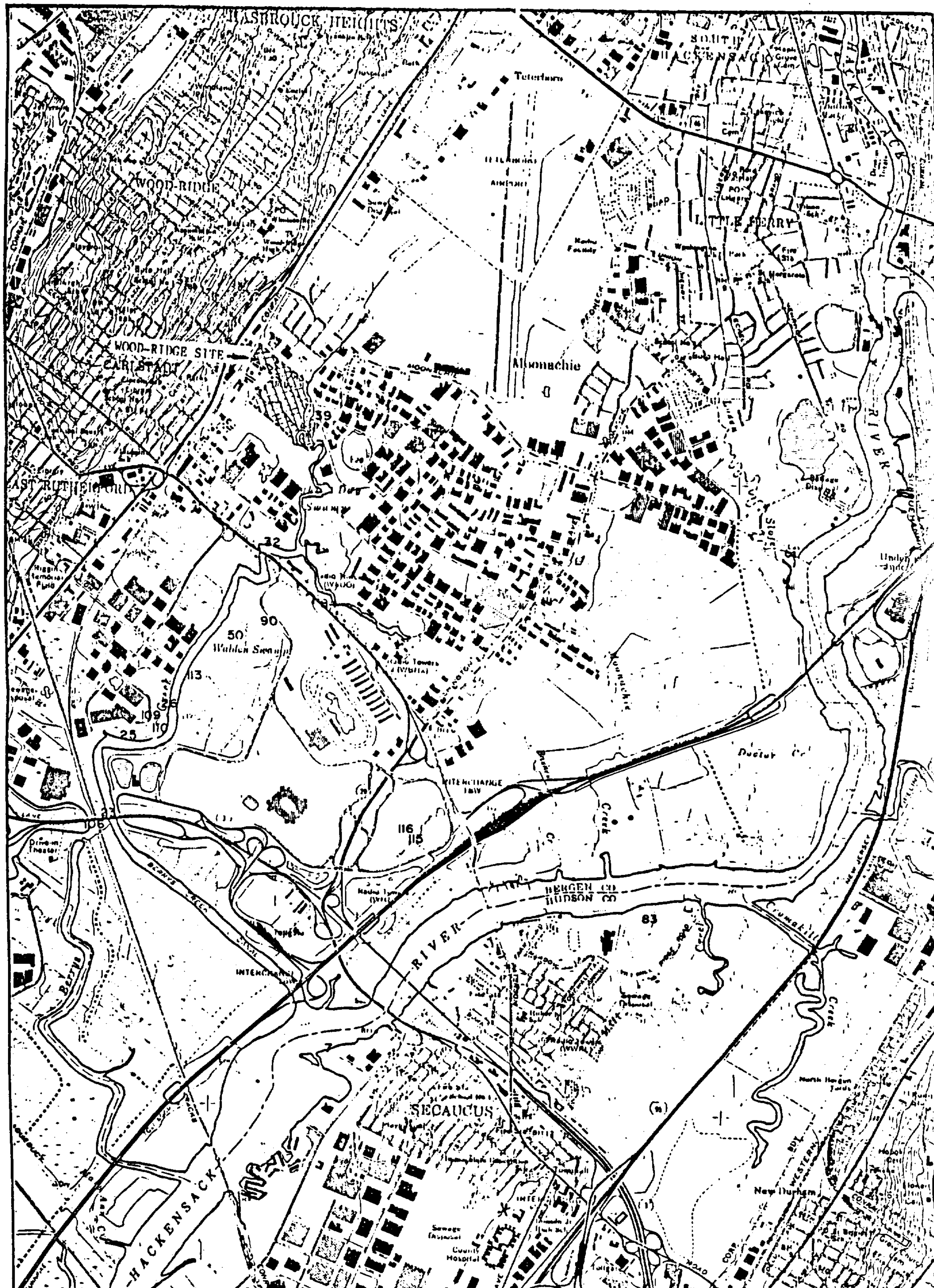
829910118

SMALL-SCALE MAP CHANNEL SEDIMENT MERCURY VALUES GREATER THAN 20.0 ppm

16:13:35 26 SEP 1985

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3287	3	ch sed	Hg	67.90	ppm		10	81	west side	NJDEP 85
3288	3	ch sed	Hg	32.08	ppm		10	81	east side	NJDEP 85
3292	4	ch sed	Hg	35.86	ppm		10	81	center	NJDEP 85
3293	4	ch sed	Hg	40.75	ppm		10	81	east side	NJDEP 85
3297	5	ch sed	Hg	117.88	ppm		10	81	west side	NJDEP 85
3298	5	ch sed	Hg	101.61	ppm		10	81	center	NJDEP 85
3299	5	ch sed	Hg	76.60	ppm		10	81	east side	NJDEP 85
1544	7	ch sed	Hg	32.00	ppm		10	76	0-2 inch	JMA 74
7777	23	ch sed	Hg	36.00	ppm	10	12	80	0-4 inch	HMDC 80
3361	25	sed	Hg	60.00	ppm	1	6	84	0 inch	Crow 84
3362	25	sed	Hg	44.00	ppm	1	6	84	4 inch	Crow 84
3363	25	sed	Hg	242.00	ppm	1	6	84	10 inch	Crow 84
3364	25	sed	Hg	165.00	ppm	1	6	84	16 inch	Crow 84
3365	25	sed	Hg	77.00	ppm	1	6	84	22 inch	Crow 84
3367	26	sed	Hg	28.00	ppm	1	6	84	comp	Crow 84
6674	32	sed	Hg	21.20	ppm		6	77	bl silt 18 inch	Huch 77
2133	39	ch sed	HG	276.00	ppm	.10		72	0-4 inch	HMDC 72
2134	39	ch sed	HG	807.00	ppm	.10		72	4-8 inch	HMDC 72
2135	39	ch sed	HG	1142.00	ppm	.10		72	8-12 inch	HMDC 72
2136	39	ch sed	HG	1392.00	ppm	.10		72	12-18 inch	HMDC 72
2221	50	ch sed	HG	58.00	ppm	.10		72	0-2 inch	HMDC 72
2222	50	ch sed	HG	438.00	ppm	.10		72	2-4 inch	HMDC 72
2223	50	ch sed	HG	247.00	ppm	.10		72	4-6 inch	HMDC 72
2393	83	ch sed	HG	36.00	ppm	.10		74	12-18 inch	HMDC 78
2394	84	ch sed	HG	218.00	ppm	.10		72	0-2 inch	HMDC 72
2395	84	ch sed	HG	37.00	ppm	.10		72	2-4 inch	HMDC 72
6675	90	sed	Hg	45.40	ppm		6	77	gy st/cl 9 inch	Huch 77
3399	109	sed	Hg	78.00	ppm	1	6	84	comp	Crow 84
3401	110	sed	Hg	46.00	ppm	1	6	84	0inch	Crow 84
3402	110	sed	Hg	66.00	ppm	1	6	84	2 inch	Crow 84
3403	110	sed	Hg	64.00	ppm	1	6	84	4 inch	Crow 84
3404	110	sed	Hg	47.00	ppm	1	6	84	7 inch	Crow 84
3405	110	sed	Hg	60.00	ppm	1	6	84	9 inch	Crow 84
4005	113	ch sed	Hg	74.00	ppm		5	78	0-2 inch	JMA 78
4006	113	ch sed	Hg	38.00	ppm		5	78	2-4 inch	JMA 78
4015	115	sed	Hg	32.40	ppm		5	78	4-6 inch	JMA 78
4016	116	sed	Hg	20.80	ppm		5	78	0-2 inch	JMA 78
4017	116	sed	Hg	29.90	ppm		5	78	2-4 inch	JMA 78
4018	116	sed	Hg	48.90	ppm		5	78	4-6 inch	JMA 78

39 Records Processed



ERM-Southeast, Inc.
Brentwood, Tn. 615/373-3350

FIGURE: 5-38

SMALL SCALL MAP CHANNEL SEDIMENT MERCURY LOCATIONS > 20.0 ppm

8299910120

LARGE SCALE MAP CHANNEL SEDIMENT MERCURY VALUES GREATER THAN 20.0 ppm

16:18:10 26 SEP 1985

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2761	5	sed	Hg	882.00	ppm		6	77	0-3 inch	JMA 77
2762	5	sed	Hg	695.00	ppm		6	77	3-6inch	JMA 77
2763	5	sed	Hg	81.00	ppm		6	77	6-9inch	JMA 77
2766	6	sed	Hg	679.00	ppm		6	77	0-3inch	JMA 77
2767	6	sed	Hg	625.00	ppm		6	77	3-6inch	JMA 77
2768	6	sed	Hg	179.00	ppm		6	77	6-9inch	JMA 77
2771	7	sed	Hg	23.00	ppm		6	77	3-6inch	JMA 77
2779	8	sed	Hg	361.00	ppm		6	77	0-3inch	JMA 77
2780	8	sed	Hg	420.00	ppm		6	77	3-6inch	JMA 77
2781	8	sed	Hg	624.00	ppm		6	77	6-9inch	JMA 77
2782	8	sed	Hg	528.00	ppm		6	77	9-12inch	JMA 77
2796	9	sed	Hg	165.00	ppm		2	75	ng	JMA 77
2795	9	sed	Hg	700.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2791	9	sed	Hg	2825.00	ppm		6	77	0-3inch	JMA 77
2792	9	sed	Hg	39940.00	ppm		6	77	3-6inch	JMA 77
2793	9	sed	Hg	89162.00	ppm		6	77	6-9inch	JMA 77
2794	9	sed	Hg	66533.00	ppm		6	77	9-12inch	JMA 77
2788	9	sed	Hg	76.43	ppm		7	78	bk./br	Stop 78
2789	9	sed	Total Hg	82.00	ppm		2	84	PONAR Grab	Bart 84
2805	10	sed	Hg	147.00	ppm		2	75	PONAR Grab	JMA 77
2804	10	sed	Hg	410.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2800	10	sed	Hg	993.00	ppm		6	77	0-3inch	JMA 77
2801	10	sed	Hg	307.00	ppm		6	77	3-6inch	JMA 77
2802	10	sed	Hg	23.00	ppm		6	77	6-9inch	JMA 77
2799	10	sed	Hg	42.78	ppm		7	78	br. sand	Stop 78
2810	11	sed	Hg	57.00	ppm		6	77	0-3 inch	JMA 77
2811	11	sed	Hg	24.00	ppm		6	77	3-6 inch	JMA 77
2813	11	sed	Hg	23.00	ppm		6	77	9-12inch	JMA 77
3084	23	sed	Hg	25.00	ppm		3	80	PONAR Grab	Aw 80
3095	32	sed	Hg	68.00	ppm		3	80	PONAR Grab	Aw 80
3098	36	mrsh sed	Hg	27.00	ppm		3	76	PONAR Grab	JMA 76
3102	36	mrsh sed	Hg	30.00	ppm		3	76	ng	JMA 76
3104	36	mrsh sed	Hg	22.00	ppm		3	76	ng	JMA 76
3105	36	mrsh sed	Hg	36.00	ppm		3	76	ng	JMA 76
3106	36	mrsh sed	Hg	30.00	ppm		3	76	ng	JMA 76
3107	36	mrsh sed	Hg	32.00	ppm		3	76	ng	JMA 76
3111	38	sed	Hg	87.60	ppm		11	79	ng	Aw 79
2925	43	sed	Hg	150.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2924	43	sed	Hg	83.32	ppm		7	78	bk,surface	Stop 78
3120	44	mrsh sed	Hg	208.00	ppm			72	4-6 inch	JMA 76
3117	44	mrsh sed	Hg	61.70	ppm			74	0-6 inch	JMA 76
2927	44	sed	Hg	420.00	ppm		4	80	dry avg.PONAR Grab	Aw 80

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TABLE 5-0

LARGE-SCALE MAP CHANNEL SEDIMENT MERCURY VALUES GREATER THAN 20.0 ppm

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF..
2926	44	sed	Hg	776.00	ppm		7	78	br.&bk.	Stop 78
2928	45	sed	Hg	76.43	ppm		7	78	bk,br.	Stop 78
2929	46	sed	Hg	30.56	ppm		7	78	br. sand	Stop 78
2936	48	sed	Hg	110.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2934	48	sed	Total Hg	131.00	ppm		2	84	PONAR Grab	Bart 84
3121	49	mrsh sed	Hg	40.60	ppm			74	0-6 inch	JMA 76
2939	49	sed	Hg	152.00	ppm		2	84	Lowtide 1	Weis 84
2940	49	sed	Hg	38.00	ppm		2	84	Lt 2	Weis 84
2941	49	sed	Hg	164.00	ppm		2	84	Lt 1	Weis 84
2942	49	sed	Hg	38.00	ppm		2	84	Lt 2	Weis 84
2943	49	sed	Hg	105.00	ppm		2	84	Lt 1	Weis 84
2945	49	sed	Hg	39.00	ppm		2	84	Lt 1	Weis 84
2946	49	sed	Hg	124.00	ppm		2	84	Lt 2	Weis 84
2947	49	sed	Hg	59.00	ppm		2	84	Lt 1	Weis 84
2948	49	sed	Hg	307.00	ppm		2	84	Lt 2	Weis 84
2949	49	sed	Hg	93.00	ppm		2	84	Lt 1	Weis 84
2950	49	sed	Hg	35.00	ppm		2	84	Lt 2	Weis 84
2951	49	sed	Hg	182.00	ppm		2	84	Lt 1	Weis 84
2952	49	sed	Hg	271.00	ppm		2	84	Lt 2	Weis 84
2953	49	sed	Hg	74.00	ppm		2	84	Lt 1	Weis 84
2954	49	sed	Hg	70.00	ppm		2	84	Lt 2	Weis 84
2955	49	sed	Hg	152.00	ppm		2	84	Lt 1	Weis 84
2956	49	sed	Hg	346.00	ppm		2	84	Lt 2	Weis 84
2957	49	sed	Hg	122.00	ppm		2	84	Lt 1	Weis 84
2958	49	sed	Hg	44.00	ppm		2	84	Lt 2	Weis 84
2959	49	sed	Hg	133.00	ppm		2	84	Lt 1	Weis 84
2960	49	sed	Hg	40.00	ppm		2	84	Lt 2	Weis 84
2961	49	sed	Hg	32.00	ppm		2	84	Lt 1	Weis 84
2962	49	sed	Hg	93.00	ppm		2	84	Lt 2	Weis 84
2963	49	sed	Hg	57.00	ppm		2	84	Lt 1	Weis 84
2964	49	sed	Hg	74.00	ppm		2	84	Lt 2	Weis 84
2965	49	sed	Hg	137.00	ppm		2	84	Lt 1	Weis 84
2966	49	sed	Hg	45.00	ppm		2	84	Lt 2	Weis 84
2967	49	sed	Hg	67.00	ppm		2	84	Lt 1	Weis 84
2968	49	sed	Hg	186.00	ppm		2	84	Lt 2	Weis 84
2969	49	sed	Hg	82.00	ppm		2	84	Lt 1	Weis 84
2970	49	sed	Hg	383.00	ppm		2	84	Lt 2	Weis 84
2971	49	sed	Hg	276.00	ppm		2	84	Lt 1	Weis 84
2972	49	sed	Hg	807.00	ppm		2	84	Lt 2	Weis 84
2973	49	sed	Hg	1142.00	ppm		2	84	Lt 1	Weis 84
2974	49	sed	Hg	1392.00	ppm		2	84	Lt 2	Weis 84
2938	49	sed	Hg	570.00	ppm		4	80	dry avg.PONAR Grab	Aw 80

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LARGE-SCALE MAP CHANNEL SEDIMENT MERCURY VALUES GREATER THAN 20.0 ppm

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2937	49	sed	Total Hg	192.50	ppm		2	84	PONAR Grab	Bart 84
2977	50	sed	Hg	170.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2975	50	sed	Total Hg	576.00	ppm		2	84	PONAR Grab	Bart 84
2980	51	sed	Hg	220.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2978	51	sed	Total Hg	452.00	ppm		2	84	PONAR Grab	Bart 84
2982	53	sed	Hg	96.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2983	54	sed	Hg	140.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2984	55	sed	Hg	171.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3175	56	sed	Hg	65.00	ppm		3	82	0-1inchinorganicHg	Wood 82
3176	56	sed	Hg	700.00	ppm		3	82	3-18inchinorganicH	Wood 82
3177	56	sed	Hg	1700.00	ppm		3	82	18-30inchinorganic	Wood 82
3178	56	sed	Hg	300.00	ppm		3	82	18-30inchorganic	Wood 82
2985	56	sed	Hg	38.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2986	57	sed	Hg	370.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2987	58	sed	Hg	140.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2988	59	sed	Hg	230.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2990	60	sed	Hg	167.00	ppm		2	75	ng	JMA 77
2989	60	sed	Hg	120.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2992	60	sed	Hg	577.00	ppm		8	76	ng	JMA 77
2991	60	sed	Hg	35.00	ppm		11	75	ng	JMA 77
2993	61	sed	Hg	48.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
7900	61	sed	Hg	1730.00	ppm		12	80	0-4 in	HMDC 80
7901	61	sed	Hg	68.00	ppb		12	80	4-8 in	HMDC 80
2994	62	sed	Hg	140.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2995	63	sed	Hg	520.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2996	64	sed	Hg	130.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2997	65	sed	Hg	310.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3193	65	ch sed	Hg	349.26	ppm		10	81	west PONAR Grab	NJDEP 85
3194	65	ch sed	Hg	151.89	ppm		10	81	east PONAR Grab	NJDEP 85
2998	66	sed	Hg	200.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2999	67	sed	Hg	260.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3004	68	sed	Hg	490.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3199	68	ch sed	Hg	42.49	ppm		10	81	right PONAR grab	NJDEP 85
3200	68	ch sed	Hg	40.19	ppm		10	81	left PONAR grab	NJDEP 85
3201	68	ch sed	Hg	60.00	ppm		10	81	center PONAR grab	NJDEP 85
3005	69	sed	Hg	160.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3205	70	sed	Hg	38.00	ppm		3	82	0-1inchinorganic	Wood 82
3006	70	sed	Hg	240.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3007	71	sed	Hg	460.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3008	72	sed	Hg	79.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3009	73	sed	Hg	120.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3010	74	sed	Hg	260.00	ppm		4	80	dry avg.PONAR Grab	Aw 80

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LARGE-SCALE MAP CHANNEL SEDIMENT MERCURY VALUES GREATER THAN 20.0 ppm

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3011	75	sed	Hg	240.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3209	76	sed	Hg	30.00	ppm		3	82	0-11inchinorganic	Wood 82
3211	76	sed	Hg	110.00	ppm		3	82	1-34inchinorganic	Wood 82
3215	76	ch sed	Hg	106.46	ppm		10	81	west PONAR Grab	NJDEP 85
3216	76	ch sed	Hg	72.33	ppm		10	81	east PONAR Grab	NJDEP 85
3217	76	ch sed	Hg	33.83	ppm		10	81	center PONAR Grab	NJDEP 85
3013	77	sed	Hg	350.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3014	78	sed	Hg	46.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3015	79	sed	Hg	44.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3016	80	sed	Hg	130.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3017	81	sed	Hg	100.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3018	82	sed	Hg	320.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3019	83	sed	Hg	220.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3021	83	sed	Hg	4480.00	ppm		8	76	ng	JMA 77
3022	84	sed	Hg	41.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3023	85	sed	Hg	150.00	ppm		4	80	top corePONAR Grab	Aw 80
3222	85	ch sed	Hg	116.07	ppm		10	81	east PONAR Grab	NJDEP 85
3223	85	ch sed	Hg	118.47	ppm		10	81	center PONAR Grab	NJDEP 85
3027	87	sed	Hg	280.00	ppm		4	80	T.core PONAR Grab	Aw 80
3028	87	sed	Hg	280.00	ppm		4	80	center core PONAR	Aw 80
3029	87	sed	Hg	65.00	ppm		4	80	B.core PONAR Grab	Aw 80
3227	88	sed	Hg	45.00	ppm		3	82	0-11inchinorganic	Wood 82
3228	88	sed	Hg	110.00	ppm		3	82	1-26inchinorganic	Wood 82
3030	88	sed	Hg	30.00	ppm		4	80	T.core PONAR Grab	Aw 80
3034	90	sed	Hg	56.00	ppm		4	80	top corePONAR Grab	Aw 80
3232	90	ch sed	Hg	44.37	ppm		10	81	WEST PONAR Grab	NJDEP 85
3234	90	ch sed	Hg	288.89	ppm		10	81	center PONAR Grab	NJDEP 85
3037	91	sed	Hg	52.00	ppm		4	80	T.core PONAR Grab	Aw 80
3041	94	sed	Hg	35.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3043	96	sed	Hg	35.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3239	96	ch sed	Hg	108.33	ppm		10	81	center PONAR Grab	NJDEP 85
3240	96	ch sed	Hg	121.28	ppm		10	81	east PONAR Grab	NJDEP 85
3244	119	ch sed	Hg	128.47	ppm		10	81	west PONAR Grab	NJDEP 85
3245	119	ch sed	Hg	100.00	ppm		10	81	east PONAR Grab	NJDEP 85
3246	119	ch sed	Hg	275.27	ppm		10	81	center PONAR Grab	NJDEP 85
3267	126	ch sed	Hg	128.00	ppm		9	83	composite	Crow 84
3271	129	ch sed	Hg	331.00	ppm		9	83	composite	Crow 84
3273	130	ch sed	Hg	99.50	ppm		9	83	composite	Crow 84
3275	131	ch sed	Hg	25.20	ppm		9	83	composite	Crow 84

165 Records Processed

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samples are from the same location for various years, differences in the sampling techniques, the dynamic nature of the estuarine system, and the extremely heterogeneous nature of the sediment make it difficult for an accurate comparison of data.

The maximum mercury value reported was 89,162 ppm at Station 9 by JMA 1977. The average value for this core was 49,815 ppm. Station 9 is the original location of the plant discharge. A sample was also collected at this site in 1975 and reported 165 ppm. AWARE reported 700 ppm at this site during 1980 from a grab sample with 84 ppm reported by Bartha (1984). Similar variances are observed at Station 10 (upstream of 9) as depicted on Figure 5-39.

A small amount of comparable data exists that describes vertical distribution of mercury in channel sediments cores (Table 5-10). In Lower Berrys Creek, the highest mercury concentration is typically in the upper section of the core, however, the lowest concentration of mercury was detected in the top, middle, and bottom of three separate core samples. In core samples collected from the middle Berrys Creek area the highest concentration of mercury is more consistently located in the upper section of the cores and lowest concentration in the bottom section. A single set of datum exists to discuss stratification of mercury in upper Berrys Creek at the tidal pool. Within this station highest mercury concentration was at the bottom of the core and lowest at the top. Upstream of the tidal pool on the West Riser Ditch and in Peach Island Creek, however, the reverse is observed. Although a great deal of data exist, poor compatibility and lack of trend do not permit the discussion of definite conclusions in the data.

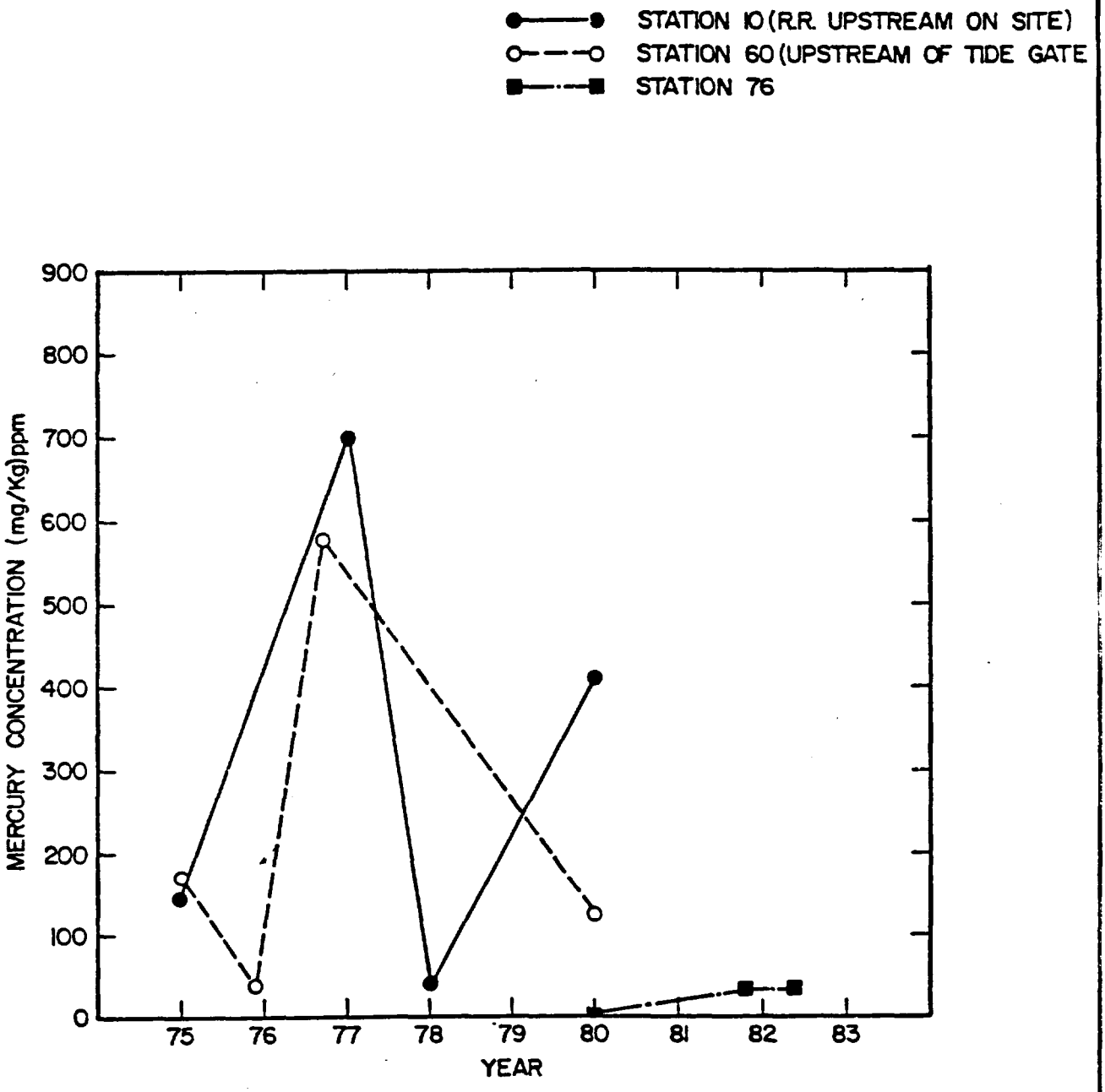

FIGURE: 5-39 SEDIMENT MERCURY DATA-LARGE SCALE MAP BERRYS CREEK NEW JERSEY.

ERM-Southeast, Inc.

Brentwood Tn 615/373-3350

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TABLE 5-10

VARIATION IN THE CREEK SEDIMENT MERCURY CONCENTRATION FROM LOCATION WITHIN CORE SAMPLES

Small-Scale Map Station	Section of Core with Highest Hg (inches)	Section of Core with Lowest Hg (inches)	Total Depth of Core (inches)	Year Sampled
LBC 1	0-2	12-18	18	1972
LBC 12	6-12	0-6	24	1978
LBC 30	0-2	4-6	12	1972
LBC 26	0-2	12-17	17	1972
MBC 25	10	34	34	1984
MBC 50	2-4	12-15	15	1972
UBC 39	12-18	0-4	18	1972
PIC 84	0-2	6-12	18	1972
Upstream of Site 42	2-4	12-15	15	1972

LBC: Lower Berrys Creek
MBC: Middle Berrys Creek
UBC: Upper Berrys Creek
PIC: Peach Island Creek

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5.2.4.1.2 Arsenic. Upstream of the Paterson Plank Road bridge, eight channel sediment samples were analyzed for arsenic. The range for specific sampling sites was 8 to 19 ppm. Only one sample per site was analyzed therefore single samples from a sampling site also ranged from 8 to 19 ppm. The mean for individual sampling sites is 12.4 ± 3.5 ppm.

The mean value and standard deviation of samples collected upstream of the Paterson Plank Road bridge are well below the 200 ppm value developed by the USGS for New Jersey quality.

The range of all channel sediment samples is 0.6 to 35 ppm for specific sampling sites and 0.01 to 38 ppm for single samples from sampling sites. The mean arsenic concentration for individual sampling sites is 13.2 ± 6.6 ppm.

5.2.4.1.3 Cadmium. Upstream of the Paterson Plank Road bridge eight channel sediment samples were analyzed for cadmium. The range for specific sampling sites is 17.5 to 882 ppm. Only one sample per sampling site was analyzed therefore single samples from a sampling site also ranged from 17.5 to 882 ppm. The mean for individual sampling sites is 131 ± 303 ppm.

The mean value and standard deviation of samples collected upstream of the Paterson Plank Road bridge are high as compared to the 5 ppm developed by the USGS. If the 882 ppm value is omitted from calculations, the mean and standard deviation are reduced to 18.9 ± 9.4 ppm. This is still higher than the value calculated for New Jersey but considerably less than the value calculated with the 882 ppm value included.

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The samples collected between the Paterson Plank Road bridge and the Route 3 bridge by HMDC ranged between 0.12 and 64 ppm for specific sampling sites and 0.04 to 91 ppm for single samples from a sampling site. The mean for individual sampling sites is 20.3 ± 19.1 ppm. The mean value and standard deviation are high as compared to the USGS values.

The range of all channel sediment samples is 0.12 to 882 ppm for specific sampling sites and 0.04 to 882 ppm for single samples from sampling sites. The mean cadmium concentration for individual sampling sites is 38.7 ± 129 ppm. If the 882 ppm value is omitted from calculations the mean and standard deviation becomes 19.6 ± 15.5 ppm.

5.2.4.1.4 Chromium. Upstream of Paterson Plank Road bridge seven channel sediment samples were analyzed for chromium. The range for specific sampling sites was 190 to 700 ppm. Only one sample per station was analyzed therefore single samples from a sampling location also ranged from 190 to 700 ppm. The mean for individual sampling locations is 393 ± 177 ppm. The mean value and standard deviation of samples collected upstream of the Paterson Plank Road bridge are low as compared to the 200 ppm value recommended by the USGS for New Jersey sediment.

The samples collected between the Paterson Plank Road bridge and the Route 3 bridge by HMDC ranged between 18 and 6,716 ppm for specific sampling sites and 17 to 8,059 ppm for single samples from a sampling site. The mean for individual sampling sites is 1,077 ± 1,529 ppm. The mean value and standard deviation are high as compared to the recommended USGS value. The range of values is also high when compared to the range reported for New Jersey soils.

The range of all channel sediment samples is 18 to 6,716 ppm for specific sampling sites and 17 to 8,059 ppm for single samples from sampling sites. The mean chromium concentration for individual sampling sites is 727 ± 1,163 ppm.

5.2.4.1.5 Copper. Upstream of Paterson Plank Road bridge seven channel sediment samples were analyzed for copper. The range for specific sampling sites is 162 to 824 ppm. Only one sample per site was analyzed therefore single samples from a sampling site also ranged from 162 to 824 ppm. The mean for individual sampling sites is 396 ± 218 ppm.

The mean value and standard deviation of samples collected upstream of Paterson Plank Road are low as compared to the 2,000 ppm value recommended by the USGS for New Jersey sediment.

The samples collected between the Paterson Plank Road bridge and the Route 3 bridge by HMDC ranged between 14.5 and 998 ppm for specific sampling sites and 14 to 1,241 ppm for single samples from a sampling site. The mean for individual sampling sites is 376 ± 312 ppm. The mean value and standard deviation are low as compared to the USGS value.

The range of all channel sediment samples is 14.5 to 1,998 ppm for specific sampling sites and 14 to 1,241 ppm for single samples from sampling sites. The mean copper concentration for individual sampling sites is 380 ± 291 ppm.

5.2.4.1.6 Lead. Upstream of the Paterson Plank Road bridge eight channel sediment samples were analyzed for lead. The range for specific sampling sites was 70.9 to 440 ppm. Only one sample per site was analyzed therefore single samples from a sampling site also ranged

from 70.9 to 440 ppm. The mean for individual sampling sites is 239 ± 114 ppm.

The mean value and standard deviation of samples collected upstream of the Paterson Plank Road bridge are low as compared to the 500 ppm value recommended by the USGS.

The samples collected between the Paterson Plank Road bridge and the Route 3 bridge by HMDC ranged from 12 to 513 ppm for specific sampling sites and 10 to 707 ppm for single samples from a sampling site. The mean for individual sampling sites is 234 ± 153 ppm. The mean value and standard deviation are approximately half of the USGS recommended value.

The range of all channel sediment samples is 6.8 to 513 ppm for specific sampling sites and 6.8 to 707 ppm for single samples from sampling sites. The mean lead concentration for individual sampling sites is 224 ± 146 ppm.

5.2.4.1.7 Nickel. Upstream of Paterson Plank Road bridge eight channel sediment samples were analyzed for nickel. The range for specific sampling sites is 28 to 60 ppm. Only one sample per site was analyzed therefore single samples from a sampling site also ranged from 28 to 60 ppm. The mean for individual sampling sites is 45.0 ± 9.8 ppm. The mean value and standard deviation of samples collected upstream of Paterson Plank Road are quite low compared to the 2,000 ppm value developed by the USGS for New Jersey sediment.

Samples collected between the Paterson Plank Road bridge and the Route 3 bridge by HMDC ranged from 22.5 to 167 ppm for specific sampling sites and 20 to 181 ppm for single samples from a sampling site. The mean for individual sampling sites is 70.3 ± 42.4 ppm. The mean value

and standard deviation are lower than recommended New Jersey sediment quality.

The range of all channel sediment samples is 5.1 to 167 ppm for specific sampling sites and 3.3 to 181 ppm for single samples from sampling sites. The mean nickel concentration for individual sampling sites is 60.9 ± 38.9 ppm.

5.2.4.1.8 Zinc. Upstream of the Paterson Plank Road bridge eight channel sediment samples were analyzed for zinc. The range for specific sampling sites was 122 to 8,010 ppm. Only one sample per site was analyzed therefore single samples from a sampling site also ranged from 122 to 8,010 ppm. The mean for individual sampling sites is 1,200 ± 2,750 ppm. The mean value and standard deviation of samples collected upstream of the Paterson Plank Road bridge are quite low as compared to the 5,000 ppm sediment value developed by the USGS for New Jersey sediment.

The samples collected between the Paterson Plank Road bridge and the Route 3 bridge by HMDC ranged from 21 to 18,700 ppm for specific sampling sites and 18 to 23,900 ppm for single samples from a sampling site. The mean for individual sampling sites is 4,030 ± 5,260 ppm. The mean value and standard deviation are similar to the USGS recommended value.

The range of all channel sediment samples is 21 to 18,700 ppm for specific sampling sites and 18 to 23,900 ppm for single samples from sampling sites. The mean zinc concentration for individual sampling sites is 3,130 ± 4,730 ppm.

5.2.4.1.9 Beryllium. Eight channel sediment samples were analyzed for beryllium. A single sample only was analyzed at each

sampling site. The range of these samples was 0.14 to 0.90 ppm. A mean and standard deviation of 0.61 $\pm$ 0.27 ppm is calculated for the samples. This mean value for beryllium is less than the value of 200 ppm for New Jersey sediment recommended by the USGS.

5.2.4.1.10 Selenium. A single sample has been analyzed for selenium. No selenium was detected in this sample.

5.2.1.4.1.11 Silver. One sample has been analyzed for silver at 0.30 ppm. There was no recommended value for silver in the 1979 document.

5.2.1.4.1.12 Organic Contaminants. A single channel sediment sample was analyzed for organic contaminants at station 32. Results of the sample indicate the presence of total PNA at 19 ppm, total chlorinated pesticides at 1.73 ppm and total VOC at 5.18. The single compound detected at the highest value was flourene at 10 ppm.

5.2.4.2 Surface Water. Mercury in surface water is reported from numerous sources dating from 1974 to 1982. Mercury analyses were reported in 314 records for 13 stations on the small-scale map. Most records are for stations 23, 32, 37, 60 and 73. There are insufficient comparable data to discuss temporal trends. Metals in surface water besides mercury have been analyzed in the Berrys Creek area on three separate occasions - by Jack McCormick and Associates (JMA), 1977; Bergen County and Associates (BCA), 1978 and the New Jersey Department of Environmental Protection (NJDEP), 1981. JMA analyzed As, Cd, Pb, Ni and Zn at nine stations, four stations twice, in 1977; BCA analyzed four stations for As, Cd, Cr, Cu, Fe, Pb, Ni and Zn in 1978 and in 1981 the NJDEP analyzed 14 stations for As, Be, Cd, Cr, Cu, Pb, Ni, Se and Zn.

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The Freshwater and Saltwater Water Quality Criteria for mercury are listed in Table 5-11. Along with the criteria are number of exceedances for filtered samples and analyses. Other contaminants were not analyzed from filtered samples, therefore, criteria cannot be applied to them. Water quality criteria data available for organic compounds analyzed are in Table 5-12.

5.2.4.2.1 Mercury. Within Berrys Creek surface water was collected in the creek as well as its tributaries and side channels in the marshes. In the upper Berrys Creek area (upstream of Paterson Plank Road) concentrations ranged from 0.0 to 47.0 ppb for unfiltered samples and from 0.0 to 0.27 ppb for filtered samples. A single station was sampled in the middle Berrys Creek area with two samples collected by the NJDEP during 1981. The filtered value reported 1.4 ppb while the unfiltered sample was 0.2 ppb (Station 26).

Six stations were sampled in the lower Berrys Creek areas (downstream of Route 3 to the Hackensack River). Unfiltered samples ranged from 0.0 to 46.6 ppb while filtered samples ranged from 0.0 to 4.0 ppb. Seven exceedances of the 0.2 ppb water quality criteria were noted out of 86 filtered analyses. Suspended solids were also reported in this section of the creek at Route 3 bridge in August 1982 by HMDC. Mercury attached to suspended solids ranged from 53.4 ppm to 940.3 ppm with an average value of 298 ppm.

Three stations were also sampled outside the Berrys Creek system (60, 73, 76 small-scale map). Unfiltered values ranged from 0.0 to 4.2 ppb while filtered samples ranged from 0.0 to 0.17 ppb. Although the values in surface water are commonly greater than 0.2 ppb for either map the criteria are established based upon water filtered with a 0.45 u

TABLE 5-11

EXCEEDANCE OF WATER QUALITY VALUES IN SURFACE, FRESHWATER AND SALTWATER: SMALL- AND LARGE-SCALE MAP DATA BERRYS CREEK AREA

Contaminant	Freshwater	Saltwater	# Exceedances	#Analyses	Stations
Mercury	0.2	0.1	7	86	23,26,32, 39(sm-scale)
			1	1	1 lg-scale

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TABLE 5-12

FRESHWATER AND SALTWATER CRITERIA FOR
THE PROTECTION OF AQUATIC LIFE
(EPA 1980)

Compound	Freshwater Chronic (ppb)	Freshwater Acute (ppb)	Saltwater Chronic (ppb)	Saltwater Acute (ppb)
methylene chloride	--	193.000	--	--
chloroform	--	28.900	--	--
1,1.1-trichloroethane	--	18,000	--	31.200
trichloroethene	--	45.000	--	2,000
tetrachloroethene	840	5,280	450	10,200
benzene	--	5.300	--	5,100
ethyl benzene	--	32.000	--	430
toluene	--	17.500	5.000	6.300
chlorobenzene	--	250	129	160
trans-1,2-dichloroethene	--	11.600	--	224.000
1,2-dichloroethane	20,000	118,000	--	113,000

-- = no value referenced

From: EPA (1980)

filter. Therefore, a total 8 percent of filtered surface water samples for mercury were reported to exceed the water quality criteria.

5.2.4.2.2 Arsenic. BCA and the NJDEP analyzed samples in Berrys Creek and tributaries. Arsenic concentrations ranged from 1 to 905 ppb. The 905 ppb value measured by BCA in Berrys Creek Creek downstream of the Berrys Creek Canal cutoff is 25 times higher than any other reported arsenic value. The mean and standard deviation of these values is 60.8 ± 225 ppb; 4.4 ± 4.5 ppb excluding the 905 ppb value. The 905 ppb value is the only value exceeding the 50 ppb drinking water standard. The seven samples collected between the tide gate and the Paterson Plank Road bridge averaged 2.1 ± 0.7 ppb.

5.2.4.2.3. Cadmium. BCA and the NJDEP analyzed samples in Berrys Creek and tributaries. Cadmium concentrations ranged from <1 to 64 ppb. The 64 ppb value was measured by BCA in Berrys Creek Creek near the intersection with Berrys Creek Canal. The 64 ppb value is four times as high as the next highest value. The mean and standard deviation is 6.3 ± 15.4 ppb, 2.7 ± 4.2 ppb without the 64 ppb value. Cadmium concentrations measured between the tide gate and Paterson Plank Road bridge averaged 1 ppb.

5.2.4.2.4 Chromium. NJDEP measured chromium at seven stations between the tide gate and the Paterson Plank Road bridge. The range was 5 to 19 ppb with a mean and standard deviation of 12.7 ± 4.5 ppb. NJDEP and BCA measured chromium at nine stations downstream of the Paterson Plank Road bridge. The range is 7.5 to 50 ppb, with a mean and standard deviation of 15.5 ± 13.4 ppb calculated.

5.2.4.2.5 Copper. The NJDEP measured copper at seven stations between the tide gate and the Paterson Plank Road bridge. The

range was 7 to 42 ppb, with a mean and standard deviation of 14.5 ± 11.5 ppb. NJDEP and BCA measured copper downstream of the Paterson Plank Road bridge. A mean and standard deviation of 14.4 ± 23.9 ppb was calculated.

5.2.4.2.6 Iron. BCA measured iron at five stations downstream of Paterson Plank Road bridge. A mean and standard deviation of 656 ± 551 ppb is calculated. The range is 1,460 to 200 ppb.

5.2.4.2.7 Lead. The NJDEP and BCA analyzed 17 samples for lead. Values ranged from 8 to 65.3 with a mean and standard deviation of 23.6 ± 16.5 ppb. Seven of the NJDEP samples were collected between the Paterson Plank Road bridge and the tide gate. The average of the samples is 38.2 ± 16.5 ppb. Samples collected by BCA and the NJDEP downstream of the Paterson Plank Road bridge averaged 13.8 ± 5.1 ppb.

5.2.4.2.8 Nickel. The NJDEP and BCA analyzed for nickel in samples collected in Berrys Creek and its tributaries. Seven samples were collected between the tide gate and the Paterson Plank Road bridge by the NJDEP. Nickel values ranged between 12 and 28 ppb with an average of 19.6 ± 6.2 ppb. Samples collected downstream of the Paterson Plank Road bridge by BCA and the NJDEP ranged from 10 to 300 ppb with an average value of 112 ± 103 ppb calculated. It is noted that the values reported by BCA are two times higher than the values reported by NJDEP.

5.2.4.2.9 Silver. The NJDEP analyzed for silver in samples collected in Berrys Creek and its tributaries. All 13 samples were reported to contain silver concentrations of 1 ppb or less.

5.2.4.2.10 Beryllium. The NJDEP analyzed for beryllium in 13 samples collected in Berrys Creek and its tributaries. All 13 samples were reported to contain beryllium concentrations of 1 ppb or less.

5.2.4.2.11 Zinc. BCA and the NJDEP collected and analyzed 17 samples in Berrys Creek and its tributaries. Seven samples were collected between the tide gate and the Paterson Plank Road bridge by the NJDEP. These samples ranged from 110 to 275, with a mean and standard deviation of 216 $\pm$ 58 ppb. The ten samples collected by BCA and the NJDEP downstream of the Paterson Plank Road bridge ranged from 7 to 250 ppb, averaging 62.6 $\pm$ 68.5 ppm.

5.2.4.2.12 Organic Contaminants. The NJDEP collected samples from 15 stations for the determination of volatile organic compounds (VOC) in 1981. A total of 38 compounds were analyzed for. Table 5-13 lists those compounds that were analyzed. Of the 15 stations the location can be accurately determined for 13. The locations of the sampling sites range from Berrys Creek Creek at the Hackensack River to the West Riser Ditch of Berrys Creek at Moonachie Road. Nine samples were collected in the main stem of Berrys Creek or Berrys Creek Canal, while four sample stations were in tributaries of Berrys Creek.

Four compounds: methylene chloride (CH_2Cl_2); chloroform ($CHCl_3$); trichloroethylene (CCl_2CHCl) and tetrachlorethylene (CCl_2CCl_2) were quantified in samples from all 13 sites. The compound 1,1,1-trichloroethane (CCl_3CH_3) was detected in all but one sample and 1,1,2-trichlorotriflouromethane, (freon 113) was detected in eight samples. At only two sites were additional compounds detected.

A synopsis of the status of those compounds detected is presented as Table 5-14. The site at which the maximum value is reported for

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TABLE 5-13

VOCS ANALYZED IN SURFACE WATER

Chloromethane	Trans-1,3-dichloropropene
Dichlorodiflouromethane	Trichloroethylene
Bromomethane	Benzene
Vinyl Chloride	Dibromochloromethane
Chloroethane	Trans-1,2-dichloropropene
Methylene Chloride	Cis-1,3-dichloropropene
Trichloroflouromethane	1,1,2-Trichloroethane
1,1-Dichloroethylene	1,2-Dibromomethane
1,1-dichoroethane	Bromoform
Trnas-1,2-dichlorethylene	Diiodomethane
Chloroform	1,1,2,2-Tetrachloroethene
1,2-Dichloroethane	Toluene
(Freon 113) 1,1.2- Trichlorotriflouroethane	Chlorobenzene
	Ethylbenzene
1,1.1-Trichloroethane	o-xylene
Carbon Tetrachloride	m-xylene
Bromodichloromethane	p-xylene
Bis-chloromethylether	Acrolein
1,2-Dichloropropane	Acrylonitrile

TABLE 5-14

STATUS OF VOCS IN SURFACE WATER

Compound	Range	Mean	Standard Deviation	# of Detection[1]
methylene chloride	88.9-5.9	23.9	23.5	13
chloroform	5.1-0.4	1.4	1.3	13
trichloroethene	10.5-0.3	2.3	2.7	13
tetrachloroethene	33.8-0.8	6.4	9.3	13
1.1.1-trichloroethane	7.4-ND[2]	1.6	1.8	12
Freon 113	60.4-ND	8.3	16.6	8
trans-1.2-dichloroethane	3.4	--	--	1
1,2-dichloroethane	25.9	--	--	1
chlorobenzene	0.3	--	--	1
benzene	9.5	--	--	1
toluene	2.8	--	--	1
ethylbenzene	9.1	--	--	1
o-xylene	13.9	--	--	1
m-xylene	64.8	--	--	1
p-xylene	28.4	--	--	1

[1] Number of detections of a posible 13.
[2] ND = not detected

compounds reported for more than one site, except for methylene chloride, is station 40. No discernible trends are apparent in the distribution of VOCs in the surface water. However, it is observed that the stations (40 and 106) with the highest VOC concentrations are either well upstream of the 40-acre site or well downstream of the site. And samples from Berrys Creek and tributaries near the site indicate little, if any, impact of the site on VOC concentrations.

5.2.5 Marshland

The only specific sample type which is unique to marshlands are sediment samples. Therefore, this is the only sample type discussed. The general range of mercury contamination in marsh sediment is illustrated by colored dots in Figure 5-40. Similar illustrations for other contaminants were previously presented in Figures 5-22 through 5-31.

5.2.5.1 Marsh Sediment Mercury. A total of 233 records of marsh sediment data are reported on the small scale map for a total of 60 stations. Marsh sediment records on the large-scale map totalled 22 for four stations. The range of marsh sediment mercury concentrations in upper Berrys Creek was from 0.6 ppm to 2,006 ppm with the middle and lower Berrys Creek area marsh sediments ranging from 0.3 ppm to 246 ppm and 0.0 to 62 ppm, respectively.

It is difficult to develop trends in these data due to the lack of successive sampling events of similar depth at specific stations. A total of two sites contained comparable data from three sample periods with a limited amount of comparable data collected over two sample periods for selected stations. The two stations with three comparable

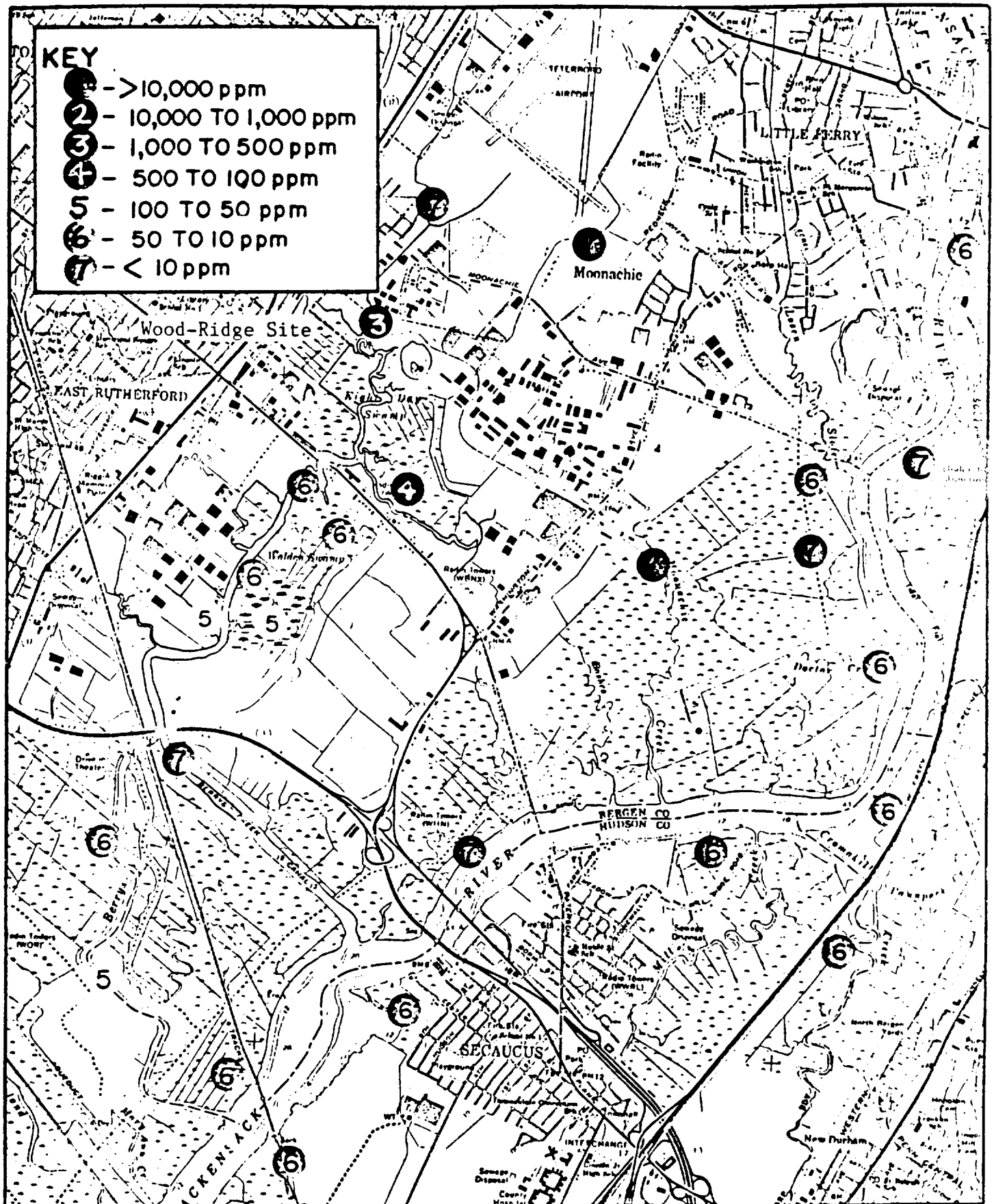

FIGURE 5-40

MEAN MARSHLAND MERCURY CONCENTRATIONS
(SMALL SCALE MAP)(TOP 3 FEET)

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data points were 45 and 50, each with three similar marsh sediment samples reported from various documents from the Hackensack Meadowlands Development Commission (HMDC) and Jack McCormick and Associates (JMA). Both Stations 45 and 50 are located in Walden Swamp. At Station 45 marsh sediments were reported for the years 1972, 1974 and 1976 with similar data for 0-2 in. to 0-6 in. depth cores. The upper layer of sediment for each sample increased in concentration from 1972 to 1976 from 6.0 ppm in 1972 to 36.7 ppm in 1974 and 136 ppm in 1976. No data were found at Station 45 after 1976. At Station 50, data are available for the years 1972, 1976, and 1977. Values at 0-2 in. depths for those years are 2.3 ppm, 35.0 ppm and 64.0 ppm, respectively. Deeper sediment data may also be compared for Station 50 at depths of 4-6 in. in 1972, 2-8 in. in 1976 and 2-6 in. in 1977. The values reported for these levels are 8.2 ppm, 84.0 ppm and 76.0 ppm, respectively. Both 0-2 in. and 2-8 in. samples indicate an increase of mercury concentration over time. Additional stations in the Walden Swamp area where sediment was sampled include: 27, 46, 47 and 48. The latest date of sampling for sediment in Walden Swamp sediment is 1977. Marsh sediment of 0-2 in. depth can be compared for two events at Station 48 where mercury concentration was reported at 6.7 ppm in 1972 and 53.0 ppm in 1976. The sediment data are very sporadic and lack similarity to determine definite trends but suggest that marsh sediments in Walden Swamp tended to increase in mercury concentration from 1972 to 1977.

The distribution of mercury with depth is difficult to assess as there are very few depth profile analyses at any single station for more than one period at identical depths. Therefore, mercury in the sediment with depth may be discussed only in a very general sense. Mercury

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profiles in the marshes indicate that the highest concentration is typically in the top 0 to 6 inches; especially in the lower (Route 3 to Hackensack River) Berrys Creek area, Table 5-15. In the middle (Route 3 to Paterson Plank Road) and upper (Paterson Plank Road to West Riser Ditch tide gate) sections of Berrys Creek the mercury distribution with depth appears somewhat more mixed with the highest concentrations detected primarily in the top layer but at times detected in the lower to mid-sections of the sediment cores (core depths 12 to 25 inches were evaluated). In deeper cores (to 80 inches) collected by JMA in 1976, mercury appears to be associated primarily with the upper layer of peat (0-30 inches), and then to decrease through the middle sand layer and deep clay.

5.2.5.2 Marsh Sediment - Other Contaminants. Other contaminants (heavy metals) were sampled in marsh sediments primarily during one survey by Bergen Associates 1978 and by JMA 1978. Bergen's work was done for the Berrys Creek Center EIS. The stations sampled are in the lower Berrys Creek area (downstream of Route 3) while JMA sampled two locations in Walden Swamp. Arsenic and chromium were reported in Walden Swamp ranging from 29.8 to 67.6 ppm and 260 to 740.0 ppm, respectively. Arsenic is lower than the New Jersey sediment criteria recommended by the USGS while chromium was greater.

Four stations were sampled by Bergen 1978. Arsenic, cadmium, chromium, copper, iron, lead, nickel and zinc were analyzed. Table 5-16 gives the ranges and mean concentration for each heavy metal for all stations. All values reported by Bergen were less than USGS recommended sediment criteria.

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TABLE 5-15

VARIATION IN THE MARSH SEDIMENT MERCURY CONCENTRATION FROM LOCATION WITHIN CORE SAMPLES

Small-Scale Map Station	Section of Core with Highest Hg (inches)	Section of Core with Lowest Hg (inches)	Total Depth of Core (inches)	Year Sampled
LBC 1	2-4	6-11	11	1977
LBC 20	0-6	12-24	24	1978
MBC 26	12-18	4-6	18	1977
LBC 30	0-2	2-4	12	1977
UBC 35	0-2	4-6	12	1977
UBC 36	2-4	6-10	10	1977
UBC 39	12-13	2-4	13	1977
UBC 42	0-2	12-18	18	1977
(T.M.) MBC 45	2-10	10-25	25	1976
(T.M.) MBC 50	2-4	6-12	12	1977
(PIC) UBC 84	2-4	12-15	15	1977

LBC: Lower Berrys Creek
MBC: Middle Berrys Creek
UBC: Upper Berrys Creek
TM: Tidal Marsh
PIC: Peach Island Creek

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TABLE 5-16

MEAN HEAVY METAL CONCENTRATION
AND RANGES IN MARSH SEDIMENT
LOWER BERRYS CREEK - 1978

Metal	Mean (ppm)	Range (ppm)
Arsenic	1.9	0.01-6.6
Cadmium	0.56	0.33-1.36
Chromium	35.25	9.0-68.0
Copper	19.0	8.0-32.0
Iron	16.475.0	9,100.0-48,100.0
Lead	27.5	0.03-72.0
Nickel	30.25	10.0-47.0
Zinc	70.0	28.0-154.0

ppm: parts per million

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5.2.6 Biota

All biological samples are discussed by sample type, i.e., fish, plants and other animals. This is due to their mobility or lack of occurrence in specific areas described earlier. Mercury is the only contaminant reported in biota. All biological data are reported on the small-scale map.

5.2.6.1 Fish. Fish data are available for selected sites from 1976 to 1984. A total of 26 stations are represented with 129 records processed. Killifish (Fundulus sp) are the primary fish species collected, as this is apparently the most abundant resident species of the area. Unfortunately, an accurate inventory of the species which reside for a portion of the year (transient species) throughout the Berrys Creek area is not available. A number of fish species were analyzed by several tissue types, i.e., liver, muscle, gills, brain, etc. while the majority of fish (Killifish) were analyzed as whole fish and, therefore, lend well to comparison. Fish data indicate the average whole body mercury level in killifish exceed 1 ppm only in areas adjacent to the site and for approximately one mile downstream. Ranges of mercury in fish data are presented in Figure 5-41.

Downstream of the middle of Walden Swamp killifish whole body burdens do not exceed 1 ppm and typically are below 0.5 ppm. Other fish species (spot, goldfish, white perch) and specific tissues (brain, heart, liver, gill, etc.), however, exceed 1.0 ppm up to a maximum of 59.0 ppm in killifish heart tissue near the confluence of Berrys Creek and the Hackensack River. Two stations have been sampled for fish upstream of the tide gate on the East Riser Ditch of Berrys Creek.

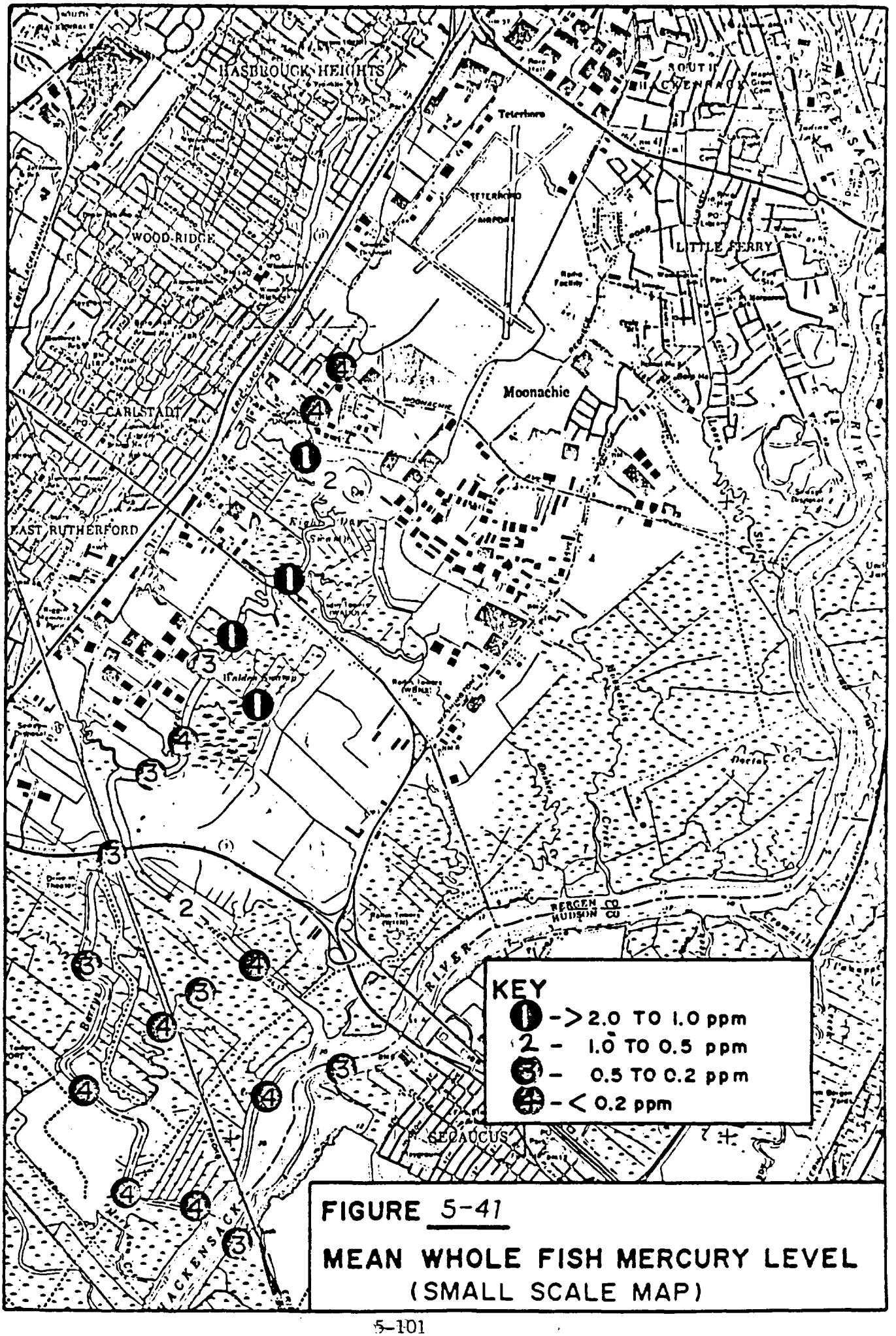

FIGURE 5-41

MEAN WHOLE FISH MERCURY LEVEL
(SMALL SCALE MAP)

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Results from both of these stations indicate mercury whole body burdens are less than 0.2 ppm in this area.

Fish data are compiled from numerous sources and include a great deal of analysis of tissue types, i.e., muscle, kidney, and liver, etc. Figure 5-42 depicts the six locations at which any fish value was reported at 1.0 ppm or greater. Fish at the tidegate location frequently indicate accumulation of mercury of 1.0 ppm or greater with similar accumulation also reported at Paterson Plank Road (Station 32). Table 5-17 reveals 43 records for the fish tissue mercury concentrations greater than 1.0 ppm.

Data are reported for two or more periods from three stations (23 - Route 3 bridge and 38 tidal pool and 32 Paterson Plank Road) for killifish whole body tissue samples. The data for these stations are summarized on Figure 5-43. The data indicate that the bioaccumulation of mercury decreases with distance downstream of the site. An increase in bioaccumulation is suggested with time at Stations 23 and 32 (1978 to 1983) but not at Station 38 (tidal pool).

5.2.7 Mercury in Terrestrial Life

In addition to fish analyses, there are biological results for mammals, birds, invertebrates and plants.

5.2.7.1 Plants. Plant data is useful in locating areas of accumulation due to the immobility of plants vs. animal life. A total of 14 stations were reported with 314 records processed. Five of the stations reported were near the site with four stations in or near the tidal marsh (Walden Swamp). The five remaining stations were dispersed throughout the Meadowlands area with two stations on the opposite side

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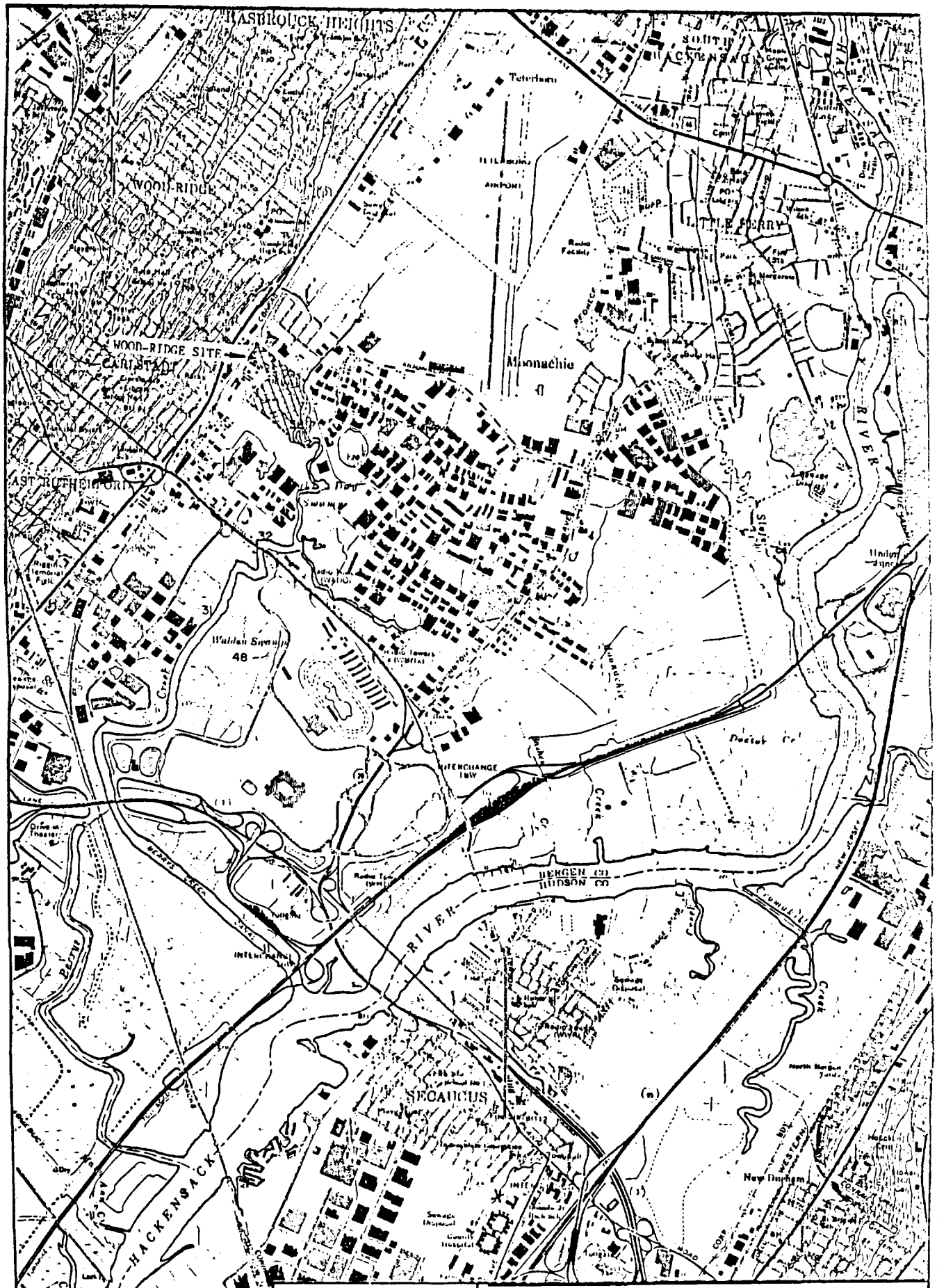

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FIGURE: 5-42 MERCURY CONCENTRATIONS IN FISH TISSUE GREATER THAN 1.0ppm

SCALE: 1"=2000'

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TABLE 17

FISH VALUES WITH MERCURY GREATER THAN 1.0 ppm

 15:14:29 26 SEP 1985

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
1514	3	fish	Hg	1.00	ppm		10	76	Killi w	JMA 76
1515	3	fish	Hg	59.00	ppm		10	76	Killi hrt	JMA 76
1516	3	fish	Hg	4.10	ppm		10	76	Killi brn	JMA 76
1517	3	fish	Hg	2.00	ppm		10	76	Killi liv	JMA 76
1518	3	fish	Hg	7.60	ppm		10	76	Killi liv	JMA 76
1521	3	fish	Hg	6.30	ppm		10	76	Spot gills	JMA 76
1522	3	fish	Hg	25.20	ppm		10	76	Spot hrt mean	JMA 76
4234	7	fish	Hg	12.00	ppm		10	76	Killi hrt	JMA 76
4235	7	fish	Hg	6.10	ppm		10	76	Killi brn	JMA 76
4236	7	fish	Hg	3.10	ppm		10	76	Killi liv	JMA 76
4239	7	fish	Hg	12.00	ppm		10	76	Killi hrt	JMA 76
4243	7	fish	Hg	2.20	ppm		10	76	Spot hrt	JMA 76
4244	7	fish	Hg	21.00	ppm		10	76	Spot brn	JMA 76
1592	11	fish	Hg	1.11	ppm			77	Wh perch mus	HMDC 78
4226	21	fish	Hg	1.37	ppm		10	76	goldfish liv	JMA 76
4227	21	fish	Hg	14.00	ppm		10	76	goldfish hrt	JMA 76
4228	21	fish	Hg	3.20	ppm		10	76	goldfish brn	JMA 76
4229	21	fish	Hg	2.10	ppm		10	76	goldfish eye	JMA 76
4241	21	fish	Hg	1.20	ppm		10	76	Killi gills	JMA 76
1718	31	fish	Hg	1.40	ppm		10	76	Killi w	JMA 76
1719	31	fish	Hg	3.30	ppm		10	76	Killi w	JMA 76
1736	32	fish	Hg	1.04	ppm		11	79	unknown w	Aw 79
1737	32	fish	Hg	1.28	ppm		11	79	unknown w	Aw 79
3369	32	fish	Hg	2.70	ppm		3	83	Killi w	NJDEP 85
3370	32	fish	Hg	1.76	ppm		3	83	Killi w	NJDEP 85
3371	32	fish	Hg	2.12	ppm		3	83	Killi w	NJDEP 85
3372	32	fish	Hg	2.36	ppm		3	83	Killi w	NJDEP 85
3381	32	fish	Hg	3.60	ppm		9	83	Killi liv	Weis 84
3382	32	fish	Hg	1.30	ppm		9	83	Killi mus	Weis 84
1799	38	fish	Hg	2.30	ppm		10	76	Killi w	JMA 76
1812	38	fish	Hg	1.60	ppm		10	76	Killi w	JMA 76
1813	38	fish	Hg	1.90	ppm		10	76	Killi w	JMA 76
3383	38	fish	Hg	1.94	ppm		11	79	unknown w	Aw 79
3384	38	fish	Hg	2.03	ppm		11	79	unknown w	Aw 79
4248	38	fish	Hg	1.30	PPM		3	83	Killi w	NJDEP 85
4249	38	fish	HG	1.54	PPM		3	83	Killi w	NJDEP 85
4250	38	fish	HG	3.08	PPM		3	83	Killi w	NJDEP 85
4251	38	fish	HG	2.00	PPM		9	83	Killi liv	WEIS 84
4252	38	fish	HG	7.00	PPM		9	83	Killi liv	WEIS 84
1848	48	fish	Hg	1.10	ppm		10	76	Killi w	JMA 76
1849	48	fish	Hg	1.30	ppm		10	76	Killi w	JMA 76
1850	48	fish	Hg	2.90	ppm		10	76	Killi w	JMA 76
4230	21	fish	Hg	1.00	ppm		10	76	goldfish visc	JMA 76

41 records processed

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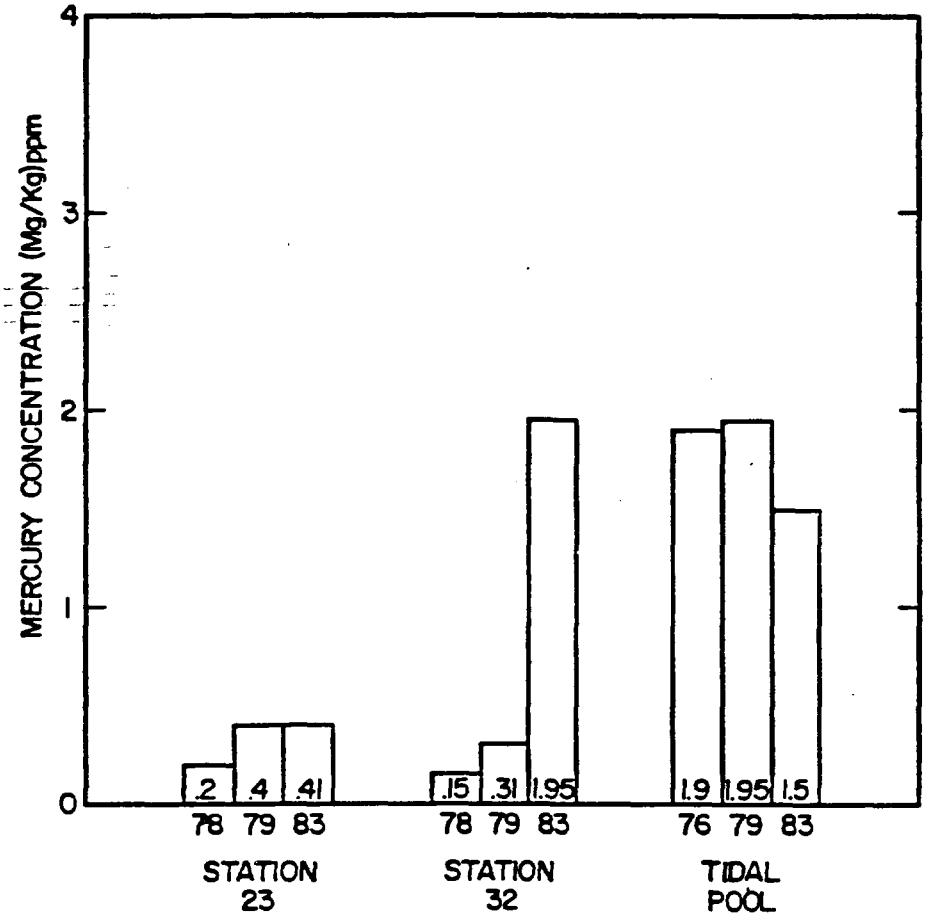

FIGURE: 5-43 MERCURY CONCENTRATIONS IN WHOLE FISH TISSUE SAMPLE FROM STATION 23, 32, AND TIDAL POOL FOR 1978 THROUGH 1982.

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Brentwood Tn. 615/373-3350

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of the Hackensack River from Berrys Creek. Figure 5-44 identifies those stations at which mercury concentrations were detected at 1.0 ppm or greater in plant tissue. Table 5-18 summarizes the values for the plant samples exceeding 1.0 ppm. The frequency of plant tissue contamination over 1.0 ppm was 14 percent. The highest reported value was 13.46 ppm from a spikerush at station 13 with the next highest value of 7.9 ppm from a cattail rhizome just downstream of the tidal pool (Station 37). Four analyses of the rhizome section of the plant (reported from three separate plant species) were equal to or exceeded 5.0 ppm. Since the rhizome is a fast-growing portion of the plant which is underneath the soil surface these higher mercury concentrations are not unexpected. The plant tissue values reported from the east side of the Hackensack River were both of Atriplex leaf samples at 1.9 and 2.2 ppm.

Plant tissue data were correlated with sediment data to evaluate the relationship between mercury concentration and specific tissue accumulation. Phragmites tissue were analyzed during 1977 at five locations in which marshland sediment were collected simultaneously in 1977 and 1976. Stations 39, 36, 26 and 43 were sampled in 1977 by the HMDC while Station 48 was sampled in 1976 by JMA. Figure 5-45 illustrates the relationship between marshland sediment mercury concentrations (average value of 10 to 17-inch deep cores) and plant tissue concentrations (rhizomes, leaf, stem, fruit structure and inflorescence). At all stations with rhizome mercury concentration correlated with sediment mercury concentration, however, no other tissue demonstrated similar conditions. Leaf and stem data revealed similarity in relative mercury concentration with leaf values consistently higher

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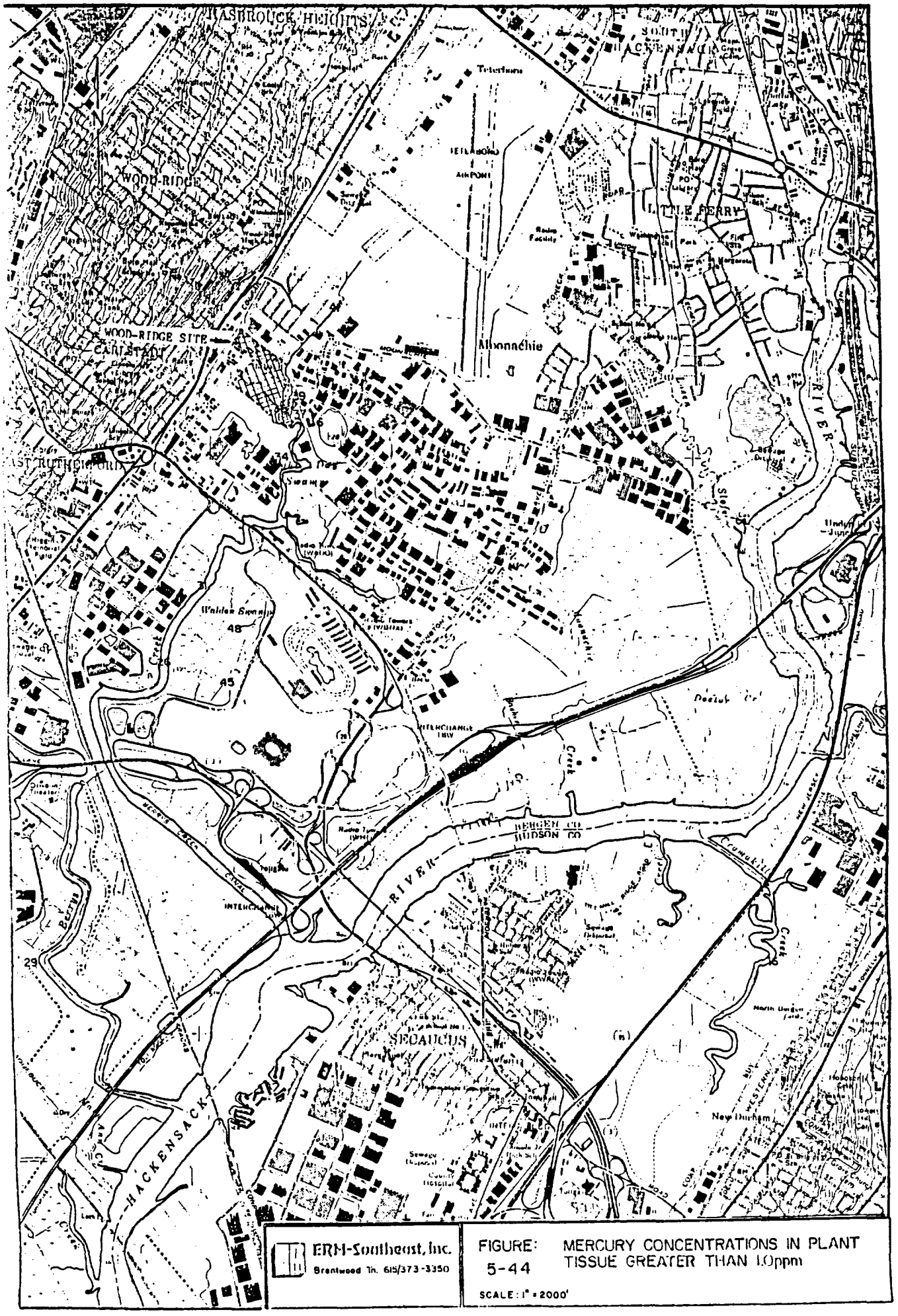

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FIGURE: 5-44

MERCURY CONCENTRATIONS IN PLANT TISSUE GREATER THAN 1.0ppm

SCALE: 1" = 2000'

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TABLE 5-18

Small Scale Map Plant Data Greater Than 1.0 ppm

14:53:36 28 JUN 1985

MAPIDATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
1508	2	plant	Hg	1.40	ppm		10	77	Spar lf	HMDC 78
1548	7	plant	Hg	1.90	ppm		10	76	Atri lf	HMDC 78
2016	16	plant	HG	2.20	ppm			77	Atri lf	HMDC 78
1668	26	plant	Hg	1.20	ppm		10	77	Spar riz	HMDC 78
1672	26	plant	Hg	5.60	ppm		10	77	Spar riz	HMDC 78
1700	29	plant	Hg	1.90	ppm		10	77	Atri lf	HMDC 78
2066	31	plant	HG	1.10	ppm			77	Typha riz	HMDC 78
2070	31	plant	HG	1.60	ppm			77	Hemp riz	HMDC 78
2072	31	plant	HG	1.10	ppm			77	Hemp lf	HMDC 78
2073	31	plant	HG	2.00	ppm			77	Hemp fr	HMDC 78
1724	31	plant	Hg	1.30	ppm		10	77	Phrag riz	HMDC 78
1728	31	plant	Hg	2.30	ppm		10	77	Spar riz	HMDC 78
1732	31	plant	Hg	3.60	ppm		10	77	Atri riz	HMDC 78
1734	31	plant	Hg	2.80	ppm		10	77	Atri lf	HMDC 78
1735	31	plant	Hg	2.50	ppm		10	77	Atri fr	HMDC 78
2093	34	plant	HG	5.64	ppm		5	78	Spar riz	HMDC 78
2104	34	plant	HG	1.25	ppm		5	78	Spar riz	HMDC 78
2116	36	plant	HG	3.50	ppm			77	Phrag riz	HMDC 78
2119	36	plant	HG	3.20	ppm			77	Phrag fr	HMDC 78
2120	37	plant	HG	7.90	ppm			77	Typha riz	HMDC 78
2121	37	plant	HG	1.80	ppm			77	Typha ste	HMDC 78
2124	37	plant	HG	3.50	ppm			77	Phrag riz	HMDC 78
2126	37	plant	HG	1.20	ppm			77	Phrag lf	HMDC 78
1807	38	plant	Hg	1.59	ppm		10	76	Phrag riz	JMA 76
2137	39	plant	HG	2.90	ppm			77	Acnid lf	HMDC 78
2138	39	plant	HG	1.20	ppm			77	Acnid fr	HMDC 78
2139	39	plant	HG	5.20	ppm			77	Typha riz	HMDC 78
2143	39	plant	HG	5.40	ppm			77	Phrag riz	HMDC 78
2147	39	plant	HG	4.30	ppm			77	Acnid riz	HMDC 78
2173	41	plant	HG	1.10	ppm		5	78	Typha riz	HMDC 78
2175	41	plant	HG	1.04	ppm		5	78	Typha lf	HMDC 78
2177	41	plant	HG	1.59	ppm		5	78	Hemp riz	HMDC 78
2179	41	plant	HG	1.08	ppm		5	78	Hemp lf	HMDC 78
2180	41	plant	HG	2.03	ppm		5	78	Hemp fr	HMDC 78
1820	45	plant	Hg	1.70	ppm		10	77	Spar lf	HMDC 78
1821	45	plant	Hg	3.00	ppm		10	77	Hemp riz	HMDC 78
1861	48	plant	Hg	1.80	ppm		10	76	Phrag lf	JMA 76
1864	48	plant	Hg	1.20	ppm		10	76	Phrag inflo	JMA 76

39 Records Processed

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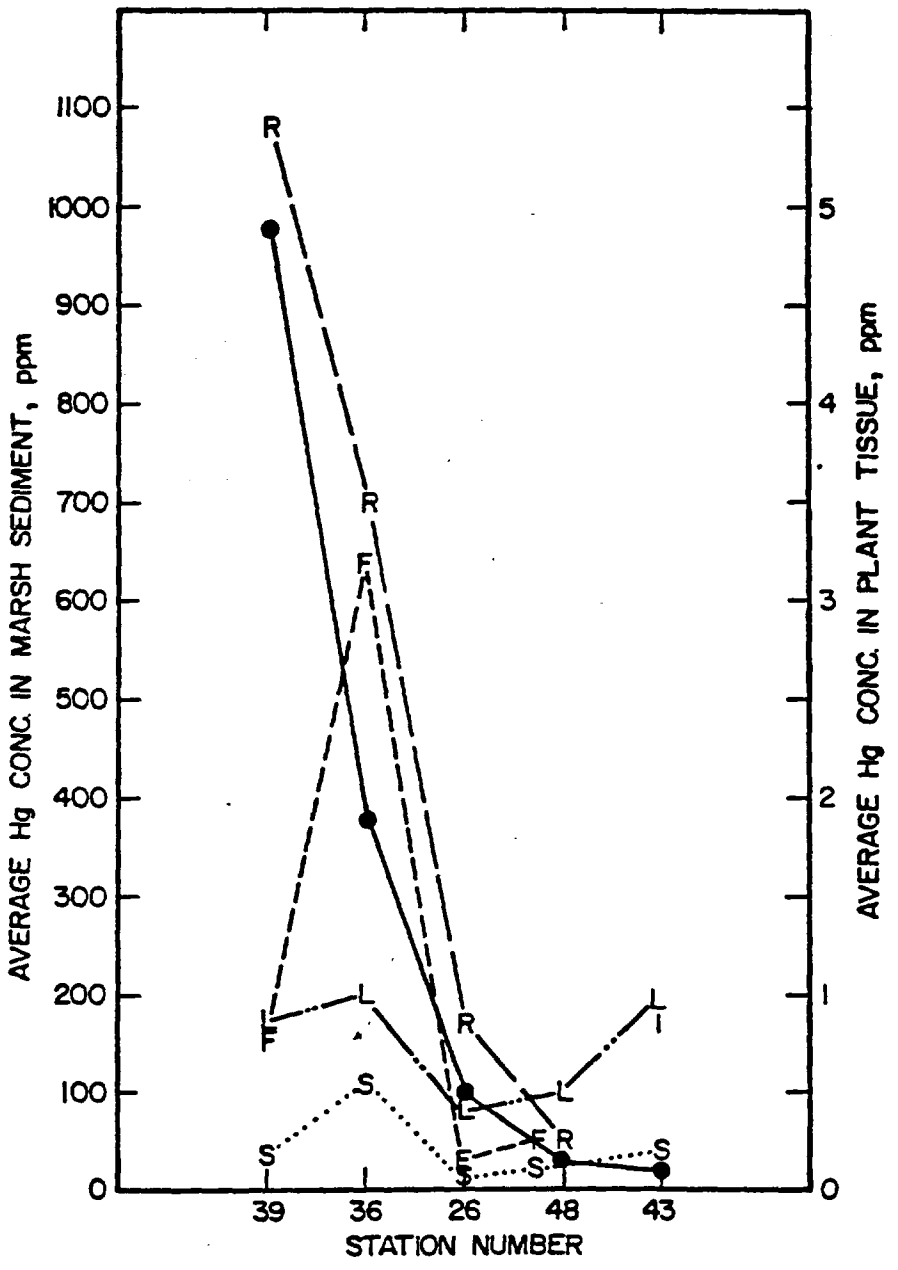

R— RHIZOME
S— STEM
L— LEAF
F— FRUITING STRUCTURE
I— INFLORESENCE

FIGURE 5-45 SEDIMENT AND PLANT MERCURY CONCENTRATION CORRELATION BERRYS CREEK NEW JERSEY.

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Brentwood Tn. 615/373-3350

than stems. In the five samples evaluated the concentration of mercury was lowest in stem tissues.

All plant data are reported from 1976 to 1978 and therefore do not cover a time period which would adequately indicate trends. The distribution, however, of plant data over a large area during the short period of time does provide a good data base for evaluation of spacial contamination.

Three species of plants constitute the majority of data. These species include Phragmites (common reed) Spartina (cord grass) and Typha (cattail). Four additional species are reported including Hemp, Soft Stem bullbrush, spike rush and Atriplex and one record of green algae data. The specific species of the plant and tissue analyzed is reported in the description of the data, i.e., stem, fruit, rhizome, etc. A single station (31) reported data for the three plant surveys 1976, 1977 and 1978. Comparable data are available for two species from Station 31 located at the upstream end of Walden Swamp at Berrys Creek. Figure 5-46 summarizes the data from the three events for both species and two tissue types: rhizome and leaf-stem average. The 1977 data indicates the highest level in mercury of each tissue and species; therefore, no trend in concentration vs. time was observed. The data do indicate that rhizome tissue accumulates far more mercury than leaf-stem tissue in five of the six examples. The 1976 and 1977 data were collected in October while 1978 data were collected in May. Therefore, growth patterns and weather may influence the interpretation of these data.

5.2.7.2 Mercury Other Animals. A total of 161 records are reported for other animals from 24 stations. The 161 records include mammals (muskrat, mouse, vole, rabbit, raccoon, skunk, opossum, and

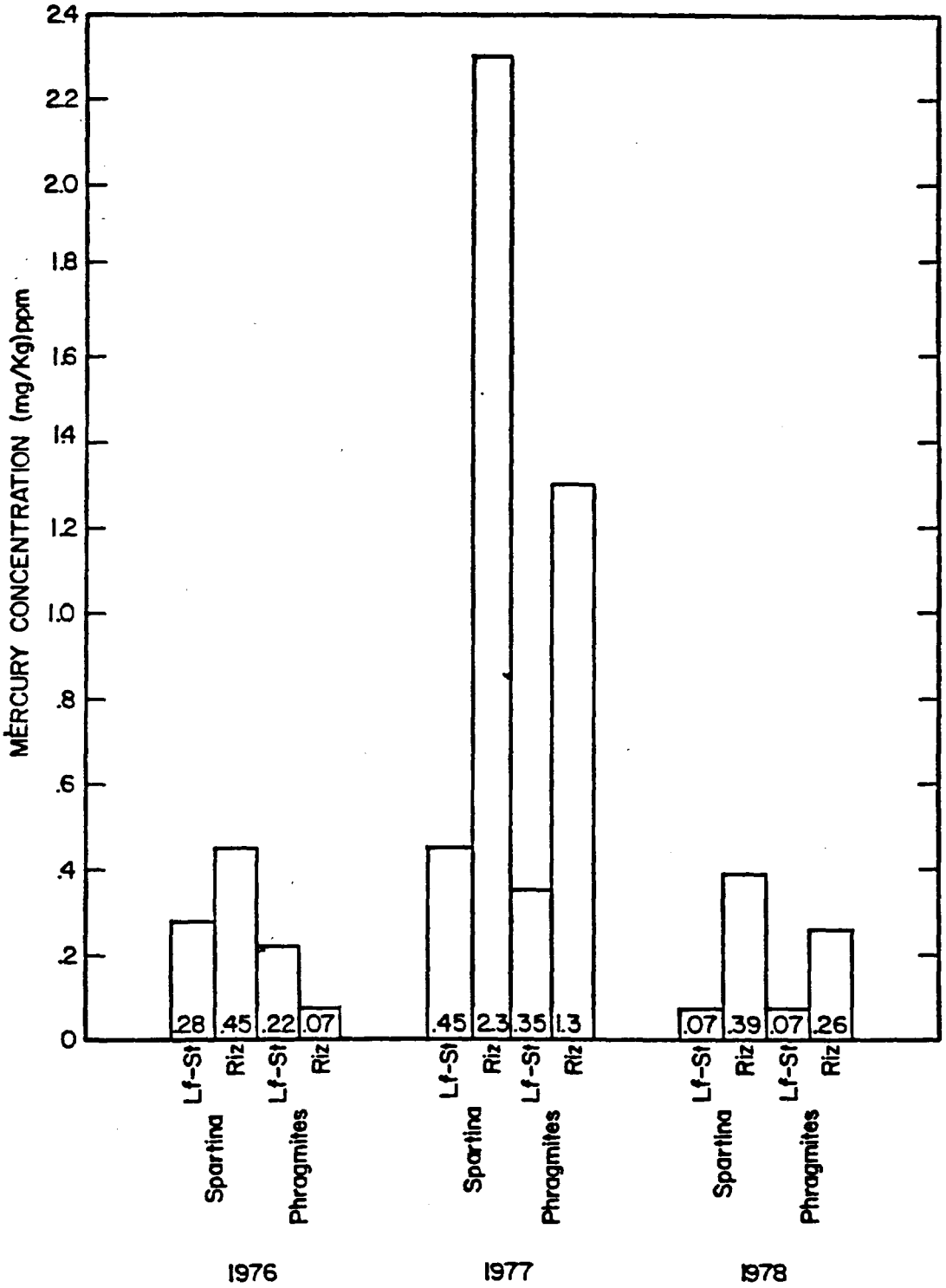

FIGURE: MERCURY CONCENTRATION IN SELECTED TISSUES OF SPARTINA AND PHRAGMITES 976 THROUGH 1978, STATION 31.

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Norway rat), birds (gallinule, green Herron, barn owl, woodcock, and black duck) and invertebrates (crab, shrimp, snail, barnacle, isopod, slug, mussel, beetle, and spider). No similar species were reported from the same station for more than one sample period, however, the data do describe a number of areas and indicate bioaccumulation of mercury has occurred in various tissues of specific organisms.

The data indicate that accumulation is observed in the resident biological community. Invertebrates generally reported the highest concentrations of mercury with 51 percent of the records greater than 1 ppm to a maximum of 150 ppm in a whole snail tissue sample collected downstream of Paterson Plank Road. Birds were also found to have a high frequency of mercury levels greater than 1.0 ppm at approximately 43 percent. The maximum concentration detected was 5.89 ppm in black duck liver taken near the Paterson Plank Road (NJDEP 1983). Mammals were the least contaminated with 6 percent of the values reported greater than 1.0 ppm. The maximum value was 4.0 ppm in a rat fur sample in the lower Berry's Creek area.

Barnacle data from October 1976 was collected at three locations:

31: Berrys Creek near the upper Walden Swamp

38: West Riser ditch tidal pool (near the site)

48: Middle section of Walden Swamp

Three values are available for each station. The concentration of mercury declines with distance from the site, with average values for each site at 4.9 ppm (Station 38), 1.95 ppm (Station 31) and 0.95 ppm (Station 48). Therefore, indicating a general trend of decreasing

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concentration with distance from the site similar to the trend observed from fish data.

5.3 NON-HAZARDOUS MATRIX CHARACTERISTICS

5.3.1 Introduction

A comprehensive survey of Site Specific literature was conducted in order to determine non-hazardous matrix characteristics for: Soils and Sediment; Water Quality; Biological Resources/Rare and Endangered Species; Hydrology and Hydraulics and Ground Water; Wetlands and Land Use; and Historical and Archeological Resources; and Air Quality. The review included document searches and discussions with scientists of the Hackensack Meadowland Development Commission (HMDC) and other agencies to acquire data for water quality and from Environmental Impact Assessment (EIA) Reports as it relates specifically to the Berrys Creek area and Wood-Ridge site.

The environmental assessment reports available for the Berrys Creek area include:

1. Giant Stadium the Meadowlands, East Rutherford, New Jersey. JMA Assoc., 1972.
2. Meadowland Arena Full EIS, The New Jersey Sports and Exposition Authority, May 1978.
3. Berrys Creek Center General Plan Application Environmental Assessment, October 1978.

5.3.2 Soil and Sediment

Site specific data reports which note non-hazardous matrix characteristics for soils and sediments are Hutchinson 1977, Jack

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McCormick and Associates (JMA) 1976, AWARE 1980 and Meyerson 1984. Grain size, soil and sediment types, and organic content are the parameters mentioned in these reports. These "descriptors" are provided in site specific data literature data base for soil and sediment from specific sampling stations (see appendices).

Additional soil characteristics for the area are given in the soil classification from soil borings analyzed as preconstruction requirements for industrial development in the Meadowlands by the HMDC. These data give boring location, depth, and soil classification. These data are available for all recent construction in the Meadowlands and are a good record of soil classification in the Meadowlands. Provided in each of the environmental assessments are various soil and geologic information including soil borings, subsurface soil conditions, stratigraphy, and description of the geology.

Sediments in the marshes and small tidal streams are typically characterized as clayey or silty and frequently in combination ranging from black to grey in color. Upstream of the site sediments are more sandy as are sediments of the larger stream channels. High levels of organic material are detected in the sediments of Berrys Creek throughout its length.

5.3.3 Water Quality

ERM found that the most productive study concerning non-hazardous matrix characteristics of surface water was a perennial study conducted during the summers of 1971 through 1984 by HMDC. The parameters monitored at three stations are tabulated and summarized for all years in Table 5-19. Table 5-19 lists the respective data pertaining to the

TABLE 5-19

THIRTEEN YEAR SUMMARY OF WATER QUALITY DATA
BCL (BERRYS CREEK AT ROUTE 3 BRIDGE)

Parameter	High Tide (max)	Low Tide (max)	Average	Range	# Sample Events	Unit
Air Temperature	26.9	26.1	26.5	15-40	52	^{o}C
Total Nitrogen	7.5	8.0	7.8	5.4-10.3	19	mg/l
Water Temperature	24.8	24.5	24.7	11.1-32	200	^{o}C
D.O.	3.2	4.1	3.6	0-15.2	190	mg/l
Salinity	5.2	4.8	4.9	0-13.4	182	o/oo
pH	6.34	6.5	6.4	5.3-8.4	89	std units
Conductivity	6813.5	4942.9	5878.2	550-16500	35	umhos/cm
Turbidity	41.4	33.7	37.6	3-95	80	NTU
COD	118.3	158.6	138.3	5-511	50	mg/l
Chloride	2271.1	2555.9	2413.5	110-10940	41	mg/l
Suspended Solids	29.2	21.4	26.8	.07-63.3	16	mg/l
Oil/Grease	26.7	9	20.8	9-420	3	mg/l
BOD	8.0	10.2	9.1	1.74-18.7	46	mg/l
TKN	4.5	3.9	4.2	1.5-7.4	14	mg/l
NO_2/NO_3	2.1	2.1	2.1	0-14	147	mg/l
TOC	28.2	29.9	29.1	7.6-314	93	mg/l
TOD	111.8	95.2	103.5	29-474	69	mg/l
SO_4	433.3	436	434.7	66-890	24	mg/l
Ortho PO_4	5.4	5.1	5.3	2.1-11	24	mg/l
PO_4	2.4	2.4	2.4	0.09-13	139	mg/l
Meta PO_4	0.84	1.06	0.95	0-4	24	mg/l
Cr	.02	.02	.02	.02	24	mg/l
Fe	.39	.19	0.29	0-0.82	24	mg/l
Mn	.99	.89	0.94	0-5	24	mg/l
Cu	0.18	.09	0.14	0-0.9	24	mg/l
OH^-	0	0	0	0	24	
CO^-_3	22.4	30.8	26.6	0-120	24	mg/l
H_2S	2.7	2.8	2.75	0-7.5	21	mg/l
HCO^-_3	94.9	95.7	95.3	0-190	24	mg/l

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TABLE 5-19 (Cont'd.)

THIRTEEN YEAR SUMMARY OF WATER QUALITY DATA
BCM (BERRYS CREEK AT PATTERSON-PLANK ROAD)

Parameter	High Tide (max)	Low Tide (max)	Average	Range	# Sample Events	Unit
Air Temperature	30.25	30	30.13	18-43	35	
Total Nitrogen	6.7	6.7	6.7	4.3-8.7	19	
Water Temperature	24.3	24.3	24.3	14-32	181	
D.O.	3.03	4.8	3.9	0-19.4	155	
Salinity	3.54	3.4	3.47	0-11	152	
pH	6.98	7.02	7.0	6-9.6	68	
Conductivity	4280.4	3042.2	3661.3	450-12,000	35	
Turbidity	45.8	54.9	50.2	4-210	64	
COD	79.9	136.9	108.4	4-294	25	
Chloride	1519.6	1664.7	1592.1	60-4000	31	
Suspended Solids	24.4	16.5	21.9	8-40.4	16	
Oil/Grease	10.5	10.8	10.6	6.1-15.5	4	
BOD	11.5	12.5	12	3.9-26.5	49	
TKN	3	1.1	2	1.1-3	2	
NO_2/NO_3	2.1	1.8	1.94	0-15	127	
TOC	32.5	34	33.25	9-80.3	78	
TOD	108.4	114.9	111.7	39.5-479	65	
SO_4	465.5	423	444.3	120-830	23	
Ortho PO_4	7.9	6.4	7.1	0.2-19	23	
PO_4	3.3	2.8	3.05	0.14-21.0	134	
Meta PO_4	0.93	0.83	0.87	0-2	23	
Cr	0.007	0.02	0.014	0-0.08	23	
Fe	0.51	0.35	0.43	0-1.1	21	
Mn	2.1	1.7	1.9	0-9	22	
Cu	0.07	0.14	0.11	0-0.9	23	
OH^-	0	0	0	0	23	
CO^-_3	0	0	0	0	24	
H_2S	0.67	3.3	2.0	0-15	20	
HCO^-_3	131.7	122.5	127.1	60-180	22	

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TABLE 5-19 (Cont'd.)

THIRTEEN YEAR SUMMARY OF WATER QUALITY DATA
BCU (BERRYS CREEK AT STARKE ROAD)

Parameter	High Tide (max)	Low Tide (max)	Average	Range	# Sample Events	Unit
Air Temperature	26.9	24.4	25.6	15-35	29	
Total Nitrogen	7.15	6.4	6.75	3.6-9.7	20	
Water Temperature	23.9	23.6	23.8	16-30.1	175	
D.O.	3.29	3.81	3.55	0-14	173	
Salinity	2.8	2.26	2.53	0-25	155	
pH	6.76	6.03	6.39	5.8-8.2	70	
Conductivity	3710.4	1730.4	2720.4	220-10,000	35	
Turbidity	66.0	49.24	57.6	4-120	60	
COD	132.7	103.9	118.3	10-175.9	25	
Chloride	949.1	960.9	955	0-3200	23	
Suspened Solids	23.5	16.7	21.3	9.2-36	16	
Oil/Grease	17.4	15.3	16.3	7.3-23.3	4	
BOD	13.0	13.7	13.4	1.8-28	53	
TKN	4.4	4.7	4.6	1.4-6.8	11	
NO_2/NO_3	1.81	1.94	1.88	0-14	141	
TOC	36.0	39.2	37.6	12.6-105	102	
TOD	118	125.8	121.9	35-597	69	
SO_4	403.3	535.6	469.4	160-1500	23	
Ortho PO_4	5.85	6.68	6.27	.99-16	23	
PO_4	2.55	2.94	2.74	0-16.3	154	
Meta PO_4	0.97	0.97	0.97	0-3.3	23	
Cr	0	.009	.005	0-0.03	24	
Fe	0.59	0.48	0.54	0-1.3	23	
Mn	1.07	0.97	1.02	0-4.5	23	
Cu	0.14	0.13	0.135	0-0.26	23	
OH^-	0	0	0	0	23	
CO^-_3	0	0	0	0	23	
H_2S	0.83	3.0	1.92	0-15	22	
HCO^-_3	122.9	124.6	123.8	70-200	23	

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sampling sites: Berrys Creek at Starke Rd., Berrys Creek at Rt. 3 bridge, and Berrys Creek at Paterson-Plank Road. These stations are depicted as sites #37, #23 and #32, respectively on the small scale map. The matrix characteristics were measured at both high and low tides. Table 5-18 shows these values with combined average values, number of samples taken and the maximum values at high and low tide. A great deal of water quality data is also available from the monitoring of the Sports Complex. These data are available on a monthly basis from 1972 through present for two stations. Station "LBC" is located at the Route 3 bridge while "UBC" is located at the Paterson-Plank Road bridge. The parameters reported for the two stations include: temperature, salinity, conductivity, dissolved oxygen, pH, turbidity, total suspended solids, fecal coliforms, petroleum hydrocarbon, chemical oxygen demand, total Kjeldahl nitrogen, total phosphates, chromium, lead, tide, and weather conditions. Precipitation is also available in the reports on a daily basis, as well as lagoon/discharge in millions of gallons per month, hourly wind speed and direction averages and hourly carbon monoxide averages. The Sports Complex data is readily accessible for review if there is an interest for seasons other than summer.

Summer months typically are the period during which the greatest impact of pollutants may be observed due to biological activity and mobility of compounds at higher temperature. In general, water temperature in Berrys Creek reaches a maximum of 32°C while averaging 24°C. Dissolved oxygen (D.O.) concentration may be the most critical parameter to water quality in the area as it is frequently reported below 1.0 mg/l in summer. Dissolved oxygen ranges from 0 to 19.4 mg/l but average values are approximately 3.5 mg/l. The salinity of Berrys

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Creek ranges from freshwater to almost marine (25 o/oo), however, the average salinity indicates only slight salinity with 2.5 o/oo in Upper Berrys Creek station and 4.9 o/oo at Route 3 bridge. The maximum value 25 o/oo is atypical of the area and may be a past storm measurement. The pH ranged from 5.3 to 9.6 with average values 6.4 to 7.0 for the three stations. Turbidity and suspended solid values were relatively high as might be expected in a tidal marsh system with average values of 49.0 NTU and 22 mg/l, respectively. Nutrient levels are also high as expected due to high productivity of marsh systems, municipal waste discharge, and urban runoff. Total kjeldahl nitrogen (TKN) values ranged from 2.0 mg/l to 4.5 mg/l for the three stations (lowest at middle site). Very high total phosphate values were observed with maximum values greater than 20.0 mg/l and Ortho-P values as high as 19.0 mg/l. Phosphate averaged 2.8 mg/l in the system and indicates a nitrogen limiting condition. However, due to the ability of bluegreen algae to fix nitrogen from the atmosphere (N_2) it is not a nutrient-limited environment (Painter 1970). Heavy metals were reported in early monitoring years, however, only non-filtered values are reported.

5.3.4 Biological Resources/Rare and Endangered Species

Most groups of the biota in the Meadowlands are well documented. Included in the environmental assessment reports are discussions of vegetation cover by section dating back to a very early publication (1897). Undoubtedly the common reed (*Phramites*) in the most abundant species of plant with *Typha* (cattail) and *Spartina* (cordgrass) often observed. Wildlife inventories report numerous species. In 1972 JMA reported 63 kinds of birds, ten mammals, one amphibian, and three

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reptiles. Within the 1978 Meadowlands Arena EIS is a more thorough description of the wildlife including inventory data back to 1961 and the description of a "biogeographical framework" established by the HMDC to organize existing information and encourage further investigation. Described are bird inventories (233 species) mammal trapping, and amphibian and reptile observations. The Berrys Creek Center (environmental assessment) contains an impressive list of plants inventoried of both upland and wetland varieties for specific regions. Also provided are standing crop determinations. Wildlife were inventoried in this study by trapping (mammals), birds by observations and literature review, and an amphibian and reptile survey was conducted. Fish populations were reported from the literature and from sampling as were benthic invertebrates. Tabulations of all plants, wildlife and aquatic organisms are presented in the Berrys Creek Center E.A. The above report also discusses the impact of the construction and future impacts of the Center directly upon the biotic community.

Within none of the environmental assessment reports is there mention of the observation of threatened or endangered species. In order to determine impacts of potential remedial action to threatened or endangered species in the Berrys Creek area further observations will be required.

5.3.5 Hydrology and Hydraulics

The review of hydrology and hydraulics in the Berrys Creek area plays an important role in many of the remedial alternatives. Specifically, sediment transport in Berrys Creek is a phenomena which requires thorough understanding and is dependent upon the hydraulics of

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the system. Sediment transport was studied by the HMDC during 1982. This study involved the analysis of mercury in water associated with both the filterable and non-filterable fractions transported past the Route 3 bridge over numerous tidal cycles. Although the study could not qualify the net loading of mercury with assertive confidence, a great deal of valuable information was generated regarding the concentration of mercury moving during various tide levels and the quantity of mercury associated with suspended sediment. Also included in this study is information concerning water quality and hydrology of the area.

Additional critical information regarding hydrology for the area is also included in the three EIS reports, as well as an annual report prepared by the National Oceanic and Atmospheric Administration (NOAA) in conjunction with the New Jersey Department of Environmental Protection. The publication by NOAA is entitled Water Resources Data for New Jersey and includes the topics of hydraulic conditions, water discharge records, water quality records, ground-water level records, tidal gaging, as well as other relevant information reported at gaging stations. Ground water is not a major concern to the development of the area, whereas the nearest potable ground water source is 1/2 mile north of the Velsicol site at a depth of more than 200 feet below grade. A total of 11 ground water monitoring wells were established during the mid 1970s at the property site. Three of these wells are located on the Wolf property with one inside the building and eight wells are on the site. The on-site wells are no longer functional due to various activity at the site.

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5.3.6 Land Use, Wetlands

A number of documents address water quality management requirements for the Northeast New Jersey area, which includes Berrys Creek. These studies outline land uses, drainage area, wetlands acreages, economy, point source control and non-point source control plans. These documents include:

1. Northeast New Jersey Water Quality Management Plan, 1975
2. Section 303(e) Water Quality Management Basin Plan, 1975
3. Draft (accepted as final) Northeast New Jersey Water Quality Management Plan, 1979

These reports summarize a great deal of data and provide general requirements for a large area, however, they do not typically provide the detailed information necessary for the management of the Berrys Creek basin.

The Berrys Creek area is managed by the Hackensack Meadowlands Development Commission. The Commission has zoned the Meadowlands into various land use categories. The regulations for development of the zones is given in the District Zoning Regulations, revised October 3, 1983. The Meadowlands zones bordering Berrys Creek or the contaminated marshes includes:

1. Light industrial and distribution A
2. Light industrial and distribution B
3. Marshland preservation
4. Highway commercial
5. Sports Complex
6. Berrys Creek Center

7. Parkside residential

8. Research Distribution Park

The upper Berrys Creek area is bounded primarily by light industrial zones which are presently being developed at a rate established by the financial marketability of the area.

5.3.7 Historical and Archeological Resources

Other environmental assessment parameters (human resources, socio-economic resources, recreation, etc.) are discussed in detail in each of the EIS reports. More recent EIS Reports are in preparation for smaller developments but are not finalized by The Sports Complex Authority and the New Jersey Turnpike Authority. Although these reports do not cover all areas of Berrys Creek, significant areas are discussed for two periods: 1972 and 1978. The Berrys Creek Canal area and the entire middle section of Berrys Creek (from Paterson-Plank Road to Route 3) are included. The upper Berrys Creek area (upstream of Paterson-Plank Road) does not have historical data relevant to these parameters, with the exception of the air quality data for mercury which is summarized in the site specific literature.

Historical and archeological resources of National or Statewide significance do not exist in the Hackensack Meadowlands District due to the findings of the EIS reports, however, the district has a rich history dating back several centuries. The socio-economic benefits of the area are numerous, as illustrated by the various zones along Berrys Creek including industrial development, residential areas, preserved marshlands and major commercial centers.

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The EIS reports do not specifically discuss the recreational benefits of the Meadowlands; however, the marshlands provide a readily accessible area for people to observe and study a special habitat as well as providing essential habitat for migratory birds. The Meadowlands' proximity to an enormous population of people and schools, plus the educational benefit of the Meadowlands environmental center provide a significant recreational and cultural benefit.

5.3.8 Air Quality

Air quality data is restricted to impacts due to traffic (CO) and other conventional air pollutants. Air quality data relevant to mercury is reported in the previously summarized air monitoring reports.

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CHAPTER 6

REGIONAL COMPLICATIONS

6.1 INTRODUCTION

Included is a comprehensive review of existing and proposed regional plans that encompass the project area. The Hackensack Meadowlands Development Commission (HMDC) is the primary planning agency for the Berrys Creek area and regulates the development of the area by The Master Plan for the district, adopted 1971 and amended most recently in 1982. The Master Plan for the District establishes an ultimate residential population of 125,000 persons. The employment base that will be created by the proposed commercial, office and industrial facilities is expected to provide nearly 200,000 jobs at full development. The Bergen County Utilities Authority (BCUA) is also involved with land use projects. Primarily these projects include municipal landfills and sanitation and must adhere to HMDC zoning regulations. No other municipal or county plans will impact the zoning of land use in the area as are presently known.

6.2 ZONING

The entire Hackensack Meadowlands is zoned into various developmental or preserved zones. The District is separated into 14 types of zones and six "specially planned areas" (area designated on the Zoning Map as a specially planned area and subject to the requirements of Subchapter 5 [District Zoning Regulations]). The zones bordering the Berrys Creek area include:

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1. Light industrial and distribution A
2. Light industrial and distribution B
3. Marshland Preservation
4. Highway Commercial
5. Sports Complex
6. Berrys Creek Center
7. Parkside Residential
8. Research Distribution Park

These zones are illustrated on the "Hackensack Meadowlands District Official Zoning Map" (Revised 1978). The regulations for development of the zones is given in "The Hackensack Meadowlands Development Commission District Zoning Regulations" (revised 10/3/83). The two items mentioned above are described in Chapter 4, Reference Items 2 and 3.

6.3 WATER QUALITY AND FLOOD MANAGEMENT

The water quality of the area is well documented back to 1970. Summaries of the water quality data and detail description of sample locations and parameters are presented in Chapter 4 - Site Description. Two ongoing monitoring programs maintain a comprehensive record of water quality in the Berrys Creek area. Through the summer months (May through August) the HMDC collects data at three locations along Berrys Creek. Samples are collected weekly and analyzed for up to 16 parameters (Table 5-19). In addition, the Sports Authority is required to collect monthly water quality data from two stations on Berrys Creek in order to monitor any potential impact of the stormwater lagoon discharge. The stations are at Paterson Plank Road and the Route 3 bridge (Figure 6-1). A total of 14 parameters similar to the HMDC data

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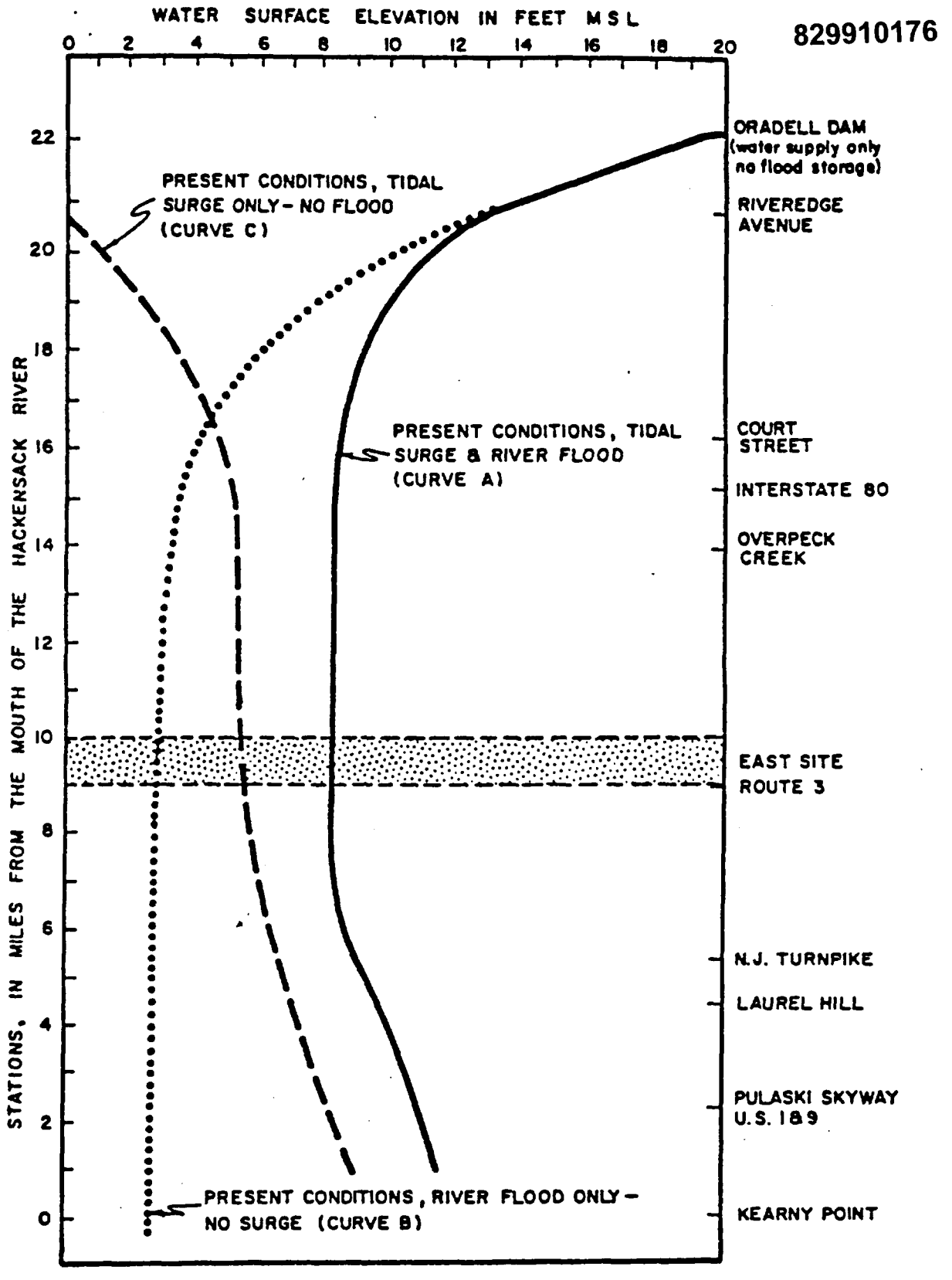

FIGURE 6-1: PREDICTED ELEVATIONS OF THE SURFACE OF THE WATER IN THE HACKENSACK RIVER DURING MAXIMUM TIDAL AND RIVERINE FLOODS. ADAPTED FROM TAMS (1968).

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are monitored plus physical conditions of tide, weather, daily precipitation and lagoon discharge volume. The Sports Authority will maintain this water quality monitoring program up to the year 2000.

Area-wide water quality and flood management reports have been generated for a number of years which include:

1. Northeast New Jersey Water Quality Management Plan 1975.
2. Section 303(c) Water Quality Management Basin Plan 1975.
3. Draft Northeast New Jersey Water Quality Management Plan 1979 (accepted as final with one addendum and one supplement).

These reports summarize land use, drainage area, wetlands and source control plans data from large areas and provide very general management requirements for large regional areas. Detailed information on projected flood levels were presented in the Meadowland Area Full EIS 1978. That section of the EIS is attached to give a summary of flood projections.

6.3.1 Project Flood Levels

Profiles of the elevations of the water surface in the Hackensack River during periods of flooding were estimated by Tippetts-Abbett-McCarthy-Stratton (TAMS 1968). The elevations for a river flood that were used as a basis for these projections were measured during the maximum flood of record in October 1903. Measurements that were made during November 1950, during what was then considered to be the tidal storm surge of record, were increased by 10 percent for use in these projections.

An elevation of 11.4 feet msl (mean sea level, 1929 datum) was calculated to describe the position of the surface of the water at the

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mouth of the Hackensack River during a tidal surge in combination with a river flood (Curve A in Figure 6-1). This level is slightly higher than the elevation of 11.0 feet, which is the estimated elevation of the 100-year flood in Newark Bay at Elizabeth, New Jersey.

The maximum elevation of the water surface at the East Site was projected to occur during a combined tidal surge and river flood (Curve A). In the event of such a design flood, the water would rise to a still-water elevation of approximately -8.4 feet msl. With only a river flood, the water surface would peak at an elevation of approximately -2.8 feet msl at high water slack (Curve B). At times of a tidal surge, with normal river flow, the still-water elevation would be about -5.3 feet msl (Curve C in Figure 6-1).

In a more recent investigation (TAMS 1975), a computer model was calibrated to perform hydraulic routing of floods and tides through the complex network of channels and marshes in the (Hackensack Meadowlands) system. After the model was calibrated to the conditions of the basin as they existed during 1963, the conditions of flood storage at appropriate nodes in the model, and the characteristics of certain links in the channels, were modified to represent changes that had occurred in the hydraulic system owing to human activities to 1962. In consultation with the Hackensack Meadowlands Development Commission, and based on the Master Plan for the District (HMDC 1972), the model again was modified to represent the conditions that were expected to exist during 1983.

Estimations of the maximum elevations of the surface of the Hackensack River at Node 12 in the model, which represents conditions near the East Site, are exhibited in Table 6-1. These projections suggest that the maximum elevation of the water that has a probable

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TABLE 6-1

PREDICTED MAXIMUM ELEVATIONS OF THE SURFACE OF THE HACKENSACK RIVER FOR RETURN PERIODS OF 10 AND 100 YEARS, FOR THE STANDARD PROJECT TIDE (SPT) AND FOR THE STANDARD PROJECT FLOOD (SPF)
From Table 11 in TAMS (1975), for Node 12 near the East Side of the Sports Complex (See Figure 2)

Return Period In Years	Elevations (Feet msl) Predicted For		
	1963[a]	1972[b]	1984[c]
10	4.7	4.9	5.2
100	5.6	5.9	6.4
SPT	8.9	9.9	10.7
SPF	5.0	5.1	5.3

[a] The configuration of the basin during 1963 is the baseline.

[b] The 1963 configuration was modified to include hydraulic changes produced by development. The Sports Complex site is considered to be entirely filled, and to provide no flood storage.

[c] The 1963 configuration was modified to include anticipated development according to the Master Plan for the District.

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recurrence interval of 100 years, which is commonly used for design purposes, will be 6.4 feet msl by 1984. The highest level of flooding, 10.7 feet msl, would be produced in 1984 by the Standard Project tide, which has an undetermined return period in excess of 100 years.

For tidal surges, the maximum tide of record that occurred during Hurricane Donna on September 12, 1960 was used to calibrate the model. At Newark Bay the maximum surface elevation of the water was 8.3 feet msl. Upstream from the confluence of Overpeck Creek with the Hackensack River, at the Court Street Bridge, the maximum elevation of the surface of the River during the same event was 6 feet msl. For a Standard Project Tide, data based on the hurricane of 1944 were utilized.

From 1974 through 1976 the Federal Flood Administration of the United States Department of Housing and Urban Development designated various lands near the Sports Complex as Special Flood Hazard Areas. The maps that were issued by the Agency indicate that nearly all of the areas adjacent to the Sports Complex are subject to flooding at least one time in 100 years (Figure 6-2).

Detailed description of the 100 and 500 years flood projection levels are given in the FIRM Flood Insurance Rate Maps. These maps are described as Reference item 4 of Chapter 4 - Site Description.

Within the Upper Berrys Creek area, three tide gates have been constructed. One tide gate is located on the West Riser ditch adjacent to the Velsicol site and was reconstructed in 1979. A second tide gate existed at the confluence of Peach Island Creek and Berrys Creek and was constructed in 1982. The third tidegate is located on the East Riser ditch and was also constructed in 1982 (see Figure 6-2 for Riser Ditch locations). All three tide gates are in working condition and provide

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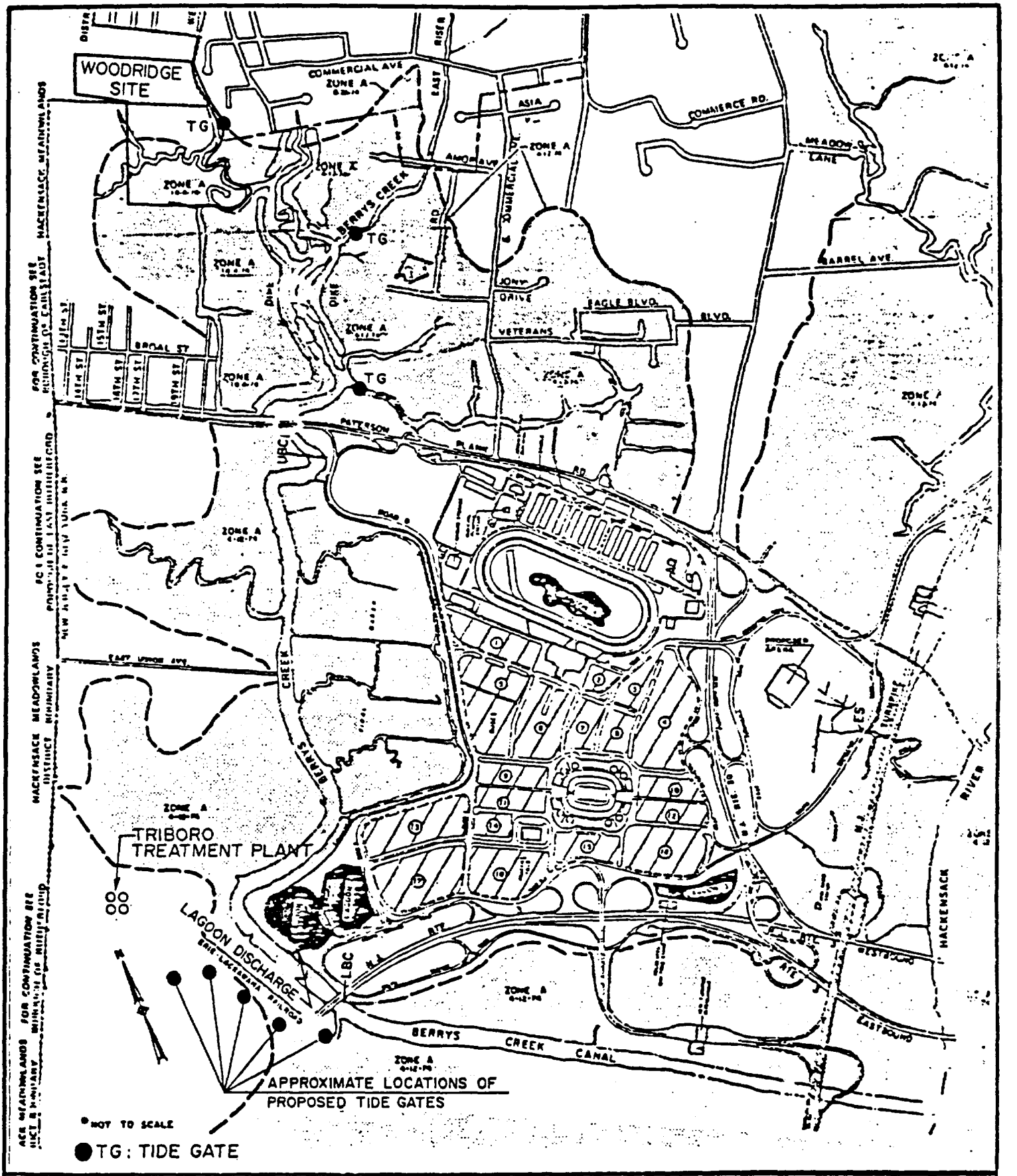

FIGURE 6-2: SPECIAL FLOOD HAZARD AREAS (SHADED) DESIGNATED BY THE FEDERAL FLOOD ADMINISTRATION IN THE VICINITY OF THE NEW JERSEY SPORTS COMPLEX.

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limited flood control as well as being potential or partial salinity barriers.

In addition, a total of five tidegates are proposed where five original tidegates were constructed in the early 1960s downstream of the Triboro treatment plant in East Rutherford on an unnamed ditch which parallels the Conrail tracks near the Triboro plant. The tide gates begin near the confluence of Berrys Creek and the unnamed ditch and are spaced up to the treatment plant. The five original tidegates are no longer functional and new flap gates are planned. Sources with the HMDC say it will take to the end of the summer for them to be constructed.

6.4 AIR QUALITY

Air quality monitoring is primarily restricted to air pollutants which have specific criteria limitations. Mercury is not a standard monitoring air pollutant and therefore is monitored only under very specific conditions such as that data listed in Chapter 5 - Chemical Contamination. Most highly residential cities in the state maintain air monitors for various pollutants including sulfur dioxide, carbon monoxide, ozone, smoke shade and nitrous oxide. The State of New Jersey Bureau of Air Pollution Control provides an annual report summarizing the data of these stations.

The Sports Complex Authority maintains an air monitor for carbon monoxide only. Precipitation, wind direction and wind speed are also recorded daily.

6.5 FEDERAL AND STATE AGENCY PLANS/ACTIVITIES

Three federal and one state agencies were contacted to evaluate their involvement in the Meadowlands. These agencies are:

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1. Environmental Analysis Branch of the Corps of Engineers
2. Fish and Wildlife
    a. Ecological Services
    b. Wetland Ecology Branch
3. U.S. EPA
    a. Marine and Wetland Protection Branch
    b. Construction Grants
4. State of New Jersey Department of Environmental Protection

The Corps of Engineers are involved in three activities in the Meadowlands. First is a flood control study of the area which may include a tidal barrier. This study is presently under review and it is not known if it will be implemented. Second is the maintenance dredging of the Hackensack and Passaic River to maintain adequate channel depth for routine ship traffic. The third activity is review of 404 permit applications for development in the area.

Both the Fish and Wildlife Service (F&WS) and EPA are involved in the Meadowlands primarily as reviewers of Corps of Engineer permit and construction activities. The only recent activities by the Fish and Wildlife Service concerned an assessment of snapping turtles in 1983 which included tissue analysis for mercury. The results of this report are expected to be published in the fall of 1985 and available for distribution sometime thereafter.

Present EPA activities in the Meadowlands primarily includes review of COE dredging operations and application and EIS work. The EPA is also involved with some studies of mercury in fish and metal scans in fish and invertebrates of the area. These data, however, are reported

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as mean values for large generalized areas, i.e., Berrys Creek, Overpeck Creek, Sawmill Creek and very little difference can be detected between these areas as far as heavy metals bioaccumulation is concerned.

The State of New Jersey is involved with two Superfund sites in the Berrys Creek area. These sites include Universal Oil Products (UOP) and Scientific Chemical Products (SCP). The SCP site in Carlstadt involved a remedial action plan (RAP) for the removal of storage tanks. A limited amount of data collected in January 1979 indicated volatile organic compounds in soil and surface water of Peach Island Creek and the surrounding area. A RI/FS site proposal was to have been made available by August 1985 according to State authorities. At present the EPA has the project lead and are awaiting the RI/FS before further action is determined. The UOP site is located between Route 17 and Murray Hill Parkway and impacts Berrys Creek via a drainage channel. The plant was the site of a processing plant where numerous products were produced. For a number of years wastes were dumped in two unlined lagoons in wetland areas. "High" levels of priority pollutants including heavy metals have been reported to the drainage. A remedial investigation report was completed in June including a summary of field data. This report and other data are available upon request from the NJDEP Water Resources agency in Newark, New Jersey.

6.6 QUAZI-GOVERNMENTAL AGENCIES

Quazi-governmental agencies contacted include:

1. The Port Authority of NY/NJ
2. The New Jersey Sports and Exposition Authority

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3. Bergen County Utilities Authority (BCUA)

4. The New Jersey Turnpike Authority

The Port Authority is not involved nor planning any activities which might impact the Meadowlands area. The New Jersey Sports and Exposition Authority includes a large area of the central Meadowlands developed in the mid-1970s. Almost all of their property has been developed with the exception of two areas. There is an 11-acre wetland area of their property presently being evaluated for development into a parking lot. An ecological study has been completed with final results available "within a couple of months." The 11 acres is near the junction of Route 3 and Paterson Plank Road, east of the sports area. The Sports Authority also owns the 120-acre Tidal Marsh which borders Berrys Creek, however, there are presently no plans for the development of this area.

The Bergen County Utilities Authority operates two significant utilities in the Meadowlands including the Triboro wastewater treatment plant and the Bergen County landfill. The landfill is located in the southeast portion of the Meadowlands. Leachate from the landfill are monitored but do not impact the Berrys Creek drainage directly. The Triboro WWTP is a facility operating at primary treatment level and is scheduled to be routed to the Bergen County wastewater treatment plant which is pending federal grants. The approval of these funds is expected to be determined within a year.

A number of major roadways cross the Berrys Creek area including the New Jersey Turnpike. Further highway development in the area is restricted to the conceptual planning of an extension of 16W. The

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progress of this extension is dependent upon the development of the area as well as other factors.

6.7 MAJOR DEVELOPMENT PROPOSALS

The Hackensack Meadowlands lies within an area of highly desirable developmental potential while also including natural wetlands habitat of ecological importance. The HMDC Master Plan zoning ordinances provide land use designations of many types. The areas of light industrial and distribution are being developed as the marketability of the areas mandates. One 30-acre tract of light industrial property which borders the Wood-Ridge site to the south is being developed at this time. The property is identified as the Clause-Oakpoint Tract. During the summer of 1983 a local engineering evaluation indicated that arsenic and mercury were present but at only low concentration in surficial soils. Leachate tests indicated that the soil could not be classified as hazardous (EP toxicity test) and development was approved. Prior to June 1985 approximately one half of the tract had been developed (some buildings near completion) with the other part of the property near Berrys Creek being filled and surcharged. During July 1985 a cease and desist order was brought on the developer by the Corps of Engineers due to non-compliance with 404 permit requirements. This order is still in effect.

Additional property within Eight Day Swamp in both the Boroughs of East Rutherford and Carlstadt, [South of the Clause-Oakpoint property and north of Peach Island Creek (on either side of Berrys Creek)] has been reviewed for development and has had preconstruction soil tests. Approximately 100 acres of property were surveyed by one developer for

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development in 1984 with numerous soil and sediment samples collected for analysis of mercury. At present a permit for construction is pending Corps of Engineers approval. The development of this property may require special mitigative procedures due to the presence of mercury concentrations in soil and sediment of 200 ppm and greater. A few other smaller tracts downstream of Paterson Plank road are considered for development and some are proceeding at this time, however, mercury contamination of these areas is not as high.

Along the Route 3 area of Berrys Creek is a large tract of land which has been considered for development since the mid-1970s. The property proposed for the Berrys Creek Center occupies approximately 130 acres located primarily south of Route 3 between Berrys Creek and the Hackensack River. During 1978 Bergen County Associates prepared "General Plan Application and Environment Assessment" for the development of the Berrys Creek Center. The Center would include shopping and business areas. The Environmental Assessment (EA) fulfilled both the Department of Environmental Protection's and HMDC's requirements for construction. Property owner disputes, however, have halted all construction to date; therefore, the future of the development of this tract is uncertain. A smaller 22-acre tract is being developed, however, to the east of the Berrys Creek Center (Berrys Creek Center East). As of September, 1985 the area is being filled and landscaped for construction of offices and a hotel. An additional environmental assessment of this project was not required due to the approval to the larger Berrys Creek Center in 1978.

It appears from a review of existing and proposed regional plans that hundreds of acres of wetland and lowlands in the Hackensack

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Meadowlands near the Berrys Creek area may be developed within the next few years. Factors controlling the development are property owner disputes, mercury mitigation, regional government approvals and property values.

The major developmental proposals for the area, at present, have made a significant impact on the Berrys Creek RI/FS in that a significant amount of data on soil and sediment characteristics and contaminants levels (i.e., heavy metals) has been generated by developers. In addition, the Berrys Creek Center EA provides a great deal of information concerning environmental impact of major development in the area. This EA through its approval by EPA and HMDC indicates that there will be no significant impact of this type development in this specific area of the Berrys Creek ecosystem. It is uncertain, however, if these activities will impact the ultimate remedial action. Implementation and further investigation of the impacts of development upon various remedial action alternatives must be investigated by specific studies.

CHAPTER 7

CONCLUSIONS

Available data indicate sediments in Berrys Creek adjacent to the 40-acre site and downstream beyond the Paterson Plank Road bridge are contaminated to several hundred parts per million mercury. These data further indicate that mercury and by inference that the contaminated sediment are not rapidly transported downstream. Therefore the bulk of the sediments most highly contaminated with mercury are located at present in the upstream portion of Berrys Creek. Channel sediment mercury concentrations upstream of the 40-acre site range from 0.1 to 10 ppm.

Soils in the 40-acre site are contaminated with mercury. High concentrations have been measured in soils beneath the Wolf property which is currently "emtombed" in concrete and asphalt. A generally high level of contamination is present in the wetland sediments in the 11-acre southern portion of the partially filled site. Surficial soils on the northern 22 acres of the site are not nearly as contaminated as the wetland area of the site although isolated "hot spots" have been reported.

Marsh sediments are contaminated in the Berrys Creek area upstream of Route 3 bridge. Marsh sediment mercury levels range from 0.1 ppm to 54 ppm in the Berrys Creek study area upstream of Moonachie Ave. on West Riser Ditch or upstream of Berrys Creek in the Hackensack River drainage. Marshland mercury concentrations downstream and adjacent to the 40-acre site exceed 1,000 ppm in some instances.

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Data indicate the contamination of fish is not acute, no average whole body results exceed 3.3 ppm. However, mercury whole fish body burdens of fish near the Wood-Ridge site are higher than the whole fish body burdens of fish captured upstream of the site or downstream of Paterson Plank Road. Values for most areas have not changed markedly over the past ten years.

Filtered mercury concentrations in surface water very rarely exceed 1.0 ppb and only exceed 0.2 ppb 8 percent of the analyses. Based on analyses of suspended sediment the great majority of water-borne mercury is associated with suspended sediments.

Mercury concentrations in ground water very rarely exceed 10 ppb and only rarely exceed 1 ppb. Based on the analyses of filtered and unfiltered samples most mercury in the ground water is associated with particulate materials.

Occasional exceedances of 10 ug/m^3 have been measured in air; however, the vast majority of values ranged between 2 and less than 0.01 ug/m^3. All mercury in air measurements were made in 1978.

Mercury levels in the majority of birds and mammals were less than 0.5 ppm with mammals indicate less bioaccumulation than birds. Many of the highest reported values were associated with either the feathers or fur of the vertebrate. Mercury concentration in invertebrates were typically higher than the concentration in vertebrates, in some cases exceeding 10 ppm.

Mercury levels measured in plants exceeded 10 ppm once. The majority of values were less than 1 ppm. The majority of high values have been detected near the 40-acre site, however, levels greater than 1.0 ppm were detected throughout the Berrys Creek area.

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Of compounds besides mercury only As, Cd, Pb and Ni were studied sufficiently to accurately assess the status on the 40-acre site, marsh sediments and soils, channel sediments, ground water and surface water. The analysis of Cu, Cr and VOCs was performed on a far more limited number and variety of samples.

Cadmium, lead and zinc values were all much higher than values typically measured in background New Jersey soils on the 40-acre site and off-site soils. Arsenic and nickel values were either slightly higher or similar to the background soil values for the three locations. Copper and chromium values were much higher than background in off-site soils. Neither Cu or Cr were analyzed on the 40-acre site.

Cadmium values frequently exceeded the 5 ppm recommended criteria for New Jersey sediments, while Cr, Pb and Zn values occasionally exceeded in criteria. As and Ni values never exceeded the sediment criteria.

Violations of water quality criteria for surface water or ground water are infrequent. Metals concentrations seldom exceeded either drinking water or aquatic life standards; while VOC concentrations never approached standards for the protection of aquatic life. Ground-water quality is impacted in numerous areas, however, ground-water usage is far upgradient of the site.

Information concerning changes in water, sediment and biological quality with time is virtually non-existent. Due to the "hot spot", "cold spot" nature of contaminations indicated by the AWARE 1980 and HMDC 1980 surveys temporal changes in sediment concentrations would likely have to be based on statistical measurements not on a point-to-

point comparison which is not available from the data assimilated in this study.

At present the HMDC and the Sports Complex Authority are conducting continuous monitoring programs in Berrys Creek. These two programs are concerned with classical water quality parameters. They will provide valuable background data and prove a useful addition in any computer modeling efforts.

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CHAPTER 8

RECOMMENDATIONS

Bioaccumulation of mercury and other contaminants is the best indicator of an environmental problem and cause for concern. The general literature indicates that mercury as well as zinc, lead, cadmium and to a lesser extent some other heavy metals accumulate through the food chain and may eventually reach man. Mercury in particular may accumulate through methylation to high levels in animal tissues from low concentrations in surface water. Therefore, more effort should be provided to monitor bioaccumulation in the area to the extent that a time table may be prepared to predict changes in the accumulation of mercury or other contaminants in forage organisms and commercial and game species in fishable waters (Hackensack River) and terrestrial environment.

The question of mercury transport and distribution in the Berrys Creek area is also a dilemma which must be understood and may also help predict bioaccumulation. The transport and ultimate fate of mercury happens to it must be understood such that we will know in advance if the mercury or other contaminants will be transported by remedial actions or natural processes. The conditions which may cause a release of contaminants may then be controlled such that contaminants will not become bioavailable (i.e., above FDA action levels).

The site specific literature review indicates that many gaps exist in the data which preclude accurate formation of conclusions concerning temporal trends in the data. General indication of spatial trends are

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available for several media, i.e., sediment, plants, soils, surface water and killifish where whole tissue analysis is reported. A limited number of temporal trends were plotted (Chapter 5) which include sediment and fish and plant data. In order to provide useful description of the background situation in Berrys Creek, those areas where trends are apparent should be monitored regularly, i.e., quarterly or semi-annual schedule. Also, there are measurements where trends may be evaluated given additional comparable data. These measurements include sediment, fish, plant, and surface water parameters. Additional data from selected stations may illustrate trends in certain parameters and should be sampled in order to determine the presence or absence of trends. All stations where trends may be detected need not be sampled but specific locations of interest should be determined and the necessary data obtained in order to evaluate trends. Specific stations where trends (in mercury data) may be illustrated with collection of one or two sets of additional data are presented by sample type below.

Sediment: Small Scale Map: 1, 23, 36, 39, 42, 43, 45, 47, 48, 50. Large Scale Map: 9, 10, 44, 49, 50, 51, 56, 60, 61, 65,70, 76, 85, 90, 96

Fish: Small Scale Map: 2, 3, 5, 7, 10, 20, 21, 23, 25, 32, 38, 48, 88

Plant: Small Scale Map: 2, 7, 9, 13, 15, 16, 22, 26, 29, 31, 33, 34, 37, 39, 41, 43, 48, 58, 59, 60, 62, 83, 94, 104

Surface Water: Small Scale Map: 23, 32, 37, 60, 73, 106

Of these stations specific effort should be given the following stations due to their location:

Sediment: Small Scale Map: 1, 23, 39, 42, 43, 45, 47, 50. Large Scale Map: 9, 10, 49, 51, 56, 60, 61, 70, 76, 85, 90, 96

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Fish: Small Scale Map: 2, 3, 5, 10, 20, 21, 23, 25, 32, 38, 48, 88

Plant: Small Scale Map: 2, 7, 9, 13, 16, 26, 31, 33, 34, 39, 41, 48, 60, 94

Surface Water: Small Scale Map: 23, 32, 37, 60, 106

Water quality data appears to be monitored relatively thoroughly. however, in the event of a modeling effort, a great deal more data than is presently collected by the HMDC would be required. In addition, a detailed and up-to-date description of soil types in the marshes and Berrys Creek does not exist. This data may be very beneficial to determine sediment movement, the stratification of mercury in the sediment and potential impacts of water quality changes on sediment chemistry.

A total of four investigative study projects have recently been completed which are directly related to the assessment of the mercury problem in Berrys Creek. These projects include:

1. An Investigation of the Net Downstream Movement of Mercury on Suspended Sediment in Berrys Creek, East Rutherford, Bergen County, New Jersey, HMDC, 1982.
2. Effects of Environmental Factors (D.O., pH, and Sediment Perturbance) on Release of Hg from Berrys Creek Sediments and Its Uptake by killifish (Fundulus heteroclitus) P. Weis, 1984.
3. Factors Controlling the Methylation and Mobilization of Mercury at the Polluted Meadowlands Area. R. Bartha, 1984.
4. Mode of Occurrence of Mercury in Berrys Creek Sediments, Meyerson, 1984.

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Through the development of Task I and Task IV the above investigations have been reviewed as well as other potential investigations. The type of work conducted by Bartha, Weis and the HMDC warrant further consideration with modification (projects 1-3 above).

The sediment transport work conducted by HMDC is important because it illustrates what can be learned by a particular study design and level of effort in Berrys Creek. In order to determine the net movement of mercury or suspended sediment from the marshes a similar approach may be utilized within a more specific study area.

Both methylation and bioaccumulation under various remedial actions are two of the biggest questions to be considered in the Berrys Creek area. Bartha and Weis experimented with Berrys Creek sediment in laboratory test to determine rates or potential for both methylation and bioaccumulation to occur. With considerable modification, methylation and bioaccumulation tests must be continued to determine the consequence of various remedial actions in the Berrys Creek area.

Investigative field activities are also an important tool for evaluating potential remedial alternatives. Proposed investigative field activities include:

1. Investigation of the role of marshes on mercury mobility and transport of mercury in Berrys Creek.
2. Investigate volatilization of mercury from marshes and mudflats.
3. Comprehensive sampling of soil, sediment, ground water, surface water, killifish, gamefish, ducks or birds, and plants.

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APPENDICES

TO

VOLUME I

NATURE OF THE PROBLEM

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LIST OF APPENDICES

Appendix No.	Title
1	All Data Small Scale Map - Figure 1
2	All Data Large Scale Map - Figure 2
3a	Inventory of Site Specific Reports Pertaining to the Berrys Creek Area
3b	Inventory of Site Specific Reports Pertaining to Berrys Creek which Meet Evaluation Criteria
4	Mercury in Channel Sediment - Small Scale Map
5	Mercury in Marsh Sediment - Small Scale Map
6	Mercury in Soil - Small Scale Map
7	Mercury in Surface Water - Small Scale Map
8	Mercury in Fish - Small Scale Map
9	Mercury in Other Animals - Small Scale Map
10	Mercury in Plants - Small Scale Map
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13	Mercury in Surface Water - Large Scale Map
14	Mercury in Ground Water - Large Scale Map
15	Mercury in Air - Large Scale Map
16	Potential Contaminants Sediment - Small Scale Map
17	Potential Contaminants Soil - Small Scale Map
18	Potential Contaminants Surface Water - Small Scale Map
19	Potential Contaminants Sediment - Large Scale Map
20	Potential Contaminants Soil - Large Scale Map
21	Potential Contaminants Surface Water - Large Scale Map
22	Potential Contaminants Ground Water - Large Scale Map

APPENDIX 1

ALL DATA SMALL SCALE MAP - FIGURE 1

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
7700				.						
7701				.						
7704				.						
7705				.						
7706				.						
7707				.						
7708				.						
7709				.						
7710				.						
7711				.						
7712				.						
7713				.						
7716										
7719										
7720				.						
7721				.						
7722				.						
7723				.						
7726				.						
7727				.						
7728				.						
7729				.						
7732				.						
7733				.						
7734				.						
7735				.						
INPUT										
2214										
4232										
DEFAULT										
7716-7720										
1973	1	ch sed	Hg	12.00	ppm	.10		72	0-2 inch	HMDC 72
1974	1	ch sed	Hg	5.90	ppm	.10		72	2-4 inch	HMDC 72
1975	1	ch sed	HG	6.70	ppm	.10		72	4-6 inch	HMDC 72
1976	1	ch sed	HG	8.90	ppm	.10		72	6-12 inch	HMDC 72
1977	1	ch sed	HG	3.90	ppm	.10		72	12-18 inch	HMDC 72
1495	1	fish	Hg	.02	ppm			77	Killi mus	HMDC 78
1978	1	mrsh sed	HG	22.00	ppm	.10		77	0-2 inch	HMDC 78
1979	1	mrsh sed	HG	28.00	ppm	.10		77	2-4 inch	HMDC 78
1980	1	mrsh sed	HG	9.70	ppm	.10		77	4-6 inch	HMDC 78
1981	1	mrsh sed	HG	3.00	ppm	.10		77	6-11 inch	HMDC 78
7791	1	sw	Hg	.00	ppb	.10	11	77	Ht unf	HMDC 78

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MAPIDATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
7792	1	sw	Hg	.00	PPB	.10	11	77	unf Lt	HMDC 78
7793	1	sw	Hg	.00	ppb	.10	12	77	Ht filter	HMDC 78
7794	1	sw	Hg	.00	ppb	.10	12	77	Lt filter	HMDC 78
1493	1	fish	Hg	.18	ppm			78	Killi w	NJMS 79
1494	1	invt	Hg	.18	ppm			78	F crab mus	HMDC 80
4332	1	invt	Hg	.61	ppm			78	F crab visc	HMDC 80
4334	1	invt	Hg	.04	ppm			78	F crab cara	HMDC 80
7773	1	sw	Hg	.19	PPB		1	78	unf Ht	HMDC 78
7796	1	sw	Hg	.00	ppb	.10	1	78	Lt unf	HMDC 78
7797	1	sw	Hg	.44	ppb	.10	2	78	Ht unf	HMDC 78
7798	1	sw	Hg	.30	ppb	.10	2	78	Lt unf	HMDC 78
7799	1	sw	Hg	.00	PPB	.10	3	78	Ht unf	HMDC 78
7800	1	sw	Hg	.19	PPB	.10	3	78	Lt unf	HMDC 78
7801	1	sw	Hg	1.90	PPB	.10	4	78	Ht unf	HMDC 78
7802	1	sw	Hg	24.00	PPB	.10	4	78	Lt unf	HMDC 78
7803	1	sw	Hg	.00	PPB	.10	4	78	Ht fil	HMDC 78
7804	1	sw	Hg	.00	PPB	.10	4	78	Lt fil	HMDC 78
7805	1	sw	Hg	.21	PPB	.10	5	78	Ht unf	HMDC 78
7806	1	sw	Hg	.33	PPB	.10	5	78	Lt unf	HMDC 78
7807	1	sw	Hg	.14	PPB	.10	6	78	Ht unf	HMDC 78
7808	1	sw	Hg	.47	PPB	.10	6	78	Lt unf	HMDC 78
7809	1	sw	Hg	.14	PPB	.10	6	78	Ht fil	HMDC 78
7810	1	sw	Hg	.17	PPB	.10	6	78	Lt fil	HMDC 78
7811	1	sw	Hg	.19	PPB	.10	7	78	Ht unf	HMDC 78
7812	1	sw	Hg	.12	PPB	.10	7	78	Lt unf	HMDC 78
7813	1	sw	Hg	.17	PPB	.10	8	78	Ht unf	HMDC 78
7814	1	sw	Hg	.00	PPB	.10	8	78	Lt unf	HMDC 78
7815	1	sw	Hg	.00	PPB	.10	8	78	Ht fil	HMDC 78
7816	1	sw	Hg	.00	PPB	.10	8	78	Lt fil	HMDC 78
7817	1	sw	Hg	.10	PPB	.10	9	78	Ht unf	HMDC 78
7818	1	sw	Hg	.18	PPB	.10	9	78	Lt unf	HMDC 78
7819	1	sw	Hg	.00	PPB	.10	10	78	Lt unf	HMDC 78
7820	1	sw	Hg	.00	PPB	.10	10	78	Ht unf	HMDC 78
7821	1	sw	Hg	.00	PPB	.10	10	78	Ht fil	HMDC 78
7822	1	sw	Hg	.00	PPB	.10	10	78	Lt fil	HMDC 78
3276	1	ch sed	Hg	6.57	ppm		10	81	center	NJDEP 85
3277	1	ch sed	Hg	5.73	ppm		10	81	east side	NJDEP 85
3278	1	ch sed	Me Hg	.30	ppm	.20	10	81	rightside	NJDEP 85
3279	1	ch sed	Me Hg	.20	ppm	.20	10	81	center	NJDEP 85
3280	1	ch sed	Me Hg	.20	ppm	.20	10	81	east side	NJDEP 85
3602	1	ch sed	Hg	3.39	ppm		10	81	west side	NJDEP 85
3603	1	sed	As	12.40	ppm		10	81	PONAR Grab	NJDEP 85

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3604	1	sed	Be	.90	ppm		10	81	PONAR Grab	NJDEP 85
3605	1	sed	Cd	8.50	ppm		10	81	PONAR Grab	NJDEP 85
3606	1	sed	Cu	218.00	ppm		10	81	PONAR Grab	NJDEP 85
3607	1	sed	Cr	300.00	ppm		10	81	PONAR Grab	NJDEP 85
3608	1	sed	Ni	47.00	ppm		10	81	PONAR Grab	NJDEP 85
3609	1	sed	Pb	10.00	ppm		10	81	PONAR Grab	NJDEP 85
3610	1	sed	Zn	490.00	ppm		10	81	PONAR Grab	NJDEP 85
3791	1	sw	MeChl	6.60	ppb		10	81	unf	NJDEP 85
3792	1	sw	ChCl3	.40	ppb		10	81	unf	NJDEP 85
3793	1	sw	tCle	.60	ppb		10	81	unf	NJDEP 85
3794	1	sw	tce	.30	ppb		10	81	unf	NJDEP 85
3795	1	sw	ttce	.90	ppb		10	81	unf	NJDEP 85
1496	2	mrsh sed	Hg	16.00	ppm		3	76	0-2 inch	JMA 76
1497	2	mrsh sed	Hg	15.00	ppm		3	76	2-4 inch	JMA 76
4222	2	fish	Hg	.00	ppm	.01	10	76	Alewife f	JMA 76
6673	2	sed	Hg	.78	ppm		6	77	bl,gy,org st	Huch 77
1503	2	plant	Hg	.00	ppm		10	77	Phrag st	HMDC 78
1504	2	plant	Hg	.81	ppm		10	77	Phrag lf	HMDC 78
1505	2	plant	Hg	.67	ppm		10	77	Phrag fr	HMDC 78
1506	2	plant	Hg	.04	ppm		10	77	Spar riz	HMDC 78
1507	2	plant	Hg	.04	ppm		10	77	Spar st	HMDC 78
1508	2	plant	Hg	1.40	ppm		10	77	Spar lf	HMDC 78
1509	2	plant	Hg	.00	ppm		10	77	Spar fr	HMDC 78
1510	2	plant	Hg	.32	ppm		10	77	Phrag riz	HMDC 78
1498	2	fish	Hg	.35	ppm			78	Killi mus	HMDC 78
1502	2	fish	Hg	.13	ppm			78	Killi w	NJMS 79
1501	2	fish	Hg	.15	ppm		5	79	Killi w	NJMS 79
1499	2	fish	Hg	.33	ppm		7	79	Killi w	NJMS 79
1500	2	fish	Hg	.11	ppm		10	79	Killi w	NJMS 79
3281	2	ch sed	Hg	3.36	ppm		10	81	west side	NJDEP 85
3282	2	ch sed	Hg	9.77	ppm		10	81	center	NJDEP 85
3283	2	ch sed	Hg	.98	ppm		10	81	east side	NJDEP 85
3284	2	ch sed	Me Hg	.20	ppm	.20	10	81	west side	NJDEP 85
3285	2	ch sed	Me Hg	.20	ppm	.20	10	81	center	NJDEP 85
3286	2	ch sed	Me Hg	.20	ppm	.20	10	81	east side	NJDEP 85
1525	3	mamm	Hg	.07	ppm	.01	3	75	mrat ky	JMA 76
1526	3	mamm	Hg	.01	ppm	.01	3	75	mratmus	JMA 76
1527	3	mamm	Hg	.02	ppm	.01	3	75	mratliv	JMA 76
1528	3	mamm	Hg	.02	ppm	.01	3	75	mratfat	JMA 76
1529	3	mamm	Hg	.01	ppm	.01	3	75	mratbrn	JMA 76
1530	3	mamm	Hg	.01	ppm	.01	3	75	mratbld	JMA 76
1512	3	fish	Hg	.52	ppm		10	76	Alewife w	JMA 76

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MAPIDATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
1513	3	fish	Hg	.27	ppm		10	76	Killi w	JMA 76
1514	3	fish	Hg	1.00	ppm		10	76	Killi w	JMA 76
1515	3	fish	Hg	59.00	ppm		10	76	Killi hrt	JMA 76
1516	3	fish	Hg	4.10	ppm		10	76	Killi brn	JMA 76
1517	3	fish	Hg	2.00	ppm		10	76	Killi liv	JMA 76
1518	3	fish	Hg	7.60	ppm		10	76	Killi liv	JMA 76
1519	3	fish	Hg	.16	ppm		10	76	Spot w	JMA 76
1520	3	fish	Hg	.19	ppm		10	76	Spot f mean	JMA 76
1521	3	fish	Hg	6.30	ppm		10	76	Spot gills	JMA 76
1522	3	fish	Hg	25.20	ppm		10	76	Spot hrt mean	JMA 76
1523	3	fish	Hg	.89	ppm		10	76	Spot brn	JMA 76
1524	3	fish	Hg	.54	ppm		10	76	Spot vis	JMA 76
3287	3	ch sed	Hg	67.90	ppm		10	81	west side	NJDEP 85
3288	3	ch sed	Hg	32.08	ppm		10	81	east side	NJDEP 85
3289	3	ch sed	Me Hg	.20	ppm	.20	10	81	west side	NJDEP 85
3290	3	ch sed	Me Hg	.30	ppm	.20	10	81	east side	NJDEP 85
1982	4	mrsh sed	HG	9.40	ppm	.10		77	0-2 inch	HMDC 78
1983	4	mrsh sed	HG	11.00	ppm	.10		77	2-4 inch	HMDC 78
1984	4	mrsh sed	HG	12.00	ppm	.10		77	4-6 inch	HMDC 78
1985	4	mrsh sed	HG	12.00	ppm	.10		77	6-10 inch	HMDC 78
1986	4	mrsh sed	HG	48.00	ppm	.10		77	ng	HMDC 78
3291	4	ch sed	Hg	19.12	ppm		10	81	west side	NJDEP 85
3292	4	ch sed	Hg	35.86	ppm		10	81	center	NJDEP 85
3293	4	ch sed	Hg	40.75	ppm		10	81	east side	NJDEP 85
3294	4	ch sed	Me Hg	.20	ppm	.20	10	81	west side	NJDEP 85
3295	4	ch sed	Me Hg	.20	ppm	.20	10	81	center	NJDEP 85
3296	4	ch sed	Me Hg	.20	ppm	.20	10	81	east side	NJDEP 85
1533	5	fish	Hg	.11	ppm		5	79	Killi w	NJMS 79
1531	5	fish	Hg	.21	ppm		7	79	Killi w	NJMS 79
1532	5	fish	Hg	.16	ppm		10	79	Killi w	NJMS 79
3297	5	ch sed	Hg	117.88	ppm		10	81	west side	NJDEP 85
3298	5	ch sed	Hg	101.61	ppm		10	81	center	NJDEP 85
3299	5	ch sed	Hg	76.60	ppm		10	81	east side	NJDEP 85
3300	5	ch sed	Me Hg	.20	ppm	.20	10	81	west side	NJDEP 85
3301	5	ch sed	Me Hg	.20	ppm	.20	10	81	center	NJDEP 85
3302	5	ch sed	Me Hg	.20	ppm	.20	10	81	east side	NJDEP 85
1534	6	fish	Hg	.15	ppm			78	Killi w	NJMS 79
1987	7	ch sed	HG	.10	ppm	.10		72	0-2 inch	HMDC 72
1988	7	ch sed	HG	.10	ppm	.10		72	2-4 inch	HMDC 72
1989	7	ch sed	HG	.10	ppm	.10		72	4-6 inch	HMDC 72
1990	7	ch sed	HG	.10	ppm	.10		72	6-13 inch	HMDC 72
1535	7	fish	Hg	.76	ppm		10	76	Amer celf	JMA 76

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
1536	7	plant	Hg	.19	ppm		10	76	Phrag riz	HMDC 78
1537	7	plant	Hg	.13	ppm		10	76	Phrag ste	HMDC 78
1538	7	plant	Hg	.48	ppm		10	76	Phrag lf	HMDC 78
1539	7	plant	Hg	.34	ppm		10	76	Phrag fruit	HMDC 78
1540	7	plant	Hg	.28	ppm		10	76	Spar riz	HMDC 78
1541	7	plant	Hg	.14	ppm		10	76	Spar ste	HMDC 78
1542	7	plant	Hg	.32	ppm		10	76	Spar lf	HMDC 78
1543	7	plant	Hg	.37	ppm		10	76	Spar fr	HMDC 78
1544	7	ch sed	Hg	32.00	ppm		10	76	0-2 inch	JMA 74
1545	7	ch sed	Hg	3.90	ppm		10	76	2-4 inch	JMA 74
1546	7	plant	Hg	.28	ppm		10	76	Atri riz	HMDC 78
1547	7	plant	Hg	.36	ppm		10	76	Atri ste	HMDC 78
1548	7	plant	Hg	1.90	ppm		10	76	Atri lf	HMDC 78
1549	7	plant	Hg	.70	ppm		10	76	Atri fr	HMDC 78
4234	7	fish	Hg	12.00	ppm		10	76	Killi hrt	JMA 76
4235	7	fish	Hg	6.10	ppm		10	76	Killi brn	JMA 76
4236	7	fish	Hg	3.10	ppm		10	76	Killi liv	JMA 76
4237	7	fish	Hg	.36	ppm		10	76	Killi w	JMA 76
4238	7	fish	Hg	.31	ppm		10	76	Killi w	JMA 76
4239	7	fish	Hg	12.00	ppm		10	76	Killi hrt	JMA 76
4242	7	fish	Hg	.47	ppm		10	76	spot gills	JMA 76
4243	7	fish	Hg	2.20	ppm		10	76	Spot hrt	JMA 76
4244	7	fish	Hg	21.00	ppm		10	76	Spot brn	JMA 76
1551	7	mrsh sed	Hg	14.00	ppm	.10		77	0-2 inch	HMDC 78
1552	7	mrsh sed	Hg	5.80	ppm	.10		77	2-4 inch	HMDC 78
1553	7	mrsh sed	Hg	5.00	ppm	.10		77	4-6 inch	HMDC 78
1554	7	mrsh sed	Hg	15.00	ppm	.10		77	6-12 inch	HMDC 78
1555	7	mrsh sed	Hg	8.60	ppm	.10		77	12-14inch	HMDC 78
1550	7	fish	Hg	.13	ppm			78	Killi	NJMS 79
1556	8	fish	Hg	.09	ppm			77	Killi mus	HMDC 78
1557	8	mamm	Hg	1.40	ppm			78	mous fur	HMDC 78
1558	8	mamm	Hg	.00	ppm			78	mous mus	HMDC 78
1559	8	mamm	Hg	.01	ppm			78	mous liv	HMDC 78
1560	8	mamm	Hg	.21	ppm			78	mous ky	HMDC 78
1561	8	mamm	Hg	.89	ppm			78	mous fur	HMDC 78
1562	8	mamm	Hg	.00	ppm			78	mous mus	HMDC 78
1563	8	mamm	Hg	.10	ppm			78	mous liv	HMDC 78
1564	8	mamm	Hg	.64	ppm			78	mous ky	HMDC 78
1565	8	mamm	Hg	2.30	ppm			78	mous fur	HMDC 78
1566	8	mamm	Hg	.03	ppm			78	mous mus	HMDC 78
1567	8	mamm	Hg	.21	ppm			78	mous liv	HMDC 78
1568	8	mamm	Hg	.52	ppm			78	mous ky	HMDC 78

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
1569	8	mamm	Hg	.24	ppm			78	mous fur	HMDC 78
1570	8	mamm	Hg	.00	ppm			78	mous mus	HMDC 78
1571	8	mamm	Hg	.00	ppm			78	mous liv	HMDC 78
1572	8	mamm	Hg	.89	ppm			78	mous ky	HMDC 78
1573	8	mamm	Hg	.00	ppm			78	mous fur	HMDC 78
1574	8	mamm	Hg	.00	ppm			78	mous mus	HMDC 78
1991	8	mamm	HG	.00	ppm			78	ng mus	HMDC 78
1992	8	mamm	HG	.00	ppm			78	mous liv	HMDC 78
1993	8	mamm	HG	.12	ppm			78	mous kid	HMDC 78
1575	9	fish	Hg	.14	ppm			77	Killi mus	HMDC 78
1576	9	plant	Hg	.05	ppm		10	77	Phrag riz	HMDC 78
1577	9	plant	Hg	.05	ppm		10	77	Phrag st	HMDC 78
1578	9	plant	Hg	.41	ppm		10	77	Phrag lf	HMDC 78
1579	9	plant	Hg	.81	ppm		10	77	Phrag fr	HMDC 78
1580	9	plant	Hg	.06	ppm		10	77	Phrag riz	HMDC 78
1581	9	plant	Hg	.50	ppm		10	77	Phrag st	HMDC 78
1582	9	plant	Hg	.11	ppm		10	77	Phrag lf	HMDC 78
1583	9	plant	Hg	.79	ppm		10	77	Phrag fr	HMDC 78
1584	9	plant	Hg	.01	ppm		10	77	Phrag riz	HMDC 78
3436	9	sw	As	13.00	pbb		8	78	Ht unf	Berg 78
3437	9	sw	Cd	2.00	pbb		8	78	Ht unf	Berg 78
3438	9	sw	Cr	10.00	pbb		8	78	Ht unf	Berg 78
3439	9	sw	Cu	2.00	pbb		8	78	Ht unf	Berg 78
3440	9	sw	Fe	980.00	pbb		8	78	Ht unf	Berg 78
3441	9	sw	Pb	10.00	pbb		8	78	Ht unf	Berg 78
3442	9	sw	Ni	150.00	pbb		8	78	Ht unf	Berg 78
3443	9	sw	Zn	20.00	pbb		8	78	Ht unf	Berg 78
3444	9	ch sed	As	1.40	ppm		8	78	0-6 inch.	Berg 78
3445	9	ch sed	As	1.10	ppm		8	78	6-12 inch	Berg 78
3446	9	ch sed	As	.01	ppm		8	78	12-24inch	Berg 78
3447	9	ch sed	As	.60	ppm		8	78	weightavg	Berg 78
3448	9	ch sed	Cd	4.00	ppm		8	78	0-6 inch	Berg 78
3449	9	ch sed	Cd	2.80	ppm		8	78	6-12inch	Berg 78
3450	9	ch sed	Cd	1.20	ppm		8	78	12-24inch	Berg 78
3451	9	ch sed	Cd	2.30	ppm		8	78	weightavg	Berg 78
3452	9	ch sed	Cr	78.00	ppm		8	78	0-6inch	Berg 78
3453	9	ch sed	Cr	72.00	ppm		8	78	6-12inch	Berg 78
3454	9	ch sed	Cr	37.00	ppm		8	78	12-24inch	Berg 78
3455	9	ch sed	Cr	56.00	ppm		8	78	weightavg	Berg 78
3834	9	sw	Hg	1.70	ppb		8	78	Ht unf	Berg 78
7795	1	sw	Hg	.20	ppb	.10	1	78	Ht unf	HMDC 78
1589	10	fish	Hg	.31	ppm			77	Killi mus	HMDC 78

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
1994	10	plant	HG	.31	ppm			77	Phrag riz	HMDC 78
1995	10	plant	HG	.07	ppm			77	Phrag ste	HMDC 78
1996	10	plant	HG	.50	ppm			77	Phrag lf	HMDC 78
1997	10	plant	HG	.97	ppm			77	Phrag fr	HMDC 78
6680	10	sed	Hg	4.40	ppm		6	77	bl,cl/st	Huch 77
1588	10	invt	Hg	.07	ppm			78	shrimp	HMDC 80
1587	10	fish	Hg	.24	ppm		5	79	Killi spg	NJMS 79
1585	10	fish	Hg	.32	ppm		7	79	Killi w	NJMS 79
1586	10	fish	Hg	.11	ppm		10	79	Killi f	NJMS 79
3788	10	sw	tce	.00	ppb		10	81	unf	NJDEP 85
3799	10	sw	MeChl	7.70	ppb		10	81	unf	NJDEP 85
3800	10	sw	ChCl3	.40	ppb		10	81	unf	NJDEP 85
3801	10	sw	tcle	.40	ppb		10	81	unf	NJDEP 85
3802	10	sw	ttce	1.20	ppb		10	81	unf	NJDEP 85
4029	10	sed	As	9.00	ppm		10	81	PONAR Grab	NJDEP 85
4030	10	sed	Ga	.64	ppm		10	81	PONAR Grab	NJDEP 85
4031	10	sed	Cd	9.50	ppm		10	81	PONAR Grab	NJDEP 85
4032	10	sed	Cu	148.00	ppm		10	81	PONAR Grab	NJDEP 85
4033	10	sed	Cr	170.00	ppm		10	81	PONAR Grab	NJDEP 85
4034	10	sed	Ni	40.00	ppm		10	81	PONAR Grab	NJDEP 85
4035	10	sed	Pb	10.00	ppm		10	81	PONAR Grab	NJDEP 85
4036	10	sed	Zn	390.00	ppm		10	81	PONAR Grab	NJDEP 85
3304	10	invt	Hg	.23	ppm		10	83	crab mus	NJDEP 85
3305	10	invt	Hg	.24	ppm		10	83	crab ky	NJDEP 85
1592	11	fish	Hg	1.11	ppm			77	Wh perch mus	HMDC 78
1593	11	fish	Hg	.65	ppm			77	Wh perch liv	HMDC 78
1594	11	fish	Hg	.11	ppm			77	Wh perch kid	HMDC 78
1595	11	fish	Hg	.22	ppm			77	Killi mus	HMDC 78
3462	11	sw	As	13.00	ppb		8	78	Ht unf	Berg 78
3463	11	sw	Cd	16.00	ppb		8	78	Ht unf	Berg 78
3464	11	sw	Cr	10.00	ppb		8	78	Ht unf	Berg 78
3465	11	sw	Cu	2.00	ppb		8	78	Ht unf	Berg 78
3466	11	sw	Fe	440.00	ppb		8	78	Ht unf	Berg 78
3467	11	sw	Pb	10.00	ppb		8	78	Ht unf	Berg 78
3468	11	sw	Ni	200.00	ppb		8	78	Ht unf	Berg 78
3469	11	sw	Zn	7.00	ppb		8	78	Ht unf	Berg 78
3835	11	sw	Hg	1.20	ppb		8	78	Ht unf	Berg 78
1999	12	fish	HG	.07	ppm				ng	HMDC 78
6679	12	sed	Hg	6.00	ppm		6	77	bl,cl/st 12inch	Huch 77
1596	12	fish	Hg	.19	ppm			78	Killi w	NJMS 79
1998	12	fish	HG	.19	ppm		7	78	killi w	NJMS 78
4037	12	mrsh sed	As	2.52	ppm		8	78	0-6inch	Berg 78

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4038	12	mrsh sed	As	2.46	ppm		8	78	6-12inch	Berg 78
4039	12	mrsh sed	As	1.18	ppm		8	78	12-24inch	Berg 78
4040	12	mrsh sed	As	1.84	ppm		8	78	weightavg	Berg 78
4041	12	mrsh sed	Cd	.35	ppm		8	78	0-6inch	Berg 78
4042	12	mrsh sed	Cd	.33	ppm		8	78	6-12inch	Berg 78
4043	12	mrsh sed	Cd	.39	ppm		8	78	12-24inch	Berg 78
4044	12	mrsh sed	Cd	.37	ppm		8	78	weightavg	Berg 78
4045	12	mrsh sed	Cr	40.00	ppm		8	78	0-6inch	Berg 78
4046	12	mrsh sed	Cr	19.00	ppm		8	78	6-12inch	Berg 78
4047	12	mrsh sed	Cr	34.00	ppm		8	78	12-24inch	Berg 78
4048	12	mrsh sed	Cr	32.00	ppm		8	78	weightavg	Berg 78
4049	12	mrsh sed	Cu	13.00	ppm		8	78	0-6inch	Berg 78
4050	12	mrsh sed	Cu	10.00	ppm		8	78	6-12inch	Berg 78
4051	12	mrsh sed	Cu	11.00	ppm		8	78	12-24inch	Berg 78
4052	12	mrsh sed	Cu	11.00	ppm		8	78	weightavg	Berg 78
4053	12	mrsh sed	Fe	11000.00	ppm		8	78	0-6inch	Berg 78
4054	12	mrsh sed	Fe	9100.00	ppm		8	78	6-12inch	Berg 78
4055	12	mrsh sed	Fe	11500.00	ppm		8	78	12-24inch	Berg 78
4056	12	mrsh sed	Fe	10800.00	ppm		8	78	weightavg	Berg 78
4057	12	mrsh sed	Pb	.03	ppm		8	78	0-6inch	Berg 78
4058	12	mrsh sed	Pb	.09	ppm		8	78	6-12inch	Berg 78
4059	12	mrsh sed	Pb	.08	ppm		8	78	12-24inch	Berg 78
4060	12	mrsh sed	Pb	.07	ppm		8	78	weightavg	Berg 78
4061	12	mrsh sed	Ni	17.00	ppm		8	78	0-6inch	Berg 78
4062	12	mrsh sed	Ni	16.00	ppm		8	78	6-12inch	Berg 78
4063	12	mrsh sed	Ni	22.00	ppm		8	78	12-24inch	Berg 78
4064	12	mrsh sed	Ni	19.00	ppm		8	78	weightavg	Berg 78
4065	12	mrsh sed	Zn	47.00	ppm		8	78	0-6inch	Berg 78
4066	12	mrsh sed	Zn	40.00	ppm		8	78	6-12inch	Berg 78
4067	12	mrsh sed	Zn	41.00	ppm		8	78	12-24inch	Berg 78
4068	12	mrsh sed	Zn	42.00	ppm		8	78	weightavg	Berg 78
4299	13	plant	Hg	13.46	ppm				Spikerush	HMDC 78
4300	13	plant	Hg	7.92	ppm				Typha riz	HMDC 78
4301	13	plant	Hg	1.83	ppm				Typha ste	HMDC 78
4302	13	plant	Hg	.34	ppm				Typha lf	HMDC 78
4303	13	plant	Hg	3.47	ppm				Phrag riz	HMDC 78
4304	13	plant	Hg	.11	ppm				Phrag ste	HMDC 78
4305	13	plant	Hg	1.15	ppm				Phrag lf	HMDC 78
4306	13	plant	Hg	.82	ppm				Phrag ft.st	HMDC 78
2000	13	ch sed	HG	.10	ppm	.10		74	0-15 inch	HMDC 78
1598	13	mrsh sed	Hg	22.00	ppm	.10		77	0-2 inch	HMDC 78
1599	13	mrsh sed	Hg	24.00	ppm	.10		77	2-4 inch	HMDC 78

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
1600	13	mrsh sed	Hg	28.00	ppm	.10		77	4-6 inch	HMDC 78
1601	13	mrsh sed	Hg	7.20	ppm	.10		77	6-12 inch	HMDC 78
1602	13	mrsh sed	Hg	9.60	ppm	.10		77	12-18 inch	HMDC 78
1597	13	invt	Hg	.10	ppm			78	F crab mus	HMDC 80
4330	13	invt	Hg	.25	ppm			78	F crab visc	HMDC 80
1603	14	fish	Hg	.29	ppm			77	Killi mus	HMDC 78
2001	15	plant	HG	.08	ppm			77	Phrag riz	HMDC 78
2002	15	plant	HG	.11	ppm			77	Phrag ste	HMDC 78
2003	15	plant	HG	.40	ppm			77	Phrag lf	HMDC 78
2004	15	plant	HG	.52	ppm			77	Phrag fr	HMDC 78
2005	15	plant	HG	.64	ppm			77	Spar riz	HMDC 78
2006	15	plant	HG	.15	ppm			77	Spar ste	HMDC 78
2007	15	plant	HG	.34	ppm			77	Spar lf	HMDC 78
2008	15	plant	HG	.26	ppm			77	Spar fr	HMDC 78
9741	15	fish	Hg	.11	ppm			77	Killi mus	HMDC 78
1604	16	fish	Hg	.11	ppm			77	Killi mus	HMDC 78
2009	16	plant	HG	.48	ppm			77	Acnid fr	HMDC 78
2010	16	plant	HG	.50	ppm			77	Phrag riz	HMDC 78
2011	16	plant	HG	.09	ppm			77	Phrag ste	HMDC 78
2012	16	plant	HG	.43	ppm			77	Phrag lf	HMDC 78
2013	16	plant	HG	.53	ppm			77	Phrag fr	HMDC 78
2014	16	plant	HG	.53	ppm			77	Atri riz	HMDC 78
2015	16	plant	HG	.77	ppm			77	Atri ste	HMDC 78
2016	16	plant	HG	2.20	ppm			77	Atri lf	HMDC 78
2017	16	plant	HG	.43	ppm			77	Atri fr	HMDC 78
2018	16	plant	HG	.63	ppm			77	Acnid riz	HMDC 78
2019	16	plant	HG	.09	ppm			77	Acnid ste	HMDC 78
2020	16	plant	HG	.77	ppm			77	Acnid lf	HMDC 78
9740	17	fish	Hg	.07	ppm			77	Killi mus	HMDC 78
2021	18	mrsh sed	HG	8.00	ppm	.10		77	0-2 inch	HMDC 78
2022	18	mrsh sed	HG	39.00	ppm	.10		77	2-4 inch	HMDC 78
2023	18	mrsh sed	HG	48.00	ppm	.10		77	4-6 inch	HMDC 78
2024	18	mrsh sed	HG	11.00	ppm	.10		77	6-12 inch	HMDC 78
2025	18	mrsh sed	HG	6.70	ppm	.10		77	12-15 inch	HMDC 78
4254	19	plant	Hg	.19	ppm				Phrag riz	HMDC 78
4255	19	plant	Hg	.12	ppm				Phrag ste	HMDC 78
4256	19	plant	Hg	.47	ppm				Phrag lf	HMDC 78
4257	19	plant	Hg	.64	ppm				Phrag ft.st	HMDC 78
2026	19	ch sed	HG	1.10	ppm	.10		72	0-2 inch	HMDC 72
2027	19	ch sed	HG	.68	ppm	.10		72	2-4 inch	HMDC 72
2028	19	ch sed	HG	.94	ppm	.10		72	4-6 inch	HMDC 72
2029	19	ch sed	HG	.42	ppm	.10		72	6-12 inch	HMDC 72

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2030	19	ch sed	HG	.14	ppm	.10		72	12-17 inch	HMDC 72
1605	19	mrsh sed	Hg	.10	ppm	.10		77	6-12 inch	HMDC 78
2031	19	mrsh sed	HG	.22	ppm	.10		77	2-4 inch	HMDC 78
2032	19	mrsh sed	HG	.10	ppm	.10		77	4-6 inch	HMDC 78
2033	19	mrsh sed	HG	.10	ppm	.10		77	6-12 inch	HMDC 78
4253	20	plant	Hg	1.89	ppm				Phrag	HMDC 78
4240	20	fish	Hg	.70	ppm		10	76	killi w	JMA 76
1607	20	fish	Hg	.39	ppm			77	Killi mus	HMDC 78
1606	20	invt	Hg	.33	ppm			78	F crab mus	HMDC 80
2034	20	bird	HG	5.77	ppm			78	Gall feth	HMDC 78
2035	20	bird	HG	.59	ppm			78	Gall mus	HMDC 78
2036	20	bird	HG	1.93	ppm			78	Gall liv	HMDC 78
4331	20	invt	Hg	1.40	ppm			78	F crab visc	HMDC 80
4333	20	invt	Hg	.20	ppm			78	F crab cara	HMDC 80
3311	20	mrsh sed	Hg	.36	ppm		8	78	0-6 inch	Berg 78
3312	20	mrsh sed	Hg	.07	ppm		8	78	6-12 inch	Berg 78
3313	20	mrsh sed	Hg	.06	ppm		8	78	12-24inch	Berg 78
3314	20	mrsh sed	Hg	.14	ppm		8	78	weightavg	Berg 78
4069	20	mrsh sed	As	2.52	ppm		8	78	0-6inch	Berg 78
4070	20	mrsh sed	As	1.22	ppm		8	78	6-12inch	Berg 78
4071	20	mrsh sed	As	.54	ppm		8	78	12-24inch	Berg 78
4072	20	mrsh sed	As	1.21	ppm		8	78	weightavg	Berg 78
4073	20	mrsh sed	Cd	.80	ppm		8	78	0-6inch	Berg 78
4074	20	mrsh sed	Cd	.55	ppm		8	78	6-12inch	Berg 78
4075	20	mrsh sed	Cd	.37	ppm		8	78	12-24inch	Berg 78
4076	20	mrsh sed	Cd	.52	ppm		8	78	weightavg	Berg 78
4077	20	mrsh sed	Cr	68.00	ppm		8	78	0-6inch	Berg 78
4078	20	mrsh sed	Cr	24.00	ppm		8	78	6-12inch	Berg 78
4079	20	mrsh sed	Cr	9.00	ppm		8	78	12-24inch	Berg 78
4080	20	mrsh sed	Cr	28.00	ppm		8	78	weightavg	Berg 78
4081	20	mrsh sed	Cu	24.00	ppm		8	78	0-6inch	Berg 78
4082	20	mrsh sed	Cu	10.00	ppm		8	78	6-12inch	Berg 78
4083	20	mrsh sed	Cu	8.00	ppm		8	78	12-24inch	Berg 78
4084	20	mrsh sed	Cu	13.00	ppm		8	78	weightavg	Berg 78
4085	20	mrsh sed	Fe	8000.00	ppm		8	78	0-6inch	Berg 78
4086	20	mrsh sed	Fe	8800.00	ppm		8	78	6-12inch	Berg 78
4087	20	mrsh sed	Fe	9100.00	ppm		8	78	12-24inch	Berg 78
4088	20	mrsh sed	Fe	8800.00	ppm		8	78	weightavg	Berg 78
4089	20	mrsh sed	Pb	72.00	ppm		8	78	0-6inch	Berg 78
4090	20	mrsh sed	Pb	16.00	ppm		8	78	6-12inch	Berg 78
4091	20	mrsh sed	Pb	7.00	ppm		8	78	12-24inch	Berg 78
4092	20	mrsh sed	Pb	26.00	ppm		8	78	weightavg	Berg 78

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4093	20	mrsh sed	Ni	30.00	ppm		8	78	0-6inch	Berg 78
4094	20	mrsh sed	Ni	21.00	ppm		8	78	6-12inch	Berg 78
4095	20	mrsh sed	Ni	10.00	ppm		8	78	12-24inch	Berg 78
4096	20	mrsh sed	Ni	18.00	ppm		8	78	weightavg	Berg 78
4097	20	mrsh sed	Zn	96.00	ppm		8	78	0-6inch	Berg 78
4098	20	mrsh sed	Zn	56.00	ppm		8	78	6-12inch	Berg 78
4099	20	mrsh sed	Zn	28.00	ppm		8	78	12-24inch	Berg 78
4100	20	mrsh sed	Zn	52.00	ppm		8	78	weightavg	Berg 78
4223	21	fish	Hg	.16	ppm		10	76	amer eel w	JMA 76
4224	21	fish	Hg	.87	ppm		10	76	goldfish f	JMA 76
4226	21	fish	Hg	1.37	ppm		10	76	goldfish liv	JMA 76
4227	21	fish	Hg	14.00	ppm		10	76	goldfish hrt	JMA 76
4228	21	fish	Hg	3.20	ppm		10	76	goldfish brn	JMA 76
4229	21	fish	Hg	2.10	ppm		10	76	goldfish eye	JMA 76
4230	21	fish	Hg	1.00	ppm		10	76	goldfish visc	JMA 76
4231	21	fish	Hg	.06	ppm		10	76	goldfish scales	JMA 76
4233	21	fish	Hg	.82	ppm		10	76	Killi w	JMA 76
4241	21	fish	Hg	1.20	ppm		10	76	Killi gills	JMA 76
6668	21	sed	Hg	.74	ppm		6	77	br cl/st	Huch 77
1610	22	fish	Hg	.27	ppm			77	Killi mus	HMDC 78
6667	22	sed	Hg	.96	ppm		6	77	br cl/silt	Huch 77
1623	22	plant	Hg	.26	ppm		10	77	Phrag riz	HMDC 78
1624	22	plant	Hg	.00	ppm		10	77	Phrag ste	HMDC 78
1625	22	plant	Hg	.15	ppm		10	77	Phrag lf	HMDC 78
1626	22	plant	Hg	.24	ppm		10	77	Phrag fr	HMDC 78
1627	22	plant	Hg	.39	ppm		10	77	Spar riz	HMDC 78
1628	22	plant	Hg	.00	ppm		10	77	Spar ste	HMDC 78
1629	22	plant	Hg	.14	ppm		10	77	Spar lf	HMDC 78
1630	22	plant	Hg	.50	ppm		10	77	Spar fr	HMDC 78
1611	22	mamm	Hg	.23	ppm			78	volefur	HMDC 78
1612	22	mamm	Hg	.00	ppm			78	volemus	HMDC 78
1613	22	mamm	Hg	.00	ppm			78	voleliv	HMDC 78
1614	22	mamm	Hg	.25	ppm			78	voleky	HMDC 78
1615	22	mamm	Hg	.32	ppm			78	volefur	HMDC 78
1616	22	mamm	Hg	.00	ppm			78	volemus	HMDC 78
1617	22	mamm	Hg	.00	ppm			78	voleliv	HMDC 78
1618	22	mamm	Hg	.13	ppm			78	voleky	HMDC 78
1619	22	mamm	Hg	.09	ppm			78	rab fur	HMDC 78
1620	22	mamm	Hg	.00	ppm			78	rab mus	HMDC 78
1621	22	mamm	Hg	.11	ppm			78	rab liv	HMDC 78
1622	22	mamm	Hg	.52	ppm			78	rab ky	HMDC 78
4335	22	invt	Hg	.25	ppm			78	G shrimp w	HMDC 80

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3315	22	soil	Hg	.01	ppm		8	78	leachate	Berg 78
3316	22	soil	Hg	.09	ppm		8	78	solid	Berg 78
3470	22	soil	As	.10	ppm		8	78	leachate	Berg 78
3471	22	soil	As	2.09	ppm		8	78	solid	Berg 78
3472	22	soil	Cd	.01	ppm		8	78	leachate	Berg 78
3473	22	soil	Cd	2.18	ppm		8	78	solid	Berg 78
3474	22	soil	Cr	.13	ppm		8	78	leachate	Berg 78
3475	22	soil	Cr	19.20	ppm		8	78	solid	Berg 78
3476	22	soil	Cu	.18	ppm		8	78	leachate	Berg 78
3477	22	soil	Cu	34.20	ppm		8	78	solid	Berg 78
3478	22	soil	Fe	80.00	ppm		8	78	leachate	Berg 78
3479	22	soil	Fe	13800.00	ppm		8	78	solid	Berg 78
3480	22	soil	Pb	.62	ppm		8	78	leachate	Berg 78
3481	22	soil	Pb	275.00	ppm		8	78	solid	Berg 78
3482	22	soil	Ni	.01	ppm		8	78	leachate	Berg 78
3483	22	soil	Ni	9.80	ppm		8	78	solid	Berg 78
3484	22	soil	Zn	3.77	ppm		8	78	leachate	Berg 78
3485	22	soil	Zn	52.10	ppm		8	78	solid	Berg 78
7746	23	sw	Hg	46.60	PPB		5	74	unf Lt	JMA 76
7745	23	sw	Hg	14.00	PPB		6	74	unf Lt	JMA 76
7744	23	sw	Hg	3.80	PPB		7	74	unf Lt	JMA 76
7770	23	sw	Hg	3.90	PPB		7	74	unf Ht	JMA 76
7743	23	sw	Hg	2.40	PPB		9	74	unf Lt	JMA 76
7769	23	sw	Hg	11.00	PPB		9	74	unf Ht	JMA 76
7742	23	sw	Hg	4.30	PPB		10	74	unf Lt	JMA 76
7768	23	sw	Hg	1.30	PPB		10	74	unf Ht	JMA 76
7741	23	sw	Hg	2.50	PPB		11	74	unf Lt	JMA 76
7767	23	sw	Hg	.20	PPB		11	74	unf Ht	JMA 76
7740	23	sw	Hg	4.60	PPB		12	74	unf Lt	JMA 76
7739	23	sw	Hg	.14	PPB		11	75	unf Lt	JMA 76
8017	23	sw	Hg	10.40	ppb		12	75	unf Lt	JMA 76
8016	23	sw	Hg	21.40	ppb		1	76	unf Lt	JMA 76
8015	23	sw	Hg	1.26	ppb		2	76	unf Lt	JMA 76
8014	23	sw	Hgt	4.46	ppb		3	76	unf Lt	JMA 76
8013	23	sw	Hg	2.80	ppb		4	76	unf Lt	JMA 76
8012	23	sw	Hg	.80	ppb		5	76	unf Lt	JMA 76
8011	23	sw	Hg	2.90	ppb		6	76	unf Lt	JMA 76
8010	23	sw	Hg	.60	ppb		7	76	unf Lt	JMA 76
8009	23	sw	Hg	.20	ppb		8	76	unf Lt	JMA 76
1655	23	fish	Hg	.25	ppm			77	Killi mus	HMDC 78
6666	23	sed	Hg	3.10	ppm		6	77	bl silt	Huch 77
3853	23	sw	Hg	.40	ppb	.10	11	77	unf Ht	HMDC 78

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3864	23	sw	Hg	.90	ppb	.10	11	77	unf Lt	HMDC 78
7875	23	sw	Hg	.00	PPB	.10	12	77	Ht fil	HMDC 78
7880	23	sw	Hg	.00	PPB	.1	12	77	Lt fil	HMDC 78
1654	23	fish	Hg	.21	ppm			78	Killi w	NJMS 79
1659	23	mamm	Hg	.09	ppm			78	mous ky	HMDC 78
2038	23	mamm	HG	.73	ppm			78	mous fur	HMDC 78
2039	23	mamm	HG	.05	ppm			78	mous mus	HMDC 78
2040	23	mamm	HG	.10	ppm			78	mous liv	HMDC 78
3854	23	sw	Hg	.80	ppb	.10	1	78	unf Ht	HMDC 78
3865	23	sw	Hg	.80	ppb	.10	1	78	unf Lt	HMDC 78
3855	23	sw	Hg	.30	ppb	.10	2	78	unf Ht	HMDC 78
3866	23	sw	Hg	.70	ppb	.10	2	78	unf Lt	HMDC 78
3856	23	sw	Hg	.50	ppb	.10	3	78	unf Ht	HMDC 78
3867	23	sw	Hg	1.70	ppb	.10	3	78	unf Lt	HMDC 78
3857	23	sw	Hg	3.20	ppb	.10	4	78	unf Ht	HMDC 78
3868	23	sw	Hg	9.70	ppb	.10	4	78	unf Lt	HMDC 78
7876	23	sw	Hg	.00	PPB	.10	4	78	Ht fil	HMDC 78
7881	23	sw	Hg	.00	PPB	.1	4	78	Lt fil	HMDC 78
3858	23	sw	Hg	.80	ppb	.10	5	78	unf Ht	HMDC 78
3869	23	sw	Hg	2.10	ppb	.10	5	78	unf Lt	HMDC 78
3859	23	sw	Hg	.40	ppb	.10	6	78	unf Ht	HMDC 78
3870	23	sw	Hg	2.60	ppb	.10	6	78	unf Lt	HMDC 78
7877	23	sw	Hg	.14	PPB	.10	6	78	Ht fil	HMDC 78
7882	23	sw	Hg	.20	PPB	.1	6	78	Lt fil	HMDC 78
3860	23	sw	Hg	.20	ppb	.10	7	78	unf Ht	HMDC 78
3871	23	sw	Hg	1.30	ppb	.10	7	78	unf Lt	HMDC 78
3486	23	sw	As	13.00	ppb		8	78	Ht unf	Berg 78
3487	23	sw	Cd	2.00	ppb		8	78	Ht unf	Berg 78
3488	23	sw	Cr	10.00	ppb		8	78	Ht unf	Berg 78
3489	23	sw	Cu	2.00	ppb		8	78	Ht unf	Berg 78
3490	23	sw	Fe	200.00	ppb		8	78	Ht unf	Berg 78
3491	23	sw	Pb	10.00	ppb		8	78	Ht unf	Berg 78
3492	23	sw	Ni	150.00	ppb		8	78	Ht unf	Berg 78
3493	23	sw	Zn	47.00	ppb		8	78	Ht unf	Berg 78
3836	23	sw	Hg	1.10	ppb		8	78	unf Ht	Berg 78
3861	23	sw	Hg	.40	ppb	.10	8	78	unf Ht	HMDC 78
3872	23	sw	Hg	9.60	ppb	.10	8	78	unf Lt	HMDC 78
7878	23	sw	Hg	.00	PPB	.10	8	78	Ht fil	HMDC 78
7883	23	sw	Hg	4.00	PPB	.1	8	78	Lt fil	HMDC 78
3862	23	sw	Hg	.60	ppb	.10	9	78	unf Ht	HMDC 78
3873	23	sw	Hg	4.60	ppb	.10	9	78	unf Lt	HMDC 78
3863	23	sw	Hg	.00	ppb	.10	10	78	unf Ht	HMDC 78

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3874	23	sw	Hg	.90	ppb	.10	10	78	unf Lt	HMDC 78
7879	23	sw	Hg	.00	PPB	.10	10	78	Ht fil	HMDC 78
7884	23	sw	Hg	.00	PPB	.1	10	78	Lt fil	HMDC 78
7702	23	sw	Hg	.00	PPB	.10	12	78	Ht filter	HMDC 78
7703	23	sw	Hg	.00	ppb	.10	12	78	Lt filter	HMDC 78
1658	23	fish	Hg	.27	ppm		5	79	Killi w	NJMS 79
1656	23	fish	Hg	.20	ppm		7	79	Killi w	NJMS 79
1657	23	fish	Hg	.77	ppm		10	79	Killi w	NJMS 79
7777	23	ch sed	Hg	36.00	ppm	.10	12	80	0-4 inch	HMDC 80
7778	23	ch sed	Hg	.10	ppm	.10	12	80	4-8 inch	HMDC 80
7779	23	ch sed	Zn	71.00	ppm		12	80	0-4 inch	HMDC 80
7780	23	ch sed	Zn	64.00	ppm		12	80	4-8 inch	HMDC 80
7781	23	ch sed	Cu	20.00	ppm		12	80	0-4 inch	HMDC 80
7782	23	ch sed	Cu	15.00	ppm		12	80	4-8 inch	HMDC 80
7783	23	ch sed	Ni	29.00	ppm		12	80	0-4 inch	HMDC 80
7784	23	ch sed	Ni	21.00	ppm		12	80	4-8 inch	HMDC 80
7785	23	ch sed	Pb	26.00	ppm		12	80	0-4 inch	HMDC 80
7786	23	sed	Pb	20.00	ppm		12	80	4-8	HMDC 80
7787	23	sed	Cr	22.00	ppm		12	80	0-4 in	HMDC 80
7788	23	sed	Cr	20.00	ppm		12	80	4-8 in	HMDC 80
7789	23	sed	Cd	.24	ppm		12	80	0-4 in	HMDC 80
7790	23	sed	Cd	.35	ppm		12	80	4-8 in	HMDC 80
3806	23	sw	MeChl	27.20	ppb		10	81	unf	NJDEP 85
3807	23	sw	tcle	1.00	ppb		10	81	unf	NJDEP 85
3808	23	sw	tce	.60	ppb		10	81	unf	NJDEP 85
3809	23	sw	ttce	2.30	ppb		10	81	unf	NJDEP 85
3837	23	sw	Hg	119.30	ppm		8	82	ss Ht	HMDC 82
3838	23	sw	Hg	53.40	ppm		8	82	ss Ht	HMDC 82
3839	23	sw	Hg	143.20	ppm		8	82	ss Ht	HMDC 82
3840	23	sw	Hg	250.70	ppm		8	82	ss Ht	HMDC 82
3841	23	sw	Hg	541.00	ppm		8	82	ss Ht	HMDC 82
3842	23	sw	Hg	512.80	ppm		8	82	ss Ht	HMDC 82
3843	23	sw	Hg	238.80	ppm		8	82	ss Ht	HMDC 82
3844	23	sw	Hg	940.30	ppm		8	82	ss Ht	HMDC 82
3845	23	sw	Hg	110.10	ppm		8	82	ss Lt	HMDC 82
3846	23	sw	Hg	128.20	ppm		8	82	ss Lt	HMDC 82
3847	23	sw	Hg	168.20	ppm		8	82	ss Lt	HMDC 82
3848	23	sw	Hg	181.20	ppm		8	82	ss Lt	HMDC 82
3849	23	sw	Hg	392.00	ppm		8	82	ss Lt	HMDC 82
3850	23	sw	Hg	367.20	ppm		8	82	ss Lt	HMDC 82
3851	23	sw	Hg	234.40	ppm		8	82	ss Lt	HMDC 82
3852	23	sw	Hg	390.60	ppm		8	82	ss Lt	HMDC 82

829910213

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3877	23	sw	Hg	.00	ppb		8	82	Ht filter	HMDC 82
3878	23	sw	Hg	.07	ppb		8	82	Ht filter	HMDC 82
3879	23	sw	Hg	.00	ppb		8	82	Ht filter	HMDC 82
3880	23	sw	Hg	.01	ppb		8	82	Ht filter	HMDC 82
3881	23	sw	Hg	.03	ppb		8	82	Ht filter	HMDC 82
3882	23	sw	Hg	.02	ppb		8	82	Ht filter	HMDC 82
3883	23	sw	Hg	.01	ppb		8	82	Ht filter	HMDC 82
3884	23	sw	Hg	.03	ppb		8	82	Ht filter	HMDC 82
3885	23	sw	Hg	.01	ppb		8	82	Lt filter	HMDC 82
3886	23	sw	Hg	.00	ppb		8	82	Lt filter	HMDC 82
3887	23	sw	Hg	.00	ppb		8	82	Lt filter	HMDC 82
3888	23	sw	Hg	.01	ppb		8	82	Lt filter	HMDC 82
3889	23	sw	Hg	.02	ppb		8	82	Lt filter	HMDC 82
3890	23	sw	Hg	.03	ppb		8	82	Lt filter	HMDC 82
3891	23	sw	Hg	.01	ppb		8	82	Lt filter	HMDC 82
3892	23	sw	Hg	.02	ppb		8	82	Lt filter	HMDC 82
3328	23	sed	Hg	5.15	ppm		9	82	PONAR Grab	NJDEP 85
3327	23	sed	Hg	4.30	ppm		2	83	PONAR Grab	NJDEP 85
3318	23	fish	Hg	.32	ppm		3	83	Killi w	NJDEP 85
3319	23	fish	Hg	.28	ppm		3	83	Killi w	NJDEP 85
3320	23	fish	Hg	.40	ppm		3	83	Killi w	NJDEP 85
3321	23	fish	Hg	.20	ppm		3	83	Killi w	NJDEP 85
3322	23	fish	Hg	.76	ppm		3	83	Killi w	NJDEP 85
3323	23	fish	Hg	.38	ppm		3	83	sunfish w	NJDEP 85
3324	23	invt	Hg	.54	ppm		3	83	shrimp	NJDEP 85
3325	23	invt	Hg	.84	ppm		3	83	shrimp	NJDEP 85
3326	23	invt	Hg	.52	ppm		3	83	shrimp	NJDEP 85
9745	24	fish	Hg	.25	ppm			77	Killi mus	HMDC 78
0009	24	ch sed	Hg	6.52	ppm		6	77	bl clay	Huch 77
1665	25	fish	Hg	.28	ppm		5	79	Killi w	NJMS 79
1663	25	fish	Hg	.41	ppm		7	79	Killi w	NJMS 79
1664	25	fish	Hg	.00	ppm		10	79	Killi w	NJMS 79
3687	25	sed	Cr	560.00	ppm		10	81	PONAR Grab	NJDEP 85
3688	25	sed	Ni	42.00	ppm		10	81	PONAR Grab	NJDEP 85
4101	25	sed	As	20.00	ppm		10	81	PONAR Grab	NJDEP 85
4102	25	sed	Be	.87	ppm		10	81	PONAR Grab	NJDEP 85
4103	25	sed	Cd	15.50	ppm		10	81	PONAR Grab	NJDEP 85
4104	25	sed	Cu	258.00	ppm		10	81	PONAR Grab	NJDEP 85
4107	25	sed	Pb	195.00	ppm		10	81	PONAR Grab	NJDEP 85
4108	25	sed	Zn	940.00	ppm		10	81	PONAR Grab	NJDEP 85
3361	25	sed	Hg	60.00	ppm	1	6	84	0 inch	Crow 84
3362	25	sed	Hg	44.00	ppm	1	6	84	4 inch	Crow 84

829910214

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3363	25	sed	Hg	242.00	ppm	1	6	84	10 inch	Crow 84
3364	25	sed	Hg	165.00	ppm	1	6	84	16 inch	Crow 84
3365	25	sed	Hg	77.00	ppm	1	6	84	22 inch	Crow 84
3366	25	sed	Hg	1.00	ppm	1	6	84	34 inch	Crow 84
2042	26	ch sed	HG	8.60	ppm	.10		72	0-2 inch	HMDC 72
2043	26	ch sed	HG	7.40	ppm	.10		72	2-4 inch	HMDC 72
2044	26	ch sed	HG	3.40	ppm	.10		72	4-6 inch	HMDC 72
2045	26	ch sed	HG	1.40	ppm	.10		72	6-12 inch	HMDC 72
2046	26	ch sed	HG	.76	ppm	.10		72	12-17 inch	HMDC 72
1680	26	mrsh sed	Hg	49.00	ppm	.10		77	0-2 inch	HMDC 78
1681	26	mrsh sed	Hg	32.00	ppm	.10		77	2-4 inch	HMDC 78
1682	26	mrsh sed	Hg	30.00	ppm	.10		77	4-6 inch	HMDC 78
1683	26	mrsh sed	Hg	164.00	ppm	.10		77	6-12 inch	HMDC 78
1684	26	mrsh sed	Hg	246.00	ppm	.10		77	12-18inch	HMDC 78
1667	26	plant	Hg	.83	ppm		10	77	Hemp ste	HMDC 78
1668	26	plant	Hg	1.20	ppm		10	77	Spar riz	HMDC 78
1669	26	plant	Hg	.24	ppm		10	77	Spar ste	HMDC 78
1670	26	plant	Hg	.71	ppm		10	77	Spar lf	HMDC 78
1671	26	plant	Hg	.29	ppm		10	77	Spar fr	HMDC 78
1672	26	plant	Hg	5.60	ppm		10	77	Spar riz	HMDC 78
1673	26	plant	Hg	.21	ppm		10	77	Spar ste	HMDC 78
1674	26	plant	Hg	.79	ppm		10	77	Spar lf	HMDC 78
1675	26	plant	Hg	.90	ppm		10	77	Spar fr	HMDC 78
1676	26	plant	Hg	.85	ppm		10	77	Phrag riz	HMDC 78
1677	26	plant	Hg	.08	ppm		10	77	Phrag ste	HMDC 78
1678	26	plant	Hg	.42	ppm		10	77	Phrag lf	HMDC 78
1679	26	plant	Hg	.15	ppm		10	77	Phrag fr	HMDC 78
1666	26	fish	Hg	.16	ppm			78	Killi w	NJMS 79
3813	26	sw	MeChl	51.00	ppb		10	81	unf	NJDEP 85
3814	26	sw	CHCl3	5.0	ppb		10	81	unf	NJDEP 85
3815	26	sw	3Cl3Fle	.70	ppb		10	81	unf	NJDEP 85
3816	26	sw	tcle	1.20	ppb		10	81	unf	NJDEP 85
3817	26	sw	tce	.60	ppb		10	81	unf	NJDEP 85
3818	26	sw	ttce	1.30	ppb		10	81	unf	NJDEP 85
3893	26	sw	Me Hg	1.40	ppb	.50	10	81	fil	NJDEP 85
3894	26	sw	Hg	.20	ppb	.50	10	81	unf	NJDEP 85
3367	26	sed	Hg	28.00	ppm	1	6	84	comp	Crow 84
2051	27	mrsh sed	HG	60.10	ppm			74	0-6 inch	JMA 74
2052	27	mrsh sed	HG	7.10	ppm			74	30-36 inch	JMA 74
6676	27	sed	Hg	18.30	ppm		6	77	bl st,cl 12 inch	Huch 77
2047	27	bird	HG	4.40	ppm			78	Gall feth	HMDC 78
2048	27	bird	HG	.19	ppm			78	Gall mus	HMDC 78

829910215

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2049	27	bird	HG	1.20	ppm			78	Gall liv	HMDC 78
2050	27	bird	HG	2.60	ppm			78	Gall kid	HMDC 78
1689	28	plant	Hg	.36	ppm		10	76	Phrag ste	JMA 76
1686	28	plant	Hg	.18	ppm		10	77	Phrag ste	HMDC 78
1687	28	plant	Hg	.00	ppm		10	77	Phrag lf	HMDC 78
1688	28	plant	Hg	.34	ppm		10	77	Phrag fr	HMDC 78
1690	29	plant	Hg	.19	ppm		10	77	Phrag riz	HMDC 78
1691	29	plant	Hg	.13	ppm		10	77	Phrag ste	HMDC 78
1692	29	plant	Hg	.48	ppm		10	77	Phrag lf	HMDC 78
1693	29	plant	Hg	.34	ppm		10	77	Phrag fr	HMDC 78
1694	29	plant	Hg	.28	ppm		10	77	Spar riz	HMDC 78
1695	29	plant	Hg	.14	ppm		10	77	Spar ste	HMDC 78
1696	29	plant	Hg	.32	ppm		10	77	Spar lf	HMDC 78
1697	29	plant	Hg	.37	ppm		10	77	Spar fr	HMDC 78
1698	29	plant	Hg	.28	ppm		10	77	Atri riz	HMDC 78
1699	29	plant	Hg	.36	ppm		10	77	Atri ste	HMDC 78
1700	29	plant	Hg	1.90	ppm		10	77	Atri lf	HMDC 78
1701	29	plant	Hg	.70	ppm		10	77	Atri fr	HMDC 78
2053	29	mamm	HG	.01	ppm			78	ng mus	HMDC 78
2054	30	ch sed	HG	14.00	ppm	.10		72	0-2 inch	HMDC 72
2055	30	ch sed	HG	6.40	ppm	.10		72	2-4 inch	HMDC 72
2056	30	ch sed	HG	3.20	ppm	.10		72	4-6 inch	HMDC 72
2057	30	ch sed	HG	4.70	ppm	.10		72	6-12 inch	HMDC 72
2058	30	mrsh sed	HG	62.00	ppm	.10		77	0-2 inch	HMDC 78
2059	30	mrsh sed	HG	7.60	ppm	.10		77	2-4 inch	HMDC 78
2060	30	mrsh sed	HG	28.00	ppm	.10		77	4-6 inch	HMDC 78
2061	30	mrsh sed	HG	28.00	ppm	.10		77	6-12 inch	HMDC 78
6671	30	sed	Hg	2.38	ppm		6	77	bl silt	Huch 77
1703	31	plant	Hg	.22	ppm		10	76	Phrag ft.st	JMA 76
1704	31	plant	Hg	.07	ppm		10	76	Phrag riz	JMA 76
1705	31	plant	Hg	.14	ppm		10	76	Typha ft. st	JMA 76
1706	31	plant	Hg	.21	ppm		10	76	Typha riz	JMA 76
1707	31	plant	Hg	.28	ppm		10	76	Spar ft. st	JMA 76
1708	31	plant	Hg	.45	ppm		10	76	Spar riz	JMA 76
1709	31	invt	Hg	150.00	ppm		10	76	snail w	JMA 76
1710	31	invt	Hg	1.80	ppm		10	76	brncl cluster	JMA 76
1711	31	invt	Hg	2.00	ppm		10	76	brncl cluster	JMA 76
1712	31	invt	Hg	2.10	ppm		10	76	brncl cluster	JMA 76
1713	31	invt	Hg	11.60	ppm		10	76	isopod w	JMA 76
1714	31	invt	Hg	7.30	ppm		10	76	isopod	JMA 76
1715	31	invt	Hg	2.20	ppm		10	76	shrmp w	JMA 76
1716	31	invt	Hg	4.70	ppm		10	76	shrmp w	JMA 76

829910216

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
1717	31	fish	Hg	.78	ppm		10	76	Killi w	JMA 76
1718	31	fish	Hg	1.40	ppm		10	76	Killi w	JMA 76
1719	31	fish	Hg	3.30	ppm		10	76	Killi w	JMA 76
1720	31	plant	Hg	.02	ppm		10	76	Phrag riz	JMA 76
2062	31	plant	HG	.49	ppm			77	Spar riz	HMDC 78
2063	31	plant	HG	.17	ppm			77	Spar ste	HMDC 78
2064	31	plant	HG	.65	ppm			77	Spar lf	HMDC 78
2065	31	plant	HG	.16	ppm			77	Spar fr	HMDC 78
2066	31	plant	HG	1.10	ppm			77	Typha riz	HMDC 78
2067	31	plant	HG	.14	ppm			77	Typha ste	HMDC 78
2068	31	plant	HG	1.00	ppm			77	Typha lf	HMDC 78
2069	31	plant	HG	.12	ppm			77	Typha fr	HMDC 78
2070	31	plant	HG	1.60	ppm			77	Hemp riz	HMDC 78
2071	31	plant	HG	.12	ppm			77	Hemp ste	HMDC 78
2072	31	plant	HG	1.10	ppm			77	Hemp lf	HMDC 78
2073	31	plant	HG	2.00	ppm			77	Hemp fr	HMDC 78
1721	31	plant	Hg	.14	ppm		10	77	Typha riz	HMDC 78
1722	31	plant	Hg	.15	ppm		10	77	Typha ste	HMDC 78
1723	31	plant	Hg	.49	ppm		10	77	Typha lf	HMDC 78
1724	31	plant	Hg	1.30	ppm		10	77	Phrag riz	HMDC 78
1725	31	plant	Hg	.17	ppm		10	77	Phrag ste	HMDC 78
1726	31	plant	Hg	.53	ppm		10	77	Phrag lf	HMDC 78
1727	31	plant	Hg	.62	ppm		10	77	Phrag fr	HMDC 78
1728	31	plant	Hg	2.30	ppm		10	77	Spar riz	HMDC 78
1729	31	plant	Hg	.11	ppm		10	77	Spar ste	HMDC 78
1730	31	plant	Hg	.79	ppm		10	77	Spar lf	HMDC 78
1731	31	plant	Hg	.59	ppm		10	77	Spar fr	HMDC 78
1732	31	plant	Hg	3.60	ppm		10	77	Atri riz	HMDC 78
1733	31	plant	Hg	.14	ppm		10	77	Atri ste	HMDC 78
1734	31	plant	Hg	2.80	ppm		10	77	Atri lf	HMDC 78
1735	31	plant	Hg	2.50	ppm		10	77	Atri fr	HMDC 78
2074	31	plant	HG	.26	ppm		5	78	Phrag riz	HMDC 78
2075	31	plant	HG	.00	ppm		5	78	Phrag ste	HMDC 78
2076	31	plant	HG	.15	ppm		5	78	Phrag lf	HMDC 78
2077	31	plant	HG	.24	ppm		5	78	Phrag fr	HMDC 78
2078	31	plant	HG	.39	ppm		5	78	Spar riz	HMDC 78
2079	31	plant	HG	.00	ppm		5	78	Spar ste	HMDC 78
2080	31	plant	HG	.14	ppm		5	78	Spar lf	HMDC 78
2081	31	plant	HG	.50	ppm		5	78	Spar fr	HMDC 78
3378	31	mamm	Hg	.20	ppm		4	82	musk liv	NJDEP 85
4114	32	sed	Ni	45.00	ppm		10	81	PONAR Grab	NJDEP 85
7762	32	sw	Hg	6.14	PPB		7	74	unf Lt	JMA 76

829910217

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
7766	32	sw	Hg	7.30	PPB		7	74	unf Ht	JMA 76
7761	32	sw	Hg	15.00	PPB		9	74	unf Lt	JMA 76
7765	32	sw	Hg	47.50	PPB		9	74	unf Ht	JMA 76
7760	32	sw	Hg	6.00	PPB		10	74	unf Lt	JMA 76
7764	32	sw	Hg	4.00	PPB		10	74	unf Ht	JMA 76
7759	32	sw	Hg	8.30	PPB		11	74	unf Lt	JMA 76
7763	32	sw	Hg	4.70	PPB		11	74	unf Ht	JMA 76
7758	32	sw	Hg	4.10	PPB		12	74	unf Lt	JMA 76
7757	32	sw	Hg	.86	PPB		11	75	unf Lt	JMA 76
7756	32	sw	Hg	7.80	PPB		12	75	unf Lt	JMA 76
7755	32	sw	Hg	5.90	PPB		1	76	unf Lt	JMA 76
7754	32	sw	Hg	2.06	PPB		2	76	unf Lt	JMA 76
7753	32	sw	Hg	3.41	PPB		3	76	unf Lt	JMA 76
7752	32	sw	Hg	2.10	PPB		4	76	unf Lt	JMA 76
7751	32	sw	Hg	.60	PPB		5	76	unf Lt	JMA 76
7750	32	sw	Hg	.90	PPB		6	76	unf Lt	JMA 76
7749	32	sw	Hg	1.60	PPB		7	76	unf Lt	JMA 76
7748	32	sw	Hg	.10	PPB		8	76	unf Lt	JMA 76
7747	32	sw	Hg	1.60	PPB		9	76	unf Lt	JMA 76
6674	32	sed	Hg	21.20	ppm		6	77	bl silt 18 inch	Huch 77
7885	32	sw	Hg	2.30	PPB	.1	11	77	Ht unf	HMDC 78
7901	32	sw	Hg	.97	PPB	.1	11	77	Lt unf	HMDC 78
7886	32	sw	Hg	.00	PPB	.1	12	77	Ht fil	HMDC 78
7902	32	sw	Hg	.00	PPB	.1	12	77	Lt fil	HMDC 78
1747	32	fish	Hg	.15	ppm			78	Killi w	NJMS 79
7887	32	sw	Hg	.86	PPB	.1	1	78	Ht unf	HMDC 78
7903	32	sw	Hg	1.00	PPB	.1	1	78	Lt unf	HMDC 78
7888	32	sw	Hg	.44	PPB	.1	2	78	Ht unf	HMDC 78
7904	32	sw	Hg	.30	PPB	.1	2	78	Lt unf	HMDC 78
7889	32	sw	Hg	2.10	PPB	.1	3	78	Ht unf	HMDC 78
7905	32	sw	Hg	.00	PPB	.1	3	78	Lt unf	HMDC 78
7890	32	sw	Hg	5.90	PPB	.1	4	78	Ht unf	HMDC 78
7891	32	sw	Hg	.00	PPB	.1	4	78	Ht fil	HMDC 78
7906	32	sw	Hg	9.90	PPB	.1	4	78	Lt unf	HMDC 78
7907	32	sw	Hg	.00	PPB	.1	4	78	Lt fil	HMDC 78
7892	32	sw	Hg	1.40	PPB	.1	5	78	Ht unf	HMDC 78
7908	32	sw	Hg	1.30	PPB	.1	5	78	Lt unf	HMDC 78
7893	32	sw	Hg	1.20	PPB	.1	6	78	Ht unf	HMDC 78
7894	32	sw	Hg	.27	PPB	.1	6	78	Ht fil	HMDC 78
7909	32	sw	Hg	1.30	PPB	.1	6	78	Lt unf	HMDC 78
7910	32	sw	Hg	.14	PPB	.1	6	78	Lt fil	HMDC 78
7895	32	sw	Hg	.82	PPB	.1	7	78	Ht unf	HMDC 78

829910218

MAPIDATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
7911	32	sw	Hg	.89	PPB	.1	7	78	Lt unf	HMDC 78
7896	32	sw	Hg	.72	PPB	.1	8	78	Ht unf	HMDC 78
7897	32	sw	Hg	.10	PPB	.1	8	78	Ht fil	HMDC 78
7912	32	sw	Hg	.85	PPB	.1	8	78	Lt unf	HMDC 78
7913	32	sw	Hg	.00	PPB	.1	8	78	Lt fil	HMDC 78
7898	32	sw	Hg	.40	PPB	.1	9	78	Ht unf	HMDC 78
7914	32	sw	Hg	.50	PPB	.1	9	78	Lt unf	HMDC 78
7899	32	sw	Hg	.61	PPB	.1	10	78	Ht unf	HMDC 78
7900	32	sw	Hg	.00	PPB	.1	10	78	Ht fil	HMDC 78
7915	32	sw	Hg	1.20	PPB	.1	10	78	Lt unf	HMDC 78
7916	32	sw	Hg	.00	PPB	.1	10	78	Lt fil	HMDC 78
1763	32	fish	Hg	.19	ppm		5	79	Killi W	NJMS 79
1761	32	fish	Hg	.36	ppm		7	79	Killi w	NJMS 79
1762	32	fish	Hg	.38	ppm		10	79	Killi w	NJMS 79
1736	32	fish	Hg	1.04	ppm		11	79	unknown w	Aw 79
1737	32	fish	Hg	1.28	ppm		11	79	unknown w	Aw 79
3494	32	sed	ebenz	1.20	ppm		3	80	PONAR Grab	Aw 80
3495	32	sed	As	18.00	ppm		3	80	PONAR Grab	Aw 80
3496	32	sed	Be	.28	ppm		3	80	PONAR Grab	Aw 80
3497	32	sed	Cd	14.00	ppm		3	80	PONAR Grab	Aw 80
3498	32	sed	Cr	570.00	ppm		3	80	PONAR Grab	Aw 80
3499	32	sed	Cu	310.00	ppm		3	80	PONAR Grab	Aw 80
3500	32	sed	Pb	200.00	ppm		3	80	PONAR Grab	Aw 80
3501	32	sed	Ni	62.00	ppm		3	80	PONAR Grab	Aw 80
3502	32	sed	Se	.00	ppm		3	80	PONAR Grab	Aw 80
3503	32	sed	Ag	.30	ppm		3	80	PONAR Grab	Aw 80
3504	32	sed	Zn	2200.00	ppm		3	80	PONAR Grab	Aw 80
3505	32	sed	Flour	10.00	ppm	.50	3	80	PONAR Grab	Aw 80
3506	32	sed	Pyrene	9.00	ppm	.50	3	80	PONAR Grab	Aw 80
3507	32	sed	Napth	.00	ppm	.50	3	80	PONAR Grab	Aw 80
3508	32	sed	EndoSul	.34	ppm	.02	3	80	PONAR Grab	Aw 80
3509	32	sed	-BHC	.03	ppm	.02	3	80	PONAR Grab	Aw 80
3510	32	sed	-BHC	.00	ppm	.02	3	80	PONAR Grab	Aw 80
3511	32	sed	S-BHC	.21	ppm	.02	3	80	PONAR Grab	Aw 80
3512	32	sed	Aldrin	.12	ppm	.02	3	80	PONAR Grab	Aw 80
3513	32	sed	Hept	.18	ppm	.02	3	80	PONAR Grab	Aw 80
3514	32	sed	Heptep	.23	ppm	.02	3	80	PONAR Grab	Aw 80
3515	32	sed	Dieldrin	.11	ppm	.02	3	80	PONAR Grab	Aw 80
3518	32	sed	Endrin	.25	ppm	.02	3	80	PONAR Grab	Aw 80
3519	32	sed	MeChl	.29	ppm		3	80	PONAR Grab	Aw 80
3520	32	sed	t-dce	.32	ppm		3	80	PONAR Grab	Aw 80
3521	32	sed	chlfrm	.36	ppm		3	80	PONAR Grab	Aw 80

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3522	32	sed	tcd	.45	ppm		3	80	PONAR Grab	Aw 80
3523	32	sed	ttce	.69	ppm		3	80	PONAR Grab	Aw 80
3524	32	sed	toluene	.17	ppm		3	80	PONAR Grab	Aw 80
3525	32	sed	chlbenz	1.70	ppm		3	80	PONAR Grab	Aw 80
3516	32	Sed	4-4'-D.DE	.00	PPM	.02	2	80	PONAR Grab	Aw 80
3517	32	Sed	4-4'-D.DT	.00	ppm	.02	2	80	PONAR Grab	Aw 80
3692	32	sed	Ga	.70	ppm		10	81	PONAR Grab	NJDEP 85
3693	32	sed	Cd	31.50	ppm		10	81	PONAR Grab	NJDEP 85
3694	32	sed	Cu	532.00	ppm		10	81	PONAR Grab	NJDEP 85
3695	32	sed	Cr	605.00	ppm		10	81	PONAR Grab	NJDEP 85
3696	32	sed	Ni	45.00	ppm		10	81	PONAR Grab	NJDEP 85
3697	32	sed	Pb	380.00	ppm		10	81	PONAR Grab	NJDEP 85
3698	32	sed	Zn	2460.00	ppm		10	81	PONAR Grab	NJDEP 85
4109	32	sed	As	15.40	ppm		10	81	PONAR Grab	NJDEP 85
4110	32	sed	Ga	.70	ppm		10	81	PONAR Grab	NJDEP 85
4111	32	sed	Cd	31.50	ppm		10	81	PONAR Grab	NJDEP 85
4112	32	sed	Cu	532.00	ppm		10	81	PONAR Grab	NJDEP 85
4113	32	sed	Cr	605.00	ppm		10	81	PONAR Grab	NJDEP 85
4115	32	sed	Pb	380.00	ppm		10	81	PONAR Grab	NJDEP 85
4116	32	sed	Zn	2460.00	ppm		10	81	PONAR Grab	NJDEP 85
3375	32	mamm	Hg	.10	ppm		4	82	musk mus	NJDEP 85
3376	32	mamm	Hg	.29	ppm		4	82	musk liv	NJDEP 85
3377	32	mamm	Hg	.10	ppm		4	82	musk mus	NJDEP 85
3380	32	sed	Hg	6.80	ppm		9	82	PONAR Grab	NJDEP 85
3379	32	sed	Hg	6.80	ppm		2	83	PONAR Grab	NJDEP 85
3368	32	fish	Hg	.80	ppm		3	83	Killi w	NJDEP 85
3369	32	fish	Hg	2.70	ppm		3	83	Killi w	NJDEP 85
3370	32	fish	Hg	1.76	ppm		3	83	Killi w	NJDEP 85
3371	32	fish	Hg	2.12	ppm		3	83	Killi w	NJDEP 85
3372	32	fish	Hg	2.36	ppm		3	83	Killi w	NJDEP 85
3373	32	bird	Hg	5.30	ppm		3	83	Blduckmus	NJDEP 85
3374	32	bird	Hg	5.89	ppm		3	83	Blduckliv	NJDEP 85
3381	32	fish	Hg	3.60	ppm		9	83	Killi liv	Weis 84
3382	32	fish	Hg	1.30	ppm		9	83	Killi mus	Weis 84
2085	33	plant	HG	.27	ppm		5	78	Phrag riz	HMDC 78
2086	33	plant	HG	.00	ppm		5	78	Phrag ste	HMDC 78
2087	33	plant	HG	.24	ppm		5	78	Phrag lf	HMDC 78
2088	33	plant	HG	.21	ppm		5	78	Phrag fr	HMDC 78
2089	33	plant	HG	.21	ppm		5	78	Spar riz	HMDC 78
2090	33	plant	HG	.00	ppm		5	78	Spar ste	HMDC 78
2091	33	plant	HG	.43	ppm		5	78	Spar lf	HMDC 78

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2092	33	plant	HG	.40	ppm		5	78	Spar fr	HMDC 78
2093	34	plant	HG	5.64	ppm		5	78	Spar riz	HMDC 78
2094	34	plant	HG	.21	ppm		5	78	Spar ste	HMDC 78
2095	34	plant	HG	.79	ppm		5	78	Spar lf	HMDC 78
2096	34	plant	HG	.90	ppm		5	78	Spar fr	HMDC 78
2097	34	plant	HG	.85	ppm		5	78	Phrag riz	HMDC 78
2098	34	plant	HG	.08	ppm		5	78	Phrag ste	HMDC 78
2099	34	plant	HG	.42	ppm		5	78	Phrag lf	HMDC 78
2100	34	plant	HG	.15	ppm		5	78	Phrag fr	HMDC 78
2101	34	plant	HG	.14	ppm		5	78	Typha riz	HMDC 78
2102	34	plant	HG	.15	ppm		5	78	Typha ste	HMDC 78
2103	34	plant	HG	.49	ppm		5	78	Typha lf	HMDC 78
2104	34	plant	HG	1.25	ppm		5	78	Spar riz	HMDC 78
2105	34	plant	HG	.24	ppm		5	78	Spar ste	HMDC 78
2106	34	plant	HG	.71	ppm		5	78	Spar lf	HMDC 78
2107	34	plant	HG	.29	ppm		5	78	Spar fr	HMDC 78
2108	35	mrsh sed	HG	133.00	ppm	.10		77	0-2 inch	HMDC 78
2109	35	mrsh sed	HG	22.00	ppm	.10		77	2-4 inch	HMDC 78
2110	35	mrsh sed	HG	2.40	ppm	.10		77	4-6 inch	HMDC 78
2111	35	mrsh sed	HG	5.90	ppm	.10		77	6-8 inch	HMDC 78
1769	36	mrsh sed	Hg	240.00	ppm		3	76	0-2 inch	JMA 76
1770	36	mrsh sed	Hg	180.00	ppm		3	76	2-4 inch	JMA 76
1771	36	mrsh sed	Hg	82.00	ppm		3	76	0-2 inch	JMA 76
1772	36	mrsh sed	Hg	262.00	ppm		3	76	2-4 inch	JMA 76
1773	36	mrsh sed	Hg	44.00	ppm		3	76	0-2 inch	JMA 76
1774	36	mrsh sed	Hg	47.00	ppm		3	76	2-4 inch	JMA 76
1775	36	mrsh sed	Hg	61.00	ppm		3	76	0-2 inch	JMA 76
2112	36	mrsh sed	HG	320.00	ppm	.10		77	0-2 inch	HMDC 78
2113	36	mrsh sed	HG	1496.00	ppm	.10		77	2-4 inch	HMDC 78
2114	36	mrsh sed	HG	332.00	ppm	.10		77	4-6 inch	HMDC 78
2115	36	mrsh sed	HG	118.00	ppm	.10		77	6-10 inch	HMDC 78
2116	36	plant	HG	3.50	ppm			77	Phrag riz	HMDC 78
2117	36	plant	HG	.54	ppm			77	Phrag ste	HMDC 78
2118	36	plant	HG	.97	ppm			77	Phrag lf	HMDC 78
2119	36	plant	HG	3.20	ppm			77	Phrag fr	HMDC 78
1765	36	fish	Hg	.49	ppm			79	Killi w	NJMS 79
1767	36	fish	Hg	.29	ppm		5	79	Killi w	NJMS 79
1766	36	fish	Hg	.82	ppm		10	79	Killi w	NJMS 79
8004	37	sw	Hg	.30	ppb		11	75	unf	JMA 77
8007	37	sw	Hg	.43	ppb		8	76	unf	JMA 77
2120	37	plant	HG	7.90	ppm			77	Typha riz	HMDC 78
2121	37	plant	HG	1.80	ppm			77	Typha ste	HMDC 78

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2122	37	plant	HG	.34	ppm			77	Typha lf	HMDC 78
2123	37	plant	HG	.00	ppm			77	Typha fr	HMDC 78
2124	37	plant	HG	3.50	ppm			77	Phrag riz	HMDC 78
2125	37	plant	HG	.11	ppm			77	Phrag ste	HMDC 78
2126	37	plant	HG	1.20	ppm			77	Phrag lf	HMDC 78
2127	37	plant	HG	.82	ppm			77	Phrag fr	HMDC 78
1800	38	mamm	Hg	.28	ppm	.01	3	75	mrat ky	JMA 76
1801	38	mamm	Hg	.02	ppm	.01	3	75	mratmus	JMA 76
1802	38	mamm	Hg	.02	ppm	.01	3	75	mratliv	JMA 76
1803	38	mamm	Hg	.02	ppm	.01	3	75	mratfat	JMA 76
1804	38	mamm	Hg	.01	ppm	.01	3	75	mratbrn	JMA 76
1805	38	mamm	Hg	.01	ppm	.01	3	75	mratbld	JMA 76
1799	38	fish	Hg	2.30	ppm		10	76	Killi w	JMA 76
1806	38	plant	Hg	.90	ppm		10	76	Phrag lf	JMA 76
1807	38	plant	Hg	1.58	ppm		10	76	Phrag riz	JMA 76
1808	38	invt	Hg	4.70	ppm		10	76	slug w	JMA 76
1809	38	invt	Hg	4.20	ppm		10	76	brncl cluster	JMA 76
1811	38	invt	Hg	6.20	ppm		10	76	brncl cluster	|MA 76
1812	38	fish	Hg	1.60	ppm		10	76	Killi w	JMA 76
1813	38	fish	Hg	1.90	ppm		10	76	Killi w	JMA 76
3383	38	fish	Hg	1.94	ppm		11	79	unknown w	Aw 79
3384	38	fish	Hg	2.03	ppm		11	79	unknown w	Aw 79
4247	38	fish	Hg	.32	ppm		3	83	Killi w	NJDEP 85
4248	38	fish	Hg	1.30	PPM		3	83	Killi w	NJDEP 85
4249	38	fish	HG	1.54	PPM		3	83	Killi w	NJDEP 85
4250	38	fish	HG	3.08	PPM		3	83	Killi w	NJDEP 85
4251	38	fish	HG	2.00	PPM		9	83	Killi liv	WEIS 84
4252	38	fish	HG	7.00	PPM		9	83	Killi liv	WEIS 84
2133	39	ch sed	HG	276.00	ppm	.10		72	0-4 inch	HMDC 72
2134	39	ch sed	HG	807.00	ppm	.10		72	4-8 inch	HMDC 72
2135	39	ch sed	HG	1142.00	ppm	.10		72	8-12 inch	HMDC 72
2136	39	ch sed	HG	1392.00	ppm	.10		72	12-18 inch	HMDC 72
8000	39	sw	Hg	.30	ppb		2	75	unf	JMA 77
8001	39	sw	Hg	.00	ppb		2	75	unf	JMA 77
8003	39	sw	Hg	.40	ppb		11	75	unf	JMA 77
2137	39	plant	HG	2.90	ppm			77	Acnid lf	HMDC 78
2138	39	plant	HG	1.20	ppm			77	Acnid fr	HMDC 78
2139	39	plant	HG	5.20	ppm			77	Typha riz	HMDC 78
2140	39	plant	HG	.54	ppm			77	Typha ste	HMDC 78
2141	39	plant	HG	.59	ppm			77	Typha lf	HMDC 78
2142	39	plant	HG	.36	ppm			77	Typha fr	HMDC 78
2143	39	plant	HG	5.40	ppm			77	Phrag riz	HMDC 78

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2144	39	plant	HG	.19	ppm			77	Phrag ste	HMDC 78
2145	39	plant	HG	.86	ppm			77	Phrag lf	HMDC 78
2146	39	plant	HG	.76	ppm			77	Phrag fr	HMDC 78
2147	39	plant	HG	4.30	ppm			77	Acnid riz	HMDC 78
2148	39	plant	HG	.00	ppm			77	Acnid ste	HMDC 78
2149	39	mrsh sed	HG	422.00	ppm	.10		77	0-2 inch	HMDC 78
2150	39	mrsh sed	HG	348.00	ppm	.10		77	2-4 inch	HMDC 78
2151	39	mrsh sed	HG	442.00	ppm	.10		77	4-6 inch	HMDC 78
2152	39	mrsh sed	HG	1697.00	ppm	.10		77	6-12 inch	HMDC 78
2153	39	mrsh sed	HG	2006.00	ppm	.10		77	12-13 inch	HMDC 78
7917	39	sw	Hg	3.20	PPB	.1	11	77	Ht unf	HMDC 78
7933	39	sw	Hg	.31	PPB	.1	11	77	Lt unf	HMDC 78
7918	39	sw	Hg	.00	PPB	.1	12	77	Ht fil	HMDC 78
7934	39	sw	Hg	.22	PPB	.1	12	77	Lt fil	HMDC 78
7919	39	sw	Hg	.92	PPB	.1	1	78	Ht unf	HMDC 78
7935	39	sw	Hg	1.40	PPB	.1	1	78	Lt unf	HMDC 78
7920	39	sw	Hg	1.10	PPB	.1	2	78	Ht unf	HMDC 78
7936	39	sw	Hg	.54	PPB	.1	2	78	Lt unf	HMDC 78
7921	39	sw	Hg	1.00	PPB	.1	3	78	Ht unf	HMDC 78
7937	39	sw	Hg	.30	PPB	.1	3	78	Lt unf	HMDC 78
7922	39	sw	Hg	13.00	PPB	.1	4	78	Ht unf	HMDC 78
7923	39	sw	Hg	.20	PPB	.1	4	78	Ht fil	HMDC 78
7938	39	sw	Hg	8.70	PPB	.1	4	78	Lt unf	HMDC 78
7939	39	sw	Hg	.00	PPB	.1	4	78	Lt fil	HMDC 78
7924	39	sw	Hg	.21	PPB	.1	5	78	Ht unf	HMDC 78
7940	39	sw	Hg	6.20	PPB	.1	5	78	Lt unf	HMDC 78
7925	39	sw	Hg	.87	PPB	.1	6	78	Ht unf	HMDC 78
7926	39	sw	Hg	.20	PPB	.1	6	78	Ht fil	HMDC 78
7941	39	sw	Hg	.70	PPB	.1	6	78	Lt unf	HMDC 78
7942	39	sw	Hg	.20	PPB	.1	6	78	Lt fil	HMDC 78
7927	39	sw	Hg	.39	PPB	.1	7	78	Ht unf	HMDC 78
7943	39	sw	Hg	1.30	PPB	.1	7	78	Lt unf	HMDC 78
7928	39	sw	Hg	.95	PPB	.1	8	78	Ht unf	HMDC 78
7929	39	sw	Hg	.00	PPB	.1	8	78	Ht fil	HMDC 78
7944	39	sw	Hg	.49	PPB	.1	8	78	Lt unf	HMDC 78
7945	39	sw	Hg	.00	PPB	.1	8	78	Lt fil	HMDC 78
7930	39	sw	Hg	.61	PPB	.1	9	78	Ht unf	HMDC 78
7946	39	sw	Hg	.84	PPB	.1	9	78	Lt unf	HMDC 78
7931	39	sw	Hg	.89	PPB	.1	10	78	Ht unf	HMDC 78
7932	39	sw	Hg	.00	PPB	.1	10	78	Ht fil	HMDC 78
7947	39	sw	Hg	1.20	PPB	.1	10	78	Lt unf	HMDC 78
1814	40	fish	Hg	.09	ppm			77	Killi w	HMDC 78

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
9744	40	fish	Hg	.25	ppm			77	Killi mus	HMDC 78
6691	40	sed	Hg	1.40	ppm		6	77	gy sd,red st/cl	Huch 77
2154	40	mamm	HG	.01	ppm			78	mrat mus	HMDC 78
2155	40	mamm	HG	.02	ppm			78	mrat kid	HMDC 78
2156	40	mamm	HG	.10	ppm			78	mrat liv	HMDC 78
2157	40	bird	HG	4.39	ppm			78	Gall kid	HMDC 78
2158	40	mamm	HG	.75	ppm			78	Rcoon fur	HMDC 78
2159	40	mamm	HG	.06	ppm			78	Rcoon mus	HMDC 78
2160	40	mamm	HG	.16	ppm			78	Rcoon liv	HMDC 78
2161	40	mamm	HG	.40	ppm			78	Rcoon kid	HMDC 78
2162	40	mamm	HG	.01	ppm			78	Rcoon bld	HMDC 78
2163	40	mamm	HG	.00	ppm			78	Rcoon fat	HMDC 78
2164	40	mamm	HG	.69	ppm			78	Skunk fur	HMDC 78
2165	40	mamm	HG	.06	ppm			78	Skunk mus	HMDC 78
2166	40	mamm	HG	.20	ppm			78	Skunk liv	HMDC 78
2167	40	mamm	HG	.27	ppm			78	Skunk kid	HMDC 78
2168	40	mamm	HG	.01	ppm			78	Skunk fat	HMDC 78
4315	41	plant	Hg	1.28	ppm				Phrag riz	HMDC 78
4316	41	plant	Hg	.17	ppm				Phrag ste	HMDC 78
4317	41	plant	Hg	.53	ppm				Phrag lf	HMDC 78
4318	41	plant	Hg	.62	ppm				Phrag ft.st	HMDC 78
4319	41	plant	Hg	2.34	ppm				Spar riz	HMDC 78
4320	41	plant	Hg	.11	ppm				Spar ste	HMDC 78
4321	41	plant	Hg	.79	ppm				Spar lf	HMDC 78
4322	41	plant	Hg	.59	ppm				Spar ft.st	HMDC 78
4323	41	plant	Hg	3.66	ppm				Atri riz	HMDC 78
4324	41	plant	Hg	.14	ppm				Atri ste	HMDC 78
4325	41	plant	Hg	2.81	ppm				Atri lf	HMDC 78
4326	41	plant	Hg	2.49	ppm				Atri ft.st	HMDC 78
2169	41	plant	HG	.49	ppm		5	78	Spar riz	HMDC 78
2170	41	plant	HG	.17	ppm		5	78	Spar ste	HMDC 78
2171	41	plant	HG	.65	ppm		5	78	Spar lf	HMDC 78
2172	41	plant	HG	.16	ppm		5	78	Spar fr	HMDC 78
2173	41	plant	HG	1.10	ppm		5	78	Typha riz	HMDC 78
2174	41	plant	HG	.14	ppm		5	78	Typha ste	HMDC 78
2175	41	plant	HG	1.04	ppm		5	78	Typha lf	HMDC 78
2176	41	plant	HG	.12	ppm		5	78	Typha fr	HMDC 78
2177	41	plant	HG	1.59	ppm		5	78	Hemp riz	HMDC 78
2178	41	plant	HG	.12	ppm		5	78	Hemp ste	HMDC 78
2179	41	plant	HG	1.08	ppm		5	78	Hemp lf	HMDC 78
2180	41	plant	HG	2.03	ppm		5	78	Hemp fr	HMDC 78
2181	42	ch sed	HG	5.40	ppm	.10		72	0 2 inch	HMDC 72

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2182	42	ch sed	HG	10.00	ppm	.10		72	2-4 inch	HMDC 72
2183	42	ch sed	HG	3.30	ppm	.10		72	4-6 inch	HMDC 72
2184	42	ch sed	HG	5.10	ppm	.10		72	6-12 inch	HMDC 72
2185	42	ch sed	HG	2.20	ppm	.10		72	12-15 inch	HMDC 72
2186	42	mrsh sed	HG	26.00	ppm	.10		77	0-2 inch	HMDC 78
2187	42	mrsh sed	HG	4.80	ppm	.10		77	2-4 inch	HMDC 78
2188	42	mrsh sed	HG	5.90	ppm	.10		77	4-6 inch	HMDC 78
2189	42	mrsh sed	HG	6.90	ppm	.10		77	6-12 inch	HMDC 78
2190	42	mrsh sed	HG	4.40	ppm	.10		77	12-18 inch	HMDC 78
2191	43	ch sed	HG	.10	ppm	.10		72	0-2 inch	HMDC 72
2192	43	ch sed	HG	.10	ppm	.10		72	2-4 inch	HMDC 72
2193	43	ch sed	HG	.10	ppm	.10		72	4-6 inch	HMDC 72
2194	43	ch sed	HG	.10	ppm	.10		72	6-12 inch	HMDC 72
2195	43	ch sed	HG	.10	ppm	.10		72	12-16 inc	HMDC 72
2196	43	plant	HG	.25	ppm			77	Phrag riz	HMDC 78
2197	43	plant	HG	.11	ppm			77	Phrag ste	HMDC 78
2198	43	plant	HG	.51	ppm			77	Phrag lf	HMDC 78
2199	43	plant	HG	.25	ppm			77	Phrag fr	HMDC 78
2200	43	plant	HG	.19	ppm			77	Atri riz	HMDC 78
2201	43	plant	HG	.07	ppm			77	Atri ste	HMDC 78
2202	43	plant	HG	.69	ppm			77	Atri lf	HMDC 78
2203	43	plant	HG	.20	ppm			77	Atri fr	HMDC 78
2204	43	plant	HG	.59	ppm			77	Typha riz	HMDC 78
2205	43	plant	HG	.02	ppm			77	Typha ste	HMDC 78
2206	43	plant	HG	.32	ppm			77	Typha lf	HMDC 78
2207	43	plant	HG	.00	ppm			77	Typha fr	HMDC 78
2208	43	mrsh sed	HG	11.00	ppm	.10		77	0-2 inch	HMDC 78
2209	43	mrsh sed	HG	14.00	ppm	.10		77	2-4 inch	HMDC 78
2210	43	mrsh sed	HG	26.00	ppm	.10		77	4-6 inch	HMDC 78
2211	43	mrsh sed	HG	38.00	ppm	.10		77	6-12 inch	HMDC 78
2212	43	mrsh sed	HG	7.20	ppm	.10		77	0-2 inch	HMDC 78
6692	44	sed	Hg	1.44	ppm		6	77	fine sd,cl 3inch	Huch 77
2215	45	mrsh sed	HG	6.00	ppm			72	0-2 inch	JMA 74
2216	45	mrsh sed	HG	7.00	ppm			72	4-6 inch	JMA 74
2213	45	mrsh sed	HG	36.70	ppm			74	0-6 inch	JMA 74
1822	45	mrsh sed	Hg	136.00	ppm		3	76	0-2inch peat	JMA 76
1823	45	mrsh sed	Hg	245.00	ppm		3	76	2-10inch peat	JMA 76
1824	45	mrsh sed	Hg	16.00	ppm		3	76	10-25inch peat	JMA 76
1825	45	mrsh sed	Hg	7.20	ppm		3	76	25-41inch	JMA 76
1826	45	mrsh sed	Hg	6.60	ppm		3	76	41-58inch	JMA 76
1827	45	mrsh sed	Hg	2.40	ppm		3	76	58-65inch clay	JMA 76
1828	45	mrsh sed	Hg	3.00	ppm		3	76	65-70inch	JMA 76

829910225

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
1829	45	mrsh sed	Hg	1.00	ppm		3	76	70-74inch	JMA 76
1816	45	plant	Hg	.00	ppm		10	77	Typha ste	HMDC 78
1817	45	plant	Hg	.72	ppm		10	77	Typha lf	HMDC 78
1818	45	plant	Hg	.00	ppm		10	77	Typha fr	HMDC 78
1819	45	plant	Hg	.12	ppm		10	77	Spar ste	HMDC 78
1820	45	plant	Hg	1.70	ppm		10	77	Spar lf	HMDC 78
1821	45	plant	Hg	3.00	ppm		10	77	Hemp riz	HMDC 78
1830	46	mrsh sed	Hg	21.00	ppm		3	76	0-2inch peat	JMA 76
1831	46	mrsh sed	Hg	20.00	ppm		3	76	2-6inch peat	JMA 76
1832	46	mrsh sed	Hg	20.00	ppm		3	76	6-11inch peat	JMA 76
1833	46	mrsh sed	Hg	4.90	ppm		3	76	11-20inch	JMA 76
1834	46	mrsh sed	Hg	1.60	ppm		3	76	20-29inch	JMA 76
1835	46	mrsh sed	Hg	2.80	ppm		3	76	29-41inch	JMA 76
1836	46	mrsh sed	Hg	1.40	ppm		3	76	41-58inch	JMA 76
1837	46	mrsh sed	Hg	.40	ppm		3	76	58-62inch	JMA 76
1838	46	mrsh sed	Hg	.70	ppm		3	76	62-66inch	JMA 76
1839	46	mrsh sed	Hg	.80	ppm		3	76	66-78inch clay	JMA 76
6677	46	sed	Hg	.17	ppm		6	77	gy st/cl 2inch	Huch 77
2217	47	mrsh sed	HG	75.00	ppm			74	0-6 inch	JMA 74
2218	47	mrsh sed	HG	5.50	ppm			74	30-36 inch	JMA 74
1840	47	mrsh sed	Hg	36.00	ppm		3	76	0-2inch peat	JMA 76
1841	47	mrsh sed	Hg	4.50	ppm		3	76	2-29inch peat	JMA 76
1842	47	mrsh sed	Hg	1.80	ppm		3	76	29-32inch peat	JMA 76
1843	47	mrsh sed	Hg	1.40	ppm		3	76	32-37inch peat	JMA 76
1844	47	mrsh sed	Hg	.90	ppm		3	76	37-39inch clay	JMA 76
1845	47	mrsh sed	Hg	2.50	ppm		3	76	39-43inch	JMA 76
1846	47	mrsh sed	Hg	1.00	ppm		3	76	43-52inch	JMA 76
1847	47	mrsh sed	Hg	.70	ppm		3	76	52-53inch	JMA 76
2219	48	mrsh sed	HG	6.70	ppm			72	0-2 inch	JMA 74
2220	48	mrshsed	HG	96.20	ppm			72	4-6 inch	JMA 74
1866	48	mrsh sed	Hg	53.00	ppm		3	76	0-2inch peat	JMA 76
1867	48	mrsh sed	Hg	3.00	ppm		3	76	2-17inch	JMA 76
1868	48	mrsh sed	Hg	7.20	ppm		3	76	17-38inch	JMA 76
1869	48	mrsh sed	Hg	.50	ppm		3	76	38-42inch clay	JMA 76
1870	48	mrsh sed	Hg	.40	ppm		3	76	42-46inch clay	JMA 76
1871	48	mrsh sed	Hg	.40	ppm		3	76	46-50inch	JMA 76
1872	48	mrsh sed	Hg	.30	ppm		3	76	50-56inch	JMA 76
1848	48	fish	Hg	1.10	ppm		10	76	Killi w	JMA 76
1849	48	fish	Hg	1.30	ppm		10	76	Killi w	JMA 76
1850	48	fish	Hg	2.90	ppm		10	76	Killi w	JMA 76
1851	48	invt	Hg	2.60	ppm		10	76	musl shl	JMA 76
1852	48	invt	Hg	1.33	ppm		10	76	beetl w	JMA 76

829910226

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
1853	48	invt	Hg	12.00	ppm		10	76	spidr w	JMA 76
1854	48	invt	Hg	.82	ppm		10	76	brncl cluster	JMA 76
1855	48	invt	Hg	.64	ppm		10	76	brncl cluster	JMA 76
1856	48	invt	Hg	1.40	ppm		10	76	brncl cluster	JMA 76
1857	48	plant	Hg	.28	ppm		10	76	Phrag ste	JMA 76
1858	48	plant	Hg	.10	ppm		10	76	Phrag ste	JMA 76
1859	48	plant	Hg	.83	ppm		10	76	Phrag lf	JMA 76
1860	48	plant	Hg	.88	ppm		10	76	Phrag lf	JMA 76
1861	48	plant	Hg	1.80	ppm		10	76	Phrag lf	JMA 76
1862	48	plant	Hg	.65	ppm		10	76	Phrag inflo	JMA 76
1863	48	plant	Hg	.98	ppm		10	76	Phrag inflo	JMA 76
1864	48	plant	Hg	1.20	ppm		10	76	Phrag inflo	JMA 76
1865	48	plant	Hg	.26	ppm		10	76	Phrag lf	JMA 76
2221	50	ch sed	HG	58.00	ppm	.10		72	0-2 inch	HMDC 72
2222	50	ch sed	HG	438.00	ppm	.10		72	2-4 inch	HMDC 72
2223	50	ch sed	HG	247.00	ppm	.10		72	4-6 inch	HMDC 72
2224	50	ch sed	HG	18.00	ppm	.10		72	6-12 inch	HMDC 72
2225	50	ch sed	HG	4.80	ppm	.10		72	12-15 inch	HMDC 72
2226	50	mrsh sed	HG	2.30	ppm			72	0-2 inch	JMA 74
2227	50	mrsh sed	HG	8.20	ppm			72	4-6 inch	JMA 74
1873	50	mrsh sed	Hg	35.00	ppm		3	76	0-2inch peat	JMA 76
1874	50	mrsh sed	Hg	84.00	ppm		3	76	2-8inch peat	JMA 76
1875	50	mrsh sed	Hg	12.00	ppm		3	76	8-30inch peat	JMA 76
1876	50	mrsh sed	Hg	9.20	ppm		3	76	30-42inch	JMA 76
1877	50	mrsh sed	Hg	2.40	ppm		3	76	42-59inch	JMA 76
1878	50	mrsh sed	Hg	14.00	ppm		3	76	59-62inch clay	JMA 76
1879	50	mrsh sed	Hg	.40	ppm		3	76	62-65inch	JMA 76
1880	50	mrsh sed	Hg	.30	ppm		3	76	65-68inch	JMA 76
1881	50	mrsh sed	Hg	.30	ppm		3	76	68-74inch	JMA 76
1882	50	mrsh sed	Hg	8.40	ppm		3	76	74-78inch peat	JMA 76
2228	50	mrsh sed	HG	64.00	ppm	.10		77	0-2 inch	HMDC 78
2229	50	mrsh sed	HG	100.00	ppm	.10		77	2-4 inch	HMDC 78
2230	50	mrsh sed	HG	52.00	ppm	.10		77	4-6 inch	HMDC 78
2231	50	mrsh sed	HG	11.00	ppm	.10		77	6-12 inch	HMDC 78
3699	50	mrsh sed	As	34.20	ppm			77	0-2 inch	JMA 78
3700	50	mrsh sed	As	33.60	ppm			77	3-5 inch	JMA 78
3701	50	mrsh sed	Cr	430.00	ppm			77	0-2 inch	JMA 78
3702	50	mrsh sed	Cr	740.00	ppm			77	3-5 inch	JMA 78
3947	50	mrsh sed	Hg	26.00	ppm		5	78	0-2 inch	JMA 78
3948	50	mrsh sed	Hg	44.00	ppm		5	78	3-5 inch	JMA 78
2232	51	ch sed	HG	2.50	ppm	.10		72	0-2 inch	HMDC 72
2233	51	ch sed	HG	1.40	ppm	.10		72	2-4 inch	HMDC 72

829910227

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2234	51	ch sed	HG	1.10	ppm	.10		72	4-6 inch	HMDC 72
2235	51	ch sed	HG	.72	ppm	.10		72	6-12 inch	HMDC 72
2236	51	mrsh sed	HG	27.00	ppm	.10		77	0-2 inch	HMDC 78
2237	51	mrsh sed	HG	23.00	ppm	.10		77	2-4 inch	HMDC 78
2238	51	mrsh sed	HG	21.00	ppm	.10		77	4-6 inch	HMDC 78
2239	51	mrsh sed	HG	57.00	ppm	.10		77	6-11 inch	HMDC 78
6678	51	sed	Hg	.60	ppm		6	77	br,gy cl,st 10inch	Huch 77
1883	51	soil	Hg	4.50	ppm	.10	3	80	unf L t	Aw 80
2240	52	mrsh sed	HG	3.00	ppm		3	73	long core	JMA 76
2241	52	mrsh sed	HG	3.20	ppm		3	73	0-2 inch	JMA 76
2242	52	mrsh sed	HG	3.60	ppm		3	73	2-4 inch	JMA 76
2243	53	mrsh sed	HG	13.00	ppm	.10		77	0-2 inch	HMDC 78
2244	53	mrsh sed	HG	32.00	ppm	.10		77	2-4 inch	HMDC 78
2245	53	mrsh sed	HG	46.00	ppm	.10		77	4-6 inch	HMDC 78
2246	53	mrsh sed	HG	6.20	ppm	.10		77	6-12 inch	HMDC 78
2247	54	ch sed	HG	9.20	ppm	.10		72	0-2 inch	HMDC 72
2248	54	ch sed	HG	10.00	ppm	.10		72	2-4 inch	HMDC 72
2249	54	ch sed	HG	9.00	ppm	.10		72	4-6 inch	HMDC 72
2250	54	ch sed	HG	9.00	ppm	.10		72	6-8 inch	HMDC 72
2251	54	mrsh sed	HG	40.00	ppm	.10		77	0-2 inch	HMDC 78
2252	54	mrsh sed	HG	54.00	ppm	.10		77	2-4 inch	HMDC 78
2253	54	mrsh sed	HG	23.00	ppm	.10		77	4-6 inch	HMDC 78
2254	54	mrsh sed	HG	4.40	ppm	.10		77	6-9 inch	HMDC 78
1884	55	mrsh sed	Hg	.33	ppm	.10		77	0-2 inch	HMDC 78
1885	55	mrsh sed	Hg	.34	ppm	.10		77	2-4 inch	HMDC 78
1886	55	mrsh sed	Hg	.66	ppm	.10		77	4-6 inch	HMDC 78
1887	55	mrsh sed	Hg	.92	ppm	.10		77	6-12 inch	HMDC 78
1888	55	mrsh sed	Hg	1.20	ppm	.10		77	12-15 inch	HMDC 78
4262	56	plant	Hg	.11	ppm				Phrag riz	HMDC 78
4263	56	plant	Hg	.33	ppm				Phrag ste	HMDC 78
4264	56	plant	Hg	.08	ppm				Phrag lf	HMDC 78
4265	56	plant	Hg	.40	ppm				Phrag ft.st	HMDC 78
2255	56	ch sed	HG	.10	ppm	.10		74	0-12 inch	HMDC 78
2256	56	mrsh sed	HG	10.00	ppm	.10		77	0-2 inch	HMDC 78
2257	56	mrsh sed	HG	4.60	ppm	.10		77	2-4 inch	HMDC 78
2258	56	mrsh sed	HG	1.20	ppm	.10		77	4-6 inch	HMDC 78
2259	56	mrsh sed	HG	22.00	ppm	.10		77	6-12 inch	HMDC 78
2260	56	mrsh sed	HG	7.40	ppm	.10		77	12-16 inch	HMDC 78
2261	57	ch sed	HG	.10	ppm	.10		74	0-4 inch	HMDC 78
2262	57	ch sed	HG	.14	ppm	.10		74	4-6 inch	HMDC 78
2263	57	ch sed	HG	.12	ppm	.10		74	6-12 inch	HMDC 78
2264	57	ch sed	HG	.10	ppm	.10		74	12-14 inch	HMDC 78

829910228

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2265	57	mrsh sed	HG	.10	ppm	.10		77	0-2 inch	HMDC 78
2266	57	mrsh sed	HG	.10	ppm	.10		77	2-4 inch	HMDC 78
2267	57	mrsh sed	HG	1.20	ppm	.10		77	4-6 inch	HMDC 78
2268	57	mrsh sed	HG	1.20	ppm	.10		77	6-12 inch	HMDC 78
2269	57	mrsh sed	HG	.10	ppm	.10		77	12-18 inch	HMDC 78
4270	58	plant	Hg	.35	ppm				Hemp riz	HMDC 78
4271	58	plant	Hg	.24	ppm				Hemp ste	HMDC 78
4272	58	plant	Hg	.64	ppm				Hemp lf	HMDC 78
4273	58	plant	Hg	.83	ppm				Hemp ft.st	HMDC 78
4274	58	plant	Hg	.11	ppm				Bullrush riz	HMDC 78
4275	58	plant	Hg	.27	ppm				Bullrush ste	HMDC 78
4276	58	plant	Hg	1.04	ppm				Bullrush ft.st	HMDC 78
4277	58	plant	Hg	.31	ppm				Spar riz	MHDC 78
4278	58	plant	Hg	.06	ppm				Spat ste	HMDC 78
4279	58	plant	Hg	.31	ppm				Spar lf	HMDC 78
4280	58	plant	Hg	.71	ppm				Spar ft.st	HMDC 78
4281	58	plant	Hg	.10	ppm				Phrag riz	HMDC 78
4282	58	plant	Hg	.12	ppm				Phrag ste	HMDC 78
4283	58	plant	Hg	.40	ppm				Phrag lf	HMDC 78
4284	58	plant	Hg	.09	ppm				Typha riz	HMDC 78
4285	58	plant	Hg	.22	ppm				Typha ste	HMDC 78
4286	58	plant	Hg	.29	ppm				Typha lf	HMDC 78
4287	58	plant	Hg	.11	ppm				Typha ft.st	HMDC 78
2274	58	ch sed	HG	2.80	ppm	.10		74	0-2 inch	HMDC 78
2275	58	ch sed	HG	1.60	ppm	.10		74	2-4 inch	HMDC 78
2276	58	ch sed	HG	2.00	ppm	.10		74	4-6 inch	HMDC 78
2277	58	ch sed	HG	5.00	ppm	.10		74	6-12 inch	HMDC 78
2278	58	mrsh sed	HG	29.00	ppm	.10		77	0-2 inch	HMDC 78
2279	58	mrsh sed	HG	46.00	ppm	.10		77	2-4 inch	HMDC 78
2280	58	mrsh sed	HG	26.00	ppm	.10		77	4-6 inch	HMDC 78
2281	58	mrsh sed	HG	4.20	ppm	.10		77	6-12 inch	HMDC 78
2282	58	mrsh sed	HG	6.20	ppm	.10		77	12-14 inch	HMDC 78
2270	58	plant	HG	.14	ppm		5	78	Phrag lf	HMDC 78
2271	58	plant	HG	.15	ppm		5	78	Phraf ste	HMDC 78
2272	58	plant	HG	.33	ppm		5	78	Phrag lf	HMDC 78
2273	58	plant	HG	.08	ppm		5	78	Phrag ste	HMDC 78
4266	59	plant	Hg	.14	ppm				Phrag riz	HMDC 78
4267	59	plant	Hg	.08	ppm				Phrag ste	HMDC 78
4268	59	plant	Hg	.23	ppm				Phrag lf	HMDC 78
4269	59	plant	Hg	.35	ppm				Phrag ft.st	HMDC 78
2286	59	ch sed	HG	.10	ppm	.10		74	0-6 inch	HMDC 78
2283	59	mrsh sed	HG	2.60	ppm	.10		77	0-2 inch	HMDC 78

829910229

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2284	59	mrsh sed	HG	2.40	ppm	.10		77	2-4 inch	HMDC 78
2285	59	mrsh sed	HG	5.30	ppm	.10		77	4-6 inch	HMDC 78
2287	59	mrsh sed	HG	.34	ppm	.10		77	6-12 inch	HMDC 78
2288	59	mrsh sed	HG	.10	ppm	.10		77	12-18 inch	HMDC 78
2299	60	ch sed	HG	3.70	ppm	.10		74	0-2 inch	HMDC 78
2300	60	ch sed	HG	3.70	ppm	.10		74	2-4 inch	HMDC 78
2301	60	ch sed	HG	2.80	ppm	.10		74	4-6 inch	HMDC 78
2302	60	ch sed	HG	.50	ppm	.10		74	6-12 inch	HMDC 78
2295	60	mrsh sed	HG	6.00	ppm	.10		77	0-2 inch	HMDC 78
2296	60	mrsh sed	HG	18.00	ppm	.10		77	2-4 inch	HMDC 78
2297	60	mrsh sed	HG	27.00	ppm	.10		77	4-6 inch	HMDC 78
2298	60	mrsh sed	HG	13.00	ppm	.10		77	6-14 inch	HMDC 78
3949	60	sw	Hg	.00	ppb	.10	11	77	unf Ht	HMDC 78
3958	60	sw	Hg	.00	ppb	.10	11	77	unf Lt	HMDC 78
7823	60	sw	Hg	.00	PPB	.10	12	77	Ht fil	HMDC 78
7824	60	sw	Hg	.00	PPB	.10	12	77	Lt fil	HMDC 78
3959	60	sw	Hg	.20	ppb	.10	1	78	unf Lt	HMDC 78
3971	60	sw	Hg	.10	ppb	.10	1	78	unf Ht	HMDC 78
3950	60	sw	Hg	.60	ppb	.10	2	78	unf Ht	HMDC 78
3960	60	sw	Hg	.20	ppb	.10	2	78	unf Lt	HMDC 78
3951	60	sw	Hg	.00	ppb	.10	3	78	unf Ht	HMDC 78
3961	60	sw	Hg	.00	ppb	.10	3	78	unf Lt	HMDC 78
3952	60	sw	Hg	.40	ppb	.10	4	78	unf Ht	HMDC 78
3962	60	sw	Hg	4.20	ppb	.10	4	78	unf Lt	HMDC 78
7825	60	sw	Hg	.00	PPB	.10	4	78	Lt fil	HMDC 78
7826	60	sw	Hg	.00	PPB	.10	4	78	Ht fil	HMDC 78
2291	60	plant	HG	.19	ppm		5	78	Phrag lf	HMDC 78
2292	60	plant	HG	.06	ppm		5	78	Phrag ste	HMDC 78
2293	60	plant	HG	.22	ppm		5	78	Phrag lf	HMDC 78
2294	60	plant	HG	.54	ppm		5	78	Phrag ste	HMDC 78
3953	60	sw	Hg	1.70	ppb	.10	5	78	unf Ht	HMDC 78
3963	60	sw	Hg	.40	ppb	.10	5	78	unf Lt	HMDC 78
3964	60	sw	Hg	.60	ppb	.10	6	78	unf Lt	HMDC 78
3972	60	sw	Hg	.10	ppb	.10	6	78	unf Ht	HMDC 78
7827	60	sw	Hg	.10	PPB	.10	6	78	Ht fil	HMDC 78
7828	60	sw	Hg	.17	PPB	.10	6	78	Lt fil	HMDC 78
3954	60	sw	Hg	.40	ppb	.10	7	78	unf Ht	HMDC 78
3965	60	sw	Hg	.20	ppb	.10	7	78	unf Lt	HMDC 78
3955	60	sw	Hg	.20	ppb	.10	8	78	unf Ht	HMDC 78
3966	60	sw	Hg	.00	ppb	.10	8	78	unf Lt	HMDC 78
7829	60	sw	Hg	.00	PPB	.10	8	78	Lt fil	HMDC 78
7830	60	sw	Hg	.00	PPB	.10	8	78	Ht fil	HMDC 78

829910230

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3956	60	sw	Hg	.20	ppb	.10	9	78	unf Ht	HMDC 78
3967	60	sw	Hg	.20	ppb	.10	9	78	unf Lt	HMDC 78
3957	60	sw	Hg	.00	ppb	.10	10	78	unf Ht	HMDC 78
3968	60	sw	Hg	.20	ppb	.10	10	78	unf Lt	HMDC 78
7831	60	sw	Hg	.00	PPB	.10	10	78	Ht fil	HMDC 78
7832	60	sw	Hg	.00	PPB	.10	10	78	Lt fil	HMDC 78
2303	61	ch sed	HG	1.30	ppm	.10		72	0-2 inch	HMDC 72
2304	61	ch sed	HG	1.70	ppm	.10		72	2-4 inch	HMDC 72
2305	61	ch sed	HG	1.80	ppm	.10		72	4-6 inch	HMDC 72
2306	61	ch sed	HG	.36	ppm	.10		72	6-12 inch	HMDC 72
2307	61	ch sed	HG	.78	ppm	.10		72	12-15 inch	HMDC 72
2308	61	mrsh sed	HG	10.00	ppm	.10		77	0-2 inch	HMDC 78
2309	61	mrsh sed	HG	14.00	ppm	.10		77	2-4 inch	HMDC 78
2310	61	mrsh sed	HG	3.80	ppm	.10		77	4-6 inch	HMDC 78
2311	61	mrsh sed	HG	1.60	ppm	.10		77	12-14 inch	HMDC 78
2312	61	mrsh sed	HG	1.50	ppm	.10		77	6-12 inch	HMDC 78
2317	62	mrsh sed	HG	105.90	ppm	.10		77	0-2 inch	HMDC 78
2318	62	mrsh sed	HG	578.00	ppm	.10		77	2-4 inch	HMDC 78
2319	62	mrsh sed	HG	47.00	ppm	.10		77	4-6 inch	HMDC 78
2320	62	mrsh sed	HG	4.90	ppm	.10		77	6-12 inch	HMDC 78
2313	62	plant	HG	.11	ppm		5	78	Phrag lf	HMDC 78
2314	62	plant	HG	.04	ppm		5	78	Phrag ste	HMDC 78
2315	62	plant	HG	.54	ppm		5	78	Phrag lf	HMDC 78
2316	62	plant	HG	.97	ppm		5	78	Phrag ste	HMDC 78
2321	63	mrsh sed	HG	493.00	ppm	.10		77	0-2 inch	HMDC 78
2322	63	mrsh sed	HG	183.00	ppm	.10		77	2-4 inch	HMDC 78
2323	63	mrsh sed	HG	719.00	ppm	.10		77	4-6 inch	HMDC 78
2324	63	mrsh sed	HG	255.00	ppm	.10		77	6-12 inch	HMDC 78
2325	63	mrsh sed	HG	4.40	ppm	.10		77	12-15 inch	HMDC 78
2326	64	mrsh sed	HG	1747.00	ppm	.10		77	0-2 inch	HMDC 78
2327	64	mrsh sed	HG	1713.00	ppm	.10		77	2-4 inch	HMDC 78
2328	64	mrsh sed	HG	342.00	ppm	.10		77	4-6 inch	HMDC 78
2329	64	mrsh sed	HG	13.00	ppm	.10		77	6-8 inch	HMDC 78
2330	65	mrsh sed	HG	82.00	ppm		3	76	0-2 inch	JMA 76
2331	65	mrsh sed	HG	262.00	ppm		3	76	2-4 inch	JMA 76
2332	66	mrsh sed	HG	196.00	ppm	.10		77	0-2 inch	HMDC 78
2333	66	mrsh sed	HG	63.00	ppm	.10		77	2-4 inch	HMDC 78
2334	66	mrsh sed	HG	.80	ppm	.10		77	4-6 inch	HMDC 78
2335	66	mrsh sed	HG	.60	ppm	.10		77	6-12 inch	HMDC 78
2336	66	mrsh sed	HG	.70	ppm	.10		77	12-13 inch	HMDC 78
2338	67	mrsh sed	HG	1455.00	ppm	.10		77	0-2 inch	HMDC 78
2339	67	mrsh sed	HG	1615.00	ppm	.10		77	2-4 inch	HMDC 78

829910231

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2340	67	mrsh sed	HG	301.00	ppm	.10		77	4-6 inch	HMDC 78
2341	67	mrsh sed	HG	142.00	ppm	.10		77	6-12 inch	HMDC 78
2342	67	mrsh sed	HG	2.70	ppm	.10		77	12-14 inch	HMDC 78
2337	67	soil	HG	86.00	ppm		3	80	PONAR Grab	Aw 80
2343	68	mrsh sed	HG	44.00	ppm		3	76	0-2 inch	JMA 76
2344	68	mrsh sed	HG	47.00	ppm		3	76	2-4 inch	JMA 76
1913	69	soil	Hg	91.00	ppm	.10	3	80	unf Lt	Aw 80
3385	70	mrsh sed	Hg	.22	ppm		8	78	0-6 inch	Berg 78
3386	70	mrsh sed	Hg	.06	ppm		8	78	6-12inch	Berg 78
3387	70	mrsh sed	Hg	.28	ppm		8	78	12-24inch	Berg 78
3388	70	mrsh sed	Hg	.14	ppm		8	78	weightavg	Berg 78
4117	70	mrsh sed	As	2.61	ppm		8	78	0-6inch	Berg 78
4118	70	mrsh sed	As	2.12	ppm		8	78	6-12inch	Berg 78
4119	70	mrsh sed	As	3.07	ppm		8	78	12-24inch	Berg 78
4120	70	mrsh sed	As	2.72	ppm		8	78	weightavg	Berg 78
4121	70	mrsh sed	Cd	1.36	ppm		8	78	0-6inch	Berg 78
4122	70	mrsh sed	Cd	.58	ppm		8	78	6-12inch	Berg 78
4123	70	mrsh sed	Cd	.70	ppm		8	78	12-24inch	Berg 78
4124	70	mrsh sed	Cd	.84	ppm		8	78	weightavg	Berg 78
4125	70	mrsh sed	Cr	52.00	ppm		8	78	0-6inch	Berg 78
4126	70	mrsh sed	Cr	57.00	ppm		8	78	6-12inch	Berg 78
4127	70	mrsh sed	Cr	40.00	ppm		8	78	12-24inch	Berg 78
4128	70	mrsh sed	Cr	47.00	ppm		8	78	weightavg	Berg 78
4129	70	mrsh sed	Cu	32.00	ppm		8	78	0-6inch	Berg 78
4130	70	mrsh sed	Cu	21.00	ppm		8	78	6-12inch	Berg 78
4131	70	mrsh sed	Cu	21.00	ppm		8	78	12-24inch	Berg 78
4132	70	mrsh sed	Cu	24.00	ppm		8	78	weightavg	Berg 78
4133	70	mrsh sed	Fe	13900.00	ppm		8	78	0-6inch	Berg 78
4134	70	mrsh sed	Fe	19900.00	ppm		8	78	6-12inch	Berg 78
4135	70	mrsh sed	Fe	14500.00	ppm		8	78	12-24inch	Berg 78
4136	70	mrsh sed	Fe	15700.00	ppm		8	78	weightavg	Berg 78
4137	70	mrsh sed	Pb	66.00	ppm		8	78	0-6inch	Berg 78
4138	70	mrsh sed	Pb	29.00	ppm		8	78	6-12inch	Berg 78
4139	70	mrsh sed	Pb	30.00	ppm		8	78	12-24inch	Berg 78
4140	70	mrsh sed	Pb	39.00	ppm		8	78	weightavg	Berg 78
4141	70	mrsh sed	Ni	58.00	ppm		8	78	0-6inch	Berg 78
4142	70	mrsh sed	Ni	32.00	ppm		8	78	6-12inch	Berg 78
4143	70	mrsh sed	Ni	32.00	ppm		8	78	12-24inch	Berg 78
4144	70	mrsh sed	Ni	39.00	ppm		8	78	weightavg	Berg 78
4145	70	mrsh sed	Zn	154.00	ppm		8	78	0-6inch	Berg 78
4146	70	mrsh sed	Zn	97.00	ppm		8	78	6-12inch	Berg 78
4147	70	mrsh sed	Zn	101.00	ppm		8	78	12-24inch	Berg 78

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4148	70	mrsh sed	Zn	113.00	ppm		8	78	weightavg	Berg 78
2345	70	soil	HG	4.50	ppm		3	80	PONAR Grab	Aw 80
1914	71	fish	Hg	.15	ppm			78	Killi w	NJMS 79
8002	72	sw	Hg	.60	ppb		11	75	unf	JMA 77
8005	72	sw	Hg	.20	ppb		8	76	unf	JMA 77
6690	72	sed	Hg	.11	ppm		6	77	fine sd,bl st 3in	Huch 77
3973	73	sw	Hg	.00	ppb	.10	11	77	unf Ht	HMDC 78
3984	73	sw	Hg	.00	ppb	.10	11	77	unf Lt	HMDC 78
7833	73	sw	Hg	.00	PPB	.10	12	77	Lt fil	HMDC 78
7834	73	sw	Hg	.00	PPB	.10	12	77	Ht fil	HMDC 78
3974	73	sw	Hg	.00	ppb	.10	1	78	unf Ht	HMDC 78
3985	73	sw	Hg	.20	ppb	.10	1	78	unf Lt	HMDC 78
3975	73	sw	Hg	.20	ppb	.10	2	78	unf Ht	HMDC 78
3986	73	sw	Hg	.60	ppb	.10	2	78	unf Lt	HMDC 78
3976	73	sw	Hg	.00	ppb	.10	3	78	unf Ht	HMDC 78
3987	73	sw	Hg	.00	ppb	.10	3	78	unf Lt	HMDC 78
3977	73	sw	Hg	.40	ppb	.10	4	78	unf Ht	HMDC 78
3988	73	sw	Hg	.90	ppb	.10	4	78	unf Lt	HMDC 78
7835	73	sw	Hg	.00	PPB	.10	4	78	Ht fil	HMDC 78
7836	73	sw	Hg	.00	PPB	.10	4	78	Lt fil	HMDC 78
3978	73	sw	Hg	.30	ppb	.10	5	78	unf Ht	HMDC 78
3989	73	sw	Hg	.30	ppb	.10	5	78	unf Lt	HMDC 78
3979	73	sw	Hg	.50	ppb	.10	6	78	unf Ht	HMDC 78
3990	73	sw	Hg	.40	ppb	.10	6	78	unf Lt	HMDC 78
7837	73	sw	Hg	.10	PPB	.10	6	78	Lt fil	HMDC 78
7838	73	sw	Hg	.00	PPB	.10	6	78	Ht fil	HMDC 78
3980	73	sw	Hg	.20	ppb	.10	7	78	unf Ht	HMDC 78
3996	73	sw	Hg	.10	ppb	.10	7	78	unf Lt	HMDC 78
3981	73	sw	Hg	.20	ppb	.10	8	78	unf Ht	HMDC 78
3991	73	sw	Hg	.00	ppb	.10	8	78	unf Lt	HMDC 78
7839	73	sw	Hg	.00	PPB	.10	8	78	Ht fil	HMDC 78
7840	73	sw	Hg	.00	PPB	.10	8	78	Lt fil	HMDC 78
3982	73	sw	Hg	.20	ppb	.10	9	78	unf Ht	HMDC 78
3992	73	sw	Hg	.20	ppb	.10	9	78	unf Lt	HMDC 78
3983	73	sw	Hg	.00	ppb	.10	10	78	unf Ht	HMDC 78
3993	73	sw	Hg	.00	ppb	.10	10	78	unf Lt	HMDC 78
7841	73	sw	Hg	.00	PPB	.10	10	78	Lt fil	HMDC 78
7842	73	sw	Hg	.00	PPB	.10	10	78	Ht fil	HMDC 78
2348	74	bird	HG	5.50	ppm			78	Gall feth	HMDC 78
2349	74	bird	HG	.47	ppm			78	Gall mus	HMDC 78
2350	74	bird	HG	2.30	ppm			78	Gall liv	HMDC 78
2351	74	bird	HG	2.10	ppm			78	Gall kid	HMDC 78

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2352	75	ch sed	HG	8.40	ppm	.10		72	0-2 inch	HMDC 72
2353	75	ch sed	HG	8.00	ppm	.10		72	2-4 inch	HMDC 72
2354	75	ch sed	HG	6.80	ppm	.10		72	4-6 inch	HMDC 72
2355	75	ch sed	HG	8.80	ppm	.10		72	6-12 inch	HMDC 72
2356	75	ch sed	HG	2.20	ppm	.10		72	12-18 inch	HMDC 72
2357	75	mrsh sed	HG	8.90	ppm	.10		77	0-2 inch	HMDC 78
2358	75	mrsh sed	HG	2.20	ppm	.10		77	2-4 inch	HMDC 78
2359	75	mrsh sed	HG	3.60	ppm	.10		77	4-6 inch	HMDC 78
2360	75	mrsh sed	HG	24.00	ppm	.10		77	6-12 inch	HMDC 78
7843	76	sw	Hg	.00	PPB	.10	11	77	Ht unf	HMDC 78
7859	76	sw	Hg	.00	PPB	.10	11	77	Lt unf	HMDC 78
7844	76	sw	Hg	.00	PPB	.10	12	77	Ht fil	HMDC 78
7860	76	sw	Hg	.00	PPB	.10	12	77	Lt fil	HMDC 78
2363	76	mamm	HG	.00	ppm			78	ng mus	HMDC 78
7845	76	sw	Hg	.11	PPB	.10	1	78	Ht unf	HMDC 78
7861	76	sw	Hg	.19	PPB	.10	1	78	Lt unf	HMDC 78
7846	76	sw	Hg	.30	PPB	.10	2	78	Ht unf	HMDC 78
7862	76	sw	Hg	.00	PPB	.10	2	78	Lt unf	HMDC 78
7847	76	sw	Hg	.00	PPB	.10	3	78	Ht unf	HMDC 78
7863	76	sw	Hg	.14	PPB	.10	3	78	Lt unf	HMDC 78
7848	76	sw	Hg	.40	PPB	.10	4	78	Ht unf	HMDC 78
7849	76	sw	Hg	.00	PPB	.10	4	78	Ht fil	HMDC 78
7864	76	sw	Hg	.70	PPB	.10	4	78	Lt unf	HMDC 78
7865	76	sw	Hg	.00	PPB	.10	4	78	Lt fil	HMDC 78
7850	76	sw	Hg	.24	PPB	.10	5	78	Ht unf	HMDC 78
7866	76	sw	Hg	.24	PPB	.10	5	78	Lt unf	HMDC 78
7851	76	sw	Hg	.14	PPB	.10	6	78	Ht unf	HMDC 78
7852	76	sw	Hg	.10	PPB	.10	6	78	Ht fil	HMDC 78
7867	76	sw	Hg	.24	PPB	.10	6	78	Lt unf	HMDC 78
7868	76	sw	Hg	.10	PPB	.10	6	78	Lt fil	HMDC 78
7853	76	sw	Hg	.12	PPB	.10	7	78	Ht unf	HMDC 78
7869	76	sw	Hg	.22	PPB	.10	7	78	Lt unf	HMDC 78
7854	76	sw	Hg	.20	PPB	.10	8	78	Ht unf	HMDC 78
7855	76	sw	Hg	.00	PPB	.10	8	78	Ht fil	HMDC 78
7870	76	sw	Hg	.00	PPB	.10	8	78	Lt unf	HMDC 78
7871	76	sw	Hg	.00	PPB	.10	8	78	Lt fil	HMDC 78
7856	76	sw	Hg	.24	PPB	.10	9	78	Ht unf	HMDC 78
7872	76	sw	Hg	.13	PPB	.10	9	78	Lt unf	HMDC 78
7857	76	sw	Hg	.00	PPB	.10	10	78	Ht unf	HMDC 78
7858	76	sw	Hg	.00	PPB	.10	10	78	Ht fil	HMDC 78
7873	76	sw	Hg	.00	PPB	.10	10	78	Lt unf	HMDC 78
7874	76	sw	Hg	.00	PPB	.10	10	78	Lt fil	HMDC 78

829910234

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2364	77	bird	HG	.45	ppm			78	GHernfeth	HMDC 78
2365	77	bird	HG	.85	ppm			78	GHern mus	HMDC 78
2366	77	bird	HG	3.10	ppm			78	GHern liv	HMDC 78
2367	77	bird	HG	2.90	ppm			78	GHern kid	HMDC 78
3389	77	soil	Hg	.01	ppm		8	78	leachate	Berg 78
3390	77	soil	Hg	.03	ppm		8	78	solid	Berg 78
3526	77	soil	As	.09	ppm		8	78	leachate	Berg 78
3527	77	soil	As	2.09	ppm		8	78	solid	Berg 78
3528	77	soil	Cd	.01	ppm		8	78	leachate	Berg 78
3529	77	soil	Cd	2.64	ppm		8	78	solid	Berg 78
3530	77	soil	Cr	.10	ppm		8	78	leachate	Berg 78
3531	77	soil	Cr	23.30	ppm		8	78	solid	Berg 78
3532	77	soil	Cu	.18	ppm		8	78	keachate	Berg 78
3533	77	soil	Cu	10.20	ppm		8	78	solid	Berg 78
3534	77	soil	Fe	95.00	ppm		8	78	leachate	Berg 78
3535	77	soil	Fe	18500.00	ppm		8	78	solid	Berg 78
3536	77	soil	Pb	.01	ppm		8	78	leachate	Berg 78
3537	77	soil	Pb	1470.00	ppm		8	78	solid	Berg 78
3538	77	soil	Ni	.15	ppm		8	78	leachate	Berg 78
3539	77	soil	Ni	45.20	ppm		8	78	solid	Berg 78
3540	77	soil	Zn	1.16	ppm		8	78	leachate	Berg 78
3541	77	soil	Zn	31.70	ppm		8	78	solid	Berg 78
2368	78	bird	HG	.06	ppm			78	B Owlmus	HMDC 78
2369	78	bird	HG	.08	ppm			78	B Owlliv	HMDC 78
2370	78	bird	HG	.10	ppm			78	B Owlkid	HMDC 78
2371	78	bird	HG	.06	ppm			78	ng mus	HMDC 78
3999	78	sed	Hg	16.20	ppm		5	78	0-2 inch	JMA 78
4000	78	sed	Hg	7.70	ppm		5	78	2-4 inch	JMA 78
4001	78	sed	Hg	1.20	ppm		5	78	4-6 inch	JMA 78
2372	79	bird	HG	.07	ppm			78	ng mus	HMDC 78
2373	79	bird	HG	1.50	ppm			78	Gall feth	HMDC 78
2374	79	bird	HG	.06	ppm			78	Gall mus	HMDC 78
2375	79	bird	HG	.56	ppm			78	Gall liv	HMDC 78
2376	79	bird	HG	.62	ppm			78	Gall kid	HMDC 78
2377	80	bird	HG	.12	ppm			78	Wdck feth	HMDC 78
2378	80	bird	HG	.26	ppm			78	Wdck mus	HMDC 78
2379	80	bird	HG	.43	ppm			78	Wdck liv	HMDC 78
2380	80	bird	HG	.82	ppm			78	Wdck kid	HMDC 78
2381	81	mamm	HG	.11	ppm			78	ng mus	HMDC 78
2382	82	bird	HG	4.30	ppm			78	GHernfeth	HMDC 78
2383	82	bird	HG	.37	ppm			78	GHern mus	HMDC 78
2384	82	bird	HG	.83	ppm			78	GHern liv	HMDC 78

829910235

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2385	82	bird	HG	.49	ppm			78	GHern kid	HMDC 78
2386	82	mamm	HG	.00	ppm			78	mrat mus	HMDC 78
2387	82	mamm	HG	.05	ppm			78	mrat kid	HMDC 78
2388	82	mamm	HG	.01	ppm			78	mrat liv	HMDC 78
4258	83	plant	Hg	.31	ppm				Phrag riz	HMDC 78
4259	83	plant	Hg	.07	ppm				Phrag ste	HMDC 78
4260	83	plant	Hg	.50	ppm				Phrag lf	HMDC 78
4261	83	plant	Hg	.97	ppm				Phrag ft.st	HMDC 78
2389	83	ch sed	HG	13.00	ppm	.10		74	0-2 inch	HMDC 78
2390	83	ch sed	HG	16.00	ppm	.10		74	2-4 inch	HMDC 78
2391	83	ch sed	HG	7.10	ppm	.10		74	4-6 inch	HMDC 78
2392	83	ch sed	HG	7.60	ppm	.10		74	6-12 inch	HMDC 78
2393	83	ch sed	HG	36.00	ppm	.10		74	12-18 inch	HMDC 78
1937	83	mrsh sed	Hg	12.00	ppm	.10		77	0-2 inch	HMDC 78
1938	83	mrsh sed	Hg	31.00	ppm	.10		77	2-4 inch	HMDC 78
1939	83	mrsh sed	Hg	32.00	ppm	.10		77	4-6 inch	HMDC 78
1940	83	mrsh sed	Hg	3.10	ppm	.10		77	6-12 inch	HMDC 78
1941	83	mrsh sed	Hg	.70	ppm	.10		77	12-18 inch	HMDC 78
2394	84	ch sed	HG	218.00	ppm	.10		72	0-2 inch	HMDC 72
2395	84	ch sed	HG	37.00	ppm	.10		72	2-4 inch	HMDC 72
2396	84	ch sed	HG	15.00	ppm	.10		72	4-6 inch	HMDC 72
2397	84	ch sed	HG	7.60	ppm	.10		72	6-12 inch	HMDC 72
2398	84	ch sed	HG	11.00	ppm	.10		72	12-18 inch	HMDC 72
2399	84	mrsh sed	HG	280.00	ppm	.10		77	0-2 inch	HMDC 78
2400	84	mrsh sed	HG	364.00	ppm	.10		77	2-4 inch	HMDC 78
2401	84	mrsh sed	HG	135.00	ppm	.10		77	4-6 inch	HMDC 78
2402	84	mrsh sed	HG	26.00	ppm	.10		77	6-12 inch	HMDC 78
2403	84	mrsh sed	HG	.90	ppm	.10		77	12-15 inch	HMDC 78
1942	84	soil	Hg	86.00	ppm	.00	3	80	unf Lt	Aw 80
3542	84	soil	Flour	.50	ppm		3	80	grab	Aw 80
3543	84	soil	Pyrene	.50	ppm		3	80	grab	Aw 80
3544	84	soil	4'4-DDT	.63	ppm		3	80	grab	Aw 80
3545	84	soil	-BHC	.02	ppm	.02	3	80	grab	Aw 80
3546	84	soil	S-BHC	.37	ppm		3	80	grab	Aw 80
3547	84	soil	Hept ep	.11	ppm		3	80	grab	Aw 80
3548	84	soil	Aldrin	.10	ppm		3	80	grab	Aw 80
3549	84	soil	Dieldrin	.10	ppm		3	80	grab	Aw 80
3550	84	soil	MeChl	.57	ppm		3	80	grab	Aw 80
3551	84	soil	ChCl3	1.40	ppm		3	80	grab	Aw 80
3552	84	soil	As	25.00	ppm		3	80	grab	Aw 80
3553	84	soil	Be	1.30	ppm		3	80	grab	Aw 80
3554	84	soil	Cd	19.00	ppm		3	80	grab	Aw 80

829910236

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3555	84	soil	Cr	950.00	ppm		3	80	grab	Aw 80
3556	84	soil	Cu	330.00	ppm		3	80	grab	Aw 80
3557	84	soil	Pb	420.00	ppm		3	80	grab	Aw 80
3558	84	soil	Ni	700.00	ppm		3	80	grab	Aw 80
3559	84	soil	Se	1.50	ppm		3	80	grab	Aw 80
3560	84	soil	Ag	2.70	ppm		3	80	grab	Aw 80
3561	84	soil	Zn	2400.00	ppm		3	80	grab	Aw 80
6669	85	sed	Hg	2.46	ppm		6	77	bl silt T	Huch 77
6670	85	sed	Hg	.47	ppm		6	77	gy silt	Huch 77
6672	86	sed	Hg	1.23	ppm		6	77	bl,br org st	Huch 77
0002	86	fish	Hg	.16	ppm		7	78	Killi w	NJMS 78
0003	87	fish	Hg	.21	ppm		7	78	Killi w	NJMS 78
1947	88	fish	Hg	.19	ppm			77	Killi w	HMDC 78
1950	88	fish	Hg	.24	ppm		5	79	Killi w	NJMS 79
1948	88	fish	Hg	.39	ppm		7	79	Killi w	NJMS 79
1949	88	fish	Hg	.32	ppm		10	79	Killi w	NJMS 79
6675	90	sed	Hg	45.40	ppm		6	77	gy st/cl 9 inch	Huch 77
9245	91	mrsh sed	Hg	14.40	ppm		6	77	cl,st	Huch 77
6681	92	sed	Hg	1.35	ppm		6	77	sd,bl,org st 8inch	Huch 77
6682	93	sed	Hg	.95	ppm		6	77	gy,red,st/cl 4inch	Huch 77
4288	94	plant	Hg	.83	ppm				Phrag riz	HMDC 78
4289	94	plant	Hg	.28	ppm				Phrag ste	HMDC 78
4290	94	plant	Hg	.60	ppm				Phrag lf	HMDC 78
4291	94	plant	Hg	.73	ppm				Phrag ft.st	HMDC 78
4292	94	plant	Hg	.00	ppm				Typha ste	HMDC 78
4293	94	plant	Hg	.72	ppm				Typha lf	HMDC 78
4294	94	plant	Hg	.00	ppm				Typha ft.st	HMDC 78
4295	94	plant	Hg	.12	ppm				Spar ste	HMDC 78
4296	94	plant	Hg	1.67	ppm				Spar lf	HMDC 78
4297	94	plant	Hg	2.95	ppm				Hemp riz	HMDC 78
4298	94	plant	Hg	.83	ppm				Hemp ste	HMDC 78
6683	94	sed	Hg	2.58	ppm		6	77	bl,org st 7inch	Huch 77
6684	95	sed	Hg	.39	ppm		6	77	bl,org st 4inch	Huch 77
6685	96	sed	Hg	.04	ppm		6	77	gy fine sd 4inch	Huch 77
6686	97	sed	Hg	.13	ppm		6	77	br st,fine sd 12 i	Huch 77
6687	98	sed	Hg	1.20	ppm		6	77	gy sd,bl st 2inch	Huch 77
6688	99	sed	Hg	.22	ppm		6	77	bl,org st 3inch	Huch 77
9742	100	fish	Hg	.09	ppm			77	Killi mus	HMDC 78
6689	100	sed	Hg	.26	ppm		6	77	fine sd,bl st 3inc	Huch 77
9731	102	mrsh sed	Hg	21.20	ppm		6	77	4 inch bl st	Huch 77
9733	103	mrsh sed	Hg	53.00	ppm		6	77	6 inch cl,st	Huch 77
4307	104	plant	Hg	.07	ppm				Phrag riz	HMDC 78

829910237

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4308	104	plant	Hg	.05	ppm				Phrag ste	HMDC 78
4309	104	plant	Hg	.41	ppm				Phrag lf	HMDC 78
4310	104	plant	Hg	.81	ppm				Phrag ft.st	HMDC 78
4311	104	plant	Hg	.06	ppm				Phrag riz	HMDC 78
4312	104	plant	Hg	.50	ppm				Phrag ste	HMDC 78
4313	104	plant	Hg	.11	ppm				Phrag lf	HMDC 78
4314	104	plant	Hg	.79	ppm				Phrag ft.st	HMDC 78
1961	104	plant	Hg	.08	ppm		10	77	Phrag riz	HMDC 78
1962	104	plant	Hg	.15	ppm		10	77	Phrag ste	HMDC 78
1963	104	plant	Hg	.45	ppm		10	77	Phrag lf	HMDC 78
1964	104	plant	Hg	.37	ppm		10	77	Phrag fr	HMDC 78
1965	104	plant	Hg	.08	ppm		10	77	Spar riz	HMDC 78
1966	104	plant	Hg	.20	ppm		10	77	Spar ste	HMDC 78
1967	104	plant	Hg	.00	ppm		10	77	Spar lf	HMDC 78
1968	104	plant	Hg	.00	ppm		10	77	Spar fr	HMDC 78
2404	105	mamm	HG	.66	ppm			78	mous fur	HMDC 78
2405	105	mamm	HG	.00	ppm			78	mous mus	HMDC 78
2406	105	mamm	HG	.08	ppm			78	mous liv	HMDC 78
2407	105	mamm	HG	.38	ppm			78	mous kid	HMDC 78
2408	105	mamm	HG	.00	ppm			78	mous fur	HMDC 78
2409	105	mamm	HG	.00	ppm			78	mous mus	HMDC 78
2410	105	mamm	HG	.00	ppm			78	mous liv	HMDC 78
2411	105	mamm	HG	.00	ppm			78	mous kid	HMDC 78
2412	105	mamm	HG	4.00	ppm			78	N rat fur	HMDC 78
2413	105	mamm	HG	.05	ppm			78	N rat mus	HMDC 78
2414	105	mamm	HG	.13	ppm			78	N rat liv	HMDC 78
2415	105	mamm	HG	1.90	ppm			78	N rat kid	HMDC 78
2416	105	mamm	HG	1.90	ppm			78	posm fur	HMDC 78
2417	105	mamm	HG	.20	ppm			78	posm mus	HMDC 78
2418	105	mamm	HG	.22	ppm			78	posm liv	HMDC 78
2419	105	mamm	HG	1.90	ppm			78	posm kid	HMDC 78
2420	105	mamm	HG	.08	ppm			78	rab fur	HMDC 78
2421	105	mamm	HG	.00	ppm			78	rab mus	HMDC 78
2422	105	mamm	HG	.15	ppm			78	rab liv	HMDC 78
2423	105	mamm	HG	.27	ppm			78	rab kid	HMDC 78
3391	105	mrsh sed	Hg	.01	ppm		8	78	0-6 inch	Berg 78
3392	105	mrsh sed	Hg	.01	ppm		8	78	6-12 inch	Berg 78
3393	105	mrsh sed	Hg	.01	ppm		8	78	12-24inch	Berg 78
3394	105	mrsh sed	Hg	.01	ppm		8	78	weightavg	Berg 78
3562	105	mrsh sed	As	6.60	ppm		8	78	0-6inch	Berg 78
3563	105	mrsh sed	As	.85	ppm		8	78	6-12inch	Berg 78
3564	105	mrsh sed	As	.01	ppm		8	78	12-24inch	Berg 78

829910238

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3565	105	mrsh sed	As	1.87	ppm		8	78	weightavg	Berg 78
3566	105	mrsh sed	Cd	.51	ppm		8	78	0-6inch	Berg 78
3567	105	mrsh sed	Cd	.61	ppm		8	78	6-12inch	Berg 78
3568	105	mrsh sed	Cd	.43	ppm		8	78	12-24inch	Berg 78
3569	105	mrsh sed	Cd	.50	ppm		8	78	weightavg	Berg 78
3570	105	mrsh sed	Cr	42.00	ppm		8	78	0-6inch	Berg 78
3571	105	mrsh sed	Cr	33.00	ppm		8	78	6-12inch	Berg 78
3572	105	mrsh sed	Cr	30.00	ppm		8	78	12-24inch	Berg 78
3573	105	mrsh sed	Cr	34.00	ppm		8	78	weightavg	Berg 78
3574	105	mrsh sed	Cu	31.00	ppm		8	78	0-6inch	Berg 78
3575	105	mrsh sed	Cu	32.00	ppm		8	78	6-12inch	Berg 78
3576	105	mrsh sed	Cu	24.00	ppm		8	78	12-24inch	Berg 78
3577	105	mrsh sed	Cu	28.00	ppm		8	78	weightavg	Berg 78
3578	105	mrsh sed	Fe	30000.00	ppm		8	78	0-6inch	Berg 78
3579	105	mrsh sed	Fe	48100.00	ppm		8	78	6-12inch	Berg 78
3580	105	mrsh sed	Fe	22100.00	ppm		8	78	12-24inch	Berg 78
3581	105	mrsh sed	Fe	30600.00	ppm		8	78	weightavg	Berg 78
3582	105	mrsh sed	Pb	46.00	ppm		8	78	0-6inch	Berg 78
3583	105	mrsh sed	Pb	47.00	ppm		8	78	6-12inch	Berg 78
3584	105	mrsh sed	Pb	43.00	ppm		8	78	12-24inch	Berg 78
3585	105	mrsh sed	Pb	45.00	ppm		8	78	weightavg	Berg 78
3751	105	mrsh sed	Zn	101.00	ppm		8	78	0-6inch	Berg 78
3752	105	mrsh sed	Zn	82.00	ppm		8	78	6-12inch	Berg 78
3753	105	mrsh sed	Zn	54.00	ppm		8	78	12-24inch	Berg 78
3754	105	mrsh sed	Zn	73.00	ppm		8	78	weightavg	Berg 78
9746	106	fish	Hg	.24	ppm			77	Killi mus	HMDC 78
3586	106	sw	As	13.00	ppb		8	78	Ht unf	Berg 78
3587	106	sw	Cd	64.00	ppb		8	78	Ht unf	Berg 78
3588	106	sw	Cr	50.00	ppb		8	78	Ht unf	Berg 78
3589	106	sw	Cu	75.00	ppb		8	78	Ht unf	Berg 78
3590	106	sw	Fe	1460.00	ppb		8	78	Ht unf	Berg 78
3591	106	sw	Pb	10.00	ppb		8	78	Ht unf	Berg 78
3592	106	sw	Ni	300.00	ppb		8	78	Ht unf	Berg 78
3593	106	sw	Zn	250.00	ppb		8	78	Ht unf	Berg 78
4003	106	sw	Hg	1.30	ppb		8	78	Ht unf	Berg 78
3821	106	sw	CHCL3	.01	ppb		10	81	unf	NJDEP 85
3822	106	sw	MeChl	89.00	ppb		10	81	unf	NJDEP 85
3823	106	sw	tcle	1.30	ppb		10	81	unf	NJDEP 85
3824	106	sw	tce	1.70	ppb		10	81	unf	NJDEP 85
3825	106	sw	benzene	9.50	ppb		10	81	unf	NJDEP 85
3826	106	sw	ttce	2.10	ppb		10	81	unf	NJDEP 85
3827	106	sw	toluene	2.80	ppb		10	81	unf	NJDEP 85

8299910239

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3828	106	sw	ebenz	9.10	ppb		10	81	unf	NJDEP 85
3829	106	sw	o-xyl	13.80	ppb		10	81	unf	NJDEP 85
3830	106	sw	m-xyl	64.80	ppb		10	81	unf	NJDEP 85
3831	106	sw	p-xyl	28.40	ppb		10	81	unf	NJDEP 85
4002	106	sw	Hg	.89	ppb	.50	10	81	unf	NJDEP 85
4153	106	sed	As	13.80	ppm		10	81	PONAR Grab	NJDEP 85
4154	106	sed	Be	.74	ppm		10	81	PONAR Grab	NJDEP 85
4155	106	sed	Cd	28.00	ppm		10	81	PONAR Grab	NJDEP 85
4156	106	sed	Cu	297.00	ppm		10	81	PONAR Grab	NJDEP 85
4157	106	sed	Cr	545.00	ppm		10	81	PONAR Grab	NJDEP 85
4158	106	sed	Ni	50.00	ppm		10	81	PONAR Grab	NJDEP 85
4159	106	sed	Pb	265.00	ppm		10	81	PONAR Grab	NJDEP 85
4160	106	sed	Zn	630.00	ppm		10	81	PONAR Grab	NJDEP 85
3594	107	sw	As	905.00	ppb		8	78	Ht unf	Berg 78
3595	107	sw	Cd	2.00	ppb		8	78	Ht unf	Berg 78
3596	107	sw	Cr	10.00	ppb		8	78	Ht unf	Berg 78
3597	107	sw	Cu	2.00	ppb		8	78	Ht unf	Berg 78
3598	107	sw	Fe	200.00	ppb		8	78	Ht unf	Berg 78
3599	107	sw	Pb	10.00	ppb		8	78	Ht unf	Berg 78
3600	107	sw	Ni	150.00	ppb		8	78	Ht unf	Berg 78
3601	107	sw	Zn	47.00	ppb		8	78	Ht unf	Berg 78
4004	107	sw	Hg	1.00	ppb		8	78	Ht unf	Berg 78
3397	108	soil	Hg	1.00	ppm	1	6	84	comp	Crow 84
3398	109	soil	Hg	50.00	ppm	1	6	84	comp	Crow 84
3399	109	sed	Hg	78.00	ppm	1	6	84	comp	Crow 84
3400	110	soil	Hg	49.00	ppm	1	6	84	comp	Crow 84
3401	110	sed	Hg	46.00	ppm	1	6	84	0inch	Crow 84
3402	110	sed	Hg	66.00	ppm	1	6	84	2 inch	Crow 84
3403	110	sed	Hg	64.00	ppm	1	6	84	4 inch	Crow 84
3404	110	sed	Hg	47.00	ppm	1	6	84	7 inch	Crow 84
3405	110	sed	Hg	60.00	ppm	1	6	84	9 inch	Crow 84
3406	111	soil	Hg	36.00	ppm	1	6	84	comp	Crow 84
3407	112	soil	Hg	32.00	ppm	1	6	84	0 inch	Crow 84
3408	112	soil	Hg	22.00	ppm	1	6	84	4 inch	Crow 84
3409	112	soil	Hg	3.00	ppm	1	6	84	10 inch	Crow 84
3410	112	soil	Hg	1.00	ppm	1	6	84	16 inch	Crow 84
3411	112	soil	Hg	1.00	ppm	1	6	84	22 inch	Crow 84
3412	112	soil	Hg	1.00	ppm	1	6	84	34 inch	Crow 84
3763	113	ch sed	Cr	1900.00	ppm			77	0-2 inch	JMA 78
3764	113	ch sed	Cr	590.00	ppm			77	2-4 inch	JMA 78
3765	113	ch sed	Cr	30.00	ppm			77	4-6 inch	JMA 78
3766	113	ch sed	As	70.00	ppm			77	0-2 inch	JMA 78

829910240

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3767	113	ch sed	As	26.30	ppm			77	2-4 inch	JMA 78
3768	113	ch sed	As	8.75	ppm			77	4-6 inch	JMA 78
3769	113	mrsh sed	As	29.80	ppm			77	0-2 inch	JMA 78
3770	113	mrsh sed	As	67.60	ppm			77	4-6 inch	JMA 78
3771	113	mrsh sed	Cr	620.00	ppm			77	0-2 inch	JMA 78
3772	113	mrsh sed	Cr	260.00	ppm			77	4-6 inch	JMA 78
4005	113	ch sed	Hg	74.00	ppm		5	78	0-2 inch	JMA 78
4006	113	ch sed	Hg	38.00	ppm		5	78	2-4 inch	JMA 78
4007	113	ch sed	Hg	.32	ppm		5	78	4-6 inch	JMA 78
4008	113	mrsh sed	Hg	19.00	ppm		5	78	0-2 inch	JMA 78
4009	113	mrsh sed	Hg	7.40	ppm		5	78	4-6 inch	JMA 78
3773	114	sed	As	13.00	ppm			77	0-2 inch	JMA 78
3774	114	sed	As	20.00	ppm			77	2-4 inch	JMA 78
3775	114	sed	As	22.00	ppm			77	4-6 inch	JMA 78
3776	114	sed	Cr	140.00	ppm			77	0-2 inch	JMA 78
3777	114	sed	Cr	370.00	ppm			77	2-4 inch	JMA 78
3778	114	sed	Cr	790.00	ppm			77	4-6 inch	JMA 78
3779	114	sed	Cu	75.00	ppm			77	0-2 inch	JMA 78
3780	114	sed	Cu	120.00	ppm			77	2-4 inch	JMA 78
3781	114	sed	Cu	140.00	ppm			77	4-6 inch	JMA 78
3782	114	sed	Pb	130.00	ppm			77	0-2 inch	JMA 78
3783	114	sed	Pb	170.00	ppm			77	2-4 inch	JMA 78
3784	114	sed	Pb	190.00	ppm			77	4-6 inch	JMA 78
3785	114	sed	Zn	210.00	ppm			77	0-2 inch	JMA 78
3786	114	sed	Zn	300.00	ppm			77	2-4 inch	JMA 78
3787	114	sed	Zn	310.00	ppm			77	4-6 inch	JMA 78
4010	114	sed	Hg	6.60	ppm		5	78	0-2 inch	JMA 78
4011	114	sed	Hg	19.20	ppm		5	78	2-4 inch	JMA 78
4012	114	sed	Hg	19.90	ppm		5	78	4-6 inch	JMA 78
4013	115	sed	Hg	18.00	ppm		5	78	0-2 inch	JMA 78
4014	115	sed	Hg	16.80	ppm		5	78	2-4 inch	JMA 78
4015	115	sed	Hg	32.40	ppm		5	78	4-6 inch	JMA 78
4016	116	sed	Hg	20.80	ppm		5	78	0-2 inch	JMA 78
4017	116	sed	Hg	29.90	ppm		5	78	2-4 inch	JMA 78
4018	116	sed	Hg	48.90	ppm		5	78	4-6 inch	JMA 78
4163	118	sed	As	16.00	ppm			77	4-6 inch	JMA 78
4164	118	sed	Cr	60.00	ppm			77	0-2 inch	JMA 78
4165	118	sed	Cr	65.00	ppm			77	2-4 inch	JMA 78
4166	118	sed	Cr	85.00	ppm			77	4-6 inch	JMA 78
4167	118	sed	Cu	70.00	ppm			77	0-2 inch	JMA 78
4168	118	sed	Cu	35.00	ppm			77	2-4 inch	JMA 78
4169	118	sed	Cu	55.00	ppm			77	4-6 inch	JMA 78

829910241

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4170	118	sed	Pb	200.00	ppm		77		0-2 inch	JMA 78
4171	118	sed	Pb	70.00	ppm		77		2-4 inch	JMA 78
4172	118	sed	Pb	130.00	ppm		77		4-6 inch	JMA 78
4173	118	sed	Zn	200.00	ppm		77		0-2 inch	JMA 78
4174	118	sed	Zn	100.00	ppm		77		2-4 inch	JMA 78
4175	118	sed	Zn	170.00	ppm		77		4-6 inch	JMA 78
4176	119	sed	As	17.00	ppm		77		0-2 inch	JMA 78
4177	119	sed	As	12.00	ppm		77		2-4 inch	JMA 78
4178	119	sed	As	11.00	ppm		77		4-6 inch	JMA 78
4179	119	sed	Cr	260.00	ppm		77		0-2 inch	JMA 78
4180	119	sed	Cr	65.00	ppm		77		2-4 inch	JMA 78
4181	119	sed	Cr	55.00	ppm		77		4-6 inch	JMA 78
4182	119	sed	Cu	80.00	ppm		77		0-2 inch	JMA 78
4183	119	sed	Cu	38.00	ppm		77		2-4 inch	JMA 78
4184	119	sed	Cu	65.00	ppm		77		4-6 inch	JMA 78
4185	119	sed	Pb	200.00	ppm		77		0-2 inch	JMA 78
4186	119	sed	Pb	55.00	ppm		77		2-4 inch	JMA 78
4187	119	sed	Pb	95.00	ppm		77		4-6 inch	JMA 78
4188	119	sed	Zn	200.00	ppm		77		0-2 inch	JMA 78
4189	119	sed	Zn	53.00	ppm		77		2-4 inch	JMA 78
4190	119	sed	Zn	50.00	ppm		77		4-6 inch	JMA 78
4191	120	sed	As	2.00	ppm		77		0-2 inch	JMA 78
4192	120	sed	As	4.00	ppm		77		2-4 inch	JMA 78
4193	120	sed	As	13.00	ppm		77		4-6 inch	JMA 78
4194	120	sed	Cr	25.00	ppm		77		0-2 inch	JMA 78
4195	120	sed	Cr	13.00	ppm		77		2-4 inch	JMA 78
4196	120	sed	Cr	200.00	ppm		77		4-6 inch	JMA 78
4197	120	sed	Cu	10.00	ppm		77		0-2 inch	JMA 78
4198	120	sed	Cu	8.00	ppm		77		2-4 inch	JMA 78
4199	120	sed	Cu	80.00	ppm		77		4-6 inch	JMA 78
4200	120	sed	Pb	55.00	ppm		77		0-2 inch	JMA 78
4201	120	sed	Pb	18.00	ppm		77		2-4 inch	JMA 78
4202	120	sed	Pb	140.00	ppm		77		4-6 inch	JMA 78
4203	120	sed	Zn	40.00	ppm		77		0-2 inch	JMA 78
4204	120	sed	Zn	30.00	ppm		77		2-4 inch	JMA 78
4205	120	sed	Zn	200.00	ppm		77		4-6 inch	JMA 78
4206	121	sed	As	12.00	ppm		77		0-2 inch	JMA 78
4207	121	sed	As	10.00	ppm		77		2-4 inch	JMA 78
4208	121	sed	As	18.00	ppm		77		4-6 inch	JMA 78
4209	121	sed	Cr	80.00	ppm		77		0-2 inch	JMA 78
4210	121	sed	Cr	30.00	ppm		77		2-4 inch	JMA 78
4211	121	sed	Cr	140.00	ppm		77		4-6 inch	JMA 78

829910242

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4212	121	sed	Cu	55.00	ppm		77		0-2 inch	JMA 78
4213	121	sed	Cu	20.00	ppm		77		2-4 inch	JMA 78
4214	121	sed	Cu	80.00	ppm		77		4-6 inch	JMA 78
4215	121	sed	Pb	140.00	ppm		77		0-2 inch	JMA 78
4216	121	sed	Pb	40.00	ppm		77		2-4 inch	JMA 78
4217	121	sed	Pb	140.00	ppm		77		4-6 inch	JMA 78
4218	121	sed	Zn	210.00	ppm		77		0-2 inch	JMA 78
4219	121	sed	Zn	70.00	ppm		77		2-4 inch	JMA 78
4220	121	sed	Zn	210.00	ppm		77		4-6 inch	JMA 78

1815 Records Processed

829910243

APPENDIX 2

ALL DATA LARGE SCALE MAP - FIGURE 2

08:20:31 27 SEP 1985

MAP2DATA.. STATION SAMPLE.... CONTAMINANT VALUE..... UNITS. LIMIT. MONTH YEAR DESCIPTION..... REF.....

INPUT
51435
14348

5350	1	sw		Hg	.70	ppb		11 79	Ht unf	Aw 79
5351	1	sw		Hg	2.70	ppb		11 79	Lt unf	Aw 79
5352	1	sw		Hg	.60	ppb		11 79	Lt filter	Aw 79
5353	2	sw		Hg	3.00	ppb		11 79	Ht unf	Aw 79
7074	3	sw		As	.0	ppb	10	6 77	unf	JMA 77
4222	3	sw		Cd	.00	ppb	50	6 77	unf	JMA 77
5354	3	sw		Hg	22.60	ppb		6 77	unf	JMA 77
7076	3	sw		Ni	.0	ppb	200	6 77	unf	JMA 77
7075	3	sw		Pb	.0	ppb	500	6 77	unf	JMA 77
5370	3	sw		Zn	160.00	ppb		6 77	unf	JMA 77
4224	4	sw		Cd	.00	ppb	50	6 77	unf	JMA 77
5355	4	sw		Hg	35.60	ppb	0.	6 77	unf	JMA 77
7079	4	sw		Ni	.0	ppb	200	6 77	unf	JMA 77
7078	4	sw		Pb	.0	ppb	500	6 77	unf	JMA 77
4223	4	sw		Zn	230.00	ppb		6 77	unf	JMA 77
7077	4	sw	As		30.00	ppb	10	6 77	unf	JMA 77
4225	5	sed		As	5.00	ppm		6 77	0-3 inch	JMA 77
4226	5	sed		As	6.00	ppm		6 77	3-6 inch	JMA 77
4227	5	sed		As	7.00	ppm		6 77	6-9 inch	JMA 77
4228	5	sed		As	6.00	ppm		6 77	9-11 inch	JMA 77
7080	5	sw		As	.0	ppb	10	6 77	unf	JMA 77
4241	5	sed		Cd	.60	ppm		6 77	0-3 inch	JMA 77
4242	5	sed		Cd	1.30	ppm		6 77	3-6 inch	JMA 77
4243	5	sed		Cd	.60	ppm		6 77	6-9 inch	JMA 77
4244	5	sed		Cd	.50	ppm		6 77	9-11 inch	JMA 77
4246	5	sw		Cd	.00	ppb	50	6 77	unf	JMA 77
2761	5	sed		Hg	882.00	ppm		6 77	0-3 inch	JMA 77
2762	5	sed		Hg	695.00	ppm		6 77	3-6inch	JMA 77
2763	5	sed		Hg	81.00	ppm		6 77	6-9inch	JMA 77
2764	5	sed		Hg	13.70	ppm		6 77	9-11inch	JMA 77
5356	5	sw		Hg	.50	ppb		6 77	unf	JMA 77
4234	5	sed		Ni	6.10	ppm		6 77	3-6 inch	JMA 77
4235	5	sed		Ni	3.30	ppm		6 77	6-9 inch	JMA 77
4236	5	sed		Ni	5.90	ppm		6 77	9-11 inch	JMA 77
7082	5	sw		Ni	.0	ppb	200	6 77	unf	JMA 77
4229	5	sed		Pb	21.00	ppm		6 77	0-3 inch	JMA 77
4230	5	sed		Pb	4.80	ppm		6 77	3-6 inch	JMA 77
4231	5	sed		Pb	.60	ppm		6 77	6-9 inch	JMA 77
4232	5	sed		Pb	1.00	ppm		6 77	9-11 inch	JMA 77

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MAP2DATA.. 08:21:19 27 SEP 1985

STATION	SAMPLE		CONTAMINANT	VALUE	UNITS	LIMIT	MONTH	YEAR	DESCIPTION	REF
7081	5	sw	Pb	.0	ppb	500	6	77	unf	JMA 77
4237	5	sed	Zn	73.00	ppm		6	77	0-3 inch	JMA 77
4238	5	sed	Zn	63.00	ppm		6	77	3-6 inch	JMA 77
4239	5	sed	Zn	7.90	ppm		6	77	6-9 inch	JMA 77
4240	5	sed	Zn	35.00	ppm		6	77	9-11 inch	JMA 77
4245	5	sw	Zn	30.00	ppb		6	77	unf	JMA 77
4247	6	sed	As	6.00	ppm		6	77	0-3 inch	JMA 77
4248	6	sed	As	7.00	ppm		6	77	3-6 inch	JMA 77
4249	6	sed	As	6.00	ppm		6	77	6-9 inch	JMA 77
7083	6	sw	As	.0	ppb	10	6	77	unf	JMA 77
4259	6	sed	Cd	4.60	ppm		6	77	0-3 inch	JMA 77
4260	6	sed	Cd	3.40	ppm		6	77	3-6 inch	JMA 77
4261	6	sed	Cd	40.00	ppm		6	77	6-9 inch	JMA 77
4263	6	sw	Cd	.00	ppb	50	6	77	unf	JMA 77
2766	6	sed	Hg	679.00	ppm		6	77	0-3inch	JMA 77
2767	6	sed	Hg	625.00	ppm		6	77	3-6inch	JMA 77
2768	6	sed	Hg	179.00	ppm		6	77	6-9inch	JMA 77
5357	6	sw	Hg	2.90	ppb		6	77	unf	JMA 77
4253	6	sed	Ni	30.00	ppm		6	77	0-3 inch	JMA 77
4254	6	sed	Ni	23.00	ppm		6	77	3-6 inch	JMA 77
4255	6	sed	Ni	23.00	ppm		6	77	6-9 inch	JMA 77
7085	6	sw	Ni	.0	ppb	200	6	77	unf	JMA 77
4250	6	sed	Pb	155.00	ppm		6	77	0-3 inch	JMA 77
4251	6	sed	Pb	65.00	ppm		6	77	3-6 inch	JMA 77
4252	6	sed	Pb	37.00	ppm		6	77	6-9 inch	JMA 77
7084	6	sw	Pb	.0	ppb	500	6	77	unf	JMA 77
4256	6	sed	Zn	2116.00	ppm		6	77	0-3 inch	JMA 77
4257	6	sed	Zn	869.00	ppm		6	77	3-6 inch	JMA 77
4258	6	sed	Zn	189.00	ppm		6	77	6-9 inch	JMA 77
4262	6	sw	Zn	40.00	ppb		6	77	unf	JMA 77
4268	7	sed	As	8.00	ppm		6	77	0-3 inch	JMA 77
4269	7	sed	As	14.00	ppm		6	77	3-6 inch	JMA 77
4270	7	sed	As	7.00	ppm		6	77	6-9 inch	JMA 77
4271	7	sed	As	6.00	ppm		6	77	9-12 inch	JMA 77
4971	7	gw	As	.02	ppm	.01	6	77	unf Lt	JMA 77
4972	7	gw	As	.00	ppm	.01	6	77	unf Ht	JMA 77
7086	7	sw	As	.0	ppb	10	6	77	unf	JMA 77
5157	7	gw	As	.00	ppm	.02	7	77	fil Ht	JMA 77
5158	7	gw	As	.00	ppm	.02	7	77	fil Lt	JMA 77
4264	7	sed	Cd	2.50	ppm		6	77	0-3 inch	JMA 77
4265	7	sed	Cd	45.00	ppm		6	77	3-6 inch	JMA 77
4266	7	sed	Cd	2.90	ppm		6	77	6-9 inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4267	7	sed	Cd	1.50	ppm		6	77	9-12 inch	JMA 77
4285	7	sw	Cd	.00	ppb	50	6	77	unf	JMA 77
4979	7	gw	Cd	.00	ppm	.05	6	77	unf Lt	JMA 77
4980	7	gw	Cd	.00	ppm	.05	6	77	unf Ht	JMA 77
7041	7	gw	Cd	.01	ppm	0.0003	6	77	fil Ht	JMA 77
7042	7	gw	Cd	.01	ppm	0.0003	6	77	fil Lt	JMA 77
2770	7	sed	Hg	11.70	ppm		6	77	0-3inch	JMA 77
2771	7	sed	Hg	23.00	ppm		6	77	3-6inch	JMA 77
2772	7	sed	Hg	5.70	ppm		6	77	6-9inch	JMA 77
2773	7	sed	Hg	1.20	ppm		6	77	9-12inch	JMA 77
3000	7	gw	Hg	.08	ppb	.1	6	77	unf Ht	JMA 77
3003	7	gw	Hg	.35	ppb	.1	6	77	unf Lt	JMA 77
5358	7	sw	Hg	23.00	ppb		6	77	unf	JMA 77
3001	7	gw	Hg	.01	ppb		7	77	fil Ht	JMA 77
3002	7	gw	Hg	.01	ppb	.3	7	77	fil Lt	JMA 77
3138	7	air	Hg	.38	ug/m3		8	78	8hr test	EPA 78
3139	7	air	Hg	1.02	ug/m3		8	78	24 hr test	EPA 78
3140	7	air	Hg	.46	ug/m3		8	78	24hr test	EPA 78
3141	7	air	Hg	.52	ug/m3		8	78	24hr test	EPA 78
3142	7	air	Hg	1.01	ug/m3		8	78	24hr test	EPA 78
3144	7	air	Hg	.47	ug/m3		8	78	12hr test	EPA 78
3145	7	air	Hg	.38	ug/m3		8	78	12hr test	EPA 78
3146	7	air	Hg	.79	ug/m3		8	78	12hr test	EPA 78
3147	7	air	Hg	1.65	ug/m3		8	78	12hr test	EPA 78
3148	7	air	Hg	1.54	ug/m3		8	78	12hr test	EPA 78
3149	7	air	Hg	.55	ug/m3		8	78	8hr test	EPA 78
3150	7	air	Hg	.38	ug/m3		8	78	8hr test	EPA 78
3151	7	air	Hg	.44	ug/m3		8	78	8hr test	EPA 78
3152	7	air	Hg	.72	ug/m3		8	78	8hr test	EPA 78
3143	7	air	Hg	.00	ppm		8	82	24hr test	EPA 78
4276	7	sed	Ni	17.00	ppm		6	77	0-3 inch	JMA 77
4277	7	sed	Ni	141.00	ppm		6	77	3-6 inch	JMA 77
4278	7	sed	Ni	15.00	ppm		6	77	6-9 inch	JMA 77
4279	7	sed	Ni	19.00	ppm		6	77	9-12 inch	JMA 77
4975	7	gw	Ni	.00	ppm	.20	6	77	unf Lt	JMA 77
4976	7	gw	Ni	.00	ppm	.20	6	77	unf Ht	JMA 77
7088	7	sw	Ni	.0	ppb	200	6	77	unf	JMA 77
7000	7	gw	Ni	.00	ppm	.10	7	77	fil Ht	JMA 77
7010	7	gw	Ni	.00	ppm	.10	7	77	fil Lt	JMA 77
4272	7	sed	Pb	31.00	ppm		6	77	0-3 inch	JMA 77
4273	7	sed	Pb	139.00	ppm		6	77	3-6 inch	JMA 77
4274	7	sed	Pb	36.00	ppm		6	77	6-9 inch	JMA 77

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MAP2DATA.. 08:22:31 27 SEP 1985

STATION	SAMPLE		CONTAMINANT	VALUE	UNITS	LIMIT	MONTH	YEAR	DESCIPTION	REF
4275	7	sed	Pb	8.30	ppm		6	77	9-12 inch	JMA 77
4973	7	gw	Pb	.00	ppm	.50	6	77	unf Lt	JMA 77
4974	7	gw	Pb	.00	ppm	.50	6	77	unf Ht	JMA 77
7087	7	sw	Pb	.0	ppb	500	6	77	unf	JMA 77
7062	7	gw	Pb	.00	ppm	10	7	77	fil Lt	JMA 77
4280	7	sed	Zn	267.00	ppm		6	77	0-3 inch	JMA 77
4281	7	sed	Zn	5187.00	ppm		6	77	3-6 inch	JMA 77
4282	7	sed	Zn	227.00	ppm		6	77	6-9 inch	JMA 77
4283	7	sed	Zn	40.00	ppm		6	77	9-12 inch	JMA 77
4284	7	sw	Zn	90.00	ppb		6	77	unf	JMA 77
4977	7	gw	Zn	4.50	ppm		6	77	unf Lt	JMA 77
4978	7	gw	Zn	3.40	ppm		6	77	unf Ht	JMA 77
7019	7	gw	Zn	4.70	ppm		7	77	fil Ht	JMA 77
7031	7	gw	Zn	2.80	ppm		7	77	fil Lt	JMA 77
4408	8	soil	As	5.00	ppm		5	77	0-2 inch	JMA 77
4409	8	soil	As	11.00	ppm		5	77	2-4 inch	JMA 77
4410	8	soil	As	6.00	ppm		5	77	4-6 inch	JMA 77
4411	8	soil	As	5.00	ppm		5	77	8-10 inch	JMA 77
4412	8	soil	As	4.00	ppm		5	77	12-14 inch	JMA 77
4413	8	soil	As	6.00	ppm		5	77	14-16 inch	JMA 77
4290	8	sed	As	7.00	ppm		6	77	0-3 inch	JMA 77
4291	8	sed	As	4.00	ppm		6	77	3-6 inch	JMA 77
4292	8	sed	As	7.00	ppm		6	77	6-9 inch	JMA 77
4293	8	sed	As	4.00	ppm		6	77	9-12 inch	JMA 77
4981	8	gw	As	.00	ppm	.01	6	77	unf Lt	JMA 77
4982	8	gw	As	.00	ppm	.01	6	77	unf Ht	JMA 77
4988	8	gw	As	.00	ppm	.01	6	77	1-1.5'T	JMA 77
4989	8	gw	As	.00	ppm	.01	6	77	1' B	JMA 77
7089	8	sw	As	.0	ppb	10	6	77	unf	JMA 77
4999	8	gw	As	.00	ppm	.02	7	77	filter Ht	JMA 77
5000	8	gw	As	.00	ppm	.02	7	77	filter Lt	JMA 77
4592	8	soil	Cd	4.00	ppm	.30	5	77	0-2 inch	JMA 77
4593	8	soil	Cd	2.00	ppm	.30	5	77	2-4 inch	JMA 77
4594	8	soil	Cd	2.00	ppm	.30	5	77	4-6 inch	JMA 77
4595	8	soil	Cd	.30	ppm	.30	5	77	8-10 inch	JMA 77
4596	8	soil	Cd	.30	ppm	.30	5	77	12-14 inch	JMA 77
4597	8	soil	Cd	.50	ppm	.30	5	77	14-16 inch	JMA 77
4286	8	sed	Cd	1.60	ppm		6	77	0-3 inch	JMA 77
4287	8	sed	Cd	.90	ppm		6	77	3-6 inch	JMA 77
4288	8	sed	Cd	1.00	ppm		6	77	6-9 inch	JMA 77
4289	8	sed	Cd	1.00	ppm		6	77	9-12 inch	JMA 77
4307	8	sw	Cd	.00	ppb	50	6	77	unf	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4987	8	gw	Cd	.00	ppm	.05	6	77	unf Lt	JMA 77
4995	8	gw	Cd	.00	ppm	.05	6	77	1-1.5'T	JMA 77
4996	8	gw	Cd	.00	ppm	.05	6	77	1' B	JMA 77
4997	8	gw	Cd	.00	ppm	.05	6	77	unf Ht	JMA 77
7043	8	gw	Cd	.00	ppm	.0003	6	77	fil Ht	JMA 77
7044	8	gw	Cd	.01	ppm	.0003	6	77	fil Lt	JMA 77
2775	8	soil	Hg	2558.00	ppm		6	77	0-6inch	JMA 77
2776	8	soil	Hg	2885.00	ppm		6	77	6-12inch	JMA 77
2777	8	soil	Hg	3397.00	ppm		6	77	12-18inch	JMA 77
2778	8	soil	Hg	4719.00	ppm		6	77	18-24inch	JMA 77
2779	8	sed	Hg	361.00	ppm		6	77	0-3inch	JMA 77
2780	8	sed	Hg	420.00	ppm		6	77	3-6inch	JMA 77
2781	8	sed	Hg	624.00	ppm		6	77	6-9inch	JMA 77
2782	8	sed	Hg	528.00	ppm		6	77	9-12inch	JMA 77
2784	8	gw	Hg	.74	ppb		6	77	unf. B	JMA 77
5359	8	sw	Hg	3.70	ppb		6	77	unf	JMA 77
5369	8	gw	Hg	1.98	ppb		6	77	unf T	JMA 77
5381	8	gw	Hg	.57	ppb	.1	6	77	unf Lt	JMA 77
5382	8	gw	Hg	.23	ppb	.1	6	77	unf Ht	JMA 77
2785	8	gw	Hg	.00	ppb	.3	7	77	fil Ht	JMA 77
2786	8	gw	Hg	.00	ppb	.3	7	77	fil Lt	JMA 77
2783	8	air	Hg	.00	ug/m3		7	78	airHglevl	Stop 78
4420	8	soil	Ni	90.00	ppm		5	77	0-2 inch	JMA 77
4421	8	soil	Ni	73.00	ppm		5	77	2-4 inch	JMA 77
4422	8	soil	Ni	33.00	ppm		5	77	4-6 inch	JMA 77
4423	8	soil	Ni	12.00	ppm		5	77	8-10 inch	JMA 77
4424	8	soil	Ni	17.00	ppm		5	77	12-14 inch	JMA 77
4425	8	soil	Ni	28.00	ppm		5	77	14-16 inch	JMA 77
4298	8	sed	Ni	21.00	ppm		6	77	0-3 inch	JMA 77
4299	8	sed	Ni	15.00	ppm		6	77	3-6 inch	JMA 77
4300	8	sed	Ni	16.00	ppm		6	77	6-9 inch	JMA 77
4301	8	sed	Ni	28.00	ppm		6	77	9-12 inch	JMA 77
4985	8	gw	Ni	.00	ppm	.20	6	77	unf Lt	JMA 77
4986	8	gw	Ni	.00	ppm	.20	6	77	unf Ht	JMA 77
4991	8	gw	Ni	.00	ppm	.20	6	77	1-1.5'T	JMA 77
4992	8	gw	Ni	.00	ppm	.20	6	77	1' B	JMA 77
7091	8	sw	Ni	.0	ppb	200	6	77	unf	JMA 77
7001	8	gw	Ni	.00	ppm	.10	7	77	fil Ht	JMA 77
7011	8	gw	Ni	.00	ppm	.10	7	77	fil Lt	JMA 77
4414	8	soil	Pb	280.00	ppm		5	77	0-2 inch	JMA 77
4415	8	soil	Pb	470.00	ppm		5	77	2-4 inch	JMA 77
4416	8	soil	Pb	160.00	ppm		5	77	4-6 inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4417	8	soil	Pb	10.00	ppm		5	77	8-10 inch	JMA 77
4418	8	soil	Pb	10.00	ppm		5	77	12-14 inch	JMA 77
4419	8	soil	Pb	17.00	ppm		5	77	14-16 inch	JMA 77
4294	8	sed	Pb	162.00	ppm		6	77	0-3 inch	JMA 77
4295	8	sed	Pb	149.00	ppm		6	77	3-6 inch	JMA 77
4296	8	sed	Pb	234.00	ppm		6	77	6-9 inch	JMA 77
4297	8	sed	Pb	165.00	ppm		6	77	9-12 inch	JMA 77
4983	8	gw	Pb	.00	ppm	.50	6	77	unf Lt	JMA 77
4984	8	gw	Pb	.00	ppm	.50	6	77	unf Ht	JMA 77
4990	8	gw	Pb	.00	ppm	.05	6	77	1-1.5'T	JMA 77
4998	8	gw	Pb	.00	ppm	.05	6	77	1'B	JMA 77
7090	8	sw	Pb	.0	ppb	500	6	77	unf	JMA 77
7063	8	gw	Pb	.00	ppm	10	7	77	fil Ht	JMA 77
7064	8	gw	Pb	.00	ppm	10	7	77	fil Lt	JMA 77
4426	8	soil	Zn	2600.00	ppm		5	77	0-2 inch	JMA 77
4427	8	soil	Zn	1500.00	ppm		5	77	2-4 inch	JMA 77
4428	8	soil	Zn	680.00	ppm		5	77	4-6 inch	JMA 77
4429	8	soil	Zn	29.00	ppm		5	77	8-10 inch	JMA 77
4430	8	soil	Zn	50.00	ppm		5	77	12-14 inch	JMA 77
4431	8	soil	Zn	72.00	ppm		5	77	14-16 inch	JMA 77
4302	8	sed	Zn	428.00	ppm		6	77	0-3 inch	JMA 77
4303	8	sed	Zn	171.00	ppm		6	77	3-6 inch	JMA 77
4304	8	sed	Zn	193.00	ppm		6	77	6-9 inch	JMA 77
4305	8	sed	Zn	302.00	ppm		6	77	9-12 inch	JMA 77
4306	8	sw	Zn	80.00	ppb		6	77	unf	JMA 77
4969	8	gw	Zn	.07	ppm		6	77	unf Lt	JMA 77
4970	8	gw	Zn	.03	ppm		6	77	unf Ht	JMA 77
4993	8	gw	Zn	.24	ppm		6	77	1-1.5'T	JMA 77
4994	8	gw	Zn	.15	ppm		6	77	1' B	JMA 77
7029	8	gw	Zn	.07	ppm		6	77	unf Lt	JMA 77
7030	8	gw	Zn	.03	ppm		6	77	unf Ht	JMA 77
7020	8	gw	Zn	3.6	ppm		7	77	fil Ht	JMA 77
7032	8	gw	Zn	.02	ppm		7	77	fil Lt	JMA 77
4312	9	sed	As	23.00	ppm		6	77	0-3 inch	JMA 77
4313	9	sed	As	56.00	ppm		6	77	3-6 inch	JMA 77
4314	9	sed	As	25.00	ppm		6	77	6-9 inch	JMA 77
4315	9	sed	As	41.00	ppm		6	77	9-12 inch	JMA 77
7092	9	sw	As	.0	ppb	10	6	77	unf	JMA 77
4330	9	sw	As	.00	ppb	20	7	77	unf	JMA 77
4308	9	sed	Cd	19.00	ppm		6	77	0-3 inch	JMA 77
4309	9	sed	Cd	17.00	ppm		6	77	3-6 inch	JMA 77
4310	9	sed	Cd	12.00	ppm		6	77	6-9 inch	JMA 77

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MAP2DATA.. 08:24:19 27 SEP 1985

STATION	SAMPLE		CONTAMINANT	VALUE	UNITS	LIMIT	MONTH	YEAR	DESCIPTION	REF
4311	9	sed	Cd	18.00	ppm		6	77	9-12 inch	JMA 77
4329	9	sw	Cd	.00	ppb	50	6	77	unf	JMA 77
4334	9	sw	Cd	10.00	ppb	3	7	77	unf	JMA 77
2796	9	sed	Hg	165.00	ppm		2	75	ng	JMA 77
2795	9	sed	Hg	700.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2791	9	sed	Hg	2825.00	ppm		6	77	0-3inch	JMA 77
2792	9	sed	Hg	39940.00	ppm		6	77	3-6inch	JMA 77
2793	9	sed	Hg	89162.00	ppm		6	77	6-9inch	JMA 77
2794	9	sed	Hg	66533.00	ppm		6	77	9-12inch	JMA 77
5360	9	sw	Hg	13.00	ppb		6	77	unf	JMA 77
8200	9	sw	Hg	.04	ppb		7	77	unf	JMA 77
2788	9	sed	Hg	76.43	ppm		7	78	bk./br	Stop 78
2797	9	air	Hg	.00	ug/m3		7	78	airHglevl	Stop 78
4320	9	sed	Ni	81.00	ppm		6	77	0-3 inch	JMA 77
4321	9	sed	Ni	146.00	ppm		6	77	3-6 inch	JMA 77
4322	9	sed	Ni	67.00	ppm		6	77	6-9 inch	JMA 77
4323	9	sed	Ni	91.00	ppm		6	77	9-12 inch	JMA 77
7094	9	sw	Ni	.0	ppb	200	6	77	unf	JMA 77
4332	9	sw	Ni	.00	ppb	100	7	77	unf	JMA 77
4316	9	sed	Pb	480.00	ppm		6	77	0-3 inch	JMA 77
4317	9	sed	Pb	554.00	ppm		6	77	3-6 inch	JMA 77
4318	9	sed	Pb	439.00	ppm		6	77	6-9 inch	JMA 77
4319	9	sed	Pb	450.00	ppm		6	77	9-12 inch	JMA 77
7093	9	sw	Pb	.0	ppb	500	6	77	unf	JMA 77
4331	9	sw	Pb	.00	ppb	10	7	77	unf	JMA 77
4324	9	sed	Zn	2723.00	ppm		6	77	0-3 inch	JMA 77
4325	9	sed	Zn	8615.00	ppm		6	77	3-6 inch	JMA 77
4326	9	sed	Zn	4032.00	ppm		6	77	6-9 inch	JMA 77
4327	9	sed	Zn	6153.00	ppm		6	77	9-12 inch	JMA 77
4328	9	sw	Zn	180.00	ppb		6	77	unf	JMA 77
4333	9	sw	Zn	140.00	ppb		7	77	unf	JMA 77
2790	9	sed	Me Hg	.01	ppm		2	84	PONAR Grab	Bart 84
2789	9	sed	Total Hg	82.00	ppm		2	84	PONAR Grab	Bart 84
4339	10	sed	As	38.00	ppm		6	77	0-3 inch	JMA 77
4340	10	sed	As	21.00	ppm		6	77	3-6 inch	JMA 77
4341	10	sed	As	10.00	ppm		6	77	6-9 inch	JMA 77
4342	10	sed	As	6.00	ppm		6	77	9-12 inch	JMA 77
4600	10	soil	As	6.00	ppm		6	77	0-6 inch	JMA 77
4601	10	soil	As	10.00	ppm		6	77	6-12 inch	JMA 77
7095	10	sw	As	.0	ppb	10	6	77	unf	JMA 77
4357	10	sw	As	.00	ppb	20	7	77	unf	JMA 77
4335	10	sed	Cd	58.00	ppm		6	77	0-3 inch	JMA 77

829910251

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4336	10	sed	Cd	2.10	ppm		6	77	3-6 inch	JMA 77
4337	10	sed	Cd	21.00	ppm		6	77	6-9 inch	JMA 77
4338	10	sed	Cd	12.00	ppm		6	77	9-12 inch	JMA 77
4356	10	sw	Cd	.00	ppb	50	6	77	unf	JMA 77
4783	10	soil	Cd	1.70	ppm		6	77	0-6 inch	JMA 77
4784	10	soil	Cd	1.50	ppm		6	77	6-12 inch	JMA 77
4361	10	sw	Cd	10.00	ppb	3	7	77	unf	JMA 77
2805	10	sed	Hg	147.00	ppm		2	75	PONAR Grab	JMA 77
2804	10	sed	Hg	410.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2800	10	sed	Hg	993.00	ppm		6	77	0-3inch	JMA 77
2801	10	sed	Hg	307.00	ppm		6	77	3-6inch	JMA 77
2802	10	sed	Hg	23.00	ppm		6	77	6-9inch	JMA 77
2803	10	sed	Hg	14.70	ppm		6	77	9-12inch	JMA 77
2808	10	soil	Hg	6.10	ppm		6	77	0-6inch	JMA 77
2809	10	soil	Hg	2.60	ppm		6	77	6-12inch	JMA 77
5361	10	sw	Hg	2.20	ppb	[illegible]	6	77	unf	JMA 77
8201	10	sw	Hg	.01	ppb		7	77	unf	JMA 77
2799	10	sed	Hg	42.78	ppm		7	78	br. sand	Stop 78
2806	10	air	Hg	.00	ug/m3		7	78	airHglevl	Stop 78
4347	10	sed	Ni	63.00	ppm		6	77	0-3 inch	JMA 77
4348	10	sed	Ni	36.00	ppm		6	77	3-6 inch	JMA 77
4349	10	sed	Ni	21.00	ppm		6	77	6-9 inch	JMA 77
4350	10	sed	Ni	29.00	ppm		6	77	9-12 inch	JMA 77
4602	10	soil	Ni	26.00	ppm		6	77	0-6 inch	JMA 77
4603	10	soil	Ni	30.00	ppm		6	77	6-12 inch	JMA 77
7097	10	sw	Ni	.0	ppb	200	6	77	unf	JMA 77
4359	10	sw	Ni	.00	ppb	100	7	77	unf	JMA 77
4343	10	sed	Pb	252.00	ppm		6	77	0-3 inch	JMA 77
4344	10	sed	Pb	26.00	ppm		6	77	3-6 inch	JMA 77
4345	10	sed	Pb	2.30	ppm		6	77	6-9 inch	JMA 77
4346	10	sed	Pb	3.20	ppm		6	77	9-12 inch	JMA 77
4598	10	soil	Pb	40.00	ppm		6	77	0-6 inch	JMA 77
4599	10	soil	Pb	40.00	ppm		6	77	6-12 inch	JMA 77
7096	10	sw	Pb	.0	ppb	500	6	77	unf	JMA 77
4358	10	sw	Pb	.00	ppb	10	7	77	unf	JMA 77
4351	10	sed	Zn	802.00	ppm		6	77	0-3 inch	JMA 77
4352	10	sed	Zn	518.00	ppm		6	77	3-6 inch	JMA 77
4353	10	sed	Zn	167.00	ppm		6	77	6-9 inch	JMA 77
4354	10	sed	Zn	240.00	ppm		6	77	9-12 inch	JMA 77
4355	10	sw	Zn	90.00	ppb		6	77	unf	JMA 77
4781	10	soil	Zn	42.00	ppm		6	77	0-6 inch	JMA 77
4782	10	soil	Zn	56.00	ppm		6	77	6-12 inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4360	10	sw	Zn	100.00	ppb		7	77	unf	JMA 77
4366	11	sed	As	35.00	ppm		6	77	0-3 inch	JMA 77
4367	11	sed	As	21.00	ppm		6	77	3-6 inch	JMA 77
4368	11	sed	As	7.00	ppm		6	77	6-9 inch	JMA 77
4369	11	sed	As	11.00	ppm		6	77	9-12 inch	JMA 77
7098	11	sw	As	.0	ppb	10	6	77	unf	JMA 77
4384	11	sw	As	.00	ppb	20	7	77	unf	JMA 77
4362	11	sed	Cd	24.00	ppm		6	77	0-3 inch	JMA 77
4363	11	sed	Cd	6.60	ppm		6	77	3-6 inch	JMA 77
4364	11	sed	Cd	2.40	ppm		6	77	6-9 inch	JMA 77
4365	11	sed	Cd	6.90	ppm		6	77	9-12 inch	JMA 77
4383	11	sw	Cd	.00	ppb	50	6	77	unf	JMA 77
4388	11	sw	Cd	10.00	ppb	3	7	77	unf	JMA 77
2810	11	sed	Hg	57.00	ppm		6	77	0-3 inch	JMA 77
2811	11	sed	Hg	24.00	ppm		6	77	3-6 inch	JMA 77
2812	11	sed	Hg	5.60	ppm		6	77	6-9inch	JMA 77
2813	11	sed	Hg	23.00	ppm		6	77	9-12inch	JMA 77
5362	11	sw	Hg	1.90	ppb	[illegible]	6	77	unf	JMA 77
8203	11	sw	Hg	.01	ppb		7	77	unf	JMA 77
4374	11	sed	Ni	47.00	ppm		6	77	0-3 inch	JMA 77
4375	11	sed	Ni	44.00	ppm		6	77	3-6 inch	JMA 77
4376	11	sed	Ni	17.00	ppm		6	77	6-9 inch	JMA 77
4377	11	sed	Ni	18.00	ppm		6	77	9-12 inch	JMA 77
7100	11	sw	Ni	.0	ppb	200	6	77	unf	JMA 77
4386	11	sw	Ni	.00	ppb	100	7	77	unf	JMA 77
4370	11	sed	Pb	75.00	ppm		6	77	0-3 inch	JMA 77
4371	11	sed	Pb	45.00	ppm		6	77	3-6 inch	JMA 77
4372	11	sed	Pb	148.00	ppm		6	77	6-9 inch	JMA 77
4373	11	sed	Pb	309.00	ppm		6	77	9-12 inch	JMA 77
7099	11	sw	Pb	.0	ppb	500	6	77	unf	JMA 77
4385	11	sw	Pb	.00	ppb	10	7	77	unf	JMA 77
4378	11	sed	Zn	774.00	ppm		6	77	0-3 inch	JMA 77
4379	11	sed	Zn	406.00	ppm		6	77	3-6 inch	JMA 77
4380	11	sed	Zn	683.00	ppm		6	77	6-9 inch	JMA 77
4381	11	sed	Zn	129.00	ppm		6	77	9-12 inch	JMA 77
4382	11	sw	Zn	130.00	ppb		6	77	unf	JMA 77
4387	11	sw	Zn	90.00	ppb		7	77	unf	JMA 77
5363	12	sw	Hg	.50	ppb		3	80	unf	Aw 80
5364	12	sw	Hg	.00	ppb	0	3	80	filtered	Aw 80
5365	12	sw	Hg	.00	ppb	0	3	80	unf	Aw 80
2818	13	air	Hg	.20	ug/.5g		7	78	Hginsample	Stop 78
2819	13	air	Hg	5.00	ug/m3		7	78	airHglevl	Stop 78

829910253

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2820	13	soil	Hg	24.41	ppm		7	78	br.,pebly	Stop 78
4604	14	soil	As	19.00	ppm		6	77	0-6 inch	JMA 77
4605	14	soil	As	30.00	ppm		6	77	6-12 inch	JMA 77
4606	14	soil	As	21.00	ppm		6	77	12-18 inch	JMA 77
4607	14	soil	As	22.00	ppm		6	77	18-24 inch	JMA 77
4789	14	soil	Cd	18.00	ppm		6	77	0-6 inch	JMA 77
4790	14	soil	Cd	15.00	ppm		6	77	6-12 inch	JMA 77
4791	14	soil	Cd	12.00	ppm		6	77	12-18 inch	JMA 77
4792	14	soil	Cd	13.00	ppm		6	77	18-24 inch	JMA 77
2821	14	air	Hg	.00	ug/m3		7	78	airHglevl	Stop 78
2822	14	soil	Hg	8.76	ppm		7	78	glassrust	Stop 78
4785	14	soil	Ni	195.00	ppm		6	77	0-6 inch	JMA 77
4786	14	soil	Ni	157.00	ppm		6	77	6-12 inch	JMA 77
4787	14	soil	Ni	216.00	ppm		6	77	12-18 inch	JMA 77
4788	14	soil	Ni	132.00	ppm		6	77	18-24 inch	JMA 77
4608	14	soil	Pb	672.00	ppm		6	77	0-6 inch	JMA 77
4609	14	soil	Pb	896.00	ppm		6	77	6-12 inch	JMA 77
4610	14	soil	Pb	970.00	ppm		6	77	12-18 inch	JMA 77
4611	14	soil	Pb	990.00	ppm		6	77	18-24 inch	JMA 77
4965	14	soil	Zn	4719.00	ppm		6	77	0-6 inch	JMA 77
4966	14	soil	Zn	3392.00	ppm		6	77	6-12 inch	JMA 77
4967	14	soil	Zn	4382.00	ppm		6	77	12-18 inch	JMA 77
4612	15	soil	As	9.00	ppm		6	77	0-6 inch	JMA 77
4613	15	soil	As	6.00	ppm		6	77	6-12 inch	JMA 77
4614	15	soil	As	8.00	ppm		6	77	12-18 inch	JMA 77
4615	15	soil	As	.11	ppm		6	77	18-24 inch	JMA 77
4801	15	soil	Cd	3.10	ppm		6	77	0-6 inch	JMA 77
4802	15	soil	Cd	1.80	ppm		6	77	6-12 inch	JMA 77
4803	15	soil	Cd	3.70	ppm		6	77	12-18 inch	JMA 77
4804	15	soil	Cd	3.10	ppm		6	77	18-24 inch	JMA 77
2823	15	soil	Hg	5.70	ppm		6	77	0-6inch	JMA 77
2824	15	soil	Hg	5.50	ppm		6	77	6-12inch	JMA 77
2825	15	soil	Hg	6.80	ppm		6	77	12-18inch	JMA 77
2826	15	soil	Hg	9.80	ppm		6	77	18-24inch	JMA 77
2827	15	soil	Hg	5.43	ppm		7	78	gy.powder	Stop 78
4793	15	soil	Ni	38.00	ppm		6	77	0-6 inch	JMA 77
4794	15	soil	Ni	35.00	ppm		6	77	6-12 inch	JMA 77
4795	15	soil	Ni	95.00	ppm		6	77	12-18 inch	JMA 77
4796	15	soil	Ni	37.00	ppm		6	77	18-24 inch	JMA 77
4616	15	soil	Pb	79.00	ppm		6	77	0-6 inch	JMA 77
4617	15	soil	Pb	215.00	ppm		6	77	6-12 inch	JMA 77
4618	15	soil	Pb	490.00	ppm		6	77	12-18 inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4619	15	soil	Pb	388.00	ppm		6	77	18-24 inch	JMA 77
4797	15	soil	Zn	115.00	ppm		6	77	0-6 inch	JMA 77
4798	15	soil	Zn	180.00	ppm		6	77	6-12 inch	JMA 77
4799	15	soil	Zn	405.00	ppm		6	77	12-18 inch	JMA 77
4800	15	soil	Zn	294.00	ppm		6	77	18-24 inch	JMA 77
4620	16	soil	As	49.00	ppm		6	77	0-6 inch	JMA 77
4621	16	soil	As	82.00	ppm		6	77	6-12 inch	JMA 77
4809	16	soil	Cd	43.00	ppm		6	77	0-6 inch	JMA 77
4810	16	soil	Cd	7.50	ppm		6	77	6-12 inch	JMA 77
2830	16	soil	Hg	18.00	ppm		3	80	0-8inch	Aw 80
2831	16	soil	Hg	60.00	ppm		3	80	8-16 inch	Aw 80
2832	16	soil	Hg	180.00	ppm		3	80	16-24inch	Aw 80
2828	16	soil	Hg	546.00	ppm		6	77	0-6inch	JMA 77
2829	16	soil	Hg	1444.00	ppm		6	77	6-12inch	JMA 77
4805	16	soil	Ni	103.00	ppm		6	77	0-6 inch	JMA 77
4806	16	soil	Ni	21.00	ppm		6	77	6-12 inch	JMA 77
4622	16	soil	Pb	390.00	ppm		6	77	0-6 inch	JMA 77
4623	16	soil	Pb	125.00	ppm		6	77	6-12 inch	JMA 77
4807	16	soil	Zn	15051.00	ppm		6	77	0-6 inch	JMA 77
4808	16	soil	Zn	502.00	ppm		6	77	6-12 inch	JMA 77
2833	17	soil	Hg	1100.00	ppm		3	80	0-8inch	Aw 80
2834	17	soil	Hg	750.00	ppm		3	80	8-16inch	Aw 80
2835	17	soil	Hg	1000.00	ppm		3	80	16-24inch	Aw 80
2836	18	soil	Hg	8.00	ppm		3	80	0-8inch	Aw 80
2837	18	soil	Hg	120.00	ppm		3	80	8-16inch	Aw 80
2838	18	soil	Hg	28.00	ppm		3	80	16-24inch	Aw 80
2839	19	soil	Hg	800.00	ppm		3	80	0-8inch	Aw 80
2840	19	soil	Hg	940.00	ppm		3	80	8-16inch	Aw 80
2841	19	soil	Hg	510.00	ppm		3	80	16-24inch	Aw 80
2842	20	soil	Hg	1400.00	ppm		3	80	0-8inch	Aw 80
2843	20	soil	Hg	210.00	ppm		3	80	8-16inch	Aw 80
2844	20	soil	Hg	97.00	ppm		3	80	16-24inch	Aw 80
2845	21	soil	Hg	2000.00	ppm		3	80	0-8inch	Aw 80
2846	21	soil	Hg	610.00	ppm		3	80	8-16inch	Aw 80
2847	21	soil	Hg	260.00	ppm		3	80	16-24inch	Aw 80
2848	22	soil	Hg	400.00	ppm		3	80	0-8inch	Aw 80
2849	22	soil	Hg	1000.00	ppm		3	80	8-16inch	Aw 80
2850	22	soil	Hg	860.00	ppm		3	80	16-24inch	Aw 80
2851	23	soil	Hg	760.00	ppm		3	80	0-8inch	Aw 80
2852	23	soil	Hg	790.00	ppm		3	80	8-16 inch	Aw 80
2853	23	soil	Hg	880.00	ppm		3	80	16-24inch	Aw 80
3084	23	sed	Hg	25.00	ppm		3	80	PONAR Grab	Aw 80

829910255

08:27:19 27 SEP 1985

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3085	23	sed	Hg	.33	ppm		3	80	PONAR Grab	Aw 80
2854	24	soil	Hg	1100.00	ppm		3	80	0-8inch	Aw 80
2855	24	soil	Hg	230.00	ppm		3	80	8-16inch	Aw 80
2856	24	soil	Hg	52.00	ppm		3	80	16-24inch	Aw 80
2857	25	soil	Hg	18.00	ppm		3	80	0-8inch	Aw 80
2858	25	soil	Hg	7.40	ppm		3	80	8-16inch	Aw 80
2859	25	soil	Hg	.69	ppm		3	80	16-24inch	Aw 80
3088	26	mrsh sed	Hg	19.00	ppm			72	0-2 inch	JMA 76
3089	26	mrsh sed	Hg	.00	ppm			72	2-4 inch	JMA 76
3090	26	mrsh sed	Hg	7.40	ppm			72	4-6 inch	JMA 76
2860	26	soil	Hg	6.70	ppm		3	80	0-8inch	Aw 80
2861	26	soil	Hg	15.00	ppm		3	80	8-16inch	Aw 80
2863	26	soil	Hg	58.00	ppm		6	77	0-6 inch	JMA 77
2864	26	soil	Hg	117.00	ppm		6	77	6-12 inch	JMA 77
2865	26	soil	Hg	61.00	ppm		6	77	12-18 inch	JMA 77
2866	26	soil	Hg	850.00	ppm		6	77	18-24 inch	JMA 77
2867	27	soil	Hg	8.03	ppm		7	78	whitepowder	Stop 78
4626	28	soil	As	58.00	ppm		6	77	0-6 inch	JMA 77
4627	28	soil	As	64.00	ppm		6	77	6-12 inch	JMA 77
4813	28	soil	Cd	78.00	ppm		6	77	0-6 inch	JMA 77
4814	28	soil	Cd	72.00	ppm		6	77	6-12 inch	JMA 77
2868	28	soil	Hg	619.00	ppm		6	77	0-6inch	JMA 77
2869	28	soil	Hg	746.00	ppm		6	77	6-12 inch	JMA 77
4628	28	soil	Ni	86.00	ppm		6	77	0-6 inch	JMA 77
4629	28	soil	Ni	95.00	ppm		6	77	6-12 inch	JMA 77
4624	28	soil	Pb	321.00	ppm		6	77	6-12 inch	JMA 77
4625	28	soil	Pb	111.00	ppm		6	77	6-12 inch	JMA 77
4811	28	soil	Zn	28832.00	ppm		6	77	0-6 inch	JMA 77
4812	28	soil	Zn	25208.00	ppm		6	77	6-12 inch	JMA 77
4632	29	soil	As	20.00	ppm		6	77	0-6 inch	JMA 77
4633	29	soil	As	14.00	ppm		6	77	6-12 inch	JMA 77
4817	29	soil	Cd	4.20	ppm		6	77	0-6 inch	JMA 77
4818	29	soil	Cd	3.60	ppm		6	77	6-12 inch	JMA 77
2870	29	soil	Hg	2.40	ppm		6	77	0-6inch	JMA 77
2871	29	soil	Hg	18.50	ppm		6	77	6-12 inch	JMA 77
4634	29	soil	Ni	23.00	ppm		6	77	0-6 inch	JMA 77
4635	29	soil	Ni	20.00	ppm		6	77	6-12 inch	JMA 77
4630	29	soil	Pb	512.00	ppm		6	77	0-6 inch	JMA 77
4631	29	soil	Pb	287.00	ppm		6	77	0-6 inch	JMA 77
4815	29	soil	Zn	426.00	ppm		6	77	0-6 inch	JMA 77
4816	29	soil	Zn	284.00	ppm		6	77	6-12 inch	JMA 77
4638	30	soil	As	18.00	ppm		6	77	0-6 inch	JMA 77

829910256

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4639	30	soil	As	11.00	ppm		6	77	6-12 inch	JMA 77
4821	30	soil	Cd	2.00	ppm		6	77	0-6 inch	JMA 77
4822	30	soil	Cd	3.60	ppm		6	77	6-12 inch	JMA 77
2872	30	soil	Hg	1.50	ppm		6	77	0-6 inch	JMA 77
2873	30	soil	Hg	2.00	ppm		6	77	6-12 inch	JMA 77
4640	30	soil	Ni	13.00	ppm		6	77	0-6 inch	JMA 77
4641	30	soil	Ni	41.00	ppm		6	77	6-12 inch	JMA 77
4636	30	soil	Pb	433.00	ppm		6	77	6-12 inch	JMA 77
4637	30	soil	Pb	594.00	ppm		6	77	6-12 inch	JMA 77
4819	30	soil	Zn	180.00	ppm		6	77	0-6 inch	JMA 77
4820	30	soil	Zn	267.00	ppm		6	77	6-12 inch	JMA 77
2874	31	soil	Hg	15.40	ppm		6	77	0-6 inch	JMA 77
2875	31	soil	Hg	4.70	ppm		6	77	6-12 inch	JMA 77
2876	31	soil	Hg	7.10	ppm		6	77	12-18 inch	JMA 77
2877	31	soil	Hg	3.90	ppm		6	77	18-24 inch	JMA 77
4646	32	soil	As	5.00	ppm		6	77	0-6 inch	JMA 77
4647	32	soil	As	6.00	ppm		6	77	6-12 inch	JMA 77
4648	32	soil	As	7.00	ppm		6	77	12-18 inch	JMA 77
4649	32	soil	As	7.00	ppm		6	77	18-24 inch	JMA 77
4827	32	soil	Cd	1.70	ppm		6	77	0-6 inch	JMA 77
4828	32	soil	Cd	3.30	ppm		6	77	6-12 inch	JMA 77
4829	32	soil	Cd	2.60	ppm		6	77	12-18 inch	JMA 77
4830	32	soil	Cd	3.70	ppm		6	77	18-24 inch	JMA 77
3095	32	sed	Hg	68.00	ppm		3	80	PONAR Grab	Aw 80
2878	32	soil	Hg	30.00	ppm		6	77	0-6 inch	JMA 77
2879	32	soil	Hg	23.00	ppm		6	77	6-12 inch	JMA 77
2880	32	soil	Hg	13.80	ppm		6	77	12-18 inch	JMA 77
2881	32	soil	Hg	8.40	ppm		6	77	18-24 inch	JMA 77
3091	32	s.a.s.s.	Hg	.59	ppm		11	79	1.5hrsuspd	Aw 79
3092	32	s.a.s.s.	Hg	.74	ppm		11	79	0-3 inch	Aw 79
3093	32	s.a.s.s.	Hg	.34	ppm		11	79	3-6 inch	Aw 79
3094	32	s.a.s.s.	Hg	.35	ppm		11	79	12 hr suspended	Aw 79
4650	32	soil	Ni	29.00	ppm		6	77	0-6 inch	JMA 77
4651	32	soil	Ni	80.00	ppm		6	77	6-12 inch	JMA 77
4652	32	soil	Ni	27.00	ppm		6	77	12-18 inch	JMA 77
4653	32	soil	Ni	86.00	ppm		6	77	18-24 inch	JMA 77
4642	32	soil	Pb	44.00	ppm		6	77	0-6 inch	JMA 77
4643	32	soil	Pb	117.00	ppm		6	77	6-12 inch	JMA 77
4644	32	soil	Pb	88.00	ppm		6	77	12-18 inch	JMA 77
4645	32	soil	Pb	198.00	ppm		6	77	18-24 inch	JMA 77
4823	32	soil	Zn	13454.00	ppm		6	77	0-6 inch	JMA 77
4824	32	soil	Zn	480.00	ppm		6	77	6-12 inch	JMA 77

8299910257

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4825	32	soil	Zn	495.00	ppm		6	77	12-18 inch	JMA 77
4826	32	soil	Zn	1254.00	ppm		6	77	18-24 inch	JMA 77
4389	32	sed	T Ph	3.40	ppm		3	80	PONAR Grab	Aw 80
4658	33	soil	As	15.00	ppm		6	77	0-6 inch	JMA 77
4659	33	soil	As	10.00	ppm		6	77	6-12 inch	JMA 77
4660	33	soil	As	12.00	ppm		6	77	12 18 inch	JMA 77
4661	33	soil	As	18.00	ppm		6	77	18 24 inch	JMA 77
4835	33	soil	Cd	6.70	ppm		6	77	0-6 inch	JMA 77
4836	33	soil	Cd	3.80	ppm		6	77	6-12 inch	JMA 77
4837	33	soil	Cd	9.10	ppm		6	77	12-18 inch	JMA 77
4838	33	soil	Cd	6.40	ppm		6	77	18-24 inch	JMA 77
2882	33	soil	Hg	46.00	ppm		6	77	0-6 inch	JMA 77
2883	33	soil	Hg	8.60	ppm		6	77	6-12 inch	JMA 77
2884	33	soil	Hg	10.00	ppm		6	77	12-18 inch	JMA 77
2885	33	soil	Hg	13.70	ppm		6	77	18-24inch	JMA 77
4662	33	soil	Ni	80.00	ppm		6	77	0-6 inch	JMA 77
4663	33	soil	Ni	51.00	ppm		6	77	6-12 inch	JMA 77
4664	33	soil	Ni	66.00	ppm		6	77	12-18 inch	JMA 77
4665	33	soil	Ni	62.00	ppm		6	77	18-24 inch	JMA 77
4654	33	soil	Pb	1225.00	ppm		6	77	0-6 inch	JMA 77
4655	33	soil	Pb	11.00	ppm		6	77	6-12 inch	JMA 77
4656	33	soil	Pb	749.00	ppm		6	77	12-18 inch	JMA 77
4657	33	soil	Pb	2071.00	ppm		6	77	18-24 inch	JMA 77
4831	33	soil	Zn	1100.00	ppm		6	77	0-6 inch	JMA 77
4832	33	soil	Zn	553.00	ppm		6	77	6-12 inch	JMA 77
4833	33	soil	Zn	608.00	ppm		6	77	12-18 inch	JMA 77
4834	33	soil	Zn	586.00	ppm		6	77	18-24 inch	JMA 77
4670	34	soil	As	6.00	ppm		6	77	0-6 inch	JMA 77
4671	34	soil	As	6.00	ppm		6	77	6-12 inch	JMA 77
4672	34	soil	As	5.00	ppm		6	77	12-18 inch	JMA 77
4673	34	soil	As	6.00	ppm		6	77	18-24 inch	JMA 77
4843	34	soil	Cd	4.00	ppm		6	77	0-6 inch	JMA 77
4844	34	soil	Cd	2.80	ppm		6	77	6-12 inch	JMA 77
4845	34	soil	Cd	3.80	ppm		6	77	12-18 inch	JMA 77
4846	34	soil	Cd	27.00	ppm		6	77	18-24 inch	JMA 77
2886	34	soil	Hg	25.00	ppm		6	77	0-6inch	JMA 77
2887	34	soil	Hg	14.10	ppm		6	77	6-12inch	JMA 77
2888	34	soil	Hg	19.50	ppm		6	77	12-18inch	JMA 77
2889	34	soil	Hg	32.00	ppm		6	77	18-24inch	JMA 77
4674	34	soil	Ni	135.00	ppm		6	77	0-6 inch	JMA 77
4675	34	soil	Ni	33.00	ppm		6	77	6-12 inch	JMA 77
4676	34	soil	Ni	42.00	ppm		6	77	12-18 inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4677	34	soil	Ni	164.00	ppm		6	77	18-24 inch	JMA 77
4666	34	soil	Pb	913.00	ppm		6	77	0-6 inch	JMA 77
4667	34	soil	Pb	462.00	ppm		6	77	6-12 inch	JMA 77
4668	34	soil	Pb	1089.00	ppm		6	77	12-18 inch	JMA 77
4669	34	soil	Pb	473.00	ppm		6	77	18-24 inch	JMA 77
4839	34	soil	Zn	488.00	ppm		6	77	0-6 inch	JMA 77
4840	34	soil	Zn	316.00	ppm		6	77	6-12 inch	JMA 77
4841	34	soil	Zn	475.00	ppm		6	77	12-18 inch	JMA 77
4842	34	soil	Zn	408.00	ppm		6	77	18-24 inch	JMA 77
4678	35	soil	As	7.00	ppm		6	77	0-6 inch	JMA 77
4679	35	soil	As	11.00	ppm		6	77	6-12 inch	JMA 77
4680	35	soil	As	10.00	ppm		6	77	12-18 inch	JMA 77
4681	35	soil	As	13.00	ppm		6	77	18-24 inch	JMA 77
4855	35	soil	Cd	3.50	ppm		6	77	0-6 inch	JMA 77
4856	35	soil	Cd	7.90	ppm		6	77	6-12 inch	JMA 77
4857	35	soil	Cd	8.40	ppm		6	77	12-18 inch	JMA 77
4858	35	soil	Cd	86.00	ppm		6	77	18-24 inch	JMA 77
2890	35	soil	Hg	22.00	ppm		6	77	0-6inch	JMA 77
2891	35	soil	Hg	25.00	ppm		6	77	6-12inch	JMA 77
2892	35	soil	Hg	43.00	ppm		6	77	12-18inch	JMA 77
2893	35	soil	Hg	116.00	ppm		6	77	18-24inch	JMA 77
2894	35	air	Hg	.00	ug/m3		7	78	airHglevl	Stop 78
4847	35	soil	Ni	41.00	ppm		6	77	0-6 inch	JMA 77
4848	35	soil	Ni	77.00	ppm		6	77	6-12 inch	JMA 77
4849	35	soil	Ni	135.00	ppm		6	77	12-18 inch	JMA 77
4850	35	soil	Ni	240.00	ppm		6	77	18-24 inch	JMA 77
4682	35	soil	Pb	132.00	ppm		6	77	0-6 inch	JMA 77
4683	35	soil	Pb	899.00	ppm		6	77	6-12 inch	JMA 77
4684	35	soil	Pb	312.00	ppm		6	77	12-18 inch	JMA 77
4685	35	soil	Pb	614.00	ppm		6	77	18-24 inch	JMA 77
4851	35	soil	Zn	550.00	ppm		6	77	0-6 inch	JMA 77
4852	35	soil	Zn	1320.00	ppm		6	77	6-12 inch	JMA 77
4853	35	soil	Zn	2065.00	ppm		6	77	12-18 inch	JMA 77
4854	35	soil	Zn	2772.00	ppm		6	77	18-24 inch	JMA 77
4686	36	soil	As	5.00	ppm		6	77	0-6 inch	JMA 77
4687	36	soil	As	14.00	ppm		6	77	6-12 inch	JMA 77
4688	36	soil	As	.16	ppm		6	77	12-18 inch	JMA 77
4689	36	soil	As	14.00	ppm		6	77	18-24 inch	JMA 77
4867	36	soil	Cd	8.30	ppm		6	77	0-6 inch	JMA 77
4868	36	soil	Cd	9.30	ppm		6	77	6-12 inch	JMA 77
4869	36	soil	Cd	18.00	ppm		6	77	12-18 inch	JMA 77
4870	36	soil	Cd	10.00	ppm		6	77	18-24 inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3098	36	mrsh sed	Hg	27.00	ppm		3	76	PONAR Grab	JMA 76
3099	36	mrsh sed	Hg	16.00	ppm		3	76	ng	JMA 76
3100	36	mrsh sed	Hg	15.00	ppm		3	76	ng	JMA 76
3101	36	mrsh sed	Hg	15.00	ppm		3	76	ng	JMA 76
3102	36	mrsh sed	Hg	30.00	ppm		3	76	ng	JMA 76
3103	36	mrsh sed	Hg	5.30	ppm		3	76	ng	JMA 76
3104	36	mrsh sed	Hg	22.00	ppm		3	76	ng	JMA 76
3105	36	mrsh sed	Hg	36.00	ppm		3	76	ng	JMA 76
3106	36	mrsh sed	Hg	30.00	ppm		3	76	ng	JMA 76
3107	36	mrsh sed	Hg	32.00	ppm		3	76	ng	JMA 76
3108	36	mrsh sed	Hg	3.90	ppm		3	76	ng	JMA 76
3109	36	mrsh sed	Hg	3.20	ppm		3	76	ng	JMA 76
3110	36	mrsh sed	Hg	3.60	ppm		3	76	ng	JMA 76
2895	36	soil	Hg	151.00	ppm		6	77	0-6inch	JMA 77
2896	36	soil	Hg	2008.00	ppm		6	77	6-12inch	JMA 77
2897	36	soil	Hg	1294.00	ppm		6	77	12-18inch	JMA 77
2898	36	soil	Hg	654.00	ppm		6	77	18-24inch	JMA 77
3153	36	air	Hg	.29	ug/m3		8	78	24hr test	EPA 78
3154	36	air	Hg	.29	ppm		8	78	24hr test	EPA 78
3155	36	air	Hg	.39	ug/m3		8	78	24hr test	EPA 78
3156	36	air	Hg	.27	ug/m3		8	78	24hr test	EPA 78
3157	36	air	Hg	1.02	ug/m3		8	78	24hr test	EPA 78
3158	36	air	Hg	.75	ug/m3		8	78	24hr test	EPA 78
3159	36	air	Hg	2.85	ug/m3		8	78	24hr test	EPA 78
3160	36	air	Hg	2.40	ug/m3		8	78	24hr test	EPA 78
3162	36	air	Hg	.21	ug/m3		8	78	12hr test	EPA 78
3163	36	air	Hg	.18	ug/m3		8	78	12hr test	EPA 78
3164	36	air	Hg	.38	ug/m3		8	78	12hr test	EPA 78
3165	36	air	Hg	1.00	ug/m3		8	78	12hr test	EPA 78
3166	36	air	Hg	1.68	ug/m3		8	78	8hr test	EPA 78
3167	36	air	Hg	.25	ug/m3		8	78	8hr test	EPA 78
3168	36	air	Hg	.50	ug/m3		8	78	8hr test	EPA 78
3169	36	air	Hg	1.37	ug/m3		8	78	8hr test	EPA 78
3170	36	air	Hg	3.26	ug/m3		8	78	8hr test	EPA 78
4859	36	soil	Ni	52.00	ppm		6	77	0-6 inch	JMA 77
4860	36	soil	Ni	35.00	ppm		6	77	6-12 inch	JMA 77
4861	36	soil	Ni	58.00	ppm		6	77	12-18 inch	JMA 77
4862	36	soil	Ni	158.00	ppm		6	77	18-24 inch	JMA 77
4690	36	soil	Pb	3518.00	ppm		6	77	0-6 inch	JMA 77
4691	36	soil	Pb	3926.00	ppm		6	77	6-12 inch	JMA 77
4692	36	soil	Pb	2629.00	ppm		6	77	12-18 inch	JMA 77
4693	36	soil	Pb	2166.00	ppm		6	77	18-24 inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4863	36	soil	Zn	1800.00	ppm		6	77	0-6 inch	JMA 77
4864	36	soil	Zn	1979.00	ppm		6	77	6-12 inch	JMA 77
4865	36	soil	Zn	1998.00	ppm		6	77	12-18 inch	JMA 77
4866	36	soil	Zn	3139.00	ppm		6	77	18-24 inch	JMA 77
4694	37	soil	As	6.00	ppm		6	77	0-6 inch	JMA 77
4695	37	soil	As	6.00	ppm		6	77	6-12 inch	JMA 77
4696	37	soil	As	9.00	ppm		6	77	12-18 inch	JMA 77
4697	37	soil	As	11.00	ppm		6	77	18-24 inch	JMA 77
4879	37	soil	Cd	7.60	ppm		6	77	0-6 inch	JMA 77
4880	37	soil	Cd	4.70	ppm		6	77	6-12 inch	JMA 77
4881	37	soil	Cd	3.60	ppm		6	77	12-18 inch	JMA 77
4882	37	soil	Cd	6.90	ppm		6	77	18-24 inch	JMA 77
2899	37	soil	Hg	221.00	ppm		6	77	0-6inch	JMA 77
2900	37	soil	Hg	276.00	ppm		6	77	6-12inch	JMA 77
2901	37	soil	Hg	63.00	ppm		6	77	12-18inch	JMA 77
2902	37	soil	Hg	123000.00	ppm		6	77	18-24inch	JMA 77
4871	37	soil	Ni	49.00	ppm		6	77	0-6 inch	JMA 77
4872	37	soil	Ni	45.00	ppm		6	77	6-12 inch	JMA 77
4873	37	soil	Ni	65.00	ppm		6	77	12-18 inch	JMA 77
4874	37	soil	Ni	91.00	ppm		6	77	18-24 inch	JMA 77
4698	37	soil	Pb	270.00	ppm		6	77	0-6 inch	JMA 77
4699	37	soil	Pb	196.00	ppm		6	77	6-12 inch	JMA 77
4700	37	soil	Pb	502.00	ppm		6	77	12-18 inch	JMA 77
4701	37	soil	Pb	322.00	ppm		6	77	18-24 inch	JMA 77
4875	37	soil	Zn	17510.00	ppm		6	77	0-6 inch	JMA 77
4876	37	soil	Zn	6866.00	ppm		6	77	6-12 inch	JMA 77
4877	37	soil	Zn	3437.00	ppm		6	77	12-18 inch	JMA 77
4878	37	soil	Zn	4584.00	ppm		6	77	18-24 inch	JMA 77
2903	38	soil	Hg	11.10	ppm		6	77	0-6inch	JMA 77
2904	38	soil	Hg	11.90	ppm		6	77	6-12inch	JMA 77
2905	38	soil	Hg	14.80	ppm		6	77	12-18inch	JMA 77
2906	38	soil	Hg	12.90	ppm		6	77	18-24inch	JMA 77
3111	38	sed	Hg	87.60	ppm		11	79	ng	Aw 79
3112	38	s.a.s.s.	Hg	.11	ppm		11	79	1hrsuspended	Aw 79
3113	38	s.a.s.s.	Hg	.24	ppm		11	79	3 hr suspended	Aw 79
3114	38	s.a.s.s.	Hg	.17	ppm		11	79	6 hr suspended	Aw 79
3115	38	s.a.s.s.	Hg	.27	ppm		11	79	12 hr suspended	Aw 79
4702	39	soil	As	7.00	ppm		6	77	0-6 inch	JMA 77
4703	39	soil	As	7.00	ppm		6	77	6-12 inch	JMA 77
4704	39	soil	As	5.00	ppm		6	77	12-18 inch	JMA 77
4705	39	soil	As	9.00	ppm		6	77	18-24 inch	JMA 77
4891	39	soil	Cd	4.80	ppm		6	77	0-6 inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4892	39	soil	Cd	29.00	ppm		6	77	6-12 inch	JMA 77
4893	39	soil	Cd	8.90	ppm		6	77	12-18 inch	JMA 77
4894	39	soil	Cd	8.40	ppm		6	77	18-24 inch	JMA 77
2910	39	soil	Hg	9.20	ppm		6	77	0-6 inch	JMA 77
2911	39	soil	Hg	3.90	ppm		6	77	6-12inch	JMA 77
2912	39	soil	Hg	5.20	ppm		6	77	12-18inch	JMA 77
2913	39	soil	Hg	19.90	ppm		6	77	18-24inch	JMA 77
4883	39	soil	Ni	37.00	ppm		6	77	0-6 inch	JMA 77
4884	39	soil	Ni	37.00	ppm		6	77	6-12 inch	JMA 77
4885	39	soil	Ni	32.00	ppm		6	77	12-18 inch	JMA 77
4886	39	soil	Ni	45.00	ppm		6	77	18-24 inch	JMA 77
4706	39	soil	Pb	354.00	ppm		6	77	0-6 inch	JMA 77
4707	39	soil	Pb	298.00	ppm		6	77	6-12 inch	JMA 77
4708	39	soil	Pb	214.00	ppm		6	77	12-18 inch	JMA 77
4709	39	soil	Pb	385.00	ppm		6	77	18-24 inch	JMA 77
4887	39	soil	Zn	564.00	ppm		6	77	0-6 inch	JMA 77
4888	39	soil	Zn	4491.00	ppm		6	77	6-12 inch	JMA 77
4889	39	soil	Zn	362.00	ppm		6	77	12-18 inch	JMA 77
4890	39	soil	Zn	711.00	ppm		6	77	18-24 inch	JMA 77
4710	40	soil	As	4.00	ppm		6	77	0-6 inch	JMA 77
4711	40	soil	As	1.00	ppm		6	77	6-12 inch	JMA 77
4712	40	soil	As	7.00	ppm		6	77	12-18 inch	JMA 77
4713	40	soil	As	12.00	ppm		6	77	18-24 inch	JMA 77
7115	40	sw	Be	1.00	ppb		10	81	unf	NJDEP 85
4903	40	soil	Cd	4.90	ppm		6	77	0-6 inch	JMA 77
4904	40	soil	Cd	2.60	ppm		6	77	6-12 inch	JMA 77
4905	40	soil	Cd	2.60	ppm		6	77	12-18 inch	JMA 77
4906	40	soil	Cd	6.00	ppm		6	77	18-24 inch	JMA 77
5159	40	sw	Cd	1.00	ppb		10	81	unf	NJDEP 85
5161	40	sw	Cr	10.20	ppb		10	81	unf	NJDEP 85
5160	40	sw	Cu	9.00	ppb		10	81	unf	NJDEP 85
2914	40	soil	Hg	23.00	ppm		6	77	0-6inch	JMA 77
2915	40	soil	Hg	18.40	ppm		6	77	6-12inch	JMA 77
2916	40	soil	Hg	197.00	ppm		6	77	12-18inch	JMA 77
2917	40	soil	Hg	328.00	ppm		6	77	18-24inch	JMA 77
4895	40	soil	Ni	213.00	ppm		6	77	0-6 inch	JMA 77
4896	40	soil	Ni	19.00	ppm		6	77	6-12 inch	JMA 77
4897	40	soil	Ni	44.00	ppm		6	77	12-18 inch	JMA 77
4898	40	soil	Ni	33.00	ppm		6	77	18-24 inch	JMA 77
5162	40	sw	Ni	8.00	ppb		10	81	unf	NJDEP 85
4714	40	soil	Pb	257.00	ppm		6	77	0-6 inch	JMA 77
4715	40	soil	Pb	164.00	ppm		6	77	6-12 inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4716	40	soil	Pb	1314.00	ppm		6	77	12-18 inch	JMA 77
4717	40	soil	Pb	580.00	ppm		6	77	18-24 inch	JMA 77
5163	40	sw	Pb	10.00	ppb		10	81	unf	NJDEP 85
4899	40	soil	Zn	535.00	ppm		6	77	0-6 inch	JMA 77
4900	40	soil	Zn	313.00	ppm		6	77	6-12 inch	JMA 77
4901	40	soil	Zn	6725.00	ppm		6	77	12-18 inch	JMA 77
4902	40	soil	Zn	13634.00	ppm		6	77	18-24 inch	JMA 77
5164	40	sw	Zn	35.00	ppb		10	81	unf	NJDEP 85
5283	40	sw	tce	10.50	ppb		10	81	unf	NJDEP 85
5282	40	sw	tcle	7.40	ppb		10	81	unf	NJDEP 85
5284	40	sw	ttce	33.80	ppb		10	81	unf	NJDEP 85
5280	40	sw	CHCl3	5.10	ppb		10	81	unf	NJDEP 85
5279	40	sw	MeChl	5.90	ppb		10	81	unf	NJDEP 85
5281	40	sw	3CL3Fle	60.40	ppb		10	81	unf	NJDEP 85
4718	41	soil	As	6.00	ppm		6	77	0-6 inch	JMA 77
4719	41	soil	As	6.00	ppm		6	77	6-12 inch	JMA 77
4720	41	soil	As	4.00	ppm		6	77	12-18 inch	JMA 77
4721	41	soil	As	7.00	ppm		6	77	18-24 inch	JMA 77
4915	41	soil	Cd	1.80	ppm		6	77	0-6 inch	JMA 77
4916	41	soil	Cd	1.90	ppm		6	77	6-12 inch	JMA 77
4917	41	soil	Cd	2.20	ppm		6	77	12-18 inch	JMA 77
4918	41	soil	Cd	2.20	ppm		6	77	18-24 inch	JMA 77
2918	41	soil	Hg	75.00	ppm		6	77	0-6inch	JMA 77
2919	41	soil	Hg	34.00	ppm		6	77	6-12inch	JMA 77
2920	41	soil	Hg	19.40	ppm		6	77	12-18inch	JMA 77
2921	41	soil	Hg	15.10	ppm		6	77	18-24inch	JMA 77
4907	41	soil	Ni	21.00	ppm		6	77	0-6 inch	JMA 77
4908	41	soil	Ni	21.00	ppm		6	77	6-12 inch	JMA 77
4909	41	soil	Ni	26.00	ppm		6	77	12-18 inch	JMA 77
4910	41	soil	Ni	19.00	ppm		6	77	18-24 inch	JMA 77
4722	41	soil	Pb	125.00	ppm		6	77	0-6 inch	JMA 77
4723	41	soil	Pb	216.00	ppm		6	77	6-12 inch	JMA 77
4724	41	soil	Pb	362.00	ppm		6	77	12-18 inch	JMA 77
4725	41	soil	Pb	395.00	ppm		6	77	18-24 inch	JMA 77
4911	41	soil	Zn	112.00	ppm		6	77	0-6 inch	JMA 77
4912	41	soil	Zn	122.00	ppm		6	77	6-12 inch	JMA 77
4913	41	soil	Zn	183.00	ppm		6	77	12-18 inch	JMA 77
4914	41	soil	Zn	202.00	ppm		6	77	18-24 inch	JMA 77
4726	42	soil	As	45.00	ppm		6	77	0-6 inch	JMA 77
4727	42	soil	As	148.00	ppm		6	77	6-12 inch	JMA 77
4923	42	soil	Cd	31.00	ppm		6	77	0-6 inch	JMA 77
4924	42	soil	Cd	71.00	ppm		6	77	6-12 inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2922	42	soil	Hg	367.00	ppm		6	77	0-6inch	JMA 77
2923	42	soil	Hg	1185.00	ppm		6	77	6-12inch	JMA 77
4919	42	soil	Ni	211.00	ppm		6	77	0-6 inch	JMA 77
4920	42	soil	Ni	289.00	ppm		6	77	6-12 inch	JMA 77
4728	42	soil	Pb	430.00	ppm		6	77	0-6 inch	JMA 77
4729	42	soil	Pb	396.00	ppm		6	77	6-12 inch	JMA 77
4921	42	soil	Zn	4286.00	ppm		6	77	0-6 inch	JMA 77
4922	42	soil	Zn	10670.00	ppm		6	77	6-12 inch	JMA 77
2925	43	sed	Hg	150.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2924	43	sed	Hg	83.32	ppm		7	78	bk,surface	Stop 78
3119	44	mrsh sed	Hg	3.00	ppm			72	0-2 inch	JMA 76
3120	44	mrsh sed	Hg	208.00	ppm			72	4-6 inch	JMA 76
3117	44	mrsh sed	Hg	61.70	ppm			74	0-6 inch	JMA 76
3118	44	mrsh sed	Hg	8.30	ppm			74	30-36 inch	JMA 76
2927	44	sed	Hg	420.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2926	44	sed	Hg	776.00	ppm		7	78	br.&bk.	Stop 78
2928	45	sed	Hg	76.43	ppm		7	78	bk,br.	Stop 78
2929	46	sed	Hg	30.56	ppm		7	78	br. sand	Stop 78
4390	47	soil	As	4.00	ppm		5	77	0-2 inch	JMA 77
4391	47	soil	As	16.00	ppm		5	77	2-4 inch	JMA 77
4392	47	soil	As	.60	ppm		5	77	10-12 inch	JMA 77
4393	47	soil	As	.90	ppm		5	77	12-14 inch	JMA 77
4394	47	soil	As	10.00	ppm		5	77	14-16 inch	JMA 77
4925	47	GW	As	.00	ppm	.01	6	77	unf Lt	JMA 77
4926	47	GW	As	.00	ppm	.01	6	77	unf Ht	JMA 77
5007	47	gw	As	.00	ppm	.01	6	77	1-1.5'T	JMA 77
5008	47	gw	As	.01	ppm	.01	6	77	1' B	JMA 77
5019	47	gw	As	.00	ppm	.02	7	77	filter Ht	JMA 77
5020	47	gw	As	.00	ppm	.02	7	77	filter Lt	JMA 77
4447	47	soil	Cd	2.00	ppm		5	77	0-2 inch	JMA 77
4448	47	soil	Cd	9.00	ppm		5	77	2-4 inch	JMA 77
4449	47	soil	Cd	.60	ppm		5	77	10-12 inch	JMA 77
4450	47	soil	Cd	.30	ppm		5	77	12-14 inch	JMA 77
4451	47	soil	Cd	.30	ppm		5	77	14-16 inch	JMA 77
5015	47	gw	Cd	.00	ppm	.05	6	77	1-1.5'T	JMA 77
5016	47	gw	Cd	.00	ppm	.05	6	77	1' B	JMA 77
5017	47	gw	Cd	.00	ppm	.05	6	77	unf Lt	JMA 77
5018	47	gw	Cd	.00	ppm	.05	6	77	unf Ht	JMA 77
7045	47	gw	Cd	.00	ppm	.0003	6	77	fil Ht	JMA 77
7046	47	gw	Cd	.00	ppm	.0003	6	77	fil Lt	JMA 77
2907	47	gw	Hg	.01	ppb		6	77	unf. T	JMA 77
2909	47	gw	Hg	.05	ppb	.3	6	77	unf. B	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
5387	47	gw	Hg	.01	ppb	.1	6	77	unf Lt	JMA 77
5388	47	gw	Hg	.01	ppb	.1	6	77	unf Ht	JMA 77
2908	47	gw	Hg	.00	ppb	.3	7	77	unf Lt	JMA 77
5371	47	gw	Hg	.00	ppb	.3	7	77	fil Ht	JMA 77
7069	47	gw	Hg	.00	ppb	30	7	77	fil Lt	JMA 77
2932	47	air	Hg	54.00	ug/m3		7	78	airHglevl	Stop 78
2933	47	air	Hg	210.00	ug/m3		7	78	Hginsample	Stop 78
4437	47	soil	Ni	20.00	ppm		5	77	0-2 inch	JMA 77
4438	47	soil	Ni	54.00	ppm		5	77	2-4 inch	JMA 77
4439	47	soil	Ni	6.00	ppm		5	77	10-12 inch	JMA 77
4440	47	soil	Ni	13.00	ppm		5	77	12-14 inch	JMA 77
4441	47	soil	Ni	28.00	ppm		5	77	14-16 inch	JMA 77
5003	47	gw	Ni	.00	ppm	.20	6	77	unf Lt	JMA 77
5004	47	gw	Ni	.00	ppm	.20	6	77	unf Ht	JMA 77
5011	47	gw	Ni	.00	ppm	.20	6	77	1-1.5'T	JMA 77
5012	47	gw	Ni	.00	ppm	.20	6	77	1' B	JMA 77
7002	47	gw	Ni	.00	ppm	.10	7	77	fil Ht	JMA 77
7012	47	gw	Ni	.00	ppm	.10	7	77	fil Lt	JMA 77
4432	47	soil	Pb	170.00	ppm		5	77	0-2 inch	JMA 77
4433	47	soil	Pb	900.00	ppm		5	77	2-4 inch	JMA 77
4434	47	soil	Pb	10.00	ppm		5	77	10-12 inch	JMA 77
4435	47	soil	Pb	6.00	ppm		5	77	12-14 inch	JMA 77
4436	47	soil	Pb	15.00	ppm		5	77	14-16 inch	JMA 77
5001	47	gw	Pb	.00	ppm	.50	6	77	unf Lt	JMA 77
5002	47	gw	Pb	.00	ppm	.50	6	77	unf Ht	JMA 77
5009	47	gw	Pb	.00	ppm	.05	6	77	1-1.5'T	JMA 77
5010	47	gw	Pb	.00	ppm	.05	6	77	1' B	JMA 77
5165	47	gw	Pb	.00	ppm	.01	7	77	filter Ht	JMA 77
5166	47	gw	Pb	.00	ppm	.01	7	77	filter Lt	JMA 77
4442	47	soil	Zn	340.00	ppm		5	77	0-2 inch	JMA 77
4443	47	soil	Zn	1500.00	ppm		5	77	2-4 inch	JMA 77
4444	47	soil	Zn	28.00	ppm		5	77	10-12 inch	JMA 77
4445	47	soil	Zn	34.00	ppm		5	77	12-14 inch	JMA 77
4446	47	soil	Zn	64.00	ppm		5	77	14-16 inch	JMA 77
5005	47	gw	Zn	.06	ppm		6	77	unf Lt	JMA 77
5006	47	gw	Zn	.04	ppm		6	77	unf Ht	JMA 77
5013	47	gw	Zn	.06	ppm		6	77	1-1.5'T	JMA 77
5014	47	gw	Zn	.15	ppm		6	77	1' B	JMA 77
7021	47	gw	Zn	.14	ppm		7	77	fil Ht	JMA 77
7033	47	gw	Zn	.04	ppm		7	77	fil Lt	JMA 77
2930	47	sed	Total Hg	9.20	ppm		2	84	PONAR Grab	Bart 84
2931	47	sed	Methyl Hg	.00	ppm		2	84	PONAR Grab	Bart 84

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2936	48	sed	Hg	110.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2934	48	sed	Total Hg	131.00	ppm		2	84	PONAR Grab	Bart 84
2935	48	sed	Methyl Hg	3.00	ppm		2	84	PONAR Grab	Bart 84
3121	49	mrsh sed	Hg	40.60	ppm			74	0-6 inch	JMA 76
3122	49	mrsh sed	Hg	9.10	ppm			74	30-36 inch	JMA 76
2939	49	sed	Hg	152.00	ppm		2	84	Lowtide 1	Weis 84
2940	49	sed	Hg	38.00	ppm		2	84	Lt 2	Weis 84
2941	49	sed	Hg	164.00	ppm		2	84	Lt 1	Weis 84
2942	49	sed	Hg	38.00	ppm		2	84	Lt 2	Weis 84
2943	49	sed	Hg	105.00	ppm		2	84	Lt 1	Weis 84
2944	49	sed	Hg	17.00	ppm		2	84	Lt 2	Weis 84
2945	49	sed	Hg	39.00	ppm		2	84	Lt 1	Weis 84
2946	49	sed	Hg	124.00	ppm		2	84	Lt 2	Weis 84
2947	49	sed	Hg	59.00	ppm		2	84	Lt 1	Weis 84
2948	49	sed	Hg	307.00	ppm		2	84	Lt 2	Weis 84
2949	49	sed	Hg	93.00	ppm		2	84	Lt 1	Weis 84
2950	49	sed	Hg	35.00	ppm		2	84	Lt 2	Weis 84
2951	49	sed	Hg	182.00	ppm		2	84	Lt 1	Weis 84
2952	49	sed	Hg	271.00	ppm		2	84	Lt 2	Weis 84
2953	49	sed	Hg	74.00	ppm		2	84	Lt 1	Weis 84
2954	49	sed	Hg	70.00	ppm		2	84	Lt 2	Weis 84
2955	49	sed	Hg	152.00	ppm		2	84	Lt 1	Weis 84
2956	49	sed	Hg	346.00	ppm		2	84	Lt 2	Weis 84
2957	49	sed	Hg	122.00	ppm		2	84	Lt 1	Weis 84
2958	49	sed	Hg	44.00	ppm		2	84	Lt 2	Weis 84
2959	49	sed	Hg	133.00	ppm		2	84	Lt 1	Weis 84
2960	49	sed	Hg	40.00	ppm		2	84	Lt 2	Weis 84
2961	49	sed	Hg	32.00	ppm		2	84	Lt 1	Weis 84
2962	49	sed	Hg	93.00	ppm		2	84	Lt 2	Weis 84
2963	49	sed	Hg	57.00	ppm		2	84	Lt 1	Weis 84
2964	49	sed	Hg	74.00	ppm		2	84	Lt 2	Weis 84
2965	49	sed	Hg	137.00	ppm		2	84	Lt 1	Weis 84
2966	49	sed	Hg	45.00	ppm		2	84	Lt 2	Weis 84
2967	49	sed	Hg	67.00	ppm		2	84	Lt 1	Weis 84
2968	49	sed	Hg	186.00	ppm		2	84	Lt 2	Weis 84
2969	49	sed	Hg	82.00	ppm		2	84	Lt 1	Weis 84
2970	49	sed	Hg	383.00	ppm		2	84	Lt 2	Weis 84
2971	49	sed	Hg	276.00	ppm		2	84	Lt 1	Weis 84
2972	49	sed	Hg	807.00	ppm		2	84	Lt 2	Weis 84
2973	49	sed	Hg	1142.00	ppm		2	84	Lt 1	Weis 84
2974	49	sed	Hg	1392.00	ppm		2	84	Lt 2	Weis 84
2938	49	sed	Hg	570.00	ppm		4	80	dry avg.PONAR Grab	Aw 80

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2937	49	sed	Total Hg	192.50	ppm		2	84	PONAR Grab	Bart 84
2977	50	sed	Hg	170.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2975	50	sed	Total Hg	576.00	ppm		2	84	PONAR Grab	Bart 84
2976	50	sed	Methyl Hg	.00	ppm		2	84	PONAR Grab	Bart 84
2980	51	sed	Hg	220.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2978	51	sed	Total Hg	452.00	ppm		2	84	PONAR Grab	Bart 84
2979	51	sed	Methyl Hg	.01	ppm		2	84	PONAR Grab	Bart 84
2981	52	sed	Hg	3.80	ppm		4	80	dry avg.PONAR Grab	Aw 80
2982	53	sed	Hg	96.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2983	54	sed	Hg	140.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2984	55	sed	Hg	171.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3175	56	sed	Hg	65.00	ppm		3	82	0-1inchinorganicHg	Wood 82
3176	56	sed	Hg	700.00	ppm		3	82	3-18inchinorganicH	Wood 82
3177	56	sed	Hg	1700.00	ppm		3	82	18-30inchinorganic	Wood 82
3178	56	sed	Hg	300.00	ppm		3	82	18-30inchorganic	Wood 82
3179	56	sed	Hg	9.20	ppm		3	82	3-18inchinorganic	Wood 82
3180	56	sed	Hg	3.30	ppm		3	82	3-18inchorganic	Wood 82
3181	56	sed	Hg	6.30	ppm		3	82	18-36inchinorganic	Wood 82
3182	56	sed	Hg	5.40	ppm		3	82	18-36inchorganic	Wood 82
2985	56	sed	Hg	38.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2986	57	sed	Hg	370.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2987	58	sed	Hg	140.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2988	59	sed	Hg	230.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2990	60	sed	Hg	167.00	ppm		2	75	ng	JMA 77
3184	60	sed	Hg	.00	ppm		3	82	lotideinorganic	Wood 82
5366	60	sw	Hg	1.00	ppb		3	82	Ht inorg unf	Wood 82
5367	60	sw	Hg	1.00	ppb		3	82	Lt inorg unf	Wood 82
2989	60	sed	Hg	120.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2992	60	sed	Hg	577.00	ppm		8	76	ng	JMA 77
2991	60	sed	Hg	35.00	ppm		11	75	ng	JMA 77
7911	61	sed	Cd	11.00	ppm		12	80	0-4 in	HMDC 80
7912	61	sed	Cd	2.00	ppm		12	80	4-8 in	HMDC 80
7909	61	sed	Cr	464.00	ppm		12	80	0-4 in	HMDC 80
7910	61	sed	Cr	23.00	ppm		12	80	4-8 in	HMDC 80
7904	61	sed	Cu	342.00	ppm		12	80	0-4 in	HMDC 80
7905	61	sed	Cu	19.00	ppm		12	80	4-8 in	HMDC 80
3186	61	sed	Hg	4.85	ppm		2	83	PONAR grab	NJDEP 85
2993	61	sed	Hg	48.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3187	61	fish	Hg	.32	ppm		10	81	Killi W	NJDEP 85
3188	61	fish	Hg	1.30	ppm		10	81	Killi W	NJDEP 85
3189	61	fish	Hg	1.54	ppm		10	81	Killi W	NJDEP 85
3190	61	fish	Hg	3.08	ppm		10	81	Killi W	NJDEP 85

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3191	61	fish	Hg	1.50	ppm		11	82	Killiliv	Weis 84
3192	61	fish	Hg	.30	ppm		11	82	Killimus	Weis 84
7900	61	sed	Hg	1730.00	ppm		12	80	0-4 in	HMDC 80
7901	61	sed	Hg	68.00	ppb		12	80	4-8 in	HMDC 80
7906	61	sed	Ni	21.00	ppm		12	80	0-4 in	HMDC 80
7907	61	sed	Ni	25.00	ppm		12	80	4-8 in	HMDC 80
7908	61	sed	Pb	224.00	ppm		12	80	0-4 in	HMDC 80
7902	61	sed	Zn	1687.00	ppm		12	80	0-4 in	HMDC 80
7903	61	sed	Zn	127.00	ppm		12	80	4-8 in	HMDC 80
2994	62	sed	Hg	140.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2995	63	sed	Hg	520.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2996	64	sed	Hg	130.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
7108	65	sw	Ag	1.00	ppb		10	81	unf	NJDEP 85
5167	65	sed	As	14.00	ppm		10	81	PONAR Grab	NJDEP 85
5174	65	sw	As	2.10	ppb		10	81	unf	NJDEP 85
7109	65	sw	Be	1.00	ppb		10	81	unf	NJDEP 85
8400	65	sed	Be	.01	ppm		10	81	PONAR Grab	NJDEP 85
5168	65	sed	Cd	35.50	ppm		10	81	PONAR Grab	NJDEP 85
5175	65	sw	Cd	1.00	ppb		10	81	unf	NJDEP 85
5170	65	sed	Cr	700.00	ppm		10	81	PONAR Grab	NJDEP 85
5177	65	sw	Cr	13.00	ppb		10	81	unf	NJDEP 85
5169	65	sed	Cu	824.00	ppm		10	81	PONAR Grab	NJDEP 85
5176	65	sw	Cu	42.00	ppb		10	81	unf	NJDEP 85
2997	65	sed	Hg	310.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3193	65	ch sed	Hg	349.26	ppm		10	81	west PONAR Grab	NJDEP 85
3194	65	ch sed	Hg	151.89	ppm		10	81	east PONAR Grab	NJDEP 85
5171	65	sed	Ni	52.00	ppm		10	81	PONAR Grab	NJDEP 85
5178	65	sw	Ni	12.00	ppb		10	81	unf	NJDEP 85
5172	65	sed	Pb	440.00	ppm		10	81	PONAR Grab	NJDEP 85
5179	65	sw	Pb	46.60	ppb		10	81	unf	NJDEP 85
5173	65	sed	Zn	335.00	ppm		10	81	PONAR Grab	NJDEP 85
5180	65	sw	Zn	230.00	ppb		10	81	unf	NJDEP 85
5292	65	sw	tce	3.80	ppb		10	81	unf	NJDEP 85
3197	65	ch sed	MeHg	.00	ppm	0.2	10	81	east PONAR Grab	NJDEP 85
3198	65	ch sed	MeHg	.20	ppm	0.2	10	81	center PONAR grab	NJDEP 85
5291	65	sw	tcle	2.30	ppb		10	81	unf	NJDEP 85
5293	65	sw	ttce	14.30	ppb		10	81	unf	NJDEP 85
5289	65	sw	CHCl3	2.30	ppb		10	81	unf	NJDEP 85
3196	65	ch sed	Me Hg	.00	ppm		10	81	west Ponar Grab	NJDEP 85
5288	65	sw	MeChl	11.70	ppb		10	81	unf	NJDEP 85
5290	65	sw	3CL3Fle	17.50	ppb		10	81	unf	NJDEP 85
2998	66	sed	Hg	200.00	ppm		4	80	dry avg.PONAR Grab	Aw 80

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2999	67	sed	Hg	260.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
7110	68	sw	Ag	1.00	ppb		10	81	unf	NJDEP 85
5181	68	sed	As	9.00	ppm		10	81	PONAR Grab	NJDEP 85
5188	68	sw	As	1.60	ppb		10	81	unf	NJDEP 85
7111	68	sw	Be	1.00	ppb		10	81	unf	NJDEP 85
8401	68	sed	Be	.00	ppm		10	81	PONAR Grab	NJDEP 85
5182	68	sed	Cd	23.50	ppm		10	81	PONAR Grab	NJDEP 85
5189	68	sw	Cd	1.00	ppb		10	81	unf	NJDEP 85
5184	68	sed	Cr	205.00	ppm		10	81	PONAR Grab	NJDEP 85
5191	68	sw	Cr	5.00	ppb		10	81	unf	NJDEP 85
5183	68	sed	Cu	213.00	ppm		10	81	PONAR Grab	NJDEP 85
5190	68	sw	Cu	11.00	ppb		10	81	unf	NJDEP 85
3004	68	sed	Hg	490.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3199	68	ch sed	Hg	42.49	ppm		10	81	right PONAR grab	NJDEP 85
3200	68	ch sed	Hg	40.19	ppm		10	81	left PONAR grab	NJDEP 85
3201	68	ch sed	Hg	60.00	ppm		10	81	center PONAR grab	NJDEP 85
5185	68	sed	Ni	50.00	ppm		10	81	PONAR Grab	NJDEP 85
5192	68	sw	Ni	16.00	ppb		10	81	unf	NJDEP 85
5186	68	sed	Pb	200.00	ppm		10	81	PONAR Grab	NJDEP 85
5193	68	sw	Pb	23.30	ppb		10	81	unf	NJDEP 85
5187	68	sed	Zn	8010.00	ppm		10	81	PONAR Grab	NJDEP 85
5194	68	sw	Zn	275.00	ppb		10	81	unf	NJDEP 85
5301	68	sw	tce	1.50	ppb		10	81	unf	NJDEP 85
5300	68	sw	tcle	1.00	ppb		10	81	unf	NJDEP 85
5302	68	sw	ttce	1.10	ppb		10	81	unf	NJDEP 85
5298	68	sw	CHCl3	.60	ppb		10	81	unf	NJDEP 85
3202	68	ch sed	Me Hg	.00	ppm	.2	10	81	west PONAR Grab	NJDEP 85
3203	68	ch sed	Me Hg	.00	ppm	.2	10	81	east PONAR Grab	NJDEP 85
3204	68	ch sed	Me Hg	.00	ppm	.2	10	81	center PONAR Grab	NJDEP 85
5297	68	sw	MeChl	19.60	ppb		10	81	unf	NJDEP 85
5299	68	sw	3CL3Fle	1.20	ppb		10	81	unf	NJDEP 85
3005	69	sed	Hg	160.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3205	70	sed	Hg	38.00	ppm		3	82	0-1inchinorganic	Wood 82
3206	70	sed	Hg	17.00	ppm		3	82	1-30inchinorganic	Wood 82
3207	70	sed	Hg	5.60	ppm		3	82	30-42inchinorganic	Wood 82
3208	70	sed	Hg	5.40	ppm		3	82	30-42inchorganic	Wood 82
3006	70	sed	Hg	240.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3007	71	sed	Hg	460.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3008	72	sed	Hg	79.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3009	73	sed	Hg	120.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3010	74	sed	Hg	260.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3011	75	sed	Hg	240.00	ppm		4	80	dry avg.PONAR Grab	Aw 80

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
7112	76	sw	Ag	1.00	ppb		10	81	unf	NJDEP 85
5195	76	sed	As	8.00	ppm		10	81	PONAR Grab	NJDEP 85
5202	76	sw	As	1.50	ppb		10	81	unf	NJDEP 85
7113	76	sw	Be	1.00	ppb		10	81	unf	NJDEP 85
8402	76	sed	Be	.00	ppm		10	81	PONAR Grab	NJDEP 85
5196	76	sed	Cd	17.50	ppm		10	81	PONAR Grab	NJDEP 85
5203	76	sw	Cd	1.00	ppb		10	81	unf	NJDEP 85
5198	76	sed	Cr	190.00	ppm		10	81	PONAR Grab	NJDEP 85
5205	76	sw	Cr	16.00	ppb		10	81	unf	NJDEP 85
5197	76	sed	Cu	162.00	ppm		10	81	PONAR Grab	NJDEP 85
5204	76	sw	Cu	11.00	ppb		10	81	unf	NJDEP 85
3209	76	sed	Hg	30.00	ppm		3	82	0-1inchinorganic	Wood 82
3210	76	sed	Hg	6.60	ppm		3	82	0-1inchorganic	Wood 82
3211	76	sed	Hg	110.00	ppm		3	82	1-34inchinorganic	Wood 82
3212	76	sed	Hg	10.00	ppm		3	82	1-34inchorganic	Wood 82
3213	76	sed	Hg	2.60	ppm		3	82	34-42inchinorganic	Wood 82
3214	76	sed	Hg	.30	ppm		3	82	34-42inchorganic	Wood 82
3012	76	sed	Hg	3.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3215	76	ch sed	Hg	106.46	ppm		10	81	west PONAR Grab	NJDEP 85
3216	76	ch sed	Hg	72.33	ppm		10	81	east PONAR Grab	NJDEP 85
3217	76	ch sed	Hg	33.83	ppm		10	81	center PONAR Grab	NJDEP 85
5199	76	sed	Ni	40.00	ppm		10	81	PONAR Grab	NJDEP 85
5206	76	sw	Ni	21.00	ppb		10	81	unf	NJDEP 85
5200	76	sed	Pb	145.00	ppm		10	81	PONAR Grab	NJDEP 85
5207	76	sw	Pb	28.00	ppb		10	81	unf	NJDEP 85
5201	76	sed	Zn	128.00	ppm		10	81	PONAR Grab	NJDEP 85
5208	76	sw	Zn	265.00	ppb		10	81	unf	NJDEP 85
5310	76	sw	tce	3.30	ppb		10	81	unf	NJDEP 85
5309	76	sw	tcle	1.80	ppb		10	81	unf	NJDEP 85
5295	76	sw	ttce	.10	ppb		10	81	unf	NJDEP 85
5307	76	sw	CHCl3	1.60	ppb		10	81	unf	NJDEP 85
3218	76	ch sed	Me Hg	.20	ppm		10	81	west PONAR Grab	NJDEP 85
3219	76	ch sed	Me Hg	.20	ppm		10	81	east PONAR Grab	NJDEP 85
3220	76	ch sed	Me Hg	.20	ppm		10	81	center PONAR Grab	NJDEP 85
5306	76	sw	MeChl	13.80	ppb		10	81	unf	NJDEP 85
5308	76	sw	3CL3Fle	11.60	ppb		10	81	unf	NJDEP 85
3013	77	sed	Hg	350.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3014	78	sed	Hg	46.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3015	79	sed	Hg	44.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3016	80	sed	Hg	130.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3017	81	sed	Hg	100.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3018	82	sed	Hg	320.00	ppm		4	80	dry avg.PONAR Grab	Aw 80

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3019	83	sed	Hg	220.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3021	83	sed	Hg	4480.00	ppm		8	76	ng	JMA 77
3020	83	sed	Hg	.30	ppm		11	75	ng	JMA 77
3022	84	sed	Hg	41.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
4395	84	soil	T Ph	3.70	ppm		3	80	inch	Aw 80
7101	85	sw	Ag	1.00	ppb		10	81	unf	NJDEP 85
5209	85	sed	As	13.80	ppm		10	81	PONAR Grab	NJDEP 85
5216	85	sw	As	2.70	ppb		10	81	unf	NJDEP 85
7102	85	sw	Be	1.00	ppb		10	81	unf	NJDEP 85
8403	85	sed	Be	.01	ppm		10	81	PONAR Grab	NJDEP 85
5210	85	sed	Cd	882.00	ppm		10	81	PONAR Grab	NJDEP 85
5217	85	sw	Cd	1.00	ppb		10	81	unf	NJDEP 85
5212	85	sed	Cr	435.00	ppm		10	81	PONAR Grab	NJDEP 85
5219	85	sw	Cr	19.00	ppb		10	81	unf	NJDEP 85
5211	85	sed	Cu	444.00	ppm		10	81	PONAR Grab	NJDEP 85
5218	85	sw	Cu	17.00	ppb		10	81	unf	NJDEP 85
3023	85	sed	Hg	150.00	ppm		4	80	top corePONAR Grab	Aw 80
3024	85	sed	Hg	9.40	ppm		4	80	bottom core PONAR	Aw 80
3221	85	ch sed	Hg	4.05	ppm		10	81	west PONAR Grab	NJDEP 85
3222	85	ch sed	Hg	116.07	ppm		10	81	east PONAR Grab	NJDEP 85
3223	85	ch sed	Hg	118.47	ppm		10	81	center PONAR Grab	NJDEP 85
5213	85	sed	Ni	28.00	ppm		10	81	PONAR Grab	NJDEP 85
5220	85	sw	Ni	18.00	ppb		10	81	unf	NJDEP 85
5214	85	sed	Pb	305.00	ppm		10	81	PONAR Grab	NJDEP 85
5221	85	sw	Pb	65.30	ppb		10	81	unf	NJDEP 85
5215	85	sed	Zn	201.00	ppm		10	81	PONAR Grab	NJDEP 85
5222	85	sw	Zn	215.00	ppb		10	81	unf	NJDEP 85
5318	85	sw	tce	.70	ppb		10	81	unf	NJDEP 85
5317	85	sw	tcle	.80	ppb		10	81	unf	NJDEP 85
5319	85	sw	ttce	.80	ppb		10	81	unf	NJDEP 85
5315	85	sw	CHCl3	.50	ppb		10	81	unf	NJDEP 85
3224	85	ch sed	Me Hg	.20	ppm		10	81	west PONAR Grab	NJDEP 85
3225	85	ch sed	Me Hg	.20	ppm		10	81	east PONAR Grab	NJDEP 85
3226	85	ch sed	Me Hg	.20	ppm		10	81	center PONAR Grab	NJDEP 85
5314	85	sw	MeChl	13.60	ppb		10	81	unf	NJDEP 85
5316	85	sw	3CL3Fle	1.40	ppb		10	81	unf	NJDEP 85
3025	86	sed	Hg	9.10	ppm		4	80	T.core PONAR Grab	Aw 80
3026	86	sed	Hg	1.50	ppm		4	80	center core PONAR	Aw 80
3027	87	sed	Hg	280.00	ppm		4	80	T.core PONAR Grab	Aw 80
3028	87	sed	Hg	280.00	ppm		4	80	center core PONAR	Aw 80
3029	87	sed	Hg	65.00	ppm		4	80	B.core PONAR Grab	Aw 80
3227	88	sed	Hg	45.00	ppm		3	82	0 1inchinorganic	Wood 82

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3228	88	sed	Hg	110.00	ppm		3	82	1-26inchinorganic	Wood 82
3229	88	sed	Hg	10.00	ppm		3	82	1-26inchorganic	Wood 82
3230	88	sed	Hg	2.30	ppm		3	82	26-48inchinorganic	Wood 82
3231	88	sed	Hg	2.30	ppm		3	82	26-48inchorganic	Wood 82
3030	88	sed	Hg	30.00	ppm		4	80	T.core PONAR Grab	Aw 80
3031	88	sed	Hg	3.70	ppm		4	80	center core PONAR	Aw 80
3032	89	sed	Hg	17.00	ppm		4	80	T.core PONAR Grab	Aw 80
3033	89	sed	Hg	1.70	ppm		4	80	bottom core PONAR	Aw 80
7103	90	sw	Ag	1.00	ppb		10	81	unf	NJDEP 85
5223	90	sed	As	12.80	ppm		10	81	PONAR Grab	NJDEP 85
5230	90	sw	As	3.00	ppb		10	81	unf	NJDEP 85
7104	90	sw	Be	1.00	ppb		10	81	unf	NJDEP 85
8404	90	sed	Be	.00	ppm		10	81	PONAR Grab	NJDEP 85
5224	90	sed	Cd	21.50	ppm		10	81	PONAR Grab	NJDEP 85
5231	90	sw	Cd	1.00	ppb		10	81	unf	NJDEP 85
5226	90	sed	Cr	345.00	ppm		10	81	PONAR Grab	NJDEP 85
5233	90	sw	Cr	10.00	ppb		10	81	unf	NJDEP 85
5225	90	sed	Cu	441.00	ppm		10	81	PONAR Grab	NJDEP 85
5232	90	sw	Cu	7.00	ppb		10	81	unf	NJDEP 85
3034	90	sed	Hg	56.00	ppm		4	80	top corePONAR Grab	Aw 80
3035	90	sed	Hg	1.90	ppm		4	80	center core PONAR	Aw 80
3036	90	sed	Hg	.46	ppm		4	80	bottom core PONAR	Aw 80
3232	90	ch sed	Hg	44.37	ppm		10	81	WEST PONAR Grab	NJDEP 85
3233	90	ch sed	Hg	3.55	ppm		10	81	east PONAR Grab	NJDEP 85
3234	90	ch sed	Hg	288.89	ppm		10	81	center PONAR Grab	NJDEP 85
5227	90	sed	Ni	46.00	ppm		10	81	PONAR Grab	NJDEP 85
5234	90	sw	Ni	16.00	ppb		10	81	unf	NJDEP 85
5228	90	sed	Pb	300.00	ppm		10	81	PONAR Grab	NJDEP 85
5235	90	sw	Pb	42.00	ppb		10	81	unf	NJDEP 85
5229	90	sed	Zn	122.00	ppm		10	81	PONAR Grab	NJDEP 85
5236	90	sw	Zn	170.00	ppb		10	81	unf	NJDEP 85
5327	90	sw	tce	1.40	ppb		10	81	unf	NJDEP 85
5326	90	sw	tcle	1.20	ppb		10	81	unf	NJDEP 85
5328	90	sw	ttce	3.50	ppb		10	81	unf	NJDEP 85
5324	90	sw	CHCl3	1.20	ppb		10	81	unf	NJDEP 85
3235	90	ch sed	Me Hg	.00	ppm	.2	10	81	west PONAR Grab	NJDEP 85
3236	90	ch sed	Me Hg	.00	ppm	.2	10	81	east PONAR Grab	NJDEP 85
3237	90	ch sed	Me Hg	.00	ppm	.2	10	81	center PONAR Grab	NJDEP 85
5323	90	sw	MeChl	15.50	ppb		10	81	unf	NJDEP 85
5325	90	sw	3Cl3Fle	4.90	ppb		10	81	unf	NJDEP 85
3037	91	sed	Hg	52.00	ppm		4	80	T.core PONAR Grab	Aw 80
3038	91	sed	Hg	2.20	ppm		4	80	center core PONAR	Aw 80

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3039	92	sed	Hg	2.50	ppm		4	80	dry avg.PONAR Grab	Aw 80
3040	93	sed	Hg	14.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3041	94	sed	Hg	35.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3042	95	sed	Hg	3.50	ppm		4	80	dry avg.PONAR Grab	Aw 80
7105	96	sw	Ag	.00	ppb	100	10	81	unf	NJDEP 85
5237	96	sed	As	13.20	ppm		10	81	PONAR Grab	NJDEP 85
5244	96	sw	As	2.70	ppb		10	81	unf	NJDEP 85
7106	96	sw	Be	.00	ppb	100	10	81	unf	NJDEP 85
8405	96	sed	Be	.01	ppm		10	81	PONAR Grab	NJDEP 85
5238	96	sed	Cd	23.50	ppm		10	81	PONAR Grab	NJDEP 85
5245	96	sw	Cd	1.30	ppb		10	81	unf	NJDEP 85
5240	96	sed	Cr	374.00	ppm		10	81	PONAR Grab	NJDEP 85
5247	96	sw	Cr	14.20	ppb		10	81	unf	NJDEP 85
5239	96	sed	Cu	388.00	ppm		10	81		NJDEP 85
5246	96	sw	Cu	7.50	ppb		10	81	unf	NJDEP 85
3043	96	sed	Hg	35.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3238	96	ch sed	Hg	2.90	ppm		10	81	west PONAR Grab	NJDEP 85
3239	96	ch sed	Hg	108.33	ppm		10	81	center PONAR Grab	NJDEP 85
3240	96	ch sed	Hg	121.28	ppm		10	81	east PONAR Grab	NJDEP 85
5241	96	sed	Ni	47.00	ppm		10	81	PONAR Grab	NJDEP 85
5248	96	sw	Ni	19.00	ppb		10	81	unf	NJDEP 85
5242	96	sed	Pb	185.00	ppm		10	81	PONAR Grab	NJDEP 85
5249	96	sw	Pb	23.30	ppb		10	81	unf	NJDEP 85
5243	96	sed	Zn	148.00	ppm		10	81	PONAR Grab	NJDEP 85
5250	96	sw	Zn	110.00	ppb		10	81	unf	NJDEP 85
5337	96	sw	tce	2.20	ppb		10	81	unf	NJDEP 85
5336	96	sw	tcle	1.60	ppb		10	81	unf	NJDEP 85
5338	96	sw	ttce	1.80	ppb		10	81	unf	NJDEP 85
5334	96	sw	CHCl3	2.40	ppb		10	81	unf	NJDEP 85
5335	96	sw	DiCle	25.90	ppb		10	81	unf	NJDEP 85
3241	96	ch sed	Me Hg	.00	ppm	.2	10	81	west PONAR Grab	NJDEP 85
3242	96	ch sed	Me Hg	.00	ppm	.2	10	81	center PONAR Grab	NJDEP 85
3243	96	ch sed	Me Hg	.00	ppm	.2	10	81	east PONAR Grab	NJDEP 85
5332	96	sw	MeChl	38.30	ppb		10	81	unf	NJDEP 85
5333	96	sw	t-dce	3.40	ppb		10	81	unf	NJDEP 85
5339	96	sw	chlben	.30	ppb		10	81	unf	NJDEP 85
3047	99	air	Hg	9.90	ug/m3		7	78	airHglevl	Stop 78
3048	99	air	Hg	.35	ug/.5g		7	78	Hginsampl	Stop 78
4452	100	soil	As	20.00	ppm		5	77	0-2 inch	JMA 77
4453	100	soil	As	16.00	ppm		5	77	2-4 inch	JMA 77
4454	100	soil	As	4.00	ppm		5	77	4-6 inch	JMA 77
4455	100	soil	As	7.00	ppm		5	77	6-8 inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4456	100	soil	As	4.00	ppm		5	77	8-10 inch	JMA 77
5021	100	gw	As	.00	ppm	.01	6	77	unf Lt	JMA 77
5022	100	gw	As	.01	ppm	.01	6	77	unf Ht	JMA 77
5030	100	gw	As	.00	ppm	.01	6	77	1-1.5'T	JMA 77
5031	100	gw	As	.01	ppm	.01	6	77	1' B	JMA 77
5041	100	gw	As	.00	ppm	.02	7	77	filter Ht	JMA 77
5042	100	gw	As	.00	ppm	.02	7	77	filter Lt	JMA 77
4730	100	soil	Cd	1.00	ppm	.30	5	77	0-2 inch	JMA 77
4731	100	soil	Cd	1.00	ppm	.30	5	77	2-4 inch	JMA 77
4732	100	soil	Cd	2.00	ppm	.30	5	77	4-6 inch	JMA 77
4733	100	soil	Cd	1.00	ppm	.30	5	77	6-8 inch	JMA 77
4734	100	soil	Cd	.30	ppm	.30	5	77	8-10 inch	JMA 77
5029	100	gw	Cd	.00	ppm	.05	6	77	unf Lt	JMA 77
5037	100	gw	Cd	.00	ppm	.05	6	77	1-1.5'T	JMA 77
5038	100	gw	Cd	.00	ppm	.05	6	77	1' B	JMA 77
5039	100	gw	Cd	.00	ppm	.05	6	77	unfHt	JMA 77
7047	100	gw	Cd	.00	ppm	.0003	6	77	fil Ht	JMA 77
7048	100	gw	Cd	.00	ppm	.0003	6	77	fil Lt	JMA 77
3049	100	gw	Hg	2.10	ppb		6	77	unf T	JMA 77
5372	100	gw	Hg	1.94	ppb	.3	6	77	unf B	JMA 77
5379	100	gw	Hg	1.47	ppb	.1	6	77	unf Lt	JMA 77
5380	100	gw	Hg	.33	ppb	.1	6	77	unf Ht	JMA 77
3050	100	gw	Hg	.00	ppb	.3	7	77	fil Ht	JMA 77
3051	100	gw	Hg	.00	ppb	.3	7	77	fil Lt	JMA 77
3052	100	air	Hg	.00	ug/m3		7	78	airHglevl	Stop 78
4462	100	soil	Ni	11.00	ppm		5	77	0-2 inch	JMA 77
4463	100	soil	Ni	12.00	ppm		5	77	2-4 inch	JMA 77
4464	100	soil	Ni	16.00	ppm		5	77	4-6 inch	JMA 77
4465	100	soil	Ni	11.00	ppm		5	77	6-8 inch	JMA 77
4466	100	soil	Ni	17.00	ppm		5	77	8-10 inch	JMA 77
5025	100	gw	Ni	.00	ppm	.20	6	77	unf Lt	JMA 77
5026	100	gw	Ni	.00	ppm	.20	6	77	unf Ht	JMA 77
5033	100	gw	Ni	.00	ppm	.20	6	77	1-1.5'T	JMA 77
5034	100	gw	Ni	.00	ppm	.20	6	77	1' B	JMA 77
7003	100	gw	Ni	.00	ppm	.10	7	77	fil Ht	JMA 77
7013	100	gw	Ni	.00	ppm	.10	7	77	fil Lt	JMA 77
4457	100	soil	Pb	190.00	ppm		5	77	0-2 inch	JMA 77
4458	100	soil	Pb	170.00	ppm		5	77	2-4 inch	JMA 77
4459	100	soil	Pb	81.00	ppm		5	77	4-6 inch	JMA 77
4460	100	soil	Pb	85.00	ppm		5	77	6-8 inch	JMA 77
4461	100	soil	Pb	12.00	ppm		5	77	8-10 inch	JMA 77
5023	100	gw	Pb	.00	ppm	.50	6	77	unf Lt	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
5024	100	gw	Pb	.00	ppm	.50	6	77	unf Ht	JMA 77
5032	100	gw	Pb	.00	ppm	.05	6	77	1-1.5'T	JMA 77
5040	100	gw	Pb	.00	ppm	.05	6	77	1'B	JMA 77
4467	100	soil	Zn	170.00	ppm		5	77	0 2 inch	JMA 77
4468	100	soil	Zn	240.00	ppm		5	77	2-4 inch	JMA 77
4469	100	soil	Zn	120.00	ppm		5	77	4-6 inch	JMA 77
4470	100	soil	Zn	100.00	ppm		5	77	6-8 inch	JMA 77
4471	100	soil	Zn	47.00	ppm		5	77	8-10 inch	JMA 77
5027	100	gw	Zn	.19	ppm		6	77	unf Lt	JMA 77
5028	100	gw	Zn	.18	ppm		6	77	unf Ht	JMA 77
5035	100	gw	Zn	.25	ppm		6	77	1-1.5'T	JMA 77
5036	100	gw	Zn	.38	ppm		6	77	1' B	JMA 77
7022	100	gw	Zn	.04	ppm		7	77	fil Ht	JMA 77
7034	100	gw	Zn	.13	ppm		7	77	fil Lt	JMA 77
3053	101	air	Hg	.00	ug/m3		7	78	airHglevl	Stop 78
3171	102	air	Hg	.20	ug/m3		8	78	24hrtest	EPA 78
3172	102	air	Hg	2.09	ug/m3		8	78	24hrtest	EPA 78
3173	102	air	Hg	2.21	ug/m3		8	78	24hrtest	EPA 78
4735	103	soil	As	29.00	ppm		6	77	0-6 inch	JMA 77
4736	103	soil	As	9.00	ppm		6	77	6-12 inch	JMA 77
4737	103	soil	As	9.00	ppm		6	77	12-18 inch	JMA 77
4738	103	soil	As	11.00	ppm		6	77	18-24 inch	JMA 77
4935	103	soil	Cd	3.30	ppm		6	77	0-6 inch	JMA 77
4936	103	soil	Cd	5.50	ppm		6	77	6-12 inch	JMA 77
4937	103	soil	Cd	8.70	ppm		6	77	12-18 inch	JMA 77
4938	103	soil	Cd	9.20	ppm		6	77	18-24 inch	JMA 77
3054	103	air	Hg	.00	ug/m3		7	78	airHglevl	Stop 78
4927	103	soil	Ni	130.00	ppm		6	77	0-6 inch	JMA 77
4928	103	soil	Ni	49.00	ppm		6	77	6-12 inch	JMA 77
4929	103	soil	Ni	78.00	ppm		6	77	12-18 inch	JMA 77
4930	103	soil	Ni	85.00	ppm		6	77	18-24 inch	JMA 77
4739	103	soil	Pb	844.00	ppm		6	77	0-6 inch	JMA 77
4740	103	soil	Pb	670.00	ppm		6	77	6-12 inch	JMA 77
4741	103	soil	Pb	2717.00	ppm		6	77	12-18 inch	JMA 77
4742	103	soil	Pb	964.00	ppm		6	77	18-24 inch	JMA 77
4931	103	soil	Zn	1053.00	ppm		6	77	0-6 inch	JMA 77
4932	103	soil	Zn	715.00	ppm		6	77	6-12 inch	JMA 77
4933	103	soil	Zn	965.00	ppm		6	77	12-18 inch	JMA 77
4934	103	soil	Zn	1204.00	ppm		6	77	18-24 inch	JMA 77
3055	104	air	Hg	.00	ug/m3		7	78	airHglevl	Stop 78
3056	105	air	Hg	.55	ug/.5g		7	78	Hginsampl	Stop 78
3057	105	air	Hg	20.00	ug/m3		7	78	airHglevl	Stop 78

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3061	106	air	Hg	1.00	ug/m3		7	78	airHglevl	Stop 78
3062	107	air	Hg	.10	ug/.5g		7	78	Hginsample	Stop 78
3063	107	air	Hg	.00	ug/m3		7	78	airHglevl	Stop 78
3064	107	air	Hg	4.30	ug/m3		7	78	airHglevl	Stop 78
3065	108	air	Hg	.00	ug/m3		7	78	airHglevl	Stop 78
3066	109	air	Hg	35.00	ug/m3		7	78	airHglevl	Stop 78
3067	110	air	Hg	.00	ug/m3		7	78	airHglevl	Stop 78
3068	111	air	Hg	.00	ug/m3		7	78	airHglevl	Stop 78
4396	112	soil	As	6.00	ppm		5	77	0-2 inch	JMA 77
4397	112	soil	As	5.00	ppm		5	77	2-4 inch	JMA 77
4398	112	soil	As	6.00	ppm		5	77	4-6 inch	JMA 77
4399	112	soil	As	2.00	ppm		5	77	6-8 inch	JMA 77
4400	112	soil	As	1.00	ppm		5	77	8-10 inch	JMA 77
4401	112	soil	As	2.00	ppm		5	77	10-12 inch	JMA 77
4939	112	GW	As	.00	ppm	.01	6	77	unf Lt	JMA 77
4940	112	GW	As	.00	ppm	.01	6	77	unf Ht	JMA 77
5051	112	gw	As	.00	ppm	.01	6	77	1-1.5'T	JMA 77
5052	112	gw	As	.00	ppm	.01	6	77	1' B	JMA 77
5061	112	gw	As	.00	ppm	.02	7	77	filter Ht	JMA 77
5062	112	gw	As	.00	ppm	.02	7	77	filter Lt	JMA 77
4490	112	soil	Cd	4.00	ppm	.30	5	77	0-2 inch	JMA 77
4491	112	soil	Cd	5.00	ppm		5	77	2-4 inch	JMA 77
4492	112	soil	Cd	5.00	ppm		5	77	4-6 inch	JMA 77
4493	112	soil	Cd	.30	ppm		5	77	6-8 inch	JMA 77
4494	112	soil	Cd	.00	ppm		5	77	8-10 inch	JMA 77
4495	112	soil	Cd	.00	ppm		5	77	10-12 inch	JMA 77
5049	112	gw	Cd	.00	ppm	.05	6	77	unfHt	JMA 77
5050	112	gw	Cd	.00	ppm	.05	6	77	unf Lt	JMA 77
5059	112	gw	Cd	.00	ppm	.05	6	77	1-1.5'T	JMA 77
5060	112	gw	Cd	.00	ppm	.05	6	77	1' B	JMA 77
7049	112	gw	Cd	.00	ppm	.0003	6	77	fil Ht	JMA 77
7050	112	gw	Cd	.00	ppm	.0003	6	77	fil Lt	JMA 77
3069	112	gw	Hg	.01	ppb		6	77	unf. T	JMA 77
3071	112	gw	Hg	.01	ppb		6	77	unf. B	JMA 77
5391	112	gw	Hg	.00	ppb	.1	6	77	unf Lt	JMA 77
5392	112	gw	Hg	.00	ppb	.1	6	77	unf Ht	JMA 77
3070	112	gw	Hg	.01	ppb	.3	7	77	fil Ht	JMA 77
5374	112	gw	Hg	.00	ppb	.3	7	77	fil Lt	JMA 77
4478	112	soil	Ni	110.00	ppm		5	77	0-2 inch	JMA 77
4479	112	soil	Ni	94.00	ppm		5	77	2-4 inch	JMA 77
4480	112	soil	Ni	39.00	ppm		5	77	4-6 inch	JMA 77
4481	112	soil	Ni	12.00	ppm		5	77	6-8 inch	JMA 77

829910276

MAP2DATA.. 08:48:25 27 SEP 1985

STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4482	112	soil	Ni	17.00 ppm		5	77	8-10 inch	JMA 77
4483	112	soil	Ni	14.00 ppm		5	77	10-12 inch	JMA 77
5045	112	gw	Ni	.00 ppm	20	6	77	unf Lt	JMA 77
5046	112	gw	Ni	.00 ppm	.20	6	77	unf Ht	JMA 77
5055	112	gw	Ni	.00 ppm	.20	6	77	1-1.5'T	JMA 77
5056	112	gw	Ni	.00 ppm	.20	6	77	1' B	JMA 77
7004	112	gw	Ni	.00 ppm	.10	7	77	fil Ht	JMA 77
7014	112	gw	Ni	.00 ppm	.10	7	77	fil Lt	JMA 77
4472	112	soil	Pb	75.00 ppm		5	77	0-2 inch	JMA 77
4473	112	soil	Pb	100.00 ppm		5	77	2-4 inch	JMA 77
4474	112	soil	Pb	50.00 ppm		5	77	4-6 inch	JMA 77
4475	112	soil	Pb	26.00 ppm		5	77	6-8 inch	JMA 77
4476	112	soil	Pb	9.00 ppm		5	77	8-10 inch	JMA 77
4477	112	soil	Pb	11.00 ppm		5	77	10-12 inch	JMA 77
5043	112	gw	Pb	.00 ppm	.50	6	77	unf Lt	JMA 77
5044	112	gw	Pb	.00 ppm	.50	6	77	unf Ht	JMA 77
5053	112	gw	Pb	.00 ppm	.05	6	77	1-1.5'T	JMA 77
5054	112	gw	Pb	.00 ppm	.05	6	77	1' B	JMA 77
5251	112	gw	Pb	.00 ppm	.01	7	77	filter Ht	JMA 77
5252	112	gw	Pb	.00 ppm	.01	7	77	filter Lt	JMA 77
4484	112	soil	Zn	6000.00 ppm		5	77	0-2 inch	JMA 77
4485	112	soil	Zn	11500.00 ppm		5	77	2-4 inch	JMA 77
4486	112	soil	Zn	2200.00 ppm		5	77	4-6 inch	JMA 77
4487	112	soil	Zn	56.00 ppm		5	77	6-8 inch	JMA 77
4488	112	soil	Zn	44.00 ppm		5	77	8-10 inch	JMA 77
4489	112	soil	Zn	44.00 ppm		5	77	10-12 inch	JMA 77
5047	112	gw	Zn	.08 ppm		6	77	unf Lt	JMA 77
5048	112	gw	Zn	.08 ppm		6	77	unf Ht	JMA 77
5057	112	gw	Zn	.10 ppm		6	77	1-1.5'T	JMA 77
5058	112	gw	Zn	.17 ppm		6	77	1' B	JMA 77
7023	112	gw	Zn	.16 ppm		7	77	fil Ht	JMA 77
7035	112	gw	Zn	.15 ppm		7	77	fil Lt	JMA 77
4402	113	soil	As	3.00 ppm		5	77	0-2 inch	JMA 77
4403	113	soil	As	3.00 ppm		5	77	2-4 inch	JMA 77
4404	113	soil	As	2.00 ppm		5	77	4-6 inch	JMA 77
4405	113	soil	As	11.00 ppm		5	77	6-8 inch	JMA 77
4406	113	soil	As	8.00 ppm		5	77	8-10 inch	JMA 77
4407	113	soil	As	8.00 ppm		5	77	16-18 inch	JMA 77
4941	113	GW	As	.00 ppm	.01	6	77	unf Lt	JMA 77
4942	113	GW	As	.00 ppm	.01	6	77	unf Ht	JMA 77
5070	113	gw	As	.00 ppm	.01	6	77	1-1.5'T	JMA 77
5071	113	gw	As	.01 ppm	.01	6	77	1' B	JMA 77

829910277

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
5081	113	gw	As	.00	ppm	.02	7	77	filter Ht	JMA 77
5082	113	gw	As	.00	ppm	.02	7	77	filter Lt	JMA 77
4514	113	soil	Cd	2.00	ppm		5	77	0-2 inch	JMA 77
4515	113	soil	Cd	5.00	ppm		5	77	2-4 inch	JMA 77
4516	113	soil	Cd	4.00	ppm		5	77	4-6 inch	JMA 77
4517	113	soil	Cd	26.00	ppm		5	77	6-8 inch	JMA 77
4518	113	soil	Cd	36.00	ppm		5	77	8-10 inch	JMA 77
4519	113	soil	Cd	13.00	ppm		5	77	16-18 inch	JMA 77
5069	113	gw	Cd	.00	ppm	.05	6	77	unf Lt	JMA 77
5078	113	gw	Cd	.00	ppm	.05	6	77	1-1.5'T	JMA 77
5079	113	gw	Cd	.00	ppm	.05	6	77	1' B	JMA 77
5080	113	gw	Cd	.00	ppm	.05	6	77	unf Ht	JMA 77
7051	113	gw	Cd	.00	ppm	.0003	6	77	fil Ht	JMA 77
7052	113	gw	Cd	.00	ppm	.0003	6	77	fil Lt	JMA 77
3072	113	gw	Hg	.03	ppb		6	77	unf. T	JMA 77
3074	113	gw	Hg	.84	ppb		6	77	unf. B	JMA 77
5375	113	gw	Hg	.01	ppb	.3	6	77	fil Lt	JMA 77
5389	113	gw	Hg	.01	ppb	.1	6	77	unf Lt	JMA 77
5390	113	gw	Hg	.01	ppb	.1	6	77	unf Ht	JMA 77
3073	113	gw	Hg	.00	ppb	30	7	77	fil Ht	JMA 77
4502	113	soil	Ni	29.00	ppm		5	77	0-2 inch	JMA 77
4503	113	soil	Ni	36.00	ppm		5	77	2-4 inch	JMA 77
4504	113	soil	Ni	54.00	ppm		5	77	4-6 inch	JMA 77
4505	113	soil	Ni	22.00	ppm		5	77	6-8 inch	JMA 77
4506	113	soil	Ni	.32	ppm		5	77	8-10 inch	JMA 77
4507	113	soil	Ni	24.00	ppm		5	77	16-18 inch	JMA 77
5065	113	gw	Ni	.00	ppm	.20	6	77	unf Lt	JMA 77
5066	113	gw	Ni	.00	ppm	.20	6	77	unf Ht	JMA 77
5074	113	gw	Ni	.00	ppm	.20	6	77	1-1.5'T	JMA 77
5075	113	gw	Ni	.00	ppm	.20	6	77	1' B	JMA 77
7005	113	gs	Ni	.00	ppm	10	7	77	fil Ht	JMA 77
4496	113	soil	Pb	37.00	ppm		5	77	0-2 inch	JMA 77
4497	113	soil	Pb	95.00	ppm		5	77	2-4 inch	JMA 77
4498	113	soil	Pb	530.00	ppm		5	77	4-6 inch	JMA 77
4499	113	soil	Pb	12900.00	ppm		5	77	6-8 inch	JMA 77
4500	113	soil	Pb	14300.00	ppm		5	77	8-10 inch	JMA 77
4501	113	soil	Pb	80.00	ppm		5	77	16-18 inch	JMA 77
5063	113	gw	Pb	.00	ppm	.50	6	77	unf Lt	JMA 77
5064	113	gw	Pb	.00	ppm	.50	6	77	unf Ht	JMA 77
5072	113	gw	Pb	.00	ppm	.05	6	77	1-1.5'T	JMA 77
5073	113	gw	Pb	.00	ppm	.05	6	77	1' B	JMA 77
5253	113	gw	Pb	.00	ppm	.01	7	77	filter Ht	JMA 77

829910278

MAP2DATA.. 08:51:21 27 SEP 1985

STATION	SAMPLE....		CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
5254	113	gw	Pb	.00	ppm	.01	7	77	filter Lt	JMA 77
4508	113	soil	Zn	580.00	ppm		5	77	0-2 inch	JMA 77
4509	113	soil	Zn	1100.00	ppm		5	77	2-4 inch	JMA 77
4510	113	soil	Zn	1200.00	ppm		5	77	4-6 inch	JMA 77
4511	113	soil	Zn	1900.00	ppm		5	77	6-8 inch	JMA 77
4512	113	soil	Zn	2000.00	ppm		5	77	8-10 inch	JMA 77
4513	113	soil	Zn	3900.00	ppm		5	77	16-18 inch	JMA 77
5067	113	gw	Zn	.05	ppm		6	77	unf Lt	JMA 77
5068	113	gw	Zn	.04	ppm		6	77	unf Ht	JMA 77
5076	113	gw	Zn	.11	ppm		6	77	1-1.5'T	JMA 77
5077	113	gw	Zn	22.40	ppm		6	77	1' B	JMA 77
7024	113	gw	Zn	.11	ppm		7	77	fil Ht	JMA 77
7036	113	gw	Zn	.10	ppm		7	77	fil Lt	JMA 77
4520	114	soil	As	6.00	ppm		5	77	0-2 inch	JMA 77
4521	114	soil	As	7.00	ppm		5	77	2-4 inch	JMA 77
4522	114	soil	As	16.00	ppm		5	77	10-12 inch	JMA 77
4523	114	soil	As	25.00	ppm		5	77	12-14 inch	JMA 77
4524	114	soil	As	.90	ppm		5	77	14-16 inch	JMA 77
4525	114	soil	As	4.00	ppm		5	77	16-18 inch	JMA 77
4943	114	GW	As	.00	ppm	.01	6	77	unf Lt	JMA 77
4944	114	GW	As	.00	ppm	.01	6	77	unf Ht	JMA 77
5090	114	gw	As	.00	ppm	.01	6	77	1-1.5'T	JMA 77
5091	114	gw	As	.00	ppm	.01	6	77	1' B	JMA 77
5101	114	gw	As	.00	ppm	.02	7	77	filter Ht	JMA 77
5102	114	gw	As	.00	ppm	.02	7	77	filter Lt	JMA 77
4743	114	soil	Cd	2.00	ppm	.30	5	77	0-2 inch	JMA 77
4744	114	soil	Cd	3.00	ppm	.30	5	77	2-4 inch	JMA 77
4745	114	soil	Cd	26.00	ppm	.30	5	77	10-12 inch	JMA 77
4746	114	soil	Cd	120.00	ppm	.30	5	77	12-14 inch	JMA 77
4747	114	soil	Cd	.40	ppm	.30	5	77	14-16 inch	JMA 77
4748	114	soil	Cd	.30	ppm	.30	5	77	16-18 inch	JMA 77
5089	114	gw	Cd	.00	ppm	.05	6	77	unf Lt	JMA 77
5098	114	gw	Cd	.00	ppm	.05	6	77	1-1.5'T	JMA 77
5099	114	gw	Cd	.00	ppm	.05	6	77	1' B	JMA 77
5100	114	gw	Cd	.00	ppm	.05	6	77	unfHt	JMA 77
7053	114	gw	Cd	.0	ppm	.0003	6	77	fil Ht	JMA 77
7054	114	gw	Cd	.00	ppm	.0003	6	77	fil Lt	JMA 77
3075	114	gw	Hg	.00	ppb		6	77	unf. T	JMA 77
3077	114	gw	Hg	.03	ppb		6	77	unf. B	JMA 77
5385	114	gw	Hg	.01	ppb	.1	6	77	unf Lt	JMA 77
5386	114	gw	Hg	.00	ppb	.1	6	77	unf Ht	JMA 77
3076	114	gw	Hg	.00	ppb	.3	7	77	fil Ht	JMA 77

829910279

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
5376	114	gw	Hg	.00	ppb	.3	7	77	fil Lt	JMA 77
7006	114	gw	Ni	.00	ppm	.10	7	77	fil Ht	JMA 77
4532	114	soil	Ni	19.00	ppm		5	77	0-2 inch	JMA 77
4533	114	soil	Ni	18.00	ppm		5	77	2-4 inch	JMA 77
4534	114	soil	Ni	68.00	ppm		5	77	10-12 inch	JMA 77
4535	114	soil	Ni	69.00	ppm		5	77	12-14 inch	JMA 77
4536	114	soil	Ni	6.00	ppm		5	77	14-16 inch	JMA 77
4537	114	soil	Ni	21.00	ppm		5	77	16-18 inch	JMA 77
5085	114	gw	Ni	.00	ppm	.20	6	77	unf Lt	JMA 77
5086	114	gw	Ni	.00	ppm	.20	6	77	unf Ht	JMA 77
5094	114	gw	Ni	.00	ppm	.20	6	77	1-1.5'T	JMA 77
5095	114	gw	Ni	.00	ppm	.20	6	77	1' B	JMA 77
7015	114	gw	Ni	.00	ppm	.10	7	77	fil Lt	JMA 77
4526	114	soil	Pb	32.00	ppm		5	77	0-2 inch	JMA 77
4527	114	soil	Pb	670.00	ppm		5	77	2 4 inch	JMA 77
4528	114	soil	Pb	1400.00	ppm		5	77	10-12 inch	JMA 77
4529	114	soil	Pb	230.00	ppm		5	77	12-14 inch	JMA 77
4530	114	soil	Pb	8.00	ppm		5	77	14-16 inch	JMA 77
4531	114	soil	Pb	.11	ppm		5	77	16-18 inch	JMA 77
5083	114	gw	Pb	.00	ppm	.50	6	77	unf Lt	JMA 77
5084	114	gw	Pb	.00	ppm	.50	6	77	unf Ht	JMA 77
5092	114	gw	Pb	.00	ppm	.05	6	77	1-1.5'T	JMA 77
5093	114	gw	Pb	.00	ppm	.05	6	77	1' B	JMA 77
5255	114	gw	Pb	.00	ppm	.01	7	77	filter Ht	JMA 77
5256	114	gw	Pb	.00	ppm	.01	7	77	filter Lt	JMA 77
4538	114	soil	Zn	840.00	ppm		5	77	0-2 inch	JMA 77
4539	114	soil	Zn	1000.00	ppm		5	77	2-4 inch	JMA 77
4540	114	soil	Zn	1800.00	ppm		5	77	10-12 inch	JMA 77
4541	114	soil	Zn	2800.00	ppm		5	77	12-14 inch	JMA 77
4542	114	soil	Zn	23.00	ppm		5	77	14-16 inch	JMA 77
4543	114	soil	Zn	65.00	ppm		5	77	16-18 inch	JMA 77
5087	114	gw	Zn	.04	ppm		6	77	unf Lt	JMA 77
5088	114	gw	Zn	.02	ppm		6	77	unf Ht	JMA 77
5096	114	gw	Zn	.03	ppm		6	77	1-1.5'T	JMA 77
5097	114	gw	Zn	.16	ppm		6	77	1' B	JMA 77
7025	114	gw	Zn	.04	ppm		7	77	fil Ht	JMA 77
7037	114	gw	Zn	.02	ppm		7	77	fil Lt	JMA 77
4749	115	soil	As	6.00	ppm		6	77	0-6 inch	JMA 77
4750	115	soil	As	7.00	ppm		6	77	6-12 inch	JMA 77
4751	115	soil	As	8.00	ppm		6	77	12-18 inch	JMA 77
4752	115	soil	As	8.00	ppm		6	77	18-24 inch	JMA 77
5103	115	gw	As	.08	ppm	.01	6	77	unf Lt	JMA 77

829910280

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
5104	115	gw	As	.07	ppm	.01	6	77	unf Ht	JMA 77
5257	115	gw	As	.00	ppm	.02	7	77	filter Ht	JMA 77
5258	115	gw	As	.00	ppm	.02	7	77	filter Lt	JMA 77
4953	115	soil	Cd	2.70	ppm		6	77	0-6 inch	JMA 77
4954	115	soil	Cd	3.70	ppm		6	77	6-12 inch	JMA 77
4955	115	soil	Cd	4.00	ppm		6	77	12-18 inch	JMA 77
4956	115	soil	Cd	2.20	ppm		6	77	18-24 inch	JMA 77
5111	115	gw	Cd	.00	ppm	.05	6	77	unf Lt	JMA 77
5112	115	gw	Cd	.00	ppm	.05	6	77	unf Ht	JMA 77
7055	115	gw	Cd	.00	ppm	.0003	6	77	fil Ht	JMA 77
7056	115	gw	Cd	.01	ppm	.0003	6	77	fil Lt	JMA 77
7065	115	gw	Cd	.00	ppm	10	7	77	fil Ht	JMA 77
3078	115	gw	Hg	.41	ppb	.1	6	77	unf Lt	JMA 77
3081	115	gw	Hg	.16	ppb	.1	6	77	unf Ht	JMA 77
3079	115	gw	Hg	.09	ppb	.3	7	77	fil Ht	JMA 77
3080	115	gw	Hg	.04	ppb	.3	7	77	fil Lt	JMA 77
4945	115	soil	Ni	58.00	ppm		6	77	0-6 inch	JMA 77
4946	115	soil	Ni	58.00	ppm		6	77	6-12 inch	JMA 77
4947	115	soil	Ni	55.00	ppm		6	77	12-18 inch	JMA 77
4948	115	soil	Ni	27.00	ppm		6	77	18-24 inch	JMA 77
5107	115	gw	Ni	.00	ppm	.20	6	77	unf Lt	JMA 77
5108	115	gw	Ni	.00	ppm	.20	6	77	unf Ht	JMA 77
7016	115	gw	Ni	.00	ppm	.10	7	77	fil Lt	JMA 77
7007	115	gw	Ni	.00	ppm	.10	7	77	fil Ht	JMA 77
4753	115	soil	Pb	117.00	ppm		6	77	0-6 inch	JMA 77
4754	115	soil	Pb	179.00	ppm		6	77	6-12 inch	JMA 77
4755	115	soil	Pb	190.00	ppm		6	77	12-18 inch	JMA 77
4756	115	soil	Pb	344.00	ppm		6	77	18-24 inch	JMA 77
5105	115	gw	Pb	.00	ppm	.50	6	77	unf Lt	JMA 77
5106	115	gw	Pb	.00	ppm	.50	6	77	unf Ht	JMA 77
7066	115	gw	Pb	.00	ppm	10	7	77	fil Lt	JMA 77
4949	115	soil	Zn	1573.00	ppm		6	77	0-6 inch	JMA 77
4950	115	soil	Zn	2032.00	ppm		6	77	6-12 inch	JMA 77
4951	115	soil	Zn	12372.00	ppm		6	77	12-18 inch	JMA 77
4952	115	soil	Zn	818.00	ppm		6	77	18-24 inch	JMA 77
5109	115	gw	Zn	.05	ppm		6	77	unf Lt	JMA 77
5110	115	gw	Zn	.02	ppm		6	77	unf Ht	JMA 77
7026	115	gw	Zn	.09	ppm		7	77	fil Ht	JMA 77
7038	115	gw	Zn	.10	ppm		7	77	fil Lt	JMA 77
4544	116	soil	As	4.00	ppm		5	77	0-2 inch	JMA 77
4545	116	soil	As	12.00	ppm		5	77	2-4 inch	JMA 77
4546	116	soil	As	10.00	ppm		5	77	4-6 inch	JMA 77

829910281

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4547	116	soil	As	11.00	ppm		5	77	6-8 inch	JMA 77
4548	116	soil	As	18.00	ppm		5	77	8-10 inch	JMA 77
4549	116	soil	As	2.00	ppm		5	77	12-14 inch	JMA 77
5113	116	gw	As	.03	ppm	.01	6	77	unf Lt	JMA 77
5114	116	gw	As	.01	ppm	.01	6	77	unf Ht	JMA 77
5121	116	gw	As	.01	ppm	.01	6	77	1-1.5'T	JMA 77
5122	116	gw	As	.03	ppm	.01	6	77	1' B	JMA 77
5133	116	gw	As	.00	ppm	.02	7	77	filter Ht	JMA 77
5134	116	gw	As	.00	ppm	.02	7	77	filter Lt	JMA 77
4757	116	soil	Cd	2.00	ppm	.30	5	77	0-2 inch	JMA 77
4758	116	soil	Cd	4.00	ppm	.30	5	77	2-4 inch	JMA 77
4759	116	soil	Cd	4.00	ppm	.30	5	77	4-6 inch	JMA 77
4760	116	soil	Cd	4.00	ppm	.30	5	77	6-8 inch	JMA 77
4761	116	soil	Cd	9.00	ppm	.30	5	77	8-10 inch	JMA 77
4762	116	soil	Cd	.00	ppm	.30	5	77	12-14 inch	JMA 77
5129	116	gw	Cd	.00	ppm	.05	6	77	1-1.5'T	JMA 77
5130	116	gw	Cd	.00	ppm	.05	6	77	1' B	JMA 77
5131	116	gw	Cd	.00	ppm	.05	6	77	unf Ht	JMA 77
5132	116	gw	Cd	.00	ppm	.05	6	77	unf Lt	JMA 77
7057	116	gw	Cd	.01	ppm	.0003	6	77	fil Ht	JMA 77
7058	116	gw	Cd	.00	ppm	.0003	6	77	fil Lt	JMA 77
3058	116	gw	Hg	11.10	ppb		6	77	unf. T	JMA 77
3060	116	gw	Hg	37.70	ppb		6	77	unf B	JMA 77
5383	116	gw	Hg	10.77	ppm	.1	6	77	unf Lt	JMA 77
5384	116	gw	Hg	.68	ppb	.1	6	77	unf Ht	JMA 77
3059	116	gw	Hg	.00	ppb	.3	7	77	fil Ht	JMA 77
5373	116	gw	Hg	.00	ppb	.3	7	77	fil Lt	JMA 77
4556	116	soil	Ni	18.00	ppm		5	77	0-2 inch	JMA 77
4557	116	soil	Ni	32.00	ppm		5	77	2-4 inch	JMA 77
4558	116	soil	Ni	51.00	ppm		5	77	4-6 inch	JMA 77
4559	116	soil	Ni	37.00	ppm		5	77	6-8 inch	JMA 77
4560	116	soil	Ni	60.00	ppm		5	77	8-10 inch	JMA 77
4561	116	soil	Ni	14.00	ppm		5	77	12-14 inch	JMA 77
5117	116	gw	Ni	.00	ppm	.20	6	77	unf Lt	JMA 77
5118	116	gw	Ni	.00	ppm	.20	6	77	unf Ht	JMA 77
5125	116	gw	Ni	.00	ppm	.20	6	77	1-1.5'T	JMA 77
5126	116	gw	Ni	.00	ppm	.20	6	77	1' B	JMA 77
7008	116	gw	Ni	.00	ppm	.10	7	77	fil Ht	JMA 77
7017	116	gw	Ni	.00	ppm	.10	7	77	fil Lt	JMA 77
4550	116	soil	Pb	160.00	ppm		5	77	0-2 inch	JMA 77
4551	116	soil	Pb	610.00	ppm		5	77	2-4 inch	JMA 77
4552	116	soil	Pb	730.00	ppm		5	77	4-6 inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4553	116	soil	Pb	280.00	ppm		5	77	6-8 inch	JMA 77
4554	116	soil	Pb	610.00	ppm		5	77	8-10 inch	JMA 77
4555	116	soil	Pb	11.00	ppm		5	77	12-14 inch	JMA 77
5115	116	gw	Pb	1.40	ppm	.50	6	77	unf Lt	JMA 77
5116	116	gw	Pb	.00	ppm	.50	6	77	unf Ht	JMA 77
5123	116	gw	Pb	1.00	ppm	.05	6	77	1-1.5'T	JMA 77
5124	116	gw	Pb	3.00	ppm	.05	6	77	1' B	JMA 77
5259	116	gw	Pb	.00	ppm	.01	7	77	filter Ht	JMA 77
5260	116	gw	Pb	.00	ppm	.01	7	77	filter Lt	JMA 77
4562	116	soil	Zn	850.00	ppm		5	77	0-2 inch	JMA 77
4563	116	soil	Zn	800.00	ppm		5	77	2-4 inch	JMA 77
4564	116	soil	Zn	4500.00	ppm		5	77	4-6 inch	JMA 77
4565	116	soil	Zn	820.00	ppm		5	77	6-8 inch	JMA 77
4566	116	soil	Zn	660.00	ppm		5	77	8-10 inch	JMA 77
4567	116	soil	Zn	48.00	ppm		5	77	12-14 inch	JMA 77
5119	116	gw	Zn	11.20	ppm		6	77	unf Lt	JMA 77
5120	116	gw	Zn	2.80	ppm		6	77	unf Ht	JMA 77
5127	116	gw	Zn	21.30	ppm		6	77	1-1.5'T	JMA 77
5128	116	gw	Zn	25.20	ppm		6	77	1' B	JMA 77
7027	116	gw	Zn	.01	ppm		7	77	fil Ht	JMA 77
7039	116	gw	Zn	.30	ppm		7	77	fil Lt	JMA 77
4568	117	soil	As	5.00	ppm		5	77	0-2 inch	JMA 77
4569	117	soil	As	5.00	ppm		5	77	2-4 inch	JMA 77
4570	117	soil	As	.00	ppm		5	77	4-6 inch	JMA 77
4571	117	soil	As	2.00	ppm		5	77	8-10 inch	JMA 77
4572	117	soil	As	1.00	ppm		5	77	10-12 inch	JMA 77
4573	117	soil	As	1.00	ppm		5	77	12-14 inch	JMA 77
5135	117	gw	As	.00	ppm	.01	6	77	unf Lt	JMA 77
5136	117	gw	As	.00	ppm	.01	6	77	unf Ht	JMA 77
5144	117	gw	As	.00	ppm	.01	6	77	1-1.5'T	JMA 77
5145	117	gw	As	.00	ppm	.01	6	77	1' B	JMA 77
5155	117	gw	As	.00	ppm	.02	7	77	filter Ht	JMA 77
5156	117	gw	As	.00	ppm	.02	7	77	filter Lt	JMA 77
4763	117	soil	Cd	.90	ppm	.30	5	77	0-2 inch	JMA 77
4764	117	soil	Cd	.90	ppm	.30	5	77	2-4 inch	JMA 77
4765	117	soil	Cd	.00	ppm	.30	5	77	4-6 inch	JMA 77
4766	117	soil	Cd	.00	ppm	.30	5	77	8-10 inch	JMA 77
4767	117	soil	Cd	.00	ppm	.30	5	77	10-12 inch	JMA 77
4768	117	soil	Cd	.00	ppm	.30	5	77	12-14 inch	JMA 77
5143	117	gw	Cd	.00	ppm	5	6	77	unf Lt	JMA 77
5151	117	gw	Cd	.00	ppm	.05	6	77	1 1.5'T	JMA 77
5152	117	gw	Cd	.00	ppm	.05	6	77	1' B	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
5153	117	gw	Cd	.05	ppm	.05	6	77	unf Ht	JMA 77
7059	117	gw	Cd	.01	ppm	.0003	6	77	fil Ht	JMA 77
7060	117	gw	Cd	.01	ppm	.0003	6	77	fil Lt	JMA 77
7068	117	gw	Cd	.00	ppm	10	7	77	fil Lt	JMA 77
5377	117	gw	Hg	.02	ppb	.1	6	77	unf Lt	JMA 77
5378	117	gw	Hg	.01	ppb	.1	6	77	unf Ht	JMA 77
7072	117	gw	Hg	.01	ppb		6	77	unf T	JMA 77
7073	117	gw	Hg	.09	ppb		6	77	unf B	JMA 77
7070	117	gw	Hg	.00	ppb	30	7	77	fil Ht	JMA 77
7071	117	gw	Hg	.00	ppb	30	7	77	fil Lt	JMA 77
4580	117	soil	Ni	14.00	ppm		5	77	0-2 inch	JMA 77
4581	117	soil	Ni	14.00	ppm		5	77	2-4 inch	JMA 77
4582	117	soil	Ni	8.00	ppm		5	77	4-6 inch	JMA 77
4583	117	soil	Ni	10.00	ppm		5	77	8-10 inch	JMA 77
4584	117	soil	Ni	7.00	ppm		5	77	10-12 inch	JMA 77
4585	117	soil	Ni	11.00	ppm		5	77	12-14 inch	JMA 77
5139	117	gw	Ni	.00	ppm	.20	6	77	unf Lt	JMA 77
5140	117	gw	Ni	.00	ppm	.20	6	77	unf Ht	JMA 77
5147	117	gw	Ni	.00	ppm	.20	6	77	1-1.5'T	JMA 77
5148	117	gw	Ni	.02	ppm	.20	6	77	1' B	JMA 77
7009	117	gw	Ni	.00	ppm	.10	7	77	fil Ht	JMA 77
7018	117	gw	Ni	.00	ppm	.10	7	77	fil Lt	JMA 77
4574	117	soil	Pb	81.00	ppm		5	77	0-2 inch	JMA 77
4575	117	soil	Pb	110.00	ppm		5	77	2-4 inch	JMA 77
4576	117	soil	Pb	11.00	ppm		5	77	4-6 inch	JMA 77
4577	117	soil	Pb	7.00	ppm		5	77	8-10 inch	JMA 77
4578	117	soil	Pb	5.00	ppm		5	77	10-12 inch	JMA 77
4579	117	soil	Pb	7.00	ppm		5	77	12-14 inch	JMA 77
5137	117	gw	Pb	.00	ppm	.50	6	77	unf Lt	JMA 77
5138	117	gw	Pb	.00	ppm	.50	6	77	unf Ht	JMA 77
5146	117	gw	Pb	.00	ppm	.05	6	77	1-1.5'T	JMA 77
5154	117	gw	Pb	.00	ppm	.05	6	77	1'B	JMA 77
7067	117	gw	Pb	.00	ppm	10	7	77	fil Ht	JMA 77
4586	117	soil	Zn	280.00	ppm		5	77	0-2 inch	JMA 77
4587	117	soil	Zn	190.00	ppm		5	77	2-4 inch	JMA 77
4588	117	soil	Zn	110.00	ppm		5	77	4-6 inch	JMA 77
4589	117	soil	Zn	27.00	ppm		5	77	8-10 inch	JMA 77
4590	117	soil	Zn	19.00	ppm		5	77	10-12 inch	JMA 77
4591	117	soil	Zn	24.00	ppm		5	77	12-14 inch	JMA 77
5141	117	gw	Zn	.05	ppm		6	77	unf Lt	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
5142	117	gw	Zn	.04	ppm		6	77	unf Ht	JMA 77
5149	117	gw	Zn	.09	ppm		6	77	1-1.5'T	JMA 77
5150	117	gw	Zn	.28	ppm		6	77	1' B	JMA 77
7028	117	gw	Zn	.05	ppm		7	77	fil Ht	JMA 77
7040	117	gw	Zn	.04	ppm		7	77	fil Lt	JMA 77
4773	118	soil	As	5.00	ppm		6	77	0-6 inch	JMA 77
4774	118	soil	As	14.00	ppm		6	77	6-12 inch	JMA 77
4775	118	soil	As	11.00	ppm		6	77	12-18 inch	JMA 77
4776	118	soil	As	13.00	ppm		6	77	18-24 inch	JMA 77
4961	118	soil	Cd	3.90	ppm		6	77	0-6 inch	JMA 77
4962	118	soil	Cd	2.30	ppm		6	77	6-12 inch	JMA 77
4963	118	soil	Cd	33.00	ppm		6	77	12-18 inch	JMA 77
4964	118	soil	Cd	14.00	ppm		6	77	18-24 inch	JMA 77
4777	118	soil	Ni	52.00	ppm		6	77	0-6 inch	JMA 77
4778	118	soil	Ni	49.00	ppm		6	77	6-12 inch	JMA 77
4779	118	soil	Ni	45.00	ppm		6	77	12-18 inch	JMA 77
4780	118	soil	Ni	40.00	ppm		6	77	18-24 inch	JMA 77
4769	118	soil	Pb	479.00	ppm		6	77	0-6 inch	JMA 77
4770	118	soil	Pb	184.00	ppm		6	77	6-12 inch	JMA 77
4771	118	soil	Pb	885.00	ppm		6	77	12-18 inch	JMA 77
4772	118	soil	Pb	671.00	ppm		6	77	18-24 inch	JMA 77
4957	118	soil	Zn	1183.00	ppm		6	77	0-6 inch	JMA 77
4958	118	soil	Zn	315.00	ppm		6	77	6-12 inch	JMA 77
4959	118	soil	Zn	860.00	ppm		6	77	12-18 inch	JMA 77
4960	118	soil	Zn	1391.00	ppm		6	77	18-24 inch	JMA 77
5275	119	sw	Ag	1.00	ppb		10	81	unf	NJDEP 85
5261	119	sed	As	9.50	ppm		10	81	PONAR Grab	NJDEP 85
5268	119	sw	As	1.40	ppb		10	81	unf	NJDEP 85
7107	119	sw	Be	1.00	ppb		10	81	unf	NJDEP 85
5262	119	sed	Cd	25.50	ppm		10	81	PONAR Grab	NJDEP 85
5269	119	sw	Cd	1.00	ppb		10	81	unf	NJDEP 85
5264	119	sed	Cr	505.00	ppm		10	81	PONAR Grab	NJDEP 85
5271	119	sw	Cr	12.00	ppb		10	81	unf	NJDEP 85
5263	119	sed	Cu	297.00	ppm		10	81		NJDEP 85
5270	119	sw	Cu	11.20	ppb		10	81	unf	NJDEP 85
3244	119	ch sed	Hg	128.47	ppm		10	81	west PONAR Grab	NJDEP 85
3245	119	ch sed	Hg	100.00	ppm		10	81	east PONAR Grab	NJDEP 85
3246	119	ch sed	Hg	275.27	ppm		10	81	center PONAR Grab	NJDEP 85
3247	119	ch sed	Hg	.00	ppm	.2	10	81	west PONAR Grab	NJDEP 85
3248	119	ch sed	Hg	.00	ppm	.2	10	81	east PONAR Grab	NJDEP 85
3249	119	ch sed	Hg	.00	ppm	.2	10	81	center PONAR Grab	NJDEP 85
5368	119	SW	Hg	.34	ppm		10	81	unf	NJDEP 85

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
5265	119	sed	Ni	60.00	ppm		10	81	PONAR Grab	NJDEP 85
5272	119	sw	Ni	28.00	ppb		10	81	unf	NJDEP 85
5266	119	sed	Pb	267.00	ppm		10	81	PONAR Grab	NJDEP 85
5273	119	sw	Pb	46.60	ppb		10	81	unf	NJDEP 85
5267	119	sed	Zn	205.00	ppm		10	81	PONAR Grab	NJDEP 85
5274	119	sw	Zn	245.00	ppb		10	81	unf	NJDEP 85
8406	119	sed	Be	.00	ppm		10	81	PONAR Grab	NJDEP 85
5348	119	sw	tce	2.80	ppb		10	81	unf	NJDEP 85
5347	119	sw	tcle	1.60	ppb		10	81	unf	NJDEP 85
5349	119	sw	ttce	9.40	ppb		10	81	unf	NJDEP 85
5313	119	sw	CHCL3	.01	ppb		10	85	unf	NJDEP 85
5345	119	sw	CHCl3	1.40	ppb		10	81	unf	NJDEP 85
5344	119	sw	MeChl	11.50	ppb		10	81	unf	NJDEP 85
5346	119	sw	3CL3Fle	10.80	ppb		10	81	unf	NJDEP 85
3250	120	soil	Hg	16.60	ppm		9	83	0-24 inch	Weh 83
3251	121	soil	Hg	10.80	ppm		9	83	0-24inch	Weh 83
3252	122	soil	Hg	59.10	ppm		9	83	composite	Crow 84
3253	122	soil	Hg	59.50	ppm		9	83	0 inch	Crow 84
3254	122	soil	Hg	37.80	ppm		9	83	4 inch	Crow 84
3255	122	soil	Hg	9.70	ppm		9	83	10 inch	Crow 84
3256	122	soil	Hg	7.10	ppm		9	83	16 inch	Crow 84
3257	122	soil	Hg	1.60	ppm		9	83	22 inch	Crow 84
3258	122	soil	Hg	2.40	ppm		9	83	34 inch	Crow 84
0001	123	soil	Hg	27.60	ppm		9	83	composite	Crow 84
3259	124	soil	Hg	73.50	ppm		9	83	composite	Crow 84
3260	125	soil	Hg	44.20	ppm		9	83	0 inch	Crow 84
3261	125	soil	Hg	327.00	ppm		9	83	4 inch	Crow 84
3262	125	soil	Hg	5.80	ppm		9	83	10 inch	Crow 84
3263	125	soil	Hg	6.80	ppm		9	83	16 inch	Crow 84
3264	125	soil	Hg	3.10	ppm		9	83	22 inch	Crow 84
3265	125	soil	Hg	.30	ppm		9	83	32 inch	Crow 84
3266	126	soil	Hg	234.00	ppm		9	83	composite	Crow 84
3267	126	ch sed	Hg	128.00	ppm		9	83	composite	Crow 84
3268	127	soil	Hg	52.00	ppm		9	83	composite	Crow 84
3269	128	soil	Hg	.43	ppm		9	83	composite	Crow 84
3270	129	soil	Hg	5.70	ppm		9	83	composite	Crow 84
3271	129	ch sed	Hg	331.00	ppm		9	83	composite	Crow 84
3272	130	soil	Hg	249.00	ppm		9	83	composite	Crow 84
3273	130	ch sed	Hg	99.50	ppm		9	83	composite	Crow 84
3274	131	soil	Hg	80.10	ppm		9	83	composite	Crow 84
3275	131	ch sed	Hg	25.20	ppm		9	83	composite	Crow 84
3276	132	soil	Hg	216.00	ppm		9	83	composite	Crow 84

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3277	133	soil	Hg	15.70	ppm		9	83	composite	Crow 84
3278	134	soil	Hg	28.90	ppm		9	83	composite	Crow 84
3279	135	soil	Hg	54.90	ppm		9	83	composite	Crow 84
3280	136	soil	Hg	55.20	ppm		9	83	composite	Crow 84
3281	137	soil	Hg	39.10	ppm		9	83	composite	Crow 84

1769 Records Processed

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APPENDIX 3a

INVENTORY OF SITE SPECIFIC REPORTS PERTAINING
TO THE BERRYS CREEK AREA

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APPENDIX 3a
INVENTORY OF SITE SPECIFIC MERCURY REPORTS
PERTAINING TO THE BERRYS CREEK AREA

AWARE, Inc., 1980. "Mercury Concentrations in Berrys Creek", prepared for Velsicol Chemical Co.

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Galluzzi, P.F., 1981. "Mercury Concentrations in Mammals, Reptiles, Birds, and Waterfowl Collected in the Hackensack Meadowlands, N.J."; NJ Academy of Sciences.

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APPENDIX 3b

INVENTORY OF SITE SPECIFIC REPORTS PERTAINING TO
BERRYS CREEK WHICH MEET EVALUATION CRITERIA

APPENDIX 3b

INVENTORY OF SITE SPECIFIC MERCURY
REPORTS PERTAINING TO BERRYS CREEK
WHICH MEET EVALUATION CRITERIA
(All Other Contaminant Data Were Located Herein)

AWARE, Inc., 1980. "Mercury Concentrations in Berrys Creek", prepared for Velsicol Chemical Co.

Bartha, R., 1984. "Factors Controlling the Methylation and Mobilization of Mercury at the Polluted Meadowlands area."

Bergen County Asscs., 1978. "Berry's Creek Center, General Plan Application - Environmental Assessment" submitted to HMDC.

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Appendix 4

Mercury in Channel Sediments -Small Scale Map

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
1973	1	ch sed	Hg	12.00	ppm	.10		72	0-2 inch	HMDC 72
1974	1	ch sed	Hg	5.90	ppm	.10		72	2-4 inch	HMDC 72
1975	1	ch sed	HG	6.70	ppm	.10		72	4-6 inch	HMDC 72
1976	1	ch sed	HG	8.90	ppm	.10		72	6-12 inch	HMDC 72
1977	1	ch sed	HG	3.90	ppm	.10		72	12-18 inch	HMDC 72
3276	1	ch sed	Hg	6.57	ppm		10	81	center	NJDEP 85
3277	1	ch sed	Hg	5.73	ppm		10	81	east side	NJDEP 85
3278	1	ch sed	Me Hg	.30	ppm	.20	10	81	rightside	NJDEP 85
3279	1	ch sed	Me Hg	.20	ppm	.20	10	81	center	NJDEP 85
3280	1	ch sed	Me Hg	.20	ppm	.20	10	81	east side	NJDEP 85
3602	1	ch sed	Hg	3.39	ppm		10	81	west side	NJDEP 85
3281	2	ch sed	Hg	3.36	ppm		10	81	west side	NJDEP 85
3282	2	ch sed	Hg	9.77	ppm		10	81	center	NJDEP 85
3283	2	ch sed	Hg	.98	ppm		10	81	east side	NJDEP 85
3284	2	ch sed	Me Hg	.20	ppm	.20	10	81	west side	NJDEP 85
3285	2	ch sed	Me Hg	.20	ppm	.20	10	81	center	NJDEP 85
3286	2	ch sed	Me Hg	.20	ppm	.20	10	81	east side	NJDEP 85
3287	3	ch sed	Hg	67.90	ppm		10	81	west side	NJDEP 85
3288	3	ch sed	Hg	32.08	ppm		10	81	east side	NJDEP 85
3289	3	ch sed	Me Hg	.20	ppm	.20	10	81	west side	NJDEP 85
3290	3	ch sed	Me Hg	.30	ppm	.20	10	81	east side	NJDEP 85
3291	4	ch sed	Hg	19.12	ppm		10	81	west side	NJDEP 85
3292	4	ch sed	Hg	35.86	ppm		10	81	center	NJDEP 85
3293	4	ch sed	Hg	40.75	ppm		10	81	east side	NJDEP 85
3294	4	ch sed	Me Hg	.20	ppm	.20	10	81	west side	NJDEP 85
3295	4	ch sed	Me Hg	.20	ppm	.20	10	81	center	NJDEP 85
3296	4	ch sed	Me Hg	.20	ppm	.20	10	81	east side	NJDEP 85
3297	5	ch sed	Hg	117.88	ppm		10	81	west side	NJDEP 85
3298	5	ch sed	Hg	101.61	ppm		10	81	center	NJDEP 85
3299	5	ch sed	Hg	76.60	ppm		10	81	east side	NJDEP 85
3300	5	ch sed	Me Hg	.20	ppm	.20	10	81	west side	NJDEP 85
3301	5	ch sed	Me Hg	.20	ppm	.20	10	81	center	NJDEP 85
3302	5	ch sed	Me Hg	.20	ppm	.20	10	81	east side	NJDEP 85
1987	7	ch sed	HG	.10	ppm	.10		72	0-2 inch	HMDC 72
1988	7	ch sed	HG	.10	ppm	.10		72	2-4 inch	HMDC 72
1989	7	ch sed	HG	.10	ppm	.10		72	4-6 inch	HMDC 72
1990	7	ch sed	HG	.10	ppm	.10		72	6-13 inch	HMDC 72
1544	7	ch sed	Hg	32.00	ppm		10	76	0-2 inch	JMA 74
1545	7	ch sed	Hg	3.90	ppm		10	76	2-4 inch	JMA 74
2000	13	ch sed	HG	.10	ppm	.10		74	0-15 inch	HMDC 78
2026	19	ch sed	HG	1.10	ppm	.10		72	0-2 inch	HMDC 72
2027	19	ch sed	HG	.68	ppm	.10		72	2-4 inch	HMDC 72

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2028	19	ch sed	HG	.94	ppm	.10		72	4-6 inch	HMDC 72
2029	19	ch sed	HG	.42	ppm	.10		72	6-12 inch	HMDC 72
2030	19	ch sed	HG	.14	ppm	.10		72	12-17 inch	HMDC 72
7777	23	ch sed	Hg	36.00	ppm	10	12	80	0-4 inch	HMDC 80
7778	23	ch sed	Hg	.10	ppm	10	12	80	4-8 inch	HMDC 80
3328	23	sed	Hg	5.15	ppm		9	82	PONAR Grab	NJDEP 85
3327	23	sed	Hg	4.30	ppm		2	83	PONAR Grab	NJDEP 85
3361	25	sed	Hg	60.00	ppm	1	6	84	0 inch	Crow 84
3362	25	sed	Hg	44.00	ppm	1	6	84	4 inch	Crow 84
3363	25	sed	Hg	242.00	ppm	1	6	84	10 inch	Crow 84
3364	25	sed	Hg	165.00	ppm	1	6	84	16 inch	Crow 84
3365	25	sed	Hg	77.00	ppm	1	6	84	22 inch	Crow 84
3366	25	sed	Hg	1.00	ppm	1	6	84	34 inch	Crow 84
2042	26	ch sed	HG	8.60	ppm	.10		72	0-2 inch	HMDC 72
2043	26	ch sed	HG	7.40	ppm	.10		72	2-4 inch	HMDC 72
2044	26	ch sed	HG	3.40	ppm	.10		72	4-6 inch	HMDC 72
2045	26	ch sed	HG	1.40	ppm	.10		72	6-12 inch	HMDC 72
2046	26	ch sed	HG	.76	ppm	.10		72	12-17 inch	HMDC 72
3367	26	sed	Hg	28.00	ppm	1	6	84	comp	Crow 84
2054	30	ch sed	HG	14.00	ppm	.10		72	0-2 inch	HMDC 72
2055	30	ch sed	HG	6.40	ppm	.10		72	2-4 inch	HMDC 72
2056	30	ch sed	HG	3.20	ppm	.10		72	4-6 inch	HMDC 72
2057	30	ch sed	HG	4.70	ppm	.10		72	6-12 inch	HMDC 72
3380	32	sed	Hg	6.80	ppm		9	82	PONAR Grab	NJDEP 85
3379	32	sed	Hg	6.80	ppm		2	83	PONAR Grab	NJDEP 85
2133	39	ch sed	HG	276.00	ppm	.10		72	0-4 inch	HMDC 72
2134	39	ch sed	HG	807.00	ppm	.10		72	4-8 inch	HMDC 72
2135	39	ch sed	HG	1142.00	ppm	.10		72	8-12 inch	HMDC 72
2136	39	ch sed	HG	1392.00	ppm	.10		72	12-18 inch	HMDC 72
2181	42	ch sed	HG	5.40	ppm	.10		72	0-2 inch	HMDC 72
2182	42	ch sed	HG	10.00	ppm	.10		72	2-4 inch	HMDC 72
2183	42	ch sed	HG	3.30	ppm	.10		72	4-6 inch	HMDC 72
2184	42	ch sed	HG	5.10	ppm	.10		72	6-12 inch	HMDC 72
2185	42	ch sed	HG	2.20	ppm	.10		72	12-15 inch	HMDC 72
2191	43	ch sed	HG	.10	ppm	.10		72	0-2 inch	HMDC 72
2192	43	ch sed	HG	.10	ppm	.10		72	2-4 inch	HMDC 72
2193	43	ch sed	HG	.10	ppm	.10		72	4-6 inch	HMDC 72
2194	43	ch sed	HG	.10	ppm	.10		72	6-12 inch	HMDC 72
2195	43	ch sed	HG	.10	ppm	.10		72	12-16 inc	HMDC 72
2221	50	ch sed	HG	58.00	ppm	.10		72	0-2 inch	HMDC 72
2222	50	ch sed	HG	438.00	ppm	.10		72	2-4 inch	HMDC 72
2223	50	ch sed	HG	247.00	ppm	.10		72	4-6 inch	HMDC 72

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2224	50	ch sed	HG	18.00	ppm	.10		72	6-12 inch	HMDC 72
2225	50	ch sed	HG	4.80	ppm	.10		72	12-15 inch	HMDC 72
2232	51	ch sed	HG	2.50	ppm	.10		72	0-2 inch	HMDC 72
2233	51	ch sed	HG	1.40	ppm	.10		72	2-4 inch	HMDC 72
2234	51	ch sed	HG	1.10	ppm	.10		72	4-6 inch	HMDC 72
2235	51	ch sed	HG	.72	ppm	.10		72	6-12 inch	HMDC 72
2247	54	ch sed	HG	9.20	ppm	.10		72	0-2 inch	HMDC 72
2248	54	ch sed	HG	10.00	ppm	.10		72	2-4 inch	HMDC 72
2249	54	ch sed	HG	9.00	ppm	.10		72	4-6 inch	HMDC 72
2250	54	ch sed	HG	9.00	ppm	.10		72	6-8 inch	HMDC 72
2255	56	ch sed	HG	.10	ppm	.10		74	0-12 inch	HMDC 78
2261	57	ch sed	HG	.10	ppm	.10		74	0-4 inch	HMDC 78
2262	57	ch sed	HG	.14	ppm	.10		74	4-6 inch	HMDC 78
2263	57	ch sed	HG	.12	ppm	.10		74	6-12 inch	HMDC 78
2264	57	ch sed	HG	.10	ppm	.10		74	12-14 inch	HMDC 78
2274	58	ch sed	HG	2:80	ppm	.10		74	0-2 inch	HMDC 78
2275	58	ch sed	HG	1.60	ppm	.10		74	2-4 inch	HMDC 78
2276	58	ch sed	HG	2.00	ppm	.10		74	4-6 inch	HMDC 78
2277	58	ch sed	HG	5.00	ppm	.10		74	6-12 inch	HMDC 78
2286	59	ch sed	HG	.10	ppm	.10		74	0-6 inch	HMDC 78
2299	60	ch sed	HG	3.70	ppm	.10		74	0-2 inch	HMDC 78
2300	60	ch sed	HG	3.70	ppm	.10		74	2-4 inch	HMDC 78
2301	60	ch sed	HG	2.80	ppm	.10		74	4-6 inch	HMDC 78
2302	60	ch sed	HG	.50	ppm	.10		74	6-12 inch	HMDC 78
2303	61	ch sed	HG	1.30	ppm	.10		72	0-2 inch	HMDC 72
2304	61	ch sed	HG	1.70	ppm	.10		72	2-4 inch	HMDC 72
2305	61	ch sed	HG	1.80	ppm	.10		72	4-6 inch	HMDC 72
2306	61	ch sed	HG	.36	ppm	.10		72	6-12 inch	HMDC 72
2307	61	ch sed	HG	.78	ppm	.10		72	12-15 inch	HMDC 72
2352	75	ch sed	HG	8.40	ppm	.10		72	0-2 inch	HMDC 72
2353	75	ch sed	HG	8.00	ppm	.10		72	2-4 inch	HMDC 72
2354	75	ch sed	HG	6.80	ppm	.10		72	4-6 inch	HMDC 72
2355	75	ch sed	HG	8.80	ppm	.10		72	6-12 inch	HMDC 72
2356	75	ch sed	HG	2.20	ppm	.10		72	12-18 inch	HMDC 72
3999	78	sed	Hg	16.20	ppm		5	78	0-2 inch	JMA 78
4000	78	sed	Hg	7.70	ppm		5	78	2-4 inch	JMA 78
4001	78	sed	Hg	1.20	ppm		5	78	4-6 inch	JMA 78
2389	83	ch sed	HG	13.00	ppm	.10		74	0-2 inch	HMDC 78
2390	83	ch sed	HG	16.00	ppm	.10		74	2-4 inch	HMDC 78
2391	83	ch sed	HG	7.10	ppm	.10		74	4-6 inch	HMDC 78
2392	83	ch sed	HG	7.60	ppm	.10		74	6-12 inch	HMDC 78
2393	83	ch sed	HG	36.00	ppm	.10		74	12-18 inch	HMDC 78

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2394	84	ch sed	HG	218.00	ppm	.10		72	0-2 inch	HMDC 72
2395	84	ch sed	HG	37.00	ppm	.10		72	2-4 inch	HMDC 72
2396	84	ch sed	HG	15.00	ppm	.10		72	4-6 inch	HMDC 72
2397	84	ch sed	HG	7.60	ppm	.10		72	6-12 inch	HMDC 72
2398	84	ch sed	HG	11.00	ppm	.10		72	12-18 inch	HMDC 72
3399	109	sed	Hg	78.00	ppm	1	6	84	comp	Crow 84
3401	110	sed	Hg	46.00	ppm	1	6	84	0inch	Crow 84
3402	110	sed	Hg	66.00	ppm	1	6	84	2 inch	Crow 84
3403	110	sed	Hg	64.00	ppm	1	6	84	4 inch	Crow 84
3404	110	sed	Hg	47.00	ppm	1	6	84	7 inch	Crow 84
3405	110	sed	Hg	60.00	ppm	1	6	84	9 inch	Crow 84
4005	113	ch sed	Hg	74.00	ppm		5	78	0-2 inch	JMA 78
4006	113	ch sed	Hg	38.00	ppm		5	78	2-4 inch	JMA 78
4007	113	ch sed	Hg	.32	ppm		5	78	4-6 inch	JMA 78
4010	114	sed	Hg	6.60	ppm		5	78	0-2 inch	JMA 78
4011	114	sed	Hg	19.20	ppm		5	78	2-4 inch	JMA 78
4012	114	sed	Hg	19.90	ppm		5	78	4-6 inch	JMA 78
4013	115	sed	Hg	18.00	ppm		5	78	0-2 inch	JMA 78
4014	115	sed	Hg	16.80	ppm		5	78	2-4 inch	JMA 78
4015	115	sed	Hg	32.40	ppm		5	78	4-6 inch	JMA 78
4016	116	sed	Hg	20.80	ppm		5	78	0-2 inch	JMA 78
4017	116	sed	Hg	29.90	ppm		5	78	2-4 inch	JMA 78
4018	116	sed	Hg	48.90	ppm		5	78	4-6 inch	JMA 78

149 Records Processed

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APPENDIX 5

MERCURY IN MARSH SEDIMENT - SMALL SCALE MAP

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MAPIDATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
1978	1	mrsh sed	HG	22.00	ppm	.10		77	0-2 inch	HMDC 78
1979	1	mrsh sed	HG	28.00	ppm	.10		77	2-4 inch	HMDC 78
1980	1	mrsh sed	HG	9.70	ppm	.10		77	4-6 inch	HMDC 78
1981	1	mrsh sed	HG	3.00	ppm	.10		77	6-11 inch	HMDC 78
1496	2	mrsh sed	Hg	16.00	ppm		3	76	0-2 inch	JMA 76
1497	2	mrsh sed	Hg	15.00	ppm		3	76	2-4 inch	JMA 76
1982	4	mrsh sed	HG	9.40	ppm	.10		77	0-2 inch	HMDC 78
1983	4	mrsh sed	HG	11.00	ppm	.10		77	2-4 inch	HMDC 78
1984	4	mrsh sed	HG	12.00	ppm	.10		77	4-6 inch	HMDC 78
1985	4	mrsh sed	HG	12.00	ppm	.10		77	6-10 inch	HMDC 78
1986	4	mrsh sed	HG	48.00	ppm	.10		77	ng	HMDC 78
1551	7	mrsh sed	Hg	14.00	ppm	.10		77	0-2 inch	HMDC 78
1552	7	mrsh sed	Hg	5.80	ppm	.10		77	2-4 inch	HMDC 78
1553	7	mrsh sed	Hg	5.00	ppm	.10		77	4-6 inch	HMDC 78
1554	7	mrsh sed	Hg	15.00	ppm	.10		77	6-12 inch	HMDC 78
1555	7	mrsh sed	Hg	8.60	ppm	.10		77	12-14inch	HMDC 78
1598	13	mrsh sed	Hg	22.00	ppm	.10		77	0-2 inch	HMDC 78
1599	13	mrsh sed	Hg	24.00	ppm	.10		77	2-4 inch	HMDC 78
1600	13	mrsh sed	Hg	28.00	ppm	.10		77	4-6 inch	HMDC 78
1601	13	mrsh sed	Hg	7.20	ppm	.10		77	6-12 inch	HMDC 78
1602	13	mrsh sed	Hg	9.60	ppm	.10		77	12-18 inch	HMDC 78
2021	18	mrsh sed	HG	8.00	ppm	.10		77	0-2 inch	HMDC 78
2022	18	mrsh sed	HG	39.00	ppm	.10		77	2-4 inch	HMDC 78
2023	18	mrsh sed	HG	48.00	ppm	.10		77	4-6 inch	HMDC 78
2024	18	mrsh sed	HG	11.00	ppm	.10		77	6-12 inch	HMDC 78
2025	18	mrsh sed	HG	6.70	ppm	.10		77	12-15 inch	HMDC 78
1605	19	mrsh sed	Hg	.10	ppm	.10		77	6-12 inch	HMDC 78
2031	19	mrsh sed	HG	.22	ppm	.10		77	2-4 inch	HMDC 78
2032	19	mrsh sed	HG	.10	ppm	.10		77	4-6 inch	HMDC 78
2033	19	mrsh sed	HG	.10	ppm	.10		77	6-12 inch	HMDC 78
3311	20	mrsh sed	Hg	.36	ppm		8	78	0-6 inch	Berg 78
3312	20	mrsh sed	Hg	.07	ppm		8	78	6-12 inch	Berg 78
3313	20	mrsh sed	Hg	.06	ppm		8	78	12-24inch	Berg 78
3314	20	mrsh sed	Hg	.14	ppm		8	78	weightavg	Berg 78
1680	26	mrsh sed	Hg	49.00	ppm	.10		77	0-2 inch	HMDC 78
1681	26	mrsh sed	Hg	32.00	ppm	.10		77	2-4 inch	HMDC 78
1682	26	mrsh sed	Hg	30.00	ppm	.10		77	4-6 inch	HMDC 78
1683	26	mrsh sed	Hg	164.00	ppm	.10		77	6-12 inch	HMDC 78
1684	26	mrsh sed	Hg	246.00	ppm	.10		77	12-18inch	HMDC 78
2051	27	mrsh sed	HG	60.10	ppm			74	0-6 inch	JMA 74
2052	27	mrsh sed	HG	7.10	ppm			74	30-36 inch	JMA 74
2058	30	mrsh sed	HG	62.00	ppm	.10		77	0-2 inch	HMDC 78

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MAPIDATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2059	30	mrsh sed	HG	7.60	ppm	.10		77	2-4 inch	HMDC 78
2060	30	mrsh sed	HG	28.00	ppm	.10		77	4-6 inch	HMDC 78
2061	30	mrsh sed	HG	28.00	ppm	.10		77	6-12 inch	HMDC 78
2108	35	mrsh sed	HG	133.00	ppm	.10		77	0-2 inch	HMDC 78
2109	35	mrsh sed	HG	22.00	ppm	.10		77	2-4 inch	HMDC 78
2110	35	mrsh sed	HG	2.40	ppm	.10		77	4-6 inch	HMDC 78
2111	35	mrsh sed	HG	5.90	ppm	.10		77	6-8 inch	HMDC 78
1769	36	mrsh sed	Hg	240.00	ppm		3	76	0-2 inch	JMA 76
1770	36	mrsh sed	Hg	180.00	ppm		3	76	2-4 inch	JMA 76
1771	36	mrsh sed	Hg	82.00	ppm		3	76	0-2 inch	JMA 76
1772	36	mrsh sed	Hg	262.00	ppm		3	76	2-4 inch	JMA 76
1773	36	mrsh sed	Hg	44.00	ppm		3	76	0-2 inch	JMA 76
1774	36	mrsh sed	Hg	47.00	ppm		3	76	2-4 inch	JMA 76
1775	36	mrsh sed	Hg	61.00	ppm		3	76	0-2 inch	JMA 76
2112	36	mrsh sed	HG	320.00	ppm	.10		77	0-2 inch	HMDC 78
2113	36	mrsh sed	HG	1496.00	ppm	.10		77	2-4 inch	HMDC 78
2114	36	mrsh sed	HG	332.00	ppm	.10		77	4-6 inch	HMDC 78
2115	36	mrsh sed	HG	118.00	ppm	.10		77	6-10 inch	HMDC 78
2149	39	mrsh sed	HG	422.00	ppm	.10		77	0-2 inch	HMDC 78
2150	39	mrsh sed	HG	348.00	ppm	.10		77	2-4 inch	HMDC 78
2151	39	mrsh sed	HG	442.00	ppm	.10		77	4-6 inch	HMDC 78
2152	39	mrsh sed	HG	1697.00	ppm	.10		77	6-12 inch	HMDC 78
2153	39	mrsh sed	HG	2006.00	ppm	.10		77	12-13 inch	HMDC 78
2186	42	mrsh sed	HG	26.00	ppm	.10		77	0-2 inch	HMDC 78
2187	42	mrsh sed	HG	4.80	ppm	.10		77	2-4 inch	HMDC 78
2188	42	mrsh sed	HG	5.90	ppm	.10		77	4-6 inch	HMDC 78
2189	42	mrsh sed	HG	6.90	ppm	.10		77	6-12 inch	HMDC 78
2190	42	mrsh sed	HG	4.40	ppm	.10		77	12-18 inch	HMDC 78
2208	43	mrsh sed	HG	11.00	ppm	.10		77	0-2 inch	HMDC 78
2209	43	mrsh sed	HG	14.00	ppm	.10		77	2-4 inch	HMDC 78
2210	43	mrsh sed	HG	26.00	ppm	.10		77	4-6 inch	HMDC 78
2211	43	mrsh sed	HG	38.00	ppm	.10		77	6-12 inch	HMDC 78
2212	43	mrsh sed	HG	7.20	ppm	.10		77	0-2 inch	HMDC 78
2215	45	mrsh sed	HG	6.00	ppm			72	0-2 inch	JMA 74
2216	45	mrsh sed	HG	7.00	ppm			72	4-6 inch	JMA 74
2213	45	mrsh sed	HG	36.70	ppm			74	0-6 inch	JMA 74
1822	45	mrsh sed	Hg	136.00	ppm		3	76	0-2inch peat	JMA 76
1823	45	mrsh sed	Hg	245.00	ppm		3	76	2-10inch peat	JMA 76
1824	45	mrsh sed	Hg	16.00	ppm		3	76	10-25inch peat	JMA 76
1825	45	mrsh sed	Hg	7.20	ppm		3	76	25-41inch	JMA 76
1826	45	mrsh sed	Hg	6.60	ppm		3	76	41-58inch	JMA 76
1827	45	mrsh sed	Hg	2.40	ppm		3	76	58-65inch clay	JMA 76

829910301

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
1828	45	mrsh sed	Hg	3.00	ppm		3	76	65-70inch	JMA 76
1829	45	mrsh sed	Hg	1.00	ppm		3	76	70-74inch	JMA 76
1830	46	mrsh sed	Hg	21.00	ppm		3	76	0-2inch peat	JMA 76
1831	46	mrsh sed	Hg	20.00	ppm		3	76	2-6inch peat	JMA 76
1832	46	mrsh sed	Hg	20.00	ppm		3	76	6-11inch peat	JMA 76
1833	46	mrsh sed	Hg	4.90	ppm		3	76	11-20inch	JMA 76
1834	46	mrsh sed	Hg	1.60	ppm		3	76	20-29inch	JMA 76
1835	46	mrsh sed	Hg	2.80	ppm		3	76	29-41inch	JMA 76
1836	46	mrsh sed	Hg	1.40	ppm		3	76	41-58inch	JMA 76
1837	46	mrsh sed	Hg	.40	ppm		3	76	58-62inch	JMA 76
1838	46	mrsh sed	Hg	.70	ppm		3	76	62-66inch	JMA 76
1839	46	mrsh sed	Hg	.80	ppm		3	76	66-78inch clay	JMA 76
2217	47	mrsh sed	HG	75.00	ppm			74	0-6 inch	JMA 74
2218	47	mrsh sed	HG	5.50	ppm			74	30-36 inch	JMA 74
1840	47	mrsh sed	Hg	36.00	ppm		3	76	0-2inch peat	JMA 76
1841	47	mrsh sed	Hg	4.50	ppm		3	76	2-29inch peat	JMA 76
1842	47	mrsh sed	Hg	1.80	ppm		3	76	29-32inch peat	JMA 76
1843	47	mrsh sed	Hg	1.40	ppm		3	76	32-37inch peat	JMA 76
1844	47	mrsh sed	Hg	.90	ppm		3	76	37-39inch clay	JMA 76
1845	47	mrsh sed	Hg	2.50	ppm		3	76	39-43inch	JMA 76
1846	47	mrsh sed	Hg	1.00	ppm		3	76	43-52inch	JMA 76
1847	47	mrsh sed	Hg	.70	ppm		3	76	52-53inch	JMA 76
2219	48	mrsh sed	HG	6.70	ppm			72	0-2 inch	JMA 74
2220	48	mrshsed	HG	96.20	ppm			72	4-6 inch	JMA 74
1866	48	mrsh sed	Hg	53.00	ppm		3	76	0-2inch peat	JMA 76
1867	48	mrsh sed	Hg	3.00	ppm		3	76	2-17inch	JMA 76
1868	48	mrsh sed	Hg	7.20	ppm		3	76	17-38inch	JMA 76
1869	48	mrsh sed	Hg	.50	ppm		3	76	38-42inch clay	JMA 76
1870	48	mrsh sed	Hg	.40	ppm		3	76	42-46inch clay	JMA 76
1871	48	mrsh sed	Hg	.40	ppm		3	76	46-50inch	JMA 76
1872	48	mrsh sed	Hg	.30	ppm		3	76	50-56inch	JMA 76
2226	50	mrsh sed	HG	2.30	ppm			72	0-2 inch	JMA 74
2227	50	mrsh sed	HG	8.20	ppm			72	4-6 inch	JMA 74
1873	50	mrsh sed	Hg	35.00	ppm		3	76	0-2inch peat	JMA 76
1874	50	mrsh sed	Hg	84.00	ppm		3	76	2-8inch peat	JMA 76
1875	50	mrsh sed	Hg	12.00	ppm		3	76	8-30inch peat	JMA 76
1876	50	mrsh sed	Hg	9.20	ppm		3	76	30-42inch	JMA 76
1877	50	mrsh sed	Hg	2.40	ppm		3	76	42-59inch	JMA 76
1878	50	mrsh sed	Hg	14.00	ppm		3	76	59-62inch clay	JMA 76
1879	50	mrsh sed	Hg	.40	ppm		3	76	62-65inch	JMA 76
1880	50	mrsh sed	Hg	.30	ppm		3	76	65-68inch	JMA 76
1881	50	mrsh sed	Hg	.30	ppm		3	76	68-74inch	JMA 76

829910302

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
1882	50	mrsh sed	Hg	8.40	ppm		3	76	74-78inch peat	JMA 76
2228	50	mrsh sed	HG	64.00	ppm	.10		77	0-2 inch	HMDC 78
2229	50	mrsh sed	HG	100.00	ppm	.10		77	2-4 inch	HMDC 78
2230	50	mrsh sed	HG	52.00	ppm	.10		77	4-6 inch	HMDC 78
2231	50	mrsh sed	HG	11.00	ppm	.10		77	6-12 inch	HMDC 78
3947	50	mrsh sed	Hg	26.00	ppm		5	78	0-2 inch	JMA 78
3948	50	mrsh sed	Hg	44.00	ppm		5	78	3-5 inch	JMA 78
2236	51	mrsh sed	HG	27.00	ppm	.10		77	0-2 inch	HMDC 78
2237	51	mrsh sed	HG	23.00	ppm	.10		77	2-4 inch	HMDC 78
2238	51	mrsh sed	HG	21.00	ppm	.10		77	4-6 inch	HMDC 78
2239	51	mrsh sed	HG	57.00	ppm	.10		77	6-11 inch	HMDC 78
2240	52	mrsh sed	HG	3.00	ppm		3	73	long core	JMA 76
2241	52	mrsh sed	HG	3.20	ppm		3	73	0-2 inch	JMA 76
2242	52	mrsh sed	HG	3.60	ppm		3	73	2-4 inch	JMA 76
2243	53	mrsh sed	HG	13.00	ppm	.10		77	0-2 inch	HMDC 78
2244	53	mrsh sed	HG	32.00	ppm	.10		77	2-4 inch	HMDC 78
2245	53	mrsh sed	HG	46.00	ppm	.10		77	4-6 inch	HMDC 78
2246	53	mrsh sed	HG	6.20	ppm	.10		77	6-12 inch	HMDC 78
2251	54	mrsh sed	HG	40.00	ppm	.10		77	0-2 inch	HMDC 78
2252	54	mrsh sed	HG	54.00	ppm	.10		77	2-4 inch	HMDC 78
2253	54	mrsh sed	HG	23.00	ppm	.10		77	4-6 inch	HMDC 78
2254	54	mrsh sed	HG	4.40	ppm	.10		77	6-9 inch	HMDC 78
1884	55	mrsh sed	Hg	.33	ppm	.10		77	0-2 inch	HMDC 78
1885	55	mrsh sed	Hg	.34	ppm	.10		77	2-4 inch	HMDC 78
1886	55	mrsh sed	Hg	.66	ppm	.10		77	4-6 inch	HMDC 78
1887	55	mrsh sed	Hg	.92	ppm	.10		77	6-12 inch	HMDC 78
1888	55	mrsh sed	Hg	1.20	ppm	.10		77	12-15 inch	HMDC 78
2256	56	mrsh sed	HG	10.00	ppm	.10		77	0-2 inch	HMDC 78
2257	56	mrsh sed	HG	4.60	ppm	.10		77	2-4 inch	HMDC 78
2258	56	mrsh sed	HG	1.20	ppm	.10		77	4-6 inch	HMDC 78
2259	56	mrsh sed	HG	22.00	ppm	.10		77	6-12 inch	HMDC 78
2260	56	mrsh sed	HG	7.40	ppm	.10		77	12-16 inch	HMDC 78
2265	57	mrsh sed	HG	.10	ppm	.10		77	0-2 inch	HMDC 78
2266	57	mrsh sed	HG	.10	ppm	.10		77	2-4 inch	HMDC 78
2267	57	mrsh sed	HG	1.20	ppm	.10		77	4-6 inch	HMDC 78
2268	57	mrsh sed	HG	1.20	ppm	.10		77	6-12 inch	HMDC 78
2269	57	mrsh sed	HG	.10	ppm	.10		77	12-18 inch	HMDC 78
2278	58	mrsh sed	HG	29.00	ppm	.10		77	0-2 inch	HMDC 78
2279	58	mrsh sed	HG	46.00	ppm	.10		77	2-4 inch	HMDC 78
2280	58	mrsh sed	HG	26.00	ppm	.10		77	4-6 inch	HMDC 78
2281	58	mrsh sed	HG	4.20	ppm	.10		77	6-12 inch	HMDC 78
2282	58	mrsh sed	HG	6.20	ppm	.10		77	12-14 inch	HMDC 78

829910303

MAPIDATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2283	59	mrsh sed	HG	2.60	ppm	.10		77	0-2 inch	HMDC 78
2284	59	mrsh sed	HG	2.40	ppm	.10		77	2-4 inch	HMDC 78
2285	59	mrsh sed	HG	5.30	ppm	.10		77	4-6 inch	HMDC 78
2287	59	mrsh sed	HG	.34	ppm	.10		77	6-12 inch	HMDC 78
2288	59	mrsh sed	HG	.10	ppm	.10		77	12-18 inch	HMDC 78
2295	60	mrsh sed	HG	6.00	ppm	.10		77	0 2 inch	HMDC 78
2296	60	mrsh sed	HG	18.00	ppm	.10		77	2 1 inch	HMDC 78
2297	60	mrsh sed	HG	27.00	ppm	.10		77	4-6 inch	HMDC 78
2298	60	mrsh sed	HG	13.00	ppm	.10		77	6-14 inch	HMDC 78
2308	61	mrsh sed	HG	10.00	ppm	.10		77	0-2 inch	HMDC 78
2309	61	mrsh sed	HG	14.00	ppm	.10		77	2-4 inch	HMDC 78
2310	61	mrsh sed	HG	3.80	ppm	.10		77	4-6 inch	HMDC 78
2311	61	mrsh sed	HG	1.60	ppm	.10		77	12-14 inch	HMDC 78
2312	61	mrsh sed	HG	1.50	ppm	.10		77	6-12 inch	HMDC 78
2317	62	mrsh sed	HG	105.90	ppm	.10		77	0-2 inch	HMDC 78
2318	62	mrsh sed	HG	578.00	ppm	.10		77	2-4 inch	HMDC 78
2319	62	mrsh sed	HG	47.00	ppm	.10		77	4-6 inch	HMDC 78
2320	62	mrsh sed	HG	4.90	ppm	.10		77	6-12 inch	HMDC 78
2321	63	mrsh sed	HG	493.00	ppm	.10		77	0-2 inch	HMDC 78
2322	63	mrsh sed	HG	183.00	ppm	.10		77	2-4 inch	HMDC 78
2323	63	mrsh sed	HG	719.00	ppm	.10		77	4-6 inch	HMDC 78
2324	63	mrsh sed	HG	255.00	ppm	.10		77	6-12 inch	HMDC 78
2325	63	mrsh sed	HG	4.40	ppm	.10		77	12-15 inch	HMDC 78
2326	64	mrsh sed	HG	1747.00	ppm	.10		77	0-2 inch	HMDC 78
2327	64	mrsh sed	HG	1713.00	ppm	.10		77	2-4 inch	HMDC 78
2328	64	mrsh sed	HG	342.00	ppm	.10		77	4-6 inch	HMDC 78
2329	64	mrsh sed	HG	13.00	ppm	.10		77	6-8 inch	HMDC 78
2330	65	mrsh sed	HG	82.00	ppm		3	76	0-2 inch	JMA 76
2331	65	mrsh sed	HG	262.00	ppm		3	76	2-4 inch	JMA 76
2332	66	mrsh sed	HG	196.00	ppm	.10		77	0-2 inch	HMDC 78
2333	66	mrsh sed	HG	63.00	ppm	.10		77	2-4 inch	HMDC 78
2334	66	mrsh sed	HG	.80	ppm	.10		77	4-6 inch	HMDC 78
2335	66	mrsh sed	HG	.60	ppm	.10		77	6-12 inch	HMDC 78
2336	66	mrsh sed	HG	.70	ppm	.10		77	12-13 inch	HMDC 78
2338	67	mrsh sed	HG	1455.00	ppm	.10		77	0-2 inch	HMDC 78
2339	67	mrsh sed	HG	1615.00	ppm	.10		77	2-4 inch	HMDC 78
2340	67	mrsh sed	HG	301.00	ppm	.10		77	4-6 inch	HMDC 78
2341	67	mrsh sed	HG	142.00	ppm	.10		77	6-12 inch	HMDC 78
2342	67	mrsh sed	HG	2.70	ppm	.10		77	12-14 inch	HMDC 78
2343	68	mrsh sed	HG	44.00	ppm		3	76	0-2 inch	JMA 76
2344	68	mrsh sed	HG	47.00	ppm		3	76	2-4 inch	JMA 76
3385	70	mrsh sed	Hg	.22	ppm		8	78	0-6 inch	Berg 78

829910304

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3386	70	mrsh sed	Hg	.06	ppm		8	78	6-12inch	Berg 78
3387	70	mrsh sed	Hg	.28	ppm		8	78	12-24inch	Berg 78
3388	70	mrsh sed	Hg	.14	ppm		8	78	weightavg	Berg 78
2357	75	mrsh sed	HG	8.90	ppm	.10		77	0-2 inch	HMDC 78
2358	75	mrsh sed	HG	2.20	ppm	.10		77	2-4 inch	HMDC 78
2359	75	mrsh sed	HG	3.60	ppm	.10		77	4-6 inch	HMDC 78
2360	75	mrsh sed	HG	24.00	ppm	.10		77	6-12 inch	HMDC 78
1937	83	mrsh sed	Hg	12.00	ppm	.10		77	0-2 inch	HMDC 78
1938	83	mrsh sed	Hg	31.00	ppm	.10		77	2-4 inch	HMDC 78
1939	83	mrsh sed	Hg	32.00	ppm	.10		77	4-6 inch	HMDC 78
1940	83	mrsh sed	Hg	3.10	ppm	.10		77	6-12 inch	HMDC 78
1941	83	mrsh sed	Hg	.70	ppm	.10		77	12-18 inch	HMDC 78
2399	84	mrsh sed	HG	280.00	ppm	.10		77	0-2 inch	HMDC 78
2400	84	mrsh sed	HG	364.00	ppm	.10		77	2-4 inch	HMDC 78
2401	84	mrsh sed	HG	135.00	ppm	.10		77	4-6 inch	HMDC 78
2402	84	mrsh sed	HG	26.00	ppm	.10		77	6-12 inch	HMDC 78
2403	84	mrsh sed	HG	.90	ppm	.10		77	12-15 inch	HMDC 78
3391	105	mrsh sed	Hg	.01	ppm		8	78	0-6 inch	Berg 78
3392	105	mrsh sed	Hg	.01	ppm		8	78	6-12 inch	Berg 78
3393	105	mrsh sed	Hg	.01	ppm		8	78	12-24inch	Berg 78
3394	105	mrsh sed	Hg	.01	ppm		8	78	weightavg	Berg 78
4008	113	mrsh sed	Hg	19.00	ppm		5	78	0-2 inch	JMA 78
4009	113	mrsh sed	Hg	7.40	ppm		5	78	4-6 inch	JMA 78

233 Records Processed

829910305

APPENDIX 6

MERCURY IN SOIL - SMALL SCALE MAP

IAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3315	22	soil	Hg	.01	ppm		8	78	leachate	Berg 78
3316	22	soil	Hg	.09	ppm		8	78	solid	Berg 78
883	51	soil	Hg	4.50	ppm	.00	3	80	unf L t	Aw 80
.913	69	soil	Hg	91.00	ppm	.00	3	80	unf L t	Aw 80
3389	77	soil	Hg	.01	ppm		8	78	leachate	Berg 78
3390	77	soil	Hg	.03	ppm		8	78	solid	Berg 78
1942	84	soil	Hg	86.00	ppm	.00	3	80	unf L t	Aw 80
3397	108	soil	Hg	1.00	ppm	1	6	84	comp	Crow 84
3398	109	soil	Hg	50.00	ppm	1	6	84	comp	Crow 84
3400	110	soil	Hg	49.00	ppm	1	6	84	comp	Crow 84
3406	111	soil	Hg	36.00	ppm	1	6	84	comp	Crow 84
3407	112	soil	Hg	32.00	ppm	1	6	84	0 inch	Crow 84
3408	112	soil	Hg	22.00	ppm	1	6	84	4 inch	Crow 84
3409	112	soil	Hg	3.00	ppm	1	6	84	10 inch	Crow 84
3410	112	soil	Hg	1.00	ppm	1	6	84	16 inch	Crow 84
3411	112	soil	Hg	1.00	ppm	1	6	84	22 inch	Crow 84
3412	112	soil	Hg	1.00	ppm	1	6	84	34 inch	Crow 84

17 Records Processed

829910307

APPENDIX 7

MERCURY IN SURFACE WATER - SMALL SCALE MAP

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
7791	1	sw	Hg	.00	ppb	.10	11	77	Ht unf	HMDC 78
7792	1	sw	Hg	.00	PPB	.10	11	77	unf Lt	HMDC 78
7793	1	sw	Hg	.00	ppb	.10	12	77	Ht filter	HMDC 78
7794	1	sw	Hg	.00	ppb	.10	12	77	Lt filter	HMDC 78
7773	1	sw	Hg	.19	PPB		1	78	unf Ht	HMDC 78
7796	1	sw	Hg	.00	ppb	.10	1	78	Lt unf	HMDC 78
7797	1	sw	Hg	.44	ppb	.10	2	78	Ht unf	HMDC 78
7798	1	sw	Hg	.30	ppb	.10	2	78	Lt unf	HMDC 78
7799	1	sw	Hg	.00	PPB	.10	3	78	Ht unf	HMDC 78
7800	1	sw	Hg	.19	PPB	.10	3	78	Lt unf	HMDC 78
7801	1	sw	Hg	1.90	PPB	.10	4	78	Ht unf	HMDC 78
7802	1	sw	Hg	24.00	PPB	.10	4	78	Lt unf	HMDC 78
7803	1	sw	Hg	.00	PPB	.10	4	78	Ht fil	HMDC 78
7804	1	sw	Hg	.00	PPB	.10	4	78	Lt fil	HMDC 78
7805	1	sw	Hg	.21	PPB	.10	5	78	Ht unf	HMDC 78
7806	1	sw	Hg	.83	PPB	.10	5	78	Lt unf	HMDC 78
7807	1	sw	Hg	.14	PPB	.10	6	78	Ht unf	HMDC 78
7808	1	sw	Hg	.47	PPB	.10	6	78	Lt unf	HMDC 78
7809	1	sw	Hg	.14	PPB	.10	6	78	Ht fil	HMDC 78
7810	1	sw	Hg	.17	PPB	.10	6	78	Lt fil	HMDC 78
7811	1	sw	Hg	.19	PPB	.10	7	78	Ht unf	HMDC 78
7812	1	sw	Hg	.12	PPB	.10	7	78	Lt unf	HMDC 78
7813	1	sw	Hg	.17	PPB	.10	8	78	Ht unf	HMDC 78
7814	1	sw	Hg	.00	PPB	.10	8	78	Lt unf	HMDC 78
7815	1	sw	Hg	.00	PPB	.10	8	78	Ht fil	HMDC 78
7816	1	sw	Hg	.00	PPB	.10	8	78	Lt fil	HMDC 78
7817	1	sw	Hg	.10	PPB	.10	9	78	Ht unf	HMDC 78
7818	1	sw	Hg	.18	PPB	.10	9	78	Lt unf	HMDC 78
7819	1	sw	Hg	.00	PPB	.10	10	78	Lt unf	HMDC 78
7820	1	sw	Hg	.00	PPB	.10	10	78	Ht unf	HMDC 78
7821	1	sw	Hg	.00	PPB	.10	10	78	Ht fil	HMDC 78
7822	1	sw	Hg	.00	PPB	.10	10	78	Lt fil	HMDC 78
3834	9	sw	Hg	1.70	ppb		8	78	Ht unf	Berg 78
3835	11	sw	Hg	1.20	ppb		8	78	Ht unf	Berg 78
7746	23	sw	Hg	46.60	PPB		5	74	unf Lt	JMA 76
7745	23	sw	Hg	14.00	PPB		6	74	unf Lt	JMA 76
7744	23	sw	Hg	3.80	PPB		7	74	unf Lt	JMA 76
7770	23	sw	Hg	3.90	PPB		7	74	unf Ht	JMA 76
7743	23	sw	Hg	2.40	PPB		9	74	unf Lt	JMA 76
7769	23	sw	Hg	11.00	PPB		9	74	unf Ht	JMA 76
7742	23	sw	Hg	4.30	PPB		10	74	unf Lt	JMA 76

8299910309

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
7768	23	sw	Hg	1.30	PPB		10	74	unf Ht	JMA 76
7741	23	sw	Hg	2.50	PPB		11	74	unf Lt	JMA 76
7767	23	sw	Hg	.20	PPB		11	74	unf Ht	JMA 76
7740	23	sw	Hg	4.60	PPB		12	74	unf Lt	JMA 76
7739	23	sw	Hg	.14	PPB		11	75	unf Lt	JMA 76
8017	23	sw	Hg	10.40	ppb		12	75	unf Lt	JMA 76
8016	23	sw	Hg	21.40	ppb		1	76	unf Lt	JMA 76
8015	23	sw	Hg	1.26	ppb		2	76	unf Lt	JMA 76
8014	23	sw	Hg	4.46	ppb		3	76	unf Lt	JMA 76
8013	23	sw	Hg	2.80	ppb		4	76	unf Lt	JMA 76
8012	23	sw	Hg	.80	ppb		5	76	unf Lt	JMA 76
8011	23	sw	Hg	2.90	ppb		6	76	unf Lt	JMA 76
8010	23	sw	Hg	.60	ppb		7	76	unf Lt	JMA 76
8009	23	sw	Hg	.20	ppb		8	76	unf Lt	JMA 76
3853	23	sw	Hg	.40	ppb	.10	11	77	unf Ht	HMDC 78
3864	23	sw	Hg	.90	ppb	.10	11	77	unf Lt	HMDC 78
7875	23	sw	Hg	.00	PPB	.10	12	77	Ht fil	HMDC 78
7880	23	sw	Hg	.00	PPB	.1	12	77	Lt fil	HMDC 78
3854	23	sw	Hg	.80	ppb	.10	1	78	unf Ht	HMDC 78
3865	23	sw	Hg	.80	ppb	.10	1	78	unf Lt	HMDC 78
3855	23	sw	Hg	.30	ppb	.10	2	78	unf Ht	HMDC 78
3866	23	sw	Hg	.70	ppb	.10	2	78	unf Lt	HMDC 78
3856	23	sw	Hg	.50	ppb	.10	3	78	unf Ht	HMDC 78
3867	23	sw	Hg	1.70	ppb	.10	3	78	unf Lt	HMDC 78
3857	23	sw	Hg	3.20	ppb	.10	4	78	unf Ht	HMDC 78
3868	23	sw	Hg	9.70	ppb	.10	4	78	unf Lt	HMDC 78
7876	23	sw	Hg	.00	PPB	.10	4	78	Ht fil	HMDC 78
7881	23	sw	Hg	.00	PPB	.1	4	78	Lt fil	HMDC 78
3858	23	sw	Hg	.80	ppb	.10	5	78	unf Ht	HMDC 78
3869	23	sw	Hg	2.10	ppb	.10	5	78	unf Lt	HMDC 78
3859	23	sw	Hg	.40	ppb	.10	6	78	unf Ht	HMDC 78
3870	23	sw	Hg	2.60	ppb	.10	6	78	unf Lt	HMDC 78
7877	23	sw	Hg	.14	PPB	.10	6	78	Ht fil	HMDC 78
7882	23	sw	Hg	.20	PPB	.1	6	78	Lt fil	HMDC 78
3860	23	sw	Hg	.20	ppb	.10	7	78	unf Ht	HMDC 78
3871	23	sw	Hg	1.30	ppb	.10	7	78	unf Lt	HMDC 78
3836	23	sw	Hg	1.10	ppb		8	78	unf Ht	Berg 78
3861	23	sw	Hg	.40	ppb	.10	8	78	unf Ht	HMDC 78
3872	23	sw	Hg	9.60	ppb	.10	8	78	unf Lt	HMDC 78
7878	23	sw	Hg	.00	PPB	.10	8	78	Ht fil	HMDC 78
7883	23	sw	Hg	4.00	PPB	.1	8	78	Lt fil	HMDC 78
3862	23	sw	Hg	.60	ppb	.10	9	78	unf Ht	HMDC 78

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3873	23	sw	Hg	4.60	ppb	.10	9	78	unf Lt	HMDC 78
3863	23	sw	Hg	.00	ppb	.10	10	78	unf Ht	HMDC 78
3874	23	sw	Hg	.90	ppb	.10	10	78	unf Lt	HMDC 78
7879	23	sw	Hg	.00	PPB	.10	10	78	Ht fil	HMDC 78
7884	23	sw	Hg	.00	PPB	.1	10	78	Lt fil	HMDC 78
7702	23	sw	Hg	.00	PPB	.10	12	78	Ht filter	HMDC 78
7703	23	sw	Hg	.00	ppb	.10	12	78	Lt filter	HMDC 78
3837	23	sw	Hg	119.30	ppm		8	82	ss Ht	HMDC 82
3838	23	sw	Hg	53.40	ppm		8	82	ss Ht	HMDC 82
3839	23	sw	Hg	143.20	ppm		8	82	ss Ht	HMDC 82
3840	23	sw	Hg	250.70	ppm		8	82	ss Ht	HMDC 82
3841	23	sw	Hg	541.00	ppm		8	82	ss Ht	HMDC 82
3842	23	sw	Hg	512.80	ppm		8	82	ss Ht	HMDC 82
3843	23	sw	Hg	238.80	ppm		8	82	ss Ht	HMDC 82
3844	23	sw	Hg	940.30	ppm		8	82	ss Ht	HMDC 82
3845	23	sw	Hg	110.10	ppm		8	82	ss Lt	HMDC 82
3846	23	sw	Hg	128.20	ppm		8	82	ss Lt	HMDC 82
3847	23	sw	Hg	168.20	ppm		8	82	ss Lt	HMDC 82
3848	23	sw	Hg	181.20	ppm		8	82	ss Lt	HMDC 82
3849	23	sw	Hg	392.00	ppm		8	82	ss Lt	HMDC 82
3850	23	sw	Hg	367.20	ppm		8	82	ss Lt	HMDC 82
3851	23	sw	Hg	234.40	ppm		8	82	ss Lt	HMDC 82
3852	23	sw	Hg	390.60	ppm		8	82	ss Lt	HMDC 82
3877	23	sw	Hg	.00	ppb		8	82	Ht filter	HMDC 82
3878	23	sw	Hg	.07	ppb		8	82	Ht filter	HMDC 82
3879	23	sw	Hg	.00	ppb		8	82	Ht filter	HMDC 82
3880	23	sw	Hg	.01	ppb		8	82	Ht filter	HMDC 82
3881	23	sw	Hg	.03	ppb		8	82	Ht filter	HMDC 82
3882	23	sw	Hg	.02	ppb		8	82	Ht filter	HMDC 82
3883	23	sw	Hg	.01	ppb		8	82	Ht filter	HMDC 82
3884	23	sw	Hg	.03	ppb		8	82	Ht filter	HMDC 82
3885	23	sw	Hg	.01	ppb		8	82	Lt filter	HMDC 82
3886	23	sw	Hg	.00	ppb		8	82	Lt filter	HMDC 82
3887	23	sw	Hg	.00	ppb		8	82	Lt filter	HMDC 82
3888	23	sw	Hg	.01	ppb		8	82	Lt filter	HMDC 82
3889	23	sw	Hg	.02	ppb		8	82	Lt filter	HMDC 82
3890	23	sw	Hg	.03	ppb		8	82	Lt filter	HMDC 82
3891	23	sw	Hg	.01	ppb		8	82	Lt filter	HMDC 82
3892	23	sw	Hg	.02	ppb		8	82	Lt filter	HMDC 82
3893	26	sw	Me Hg	1.40	ppb	.50	10	81	fil	NJDEP 85
3894	26	sw	Hg	.20	ppb	.50	10	81	unf	NJDEP 85
7762	32	sw	Hg	6.14	PPB		7	74	unf Lt	JMA 76

829910311

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
7766	32	sw	Hg	7.30	PPB		7	74	unf Ht	JMA 76
7761	32	sw	Hg	15.00	PPB		9	74	unf Lt	JMA 76
7765	32	sw	Hg	47.50	PPB		9	74	unf Ht	JMA 76
7760	32	sw	Hg	6.00	PPB		10	74	unf Lt	JMA 76
7764	32	sw	Hg	4.00	PPB		10	74	unf Ht	JMA 76
7759	32	sw	Hg	8.30	PPB		11	74	unf Lt	JMA 76
7763	32	sw	Hg	4.70	PPB		11	74	unf Ht	JMA 76
7758	32	sw	Hg	4.10	PPB		12	74	unf Lt	JMA 76
7757	32	sw	Hg	.86	PPB		11	75	unf Lt	JMA 76
7756	32	sw	Hg	7.80	PPB		12	75	unf Lt	JMA 76
7755	32	sw	Hg	5.90	PPB		1	76	unf Lt	JMA 76
7754	32	sw	Hg	2.06	PPB		2	76	unf Lt	JMA 76
7753	32	sw	Hg	3.41	PPB		3	76	unf Lt	JMA 76
7752	32	sw	Hg	2.10	PPB		4	76	unf Lt	JMA 76
7751	32	sw	Hg	.60	PPB		5	76	unf Lt	JMA 76
7750	32	sw	Hg	.90	PPB		6	76	unf Lt	JMA 76
7749	32	sw	Hg	1.60	PPB		7	76	unf Lt	JMA 76
7748	32	sw	Hg	.10	PPB		8	76	unf Lt	JMA 76
7747	32	sw	Hg	1.60	PPB		9	76	unf Lt	JMA 76
7885	32	sw	Hg	2.30	PPB	.1	11	77	Ht unf	HMDC 78
7901	32	sw	Hg	.97	PPB	.1	11	77	Lt unf	HMDC 78
7886	32	sw	Hg	.00	PPB	.1	12	77	Ht fil	HMDC 78
7902	32	sw	Hg	.00	PPB	.1	12	77	Lt fil	HMDC 78
7887	32	sw	Hg	.86	PPB	.1	1	78	Ht unf	HMDC 78
7903	32	sw	Hg	1.00	PPB	.1	1	78	Lt unf	HMDC 78
7888	32	sw	Hg	.44	PPB	.1	2	78	Ht unf	HMDC 78
7904	32	sw	Hg	.30	PPB	.1	2	78	Lt unf	HMDC 78
7889	32	sw	Hg	2.10	PPB	.1	3	78	Ht unf	HMDC 78
7905	32	sw	Hg	.00	PPB	.1	3	78	Lt unf	HMDC 78
7890	32	sw	Hg	5.90	PPB	.1	4	78	Ht unf	HMDC 78
7891	32	sw	Hg	.00	PPB	.1	4	78	Ht fil	HMDC 78
7906	32	sw	Hg	9.90	PPB	.1	4	78	Lt unf	HMDC 78
7907	32	sw	Hg	.00	PPB	.1	4	78	Lt fil	HMDC 78
7892	32	sw	Hg	1.40	PPB	.1	5	78	Ht unf	HMDC 78
7908	32	sw	Hg	1.30	PPB	.1	5	78	Lt unf	HMDC 78
7893	32	sw	Hg	1.20	PPB	.1	6	78	Ht unf	HMDC 78
7894	32	sw	Hg	.27	PPB	.1	6	78	Ht fil	HMDC 78
7909	32	sw	Hg	1.30	PPB	.1	6	78	Lt unf	HMDC 78
7910	32	sw	Hg	.14	PPB	.1	6	78	Lt fil	HMDC 78
7895	32	sw	Hg	.82	PPB	.1	7	78	Ht unf	HMDC 78
7911	32	sw	Hg	.89	PPB	.1	7	78	Lt unf	HMDC 78
7896	32	sw	Hg	.72	PPB	.1	8	78	Ht unf	HMDC 78

829910312

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
7897	32	sw	Hg	.10	PPB	.1	8	78	Ht fil	HMDC 78
7912	32	sw	Hg	.85	PPB	.1	8	78	Lt unf	HMDC 78
7913	32	sw	Hg	.00	PPB	.1	8	78	Lt fil	HMDC 78
7898	32	sw	Hg	.40	PPB	.1	9	78	Ht unf	HMDC 78
7914	32	sw	Hg	.50	PPB	.1	9	78	Lt unf	HMDC 78
7899	32	sw	Hg	.61	PPB	.1	10	78	Ht unf	HMDC 78
7900	32	sw	Hg	.00	PPB	.1	10	78	Ht fil	HMDC 78
7915	32	sw	Hg	1.20	PPB	.1	10	78	Lt unf	HMDC 78
7916	32	sw	Hg	.00	PPB	.1	10	78	Lt fil	HMDC 78
8004	37	sw	Hg	.30	ppb		11	75	unf	JMA 77
8007	37	sw	Hg	.43	ppb		8	76	unf	JMA 77
8000	39	sw	Hg	.30	ppb		2	75	unf	JMA 77
8001	39	sw	Hg	.00	ppb		2	75	unf	JMA 77
8003	39	sw	Hg	.40	ppb		11	75	unf	JMA 77
7917	39	sw	Hg	3.20	PPB	.1	11	77	Ht unf	HMDC 78
7933	39	sw	Hg	.31	PPB	.1	11	77	Lt unf	HMDC 78
7918	39	sw	Hg	.00	PPB	.1	12	77	Ht fil	HMDC 78
7934	39	sw	Hg	.22	PPB	.1	12	77	Lt fil	HMDC 78
7919	39	sw	Hg	.92	PPB	.1	1	78	Ht unf	HMDC 78
7935	39	sw	Hg	1.40	PPB	.1	1	78	Lt unf	HMDC 78
7920	39	sw	Hg	1.10	PPB	.1	2	78	Ht unf	HMDC 78
7936	39	sw	Hg	.54	PPB	.1	2	78	Lt unf	HMDC 78
7921	39	sw	Hg	1.00	PPB	.1	3	78	Ht unf	HMDC 78
7937	39	sw	Hg	.30	PPB	.1	3	78	Lt unf	HMDC 78
7922	39	sw	Hg	13.00	PPB	.1	4	78	Ht unf	HMDC 78
7923	39	sw	Hg	.20	PPB	.1	4	78	Ht fil	HMDC 78
7938	39	sw	Hg	8.70	PPB	.1	4	78	Lt unf	HMDC 78
7939	39	sw	Hg	.00	PPB	.1	4	78	Lt fil	HMDC 78
7924	39	sw	Hg	.21	PPB	.1	5	78	Ht unf	HMDC 78
7940	39	sw	Hg	6.20	PPB	.1	5	78	Lt unf	HMDC 78
7925	39	sw	Hg	.87	PPB	.1	6	78	Ht unf	HMDC 78
7926	39	sw	Hg	.20	PPB	.1	6	78	Ht fil	HMDC 78
7941	39	sw	Hg	.70	PPB	.1	6	78	Lt unf	HMDC 78
7942	39	sw	Hg	.20	PPB	.1	6	78	Lt fil	HMDC 78
7927	39	sw	Hg	.39	PPB	.1	7	78	Ht unf	HMDC 78
7943	39	sw	Hg	1.30	PPB	.1	7	78	Lt unf	HMDC 78
7928	39	sw	Hg	.95	PPB	.1	8	78	Ht unf	HMDC 78
7929	39	sw	Hg	.00	PPB	.1	8	78	Ht fil	HMDC 78
7944	39	sw	Hg	.49	PPB	.1	8	78	Lt unf	HMDC 78
7945	39	sw	Hg	.00	PPB	.1	8	78	Lt fil	HMDC 78
7930	39	sw	Hg	.61	PPB	.1	9	78	Ht unf	HMDC 78
7946	39	sw	Hg	.84	PPB	.1	9	78	Lt unf	HMDC 78

829910313

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
7931	39	sw	Hg	.89	PPB	.1	10	78	Ht unf	HMDC 78
7932	39	sw	Hg	.00	PPB	.1	10	78	Ht fil	HMDC 78
7947	39	sw	Hg	1.20	PPB	.1	10	78	Lt unf	HMDC 78
3949	60	sw	Hg	.00	ppb	.10	11	77	unf Ht	HMDC 78
3958	60	sw	Hg	.00	ppb	.10	11	77	unf Lt	HMDC 78
7823	60	sw	Hg	.00	PPB	.10	12	77	Ht fil	HMDC 78
7824	60	sw	Hg	.00	PPB	.10	12	77	Lt fil	HMDC 78
3959	60	sw	Hg	.20	ppb	.10	1	78	unf Lt	HMDC 78
3971	60	sw	Hg	.10	ppb	.10	1	78	unf Ht	HMDC 78
3950	60	sw	Hg	.60	ppb	.10	2	78	unf Ht	HMDC 78
3960	60	sw	Hg	.20	ppb	.10	2	78	unf Lt	HMDC 78
3951	60	sw	Hg	.00	ppb	.10	3	78	unf Ht	HMDC 78
3961	60	sw	Hg	.00	ppb	.10	3	78	unf Lt	HMDC 78
3952	60	sw	Hg	.40	ppb	.10	4	78	unf Ht	HMDC 78
3962	60	sw	Hg	4.20	ppb	.10	4	78	unf Lt	HMDC 78
7825	60	sw	Hg	.00	PPB	.10	4	78	Lt fil	HMDC 78
7826	60	sw	Hg	.00	PPB	.10	4	78	Ht fil	HMDC 78
3953	60	sw	Hg	1.70	ppb	.10	5	78	unf Ht	HMDC 78
3963	60	sw	Hg	.40	ppb	.10	5	78	unf Lt	HMDC 78
3964	60	sw	Hg	.60	ppb	.10	6	78	unf Lt	HMDC 78
3972	60	sw	Hg	.10	ppb	.10	6	78	unf Ht	HMDC 78
7827	60	sw	Hg	.10	PPB	.10	6	78	Ht fil	HMDC 78
7828	60	sw	Hg	.17	PPB	.10	6	78	Lt fil	HMDC 78
3954	60	sw	Hg	.40	ppb	.10	7	78	unf Ht	HMDC 78
3965	60	sw	Hg	.20	ppb	.10	7	78	unf Lt	HMDC 78
3955	60	sw	Hg	.20	ppb	.10	8	78	unf Ht	HMDC 78
3966	60	sw	Hg	.00	ppb	.10	8	78	unf Lt	HMDC 78
7829	60	sw	Hg	.00	PPB	.10	8	78	Lt fil	HMDC 78
7830	60	sw	Hg	.00	PPB	.10	8	78	Ht fil	HMDC 78
3956	60	sw	Hg	.20	ppb	.10	9	78	unf Ht	HMDC 78
3967	60	sw	Hg	.20	ppb	.10	9	78	unf Lt	HMDC 78
3957	60	sw	Hg	.00	ppb	.10	10	78	unf Ht	HMDC 78
3968	60	sw	Hg	.20	ppb	.10	10	78	unf Lt	HMDC 78
7831	60	sw	Hg	.00	PPB	.10	10	78	Ht fil	HMDC 78
7832	60	sw	Hg	.00	PPB	.10	10	78	Lt fil	HMDC 78
8002	72	sw	Hg	.60	ppb		11	75	unf	JMA 77
8005	72	sw	Hg	.20	ppb		8	76	unf	JMA 77
3973	73	sw	Hg	.00	ppb	.10	11	77	unf Ht	HMDC 78
3984	73	sw	Hg	.00	ppb	.10	11	77	unf Lt	HMDC 78
7833	73	sw	Hg	.00	PPB	.10	12	77	Lt fil	HMDC 78
7834	73	sw	Hg	.00	PPB	.10	12	77	Ht fil	HMDC 78
3974	73	sw	Hg	.00	ppb	.10	1	78	unf Ht	HMDC 78

829910314

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3985	73	sw	Hg	.20	ppb	.10	1	78	unf Lt	HMDC 78
3975	73	sw	Hg	.20	ppb	.10	2	78	unf Ht	HMDC 78
3986	73	sw	Hg	.60	ppb	.10	2	78	unf Lt	HMDC 78
3976	73	sw	Hg	.00	ppb	.10	3	78	unf Ht	HMDC 78
3987	73	sw	Hg	.00	ppb	.10	3	78	unf Lt	HMDC 78
3977	73	sw	Hg	.40	ppb	.10	4	78	unf Ht	HMDC 78
3988	73	sw	Hg	.90	ppb	.10	4	78	unf Lt	HMDC 78
7835	73	sw	Hg	.00	PPB	.10	4	78	Ht fil	HMDC 78
7836	73	sw	Hg	.00	PPB	.10	4	78	Lt fil	HMDC 78
3978	73	sw	Hg	.30	ppb	.10	5	78	unf Ht	HMDC 78
3989	73	sw	Hg	.30	ppb	.10	5	78	unf Lt	HMDC 78
3979	73	sw	Hg	.50	ppb	.10	6	78	unf Ht	HMDC 78
3990	73	sw	Hg	.40	ppb	.10	6	78	unf Lt	HMDC 78
7837	73	sw	Hg	.10	PPB	.10	6	78	Lt fil	HMDC 78
7838	73	sw	Hg	.00	PPB	.10	6	78	Ht fil	HMDC 78
3980	73	sw	Hg	.20	ppb	.10	7	78	unf Ht	HMDC 78
3996	73	sw	Hg	.10	ppb	.10	7	78	unf Lt	HMDC 78
3981	73	sw	Hg	.20	ppb	.10	8	78	unf Ht	HMDC 78
3991	73	sw	Hg	.00	ppb	.10	8	78	unf Lt	HMDC 78
7839	73	sw	Hg	.00	PPB	.10	8	78	Ht fil	HMDC 78
7840	73	sw	Hg	.00	PPB	.10	8	78	Lt fil	HMDC 78
3982	73	sw	Hg	.20	ppb	.10	9	78	unf Ht	HMDC 78
3992	73	sw	Hg	.20	ppb	.10	9	78	unf Lt	HMDC 78
3983	73	sw	Hg	.00	ppb	.10	10	78	unf Ht	HMDC 78
3993	73	sw	Hg	.00	ppb	.10	10	78	unf Lt	HMDC 78
7841	73	sw	Hg	.00	PPB	.10	10	78	Lt fil	HMDC 78
7842	73	sw	Hg	.00	PPB	.10	10	78	Ht fil	HMDC 78
7843	76	sw	Hg	.00	PPB	.10	11	77	Ht unf	HMDC 78
7859	76	sw	Hg	.00	PPB	.10	11	77	Lt unf	HMDC 78
7844	76	sw	Hg	.00	PPB	.10	12	77	Ht fil	HMDC 78
7860	76	sw	Hg	.00	PPB	.10	12	77	Lt fil	HMDC 78
7845	76	sw	Hg	.11	PPB	.10	1	78	Ht unf	HMDC 78
7861	76	sw	Hg	.19	PPB	.10	1	78	Lt unf	HMDC 78
7846	76	sw	Hg	.30	PPB	.10	2	78	Ht unf	HMDC 78
7862	76	sw	Hg	.00	PPB	.10	2	78	Lt unf	HMDC 78
7847	76	sw	Hg	.00	PPB	.10	3	78	Ht unf	HMDC 78
7863	76	sw	Hg	.14	PPB	.10	3	78	Lt unf	HMDC 78
7848	76	sw	Hg	.40	PPB	.10	4	78	Ht unf	HMDC 78
7849	76	sw	Hg	.00	PPB	.10	4	78	Ht fil	HMDC 78
7864	76	sw	Hg	.70	PPB	.10	4	78	Lt unf	HMDC 78
7865	76	sw	Hg	.00	PPB	.10	4	78	Lt fil	HMDC 78
7850	76	sw	Hg	.24	PPB	.10	5	78	Ht unf	HMDC 78

829910315

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
7866	76	sw	Hg	.24	PPB	.10	5	78	Lt unf	HMDC 78
7851	76	sw	Hg	.14	PPB	.10	6	78	Ht unf	HMDC 78
7852	76	sw	Hg	.10	PPB	.10	6	78	Ht fil	HMDC 78
7867	76	sw	Hg	.24	PPB	.10	6	78	Lt unf	HMDC 78
7868	76	sw	Hg	.10	PPB	.10	6	78	Lt fil	HMDC 78
7853	76	sw	Hg	.12	PPB	.10	7	78	Ht unf	HMDC 78
7869	76	sw	Hg	.22	PPB	.10	7	78	Lt unf	HMDC 78
7854	76	sw	Hg	.20	PPB	.10	8	78	Ht unf	HMDC 78
7855	76	sw	Hg	.00	PPB	.10	8	78	Ht fil	HMDC 78
7870	76	sw	Hg	.00	PPB	.10	8	78	Lt unf	HMDC 78
7871	76	sw	Hg	.00	PPB	.10	8	78	Lt fil	HMDC 78
7856	76	sw	Hg	.24	PPB	.10	9	78	Ht unf	HMDC 78
7872	76	sw	Hg	.13	PPB	.10	9	78	Lt unf	HMDC 78
7857	76	sw	Hg	.00	PPB	.10	10	78	Ht unf	HMDC 78
7858	76	sw	Hg	.00	PPB	.10	10	78	Ht fil	HMDC 78
7873	76	sw	Hg	.00	PPB	.10	10	78	Lt unf	HMDC 78
7874	76	sw	Hg	.00	PPB	.10	10	78	Lt fil	HMDC 78
4003	106	sw	Hg	1.30	ppb		8	78	Ht unf	Berg 78
4002	106	sw	Hg	.89	ppb	.50	10	81	unf	NJDEP 85
4004	107	sw	Hg	1.00	ppb		8	78	Ht unf	Berg 78

314 Records Processed

829910316

APPENDIX 8

MERCURY IN FISH - SMALL SCALE MAP

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
1495	1	fish	Hg	.02	ppm			77	Killi mus	HMDC 78
1493	1	fish	Hg	.18	ppm			78	Killi w	NJMS 79
4222	2	fish	Hg	.00	ppm	.01	10	76	Alewife f	JMA 76
1498	2	fish	Hg	.35	ppm			78	Killi mus	HMDC 78
1502	2	fish	Hg	.13	ppm			78	Killi w	NJMS 79
1501	2	fish	Hg	.15	ppm		5	79	Killi w	NJMS 79
1499	2	fish	Hg	.33	ppm		7	79	Killi w	NJMS 79
1500	2	fish	Hg	.11	ppm		10	79	Killi w	NJMS 79
1512	3	fish	Hg	.52	ppm		10	76	Alewife w	JMA 76
1513	3	fish	Hg	.27	ppm		10	76	Killi w	JMA 76
1514	3	fish	Hg	1.00	ppm		10	76	Killi w	JMA 76
1515	3	fish	Hg	59.00	ppm		10	76	Killi hrt	JMA 76
1516	3	fish	Hg	4.10	ppm		10	76	Killi brn	JMA 76
1517	3	fish	Hg	2.00	ppm		10	76	Killi liv	JMA 76
1518	3	fish	Hg	7.60	ppm		10	76	Killi liv	JMA 76
1519	3	fish	Hg	.16	ppm		10	76	Spot w	JMA 76
1520	3	fish	Hg	.19	ppm		10	76	Spot f mean	JMA 76
1521	3	fish	Hg	6.30	ppm		10	76	Spot gills	JMA 76
1522	3	fish	Hg	25.20	ppm		10	76	Spot hrt mean	JMA 76
1523	3	fish	Hg	.89	ppm		10	76	Spot brn	JMA 76
1524	3	fish	Hg	.54	ppm		10	76	Spot vis	JMA 76
1533	5	fish	Hg	.11	ppm		5	79	Killi w	NJMS 79
1531	5	fish	Hg	.21	ppm		7	79	Killi w	NJMS 79
1532	5	fish	Hg	.16	ppm		10	79	Killi w	NJMS 79
1534	6	fish	Hg	.15	ppm			78	Killi w	NJMS 79
1535	7	fish	Hg	.76	ppm		10	76	Amer eelf	JMA 76
4234	7	fish	Hg	12.00	ppm		10	76	Killi hrt	JMA 76
4235	7	fish	Hg	6.10	ppm		10	76	Killi brn	JMA 76
4236	7	fish	Hg	3.10	ppm		10	76	Killi liv	JMA 76
4237	7	fish	Hg	.36	ppm		10	76	Killi w	JMA 76
4238	7	fish	Hg	.31	ppm		10	76	Killi w	JMA 76
4239	7	fish	Hg	12.00	ppm		10	76	Killi hrt	JMA 76
4242	7	fish	Hg	.47	ppm		10	76	spot gills	JMA 76
4243	7	fish	Hg	2.20	ppm		10	76	Spot hrt	JMA 76
4244	7	fish	Hg	21.00	ppm		10	76	Spot brn	JMA 76
1550	7	fish	Hg	.13	ppm			78	Killi	NJMS 79
1556	8	fish	Hg	.09	ppm			77	Killi mus	HMDC 78
1575	9	fish	Hg	.14	ppm			77	Killi mus	HMDC 78
1589	10	fish	Hg	.31	ppm			77	Killi mus	HMDC 78
1587	10	fish	Hg	.24	ppm		5	79	Killi spg	NJMS 79
1585	10	fish	Hg	.32	ppm		7	79	Killi w	NJMS 79
1586	10	fish	Hg	.11	ppm		10	79	Killi f	NJMS 79

829910318

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
1592	11	fish	Hg	1.11	ppm			77	Wh perch mus	HMDC 78
1593	11	fish	Hg	.65	ppm			77	Wh perch liv	HMDC 78
1594	11	fish	Hg	.11	ppm			77	Wh perch kid	HMDC 78
1595	11	fish	Hg	.22	ppm			77	Killi mus	HMDC 78
1999	12	fish	HG	.07	ppm				ng	HMDC 78
1596	12	fish	Hg	.19	ppm			78	Killi w	NJMS 79
1998	12	fish	HG	.19	ppm		7	78	killi w	NJMS 78
1603	14	fish	Hg	.29	ppm			77	Killi mus	HMDC 78
9741	15	fish	Hg	.11	ppm			77	Killi mus	HMDC 78
1604	16	fish	Hg	.11	ppm			77	Killi mus	HMDC 78
9740	17	fish	Hg	.07	ppm			77	Killi mus	HMDC 78
4240	20	fish	Hg	.70	ppm		10	76	killi w	JMA 76
1607	20	fish	Hg	.39	ppm			77	Killi mus	HMDC 78
4223	21	fish	Hg	.16	ppm		10	76	amer eel w	JMA 76
4224	21	fish	Hg	.87	ppm		10	76	goldfish f	JMA 76
4226	21	fish	Hg	1.37	ppm		10	76	goldfish liv	JMA 76
4227	21	fish	Hg	14.00	ppm		10	76	goldfish hrt	JMA 76
4228	21	fish	Hg	3.20	ppm		10	76	goldfish brn	JMA 76
4229	21	fish	Hg	2.10	ppm		10	76	goldfish eye	JMA 76
4230	21	fish	Hg	1.00	ppm		10	76	goldfish visc	JMA 76
4231	21	fish	Hg	.06	ppm		10	76	goldfish scales	JMA 76
4233	21	fish	Hg	.82	ppm		10	76	Killi w	JMA 76
4241	21	fish	Hg	1.20	ppm		10	76	Killi gills	JMA 76
1610	22	fish	Hg	.27	ppm			77	Killi mus	HMDC 78
1655	23	fish	Hg	.25	ppm			77	Killi mus	HMDC 78
1654	23	fish	Hg	.21	ppm			78	Killi w	NJMS 79
1658	23	fish	Hg	.27	ppm		5	79	Killi w	NJMS 79
1656	23	fish	Hg	.20	ppm		7	79	Killi w	NJMS 79
1657	23	fish	Hg	.77	ppm		10	79	Killi w	NJMS 79
3318	23	fish	Hg	.32	ppm		3	83	Killi w	NJDEP 85
3319	23	fish	Hg	.28	ppm		3	83	Killi w	NJDEP 85
3320	23	fish	Hg	.40	ppm		3	83	Killi w	NJDEP 85
3321	23	fish	Hg	.20	ppm		3	83	Killi w	NJDEP 85
3322	23	fish	Hg	.76	ppm		3	83	Killi w	NJDEP 85
3323	23	fish	Hg	.38	ppm		3	83	sunfish w	NJDEP 85
9745	24	fish	Hg	.25	ppm			77	Killi mus	HMDC 78
1665	25	fish	Hg	.28	ppm		5	79	Killi w	NJMS 79
1663	25	fish	Hg	.41	ppm		7	79	Killi w	NJMS 79
1664	25	fish	Hg	.00	ppm		10	79	Killi w	NJMS 79
1666	26	fish	Hg	.16	ppm			78	Killi w	NJMS 79
1717	31	fish	Hg	.78	ppm		10	76	Killi w	JMA 76
1718	31	fish	Hg	1.40	ppm		10	76	Killi w	JMA 76

829910319

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
1719	31	fish	Hg	3.30	ppm		10	76	Killi w	JMA 76
1747	32	fish	Hg	.15	ppm			78	Killi w	NJMS 79
1763	32	fish	Hg	.19	ppm		5	79	Killi W	NJMS 79
1761	32	fish	Hg	.36	ppm		7	79	Killi w	NJMS 79
1762	32	fish	Hg	.38	ppm		10	79	Killi w	NJMS 79
1736	32	fish	Hg	1.04	ppm		11	79	unknown w	Aw 79
1737	32	fish	Hg	1.28	ppm		11	79	unknown w	Aw 79
3368	32	fish	Hg	.80	ppm		3	83	Killi w	NJDEP 85
3369	32	fish	Hg	2.70	ppm		3	83	Killi w	NJDEP 85
3370	32	fish	Hg	1.76	ppm		3	83	Killi w	NJDEP 85
3371	32	fish	Hg	2.12	ppm		3	83	Killi w	NJDEP 85
3372	32	fish	Hg	2.36	ppm		3	83	Killi w	NJDEP 85
3381	32	fish	Hg	3.60	ppm		9	83	Killi liv	Weis 84
3382	32	fish	Hg	1.30	ppm		9	83	Killi mus	Weis 84
1765	36	fish	Hg	.49	ppm			79	Killi w	NJMS 79
1767	36	fish	Hg	.29	ppm		5	79	Killi w	NJMS 79
1766	36	fish	Hg	.82	ppm		10	79	Killi w	NJMS 79
1799	38	fish	Hg	2.30	ppm		10	76	Killi w	JMA 76
1812	38	fish	Hg	1.60	ppm		10	76	Killi w	JMA 76
1813	38	fish	Hg	1.90	ppm		10	76	Killi w	JMA 76
3383	38	fish	Hg	1.94	ppm		11	79	unknown w	Aw 79
3384	38	fish	Hg	2.03	ppm		11	79	unknown w	Aw 79
4247	38	fish	Hg	.32	ppm		3	83	Killi w	NJDEP 85
4248	38	fish	Hg	1.30	PPM		3	83	Killi w	NJDEP 85
4249	38	fish	HG	1.54	PPM		3	83	Killi w	NJDEP 85
4250	38	fish	HG	3.08	PPM		3	83	Killi w	NJDEP 85
4251	38	fish	HG	2.00	PPM		9	83	Killi liv	WEIS 84
4252	38	fish	HG	7.00	PPM		9	83	Killi liv	WEIS 84
1814	40	fish	Hg	.09	ppm			77	Killi w	HMDC 78
9744	40	fish	Hg	.25	ppm			77	Killi mus	HMDC 78
1848	48	fish	Hg	1.10	ppm		10	76	Killi w	JMA 76
1849	48	fish	Hg	1.30	ppm		10	76	Killi w	JMA 76
1850	48	fish	Hg	2.90	ppm		10	76	Killi w	JMA 76
1914	71	fish	Hg	.15	ppm			78	Killi w	NJMS 79
0002	86	fish	Hg	.16	ppm		7	78	Killi w	NJMS 78
0003	87	fish	Hg	.21	ppm		7	78	Killi w	NJMS 78
1947	88	fish	Hg	.19	ppm			77	Killi w	HMDC 78
1950	88	fish	Hg	.24	ppm		5	79	Killi w	NJMS 79
1948	88	fish	Hg	.39	ppm		7	79	Killi w	NJMS 79
1949	88	fish	Hg	.32	ppm		10	79	Killi w	NJMS 79
9742	100	fish	Hg	.09	ppm			77	Killi mus	HMDC 78
9746	106	fish	Hg	.24	ppm			77	Killi mus	HMDC 78

829910320

MAP1DATA.. STATION SAMPLE.... CONTAMINANT VALUE..... UNITS. LIMIT. MONTH YEAR DESCIPTION..... REF.....

126 Records Processed

8299910321

APPENDIX 9

MERCURY IN OTHER ANIMALS - SMALL SCALE MAP

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
1494	1	invt	Hg	.18	ppm			78	F crab mus	HMDC 80
4332	1	invt	Hg	.61	ppm			78	F crab visc	HMDC 80
4334	1	invt	Hg	.04	ppm			78	F crab cara	HMDC 80
1525	3	mamm	Hg	.07	ppm	.01	3	75	mrat ky	JMA 76
1526	3	mamm	Hg	.01	ppm	.01	3	75	mratmus	JMA 76
1527	3	mamm	Hg	.02	ppm	.01	3	75	mratliv	JMA 76
1528	3	mamm	Hg	.02	ppm	.01	3	75	mratfat	JMA 76
1529	3	mamm	Hg	.01	ppm	.01	3	75	mratbrn	JMA 76
1530	3	mamm	Hg	.01	ppm	.01	3	75	mratbld	JMA 76
1557	8	mamm	Hg	1.40	ppm			78	mous fur	HMDC 78
1558	8	mamm	Hg	.00	ppm			78	mous mus	HMDC 78
1559	8	mamm	Hg	.01	ppm			78	mous liv	HMDC 78
1560	8	mamm	Hg	.21	ppm			78	mous ky	HMDC 78
1561	8	mamm	Hg	.89	ppm			78	mous fur	HMDC 78
1562	8	mamm	Hg	.00	ppm			78	mous mus	HMDC 78
1563	8	mamm	Hg	.10	ppm			78	mous liv	HMDC 78
1564	8	mamm	Hg	.64	ppm			78	mous ky	HMDC 78
1565	8	mamm	Hg	2.30	ppm			78	mous fur	HMDC 78
1566	8	mamm	Hg	.03	ppm			78	mous mus	HMDC 78
1567	8	mamm	Hg	.21	ppm			78	mous liv	HMDC 78
1568	8	mamm	Hg	.52	ppm			78	mous ky	HMDC 78
1569	8	mamm	Hg	.24	ppm			78	mous fur	HMDC 78
1570	8	mamm	Hg	.00	ppm			78	mous mus	HMDC 78
1571	8	mamm	Hg	.00	ppm			78	mous liv	HMDC 78
1572	8	mamm	Hg	.89	ppm			78	mous ky	HMDC 78
1573	8	mamm	Hg	.00	ppm			78	mous fur	HMDC 78
1574	8	mamm	Hg	.00	ppm			78	mous mus	HMDC 78
1991	8	mamm	HG	.00	ppm			78	ng mus	HMDC 78
1992	8	mamm	HG	.00	ppm			78	mous liv	HMDC 78
1993	8	mamm	HG	.12	ppm			78	mous kid	HMDC 78
1588	10	invt	Hg	.07	ppm			78	shrimp	HMDC 80
3304	10	invt	Hg	.23	ppm		10	83	crab mus	NJDEP 85
3305	10	invt	Hg	.24	ppm		10	83	crab ky	NJDEP 85
1597	13	invt	Hg	.10	ppm			78	F crab mus	HMDC 80
4330	13	invt	Hg	.25	ppm			78	F crab visc	HMDC 80
1606	20	invt	Hg	.33	ppm			78	F crab mus	HMDC 80
2034	20	bird	HG	5.77	ppm			78	Gall feth	HMDC 78
2035	20	bird	HG	.59	ppm			78	Gall mus	HMDC 78
2036	20	bird	HG	1.93	ppm			78	Gall liv	HMDC 78
4331	20	invt	Hg	1.40	ppm			78	F crab visc	HMDC 80
4333	20	invt	Hg	.20	ppm			78	F crab cara	HMDC 80
1611	22	mamm	Hg	.23	ppm			78	volefur	HMDC 78

829910323

MAPIDATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
1612	22	mamm	Hg	.00	ppm			78	volemus	HMDC 78
1613	22	mamm	Hg	.00	ppm			78	voleliv	HMDC 78
1614	22	mamm	Hg	.25	ppm			78	voleky	HMDC 78
1615	22	mamm	Hg	.32	ppm			78	volefur	HMDC 78
1616	22	mamm	Hg	.00	ppm			78	volemus	HMDC 78
1617	22	mamm	Hg	.00	ppm			78	voleliv	HMDC 78
1618	22	mamm	Hg	.13	ppm			78	voleky	HMDC 78
1619	22	mamm	Hg	.09	ppm			78	rab fur	HMDC 78
1620	22	mamm	Hg	.00	ppm			78	rab mus	HMDC 78
1621	22	mamm	Hg	.11	ppm			78	rab liv	HMDC 78
1622	22	mamm	Hg	.52	ppm			78	rab ky	HMDC 78
4335	22	invt	Hg	.25	ppm			78	G shrimp w	HMDC 80
1659	23	mamm	Hg	.09	ppm			78	mous ky	HMDC 78
2038	23	mamm	HG	.73	ppm			78	mous fur	HMDC 78
2039	23	mamm	HG	.05	ppm			78	mous mus	HMDC 78
2040	23	mamm	HG	.10	ppm			78	mous liv	HMDC 78
3324	23	invt	Hg	.54	ppm		3	83	shrimp	NJDEP 85
3325	23	invt	Hg	.84	ppm		3	83	shrimp	NJDEP 85
3326	23	invt	Hg	.52	ppm		3	83	shrimp	NJDEP 85
2047	27	bird	HG	4.40	ppm			78	Gall feth	HMDC 78
2048	27	bird	HG	.19	ppm			78	Gall mus	HMDC 78
2049	27	bird	HG	1.20	ppm			78	Gall liv	HMDC 78
2050	27	bird	HG	2.60	ppm			78	Gall kid	HMDC 78
2053	29	mamm	HG	.01	ppm			78	ng mus	HMDC 78
1709	31	invt	Hg	150.00	ppm		10	76	snail w	JMA 76
1710	31	invt	Hg	1.80	ppm		10	76	brncl cluster	JMA 76
1711	31	invt	Hg	2.00	ppm		10	76	brncl cluster	JMA 76
1712	31	invt	Hg	2.10	ppm		10	76	brncl cluster	JMA 76
1713	31	invt	Hg	11.60	ppm		10	76	isopod w	JMA 76
1714	31	invt	Hg	7.30	ppm		10	76	isopod	JMA 76
1715	31	invt	Hg	2.20	ppm		10	76	shrmp w	JMA 76
1716	31	invt	Hg	4.70	ppm		10	76	shrmp w	JMA 76
3375	32	mamm	Hg	.10	ppm		4	82	musk mus	NJDEP 85
3376	32	mamm	Hg	.29	ppm		4	82	musk liv	NJDEP 85
3377	32	mamm	Hg	.10	ppm		4	82	musk mus	NJDEP 85
3378	32	mamm	Hg	.20	ppm		4	82	musk liv	NJDEP 85
3373	32	bird	Hg	5.30	ppm		3	83	Blduckmus	NJDEP 85
3374	32	bird	Hg	5.89	ppm		3	83	Blduckliv	NJDEP 85
1800	38	mamm	Hg	.28	ppm	.01	3	75	mrat ky	JMA 76
1801	38	mamm	Hg	.02	ppm	.01	3	75	mratmus	JMA 76
1802	38	mamm	Hg	.02	ppm	.01	3	75	mratliv	JMA 76
1803	38	mamm	Hg	.02	ppm	.01	3	75	mratfat	JMA 76

829910324

MAPIDATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
1804	38	mamm	Hg	.01	ppm	.01	3	75	mratbrn	JMA 76
1805	38	mamm	Hg	.01	ppm	.01	3	75	mratbld	JMA 76
1808	38	invt	Hg	4.70	ppm		10	76	slug w	JMA 76
1809	38	invt	Hg	4.20	ppm		10	76	brncl cluster	JMA 76
1810	38	invt	Hg	4.20	ppm		10	76	brncl cluster	JMA 76
1811	38	invt	Hg	6.20	ppm		10	76	brncl cluster	JMA 76
2154	40	mamm	HG	.01	ppm			78	mrat mus	HMDC 78
2155	40	mamm	HG	.02	ppm			78	mrat kid	HMDC 78
2156	40	mamm	HG	.10	ppm			78	mrat liv	HMDC 78
2157	40	bird	HG	4.39	ppm			78	Gall kid	HMDC 78
2158	40	mamm	HG	.75	ppm			78	Rcoon fur	HMDC 78
2159	40	mamm	HG	.06	ppm			78	Rcoon mus	HMDC 78
2160	40	mamm	HG	.16	ppm			78	Rcoon liv	HMDC 78
2161	40	mamm	HG	.40	ppm			78	Rcoon kid	HMDC 78
2162	40	mamm	HG	.01	ppm			78	Rcoon bld	HMDC 78
2163	40	mamm	HG	.00	ppm			78	Rcoon fat	HMDC 78
2164	40	mamm	HG	.69	ppm			78	Skunk fur	HMDC 78
2165	40	mamm	HG	.06	ppm			78	Skunk mus	HMDC 78
2166	40	mamm	HG	.20	ppm			78	Skunk liv	HMDC 78
2167	40	mamm	HG	.27	ppm			78	Skunk kid	HMDC 78
2168	40	mamm	HG	.01	ppm			78	Skunk fat	HMDC 78
1851	48	invt	Hg	2.60	ppm		10	76	musl shl	JMA 76
1852	48	invt	Hg	1.33	ppm		10	76	beetl w	JMA 76
1853	48	invt	Hg	12.00	ppm		10	76	spidr w	JMA 76
1854	48	invt	Hg	.82	ppm		10	76	brncl cluster	JMA 76
1855	48	invt	Hg	.64	ppm		10	76	brncl cluster	JMA 76
1856	48	invt	Hg	1.40	ppm		10	76	brncl cluster	JMA 76
2348	74	bird	HG	5.50	ppm			78	Gall feth	HMDC 78
2349	74	bird	HG	.47	ppm			78	Gall mus	HMDC 78
2350	74	bird	HG	2.30	ppm			78	Gall liv	HMDC 78
2351	74	bird	HG	2.10	ppm			78	Gall kid	HMDC 78
2363	76	mamm	HG	.00	ppm			78	ng mus	HMDC 78
2364	77	bird	HG	.45	ppm			78	GHernfeth	HMDC 78
2365	77	bird	HG	.85	ppm			78	GHern mus	HMDC 78
2366	77	bird	HG	3.10	ppm			78	GHern liv	HMDC 78
2367	77	bird	HG	2.90	ppm			78	GHern kid	HMDC 78
2368	78	bird	HG	.06	ppm			78	B Owlmus	HMDC 78
2369	78	bird	HG	.08	ppm			78	B Owlliv	HMDC 78
2370	78	bird	HG	.10	ppm			78	B Owlkid	HMDC 78
2371	78	bird	HG	.06	ppm			78	ng mus	HMDC 78
2372	79	bird	HG	.07	ppm			78	ng mus	HMDC 78
2373	79	bird	HG	1.50	ppm			78	Gall feth	HMDC 78

829910325

MAPIDATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2374	79	bird	HG	.06	ppm			78	Gall mus	HMDC 78
2375	79	bird	HG	.56	ppm			78	Gall liv	HMDC 78
2376	79	bird	HG	.62	ppm			78	Gall kid	HMDC 78
2377	80	bird	HG	.12	ppm			78	Wdck feth	HMDC 78
2378	80	bird	HG	.26	ppm			78	Wdck mus	HMDC 78
2379	80	bird	HG	.43	ppm			78	Wdck liv	HMDC 78
2380	80	bird	HG	.82	ppm			78	Wdck kid	HMDC 78
2381	81	mamm	HG	.11	ppm			78	ng mus	HMDC 78
2382	82	bird	HG	4.30	ppm			78	GHernfeth	HMDC 78
2383	82	bird	HG	.37	ppm			78	GHern mus	HMDC 78
2384	82	bird	HG	.83	ppm			78	GHern liv	HMDC 78
2385	82	bird	HG	.49	ppm			78	GHern kid	HMDC 78
2386	82	mamm	HG	.00	ppm			78	mrat mus	HMDC 78
2387	82	mamm	HG	.05	ppm			78	mrat kid	HMDC 78
2388	82	mamm	HG	.01	ppm			78	mrat liv	HMDC 78
2404	105	mamm	HG	.66	ppm			78	mous fur	HMDC 78
2405	105	mamm	HG	.00	ppm			78	mous mus	HMDC 78
2406	105	mamm	HG	.08	ppm			78	mous liv	HMDC 78
2407	105	mamm	HG	.38	ppm			78	mous kid	HMDC 78
2408	105	mamm	HG	.00	ppm			78	mous fur	HMDC 78
2409	105	mamm	HG	.00	ppm			78	mous mus	HMDC 78
2410	105	mamm	HG	.00	ppm			78	mous liv	HMDC 78
2411	105	mamm	HG	.00	ppm			78	mous kid	HMDC 78
2412	105	mamm	HG	4.00	ppm			78	N rat fur	HMDC 78
2413	105	mamm	HG	.05	ppm			78	N rat mus	HMDC 78
2414	105	mamm	HG	.13	ppm			78	N rat liv	HMDC 78
2415	105	mamm	HG	1.90	ppm			78	N rat kid	HMDC 78
2416	105	mamm	HG	1.90	ppm			78	posm fur	HMDC 78
2417	105	mamm	HG	.20	ppm			78	posm mus	HMDC 78
2418	105	mamm	HG	.22	ppm			78	posm liv	HMDC 78
2419	105	mamm	HG	1.90	ppm			78	posm kid	HMDC 78
2420	105	mamm	HG	.08	ppm			78	rab fur	HMDC 78
2421	105	mamm	HG	.00	ppm			78	rab mus	HMDC 78
2422	105	mamm	HG	.15	ppm			78	rab liv	HMDC 78
2423	105	mamm	HG	.27	ppm			78	rab kid	HMDC 78

161 Records Processed

829910326

APPENDIX 10

MERCURY IN PLANTS - SMALL SCALE MAP

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
1503	2	plant	Hg	.00	ppm		10	77	Phrag st	HMDC 78
1504	2	plant	Hg	.81	ppm		10	77	Phrag lf	HMDC 78
1505	2	plant	Hg	.67	ppm		10	77	Phrag fr	HMDC 78
1506	2	plant	Hg	.04	ppm		10	77	Spar riz	HMDC 78
1507	2	plant	Hg	.04	ppm		10	77	Spar st	HMDC 78
1508	2	plant	Hg	1.40	ppm		10	77	Spar lf	HMDC 78
1509	2	plant	Hg	.00	ppm		10	77	Spar fr	HMDC 78
1510	2	plant	Hg	.32	ppm		10	77	Phrag riz	HMDC 78
1536	7	plant	Hg	.19	ppm		10	76	Phrag riz	HMDC 78
1537	7	plant	Hg	.13	ppm		10	76	Phrag ste	HMDC 78
1538	7	plant	Hg	.48	ppm		10	76	Phrag lf	HMDC 78
1539	7	plant	Hg	.34	ppm		10	76	Phrag fruit	HMDC 78
1540	7	plant	Hg	.28	ppm		10	76	Spar riz	HMDC 78
1541	7	plant	Hg	.14	ppm		10	76	Spar ste	HMDC 78
1542	7	plant	Hg	.32	ppm		10	76	Spar lf	HMDC 78
1543	7	plant	Hg	.37	ppm		10	76	Spar fr	HMDC 78
1546	7	plant	Hg	.28	ppm		10	76	Atri riz	HMDC 78
1547	7	plant	Hg	.36	ppm		10	76	Atri ste	HMDC 78
1548	7	plant	Hg	1.90	ppm		10	76	Atri lf	HMDC 78
1549	7	plant	Hg	.70	ppm		10	76	Atri fr	HMDC 78
1576	9	plant	Hg	.05	ppm		10	77	Phrag riz	HMDC 78
1577	9	plant	Hg	.05	ppm		10	77	Phrag st	HMDC 78
1578	9	plant	Hg	.41	ppm		10	77	Phrag lf	HMDC 78
1579	9	plant	Hg	.81	ppm		10	77	Phrag fr	HMDC 78
1580	9	plant	Hg	.06	ppm		10	77	Phrag riz	HMDC 78
1581	9	plant	Hg	.50	ppm		10	77	Phrag st	HMDC 78
1582	9	plant	Hg	.11	ppm		10	77	Phrag lf	HMDC 78
1583	9	plant	Hg	.79	ppm		10	77	Phrag fr	HMDC 78
1584	9	plant	Hg	.01	ppm		10	77	Phrag riz	HMDC 78
1994	10	plant	HG	.31	ppm			77	Phrag riz	HMDC 78
1995	10	plant	HG	.07	ppm			77	Phrag ste	HMDC 78
1996	10	plant	HG	.50	ppm			77	Phrag lf	HMDC 78
1997	10	plant	HG	.97	ppm			77	Phrag fr	HMDC 78
4299	13	plant	Hg	13.46	ppm				Spikerush	HMDC 78
4300	13	plant	Hg	7.92	ppm				Typha riz	HMDC 78
4301	13	plant	Hg	1.83	ppm				Typha ste	HMDC 78
4302	13	plant	Hg	.34	ppm				Typha lf	HMDC 78
4303	13	plant	Hg	3.47	ppm				Phrag riz	HMDC 78
4304	13	plant	Hg	.11	ppm				Phrag ste	HMDC 78
4305	13	plant	Hg	1.15	ppm				Phrag lf	HMDC 78
4306	13	plant	Hg	.82	ppm				Phrag ft.st	HMDC 78
2001	15	plant	HG	.08	ppm			77	Phrag riz	HMDC 78

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2002	15	plant	HG	.11	ppm			77	Phrag ste	HMDC 78
2003	15	plant	HG	.40	ppm			77	Phrag lf	HMDC 78
2004	15	plant	HG	.52	ppm			77	Phrag fr	HMDC 78
2005	15	plant	HG	.64	ppm			77	Spar riz	HMDC 78
2006	15	plant	HG	.15	ppm			77	Spar ste	HMDC 78
2007	15	plant	HG	.34	ppm			77	Spar lf	HMDC 78
2008	15	plant	HG	.26	ppm			77	Spar fr	HMDC 78
2009	16	plant	HG	.48	ppm			77	Acnid fr	HMDC 78
2010	16	plant	HG	.50	ppm			77	Phrag riz	HMDC 78
2011	16	plant	HG	.09	ppm			77	Phrag ste	HMDC 78
2012	16	plant	HG	.43	ppm			77	Phrag lf	HMDC 78
2013	16	plant	HG	.53	ppm			77	Phrag fr	HMDC 78
2014	16	plant	HG	.53	ppm			77	Atri riz	HMDC 78
2015	16	plant	HG	.77	ppm			77	Atri ste	HMDC 78
2016	16	plant	HG	2.20	ppm			77	Atri lf	HMDC 78
2017	16	plant	HG	.43	ppm			77	Atri fr	HMDC 78
2018	16	plant	HG	.63	ppm			77	Acnid riz	HMDC 78
2019	16	plant	HG	.09	ppm			77	Acnid ste	HMDC 78
2020	16	plant	HG	.77	ppm			77	Acnid lf	HMDC 78
4254	19	plant	Hg	.19	ppm				Phrag riz	HMDC 78
4255	19	plant	Hg	.12	ppm				Phrag ste	HMDC 78
4256	19	plant	Hg	.47	ppm				Phrag lf	HMDC 78
4257	19	plant	Hg	.64	ppm				Phrag ft.st	HMDC 78
4253	20	plant	Hg	1.89	ppm				Phrag	HMDC 78
1623	22	plant	Hg	.26	ppm		10	77	Phrag riz	HMDC 78
1624	22	plant	Hg	.00	ppm		10	77	Phrag ste	HMDC 78
1625	22	plant	Hg	.15	ppm		10	77	Phrag lf	HMDC 78
1626	22	plant	Hg	.24	ppm		10	77	Phrag fr	HMDC 78
1627	22	plant	Hg	.39	ppm		10	77	Spar riz	HMDC 78
1628	22	plant	Hg	.00	ppm		10	77	Spar ste	HMDC 78
1629	22	plant	Hg	.14	ppm		10	77	Spar lf	HMDC 78
1630	22	plant	Hg	.50	ppm		10	77	Spar fr	HMDC 78
1667	26	plant	Hg	.83	ppm		10	77	Hemp ste	HMDC 78
1668	26	plant	Hg	1.20	ppm		10	77	Spar riz	HMDC 78
1669	26	plant	Hg	.24	ppm		10	77	Spar ste	HMDC 78
1670	26	plant	Hg	.71	ppm		10	77	Spar lf	HMDC 78
1671	26	plant	Hg	.29	ppm		10	77	Spar fr	HMDC 78
1672	26	plant	Hg	5.60	ppm		10	77	Spar riz	HMDC 78
1673	26	plant	Hg	.21	ppm		10	77	Spar ste	HMDC 78
1674	26	plant	Hg	.79	ppm		10	77	Spar lf	HMDC 78
1675	26	plant	Hg	.90	ppm		10	77	Spar fr	HMDC 78
1676	26	plant	Hg	.85	ppm		10	77	Phrag riz	HMDC 78

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
1677	26	plant	Hg	.08	ppm		10	77	Phrag ste	HMDC 78
1678	26	plant	Hg	.42	ppm		10	77	Phrag lf	HMDC 78
1679	26	plant	Hg	.15	ppm		10	77	Phrag fr	HMDC 78
1689	28	plant	Hg	.36	ppm		10	76	Phrag ste	JMA 76
1686	28	plant	Hg	.18	ppm		10	77	Phrag ste	HMDC 78
1687	28	plant	Hg	.00	ppm		10	77	Phrag lf	HMDC 78
1688	28	plant	Hg	.34	ppm		10	77	Phrag fr	HMDC 78
1690	29	plant	Hg	.19	ppm		10	77	Phrag riz	HMDC 78
1691	29	plant	Hg	.13	ppm		10	77	Phrag ste	HMDC 78
1692	29	plant	Hg	.48	ppm		10	77	Phrag lf	HMDC 78
1693	29	plant	Hg	.34	ppm		10	77	Phrag fr	HMDC 78
1694	29	plant	Hg	.28	ppm		10	77	Spar riz	HMDC 78
1695	29	plant	Hg	.14	ppm		10	77	Spar ste	HMDC 78
1696	29	plant	Hg	.32	ppm		10	77	Spar lf	HMDC 78
1697	29	plant	Hg	.37	ppm		10	77	Spar fr	HMDC 78
1698	29	plant	Hg	.28	ppm		10	77	Atri riz	HMDC 78
1699	29	plant	Hg	.36	ppm		10	77	Atri ste	HMDC 78
1700	29	plant	Hg	1.90	ppm		10	77	Atri lf	HMDC 78
1701	29	plant	Hg	.70	ppm		10	77	Atri fr	HMDC 78
1703	31	plant	Hg	.22	ppm		10	76	Phrag ft.st	JMA 76
1704	31	plant	Hg	.07	ppm		10	76	Phrag riz	JMA 76
1705	31	plant	Hg	.14	ppm		10	76	Typha ft. st	JMA 76
1706	31	plant	Hg	.21	ppm		10	76	Typha riz	JMA 76
1707	31	plant	Hg	.28	ppm		10	76	Spar ft. st	JMA 76
1708	31	plant	Hg	.45	ppm		10	76	Spar riz	JMA 76
1720	31	plant	Hg	.02	ppm		10	76	Phrag riz	JMA 76
2062	31	plant	HG	.49	ppm			77	Spar riz	HMDC 78
2063	31	plant	HG	.17	ppm			77	Spar ste	HMDC 78
2064	31	plant	HG	.65	ppm			77	Spar lf	HMDC 78
2065	31	plant	HG	.16	ppm			77	Spar fr	HMDC 78
2066	31	plant	HG	1.10	ppm			77	Typha riz	HMDC 78
2067	31	plant	HG	.14	ppm			77	Typha ste	HMDC 78
2068	31	plant	HG	1.00	ppm			77	Typha lf	HMDC 78
2069	31	plant	HG	.12	ppm			77	Typha fr	HMDC 78
2070	31	plant	HG	1.60	ppm			77	Hemp riz	HMDC 78
2071	31	plant	HG	.12	ppm			77	Hemp ste	HMDC 78
2072	31	plant	HG	1.10	ppm			77	Hemp lf	HMDC 78
2073	31	plant	HG	2.00	ppm			77	Hemp fr	HMDC 78
1721	31	plant	Hg	.14	ppm		10	77	Typha riz	HMDC 78
1722	31	plant	Hg	.15	ppm		10	77	Typha ste	HMDC 78
1723	31	plant	Hg	.49	ppm		10	77	Typha lf	HMDC 78
1724	31	plant	Hg	1.30	ppm		10	77	Phrag riz	HMDC 78

829910330

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
1725	31	plant	Hg	.17	ppm		10	77	Phrag ste	HMDC 78
1726	31	plant	Hg	.53	ppm		10	77	Phrag lf	HMDC 78
1727	31	plant	Hg	.62	ppm		10	77	Phrag fr	HMDC 78
1728	31	plant	Hg	2.30	ppm		10	77	Spar riz	HMDC 78
1729	31	plant	Hg	.11	ppm		10	77	Spar ste	HMDC 78
1730	31	plant	Hg	.79	ppm		10	77	Spar lf	HMDC 78
1731	31	plant	Hg	.59	ppm		10	77	Spar fr	HMDC 78
1732	31	plant	Hg	3.60	ppm		10	77	Atri riz	HMDC 78
1733	31	plant	Hg	.14	ppm		10	77	Atri ste	HMDC 78
1734	31	plant	Hg	2.80	ppm		10	77	Atri lf	HMDC 78
1735	31	plant	Hg	2.50	ppm		10	77	Atri fr	HMDC 78
2074	31	plant	HG	.26	ppm		5	78	Phrag riz	HMDC 78
2075	31	plant	HG	.00	ppm		5	78	Phrag ste	HMDC 78
2076	31	plant	HG	.15	ppm		5	78	Phrag lf	HMDC 78
2077	31	plant	HG	.24	ppm		5	78	Phrag fr	HMDC 78
2078	31	plant	HG	.39	ppm		5	78	Spar riz	HMDC 78
2079	31	plant	HG	.00	ppm		5	78	Spar ste	HMDC 78
2080	31	plant	HG	.14	ppm		5	78	Spar lf	HMDC 78
2081	31	plant	HG	.50	ppm		5	78	Spar fr	HMDC 78
2085	33	plant	HG	.27	ppm		5	78	Phrag riz	HMDC 78
2086	33	plant	HG	.00	ppm		5	78	Phrag ste	HMDC 78
2087	33	plant	HG	.24	ppm		5	78	Phrag lf	HMDC 78
2088	33	plant	HG	.21	ppm		5	78	Phrag fr	HMDC 78
2089	33	plant	HG	.21	ppm		5	78	Spar riz	HMDC 78
2090	33	plant	HG	.00	ppm		5	78	Spar ste	HMDC 78
2091	33	plant	HG	.43	ppm		5	78	Spar lf	HMDC 78
2092	33	plant	HG	.40	ppm		5	78	Spar fr	HMDC 78
2093	34	plant	HG	5.64	ppm		5	78	Spar riz	HMDC 78
2094	34	plant	HG	.21	ppm		5	78	Spar ste	HMDC 78
2095	34	plant	HG	.79	ppm		5	78	Spar lf	HMDC 78
2096	34	plant	HG	.90	ppm		5	78	Spar fr	HMDC 78
2097	34	plant	HG	.85	ppm		5	78	Phrag riz	HMDC 78
2098	34	plant	HG	.08	ppm		5	78	Phrag ste	HMDC 78
2099	34	plant	HG	.42	ppm		5	78	Phrag lf	HMDC 78
2100	34	plant	HG	.15	ppm		5	78	Phrag fr	HMDC 78
2101	34	plant	HG	.14	ppm		5	78	Typha riz	HMDC 78
2102	34	plant	HG	.15	ppm		5	78	Typha ste	HMDC 78
2103	34	plant	HG	.49	ppm		5	78	Typha lf	HMDC 78
2104	34	plant	HG	1.25	ppm		5	78	Spar riz	HMDC 78
2105	34	plant	HG	.24	ppm		5	78	Spar ste	HMDC 78
2106	34	plant	HG	.71	ppm		5	78	Spar lf	HMDC 78
2107	34	plant	HG	.29	ppm		5	78	Spar fr	HMDC 78

829910331

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2116	36	plant	HG	3.50	ppm			77	Phrag riz	HMDC 78
2117	36	plant	HG	.54	ppm			77	Phrag ste	HMDC 78
2118	36	plant	HG	.97	ppm			77	Phrag lf	HMDC 78
2119	36	plant	HG	3.20	ppm			77	Phrag fr	HMDC 78
2120	37	plant	HG	7.90	ppm			77	Typha riz	HMDC 78
2121	37	plant	HG	1.80	ppm			77	Typha ste	HMDC 78
2122	37	plant	HG	.34	ppm			77	Typha lf	HMDC 78
2123	37	plant	HG	.00	ppm			77	Typha fr	HMDC 78
2124	37	plant	HG	3.50	ppm			77	Phrag riz	HMDC 78
2125	37	plant	HG	.11	ppm			77	Phrag ste	HMDC 78
2126	37	plant	HG	1.20	ppm			77	Phrag lf	HMDC 78
2127	37	plant	HG	.82	ppm			77	Phrag fr	HMDC 78
1806	38	plant	Hg	.90	ppm		10	76	Phrag lf	JMA 76
1807	38	plant	Hg	1.58	ppm		10	76	Phrag riz	JMA 76
2137	39	plant	HG	2.90	ppm			77	Acnid lf	HMDC 78
2138	39	plant	HG	1.20	ppm			77	Acnid fr	HMDC 78
2139	39	plant	HG	5.20	ppm			77	Typha riz	HMDC 78
2140	39	plant	HG	.54	ppm			77	Typha ste	HMDC 78
2141	39	plant	HG	.59	ppm			77	Typha lf	HMDC 78
2142	39	plant	HG	.36	ppm			77	Typha fr	HMDC 78
2143	39	plant	HG	5.40	ppm			77	Phrag riz	HMDC 78
2144	39	plant	HG	.19	ppm			77	Phrag ste	HMDC 78
2145	39	plant	HG	.86	ppm			77	Phrag lf	HMDC 78
2146	39	plant	HG	.76	ppm			77	Phrag fr	HMDC 78
2147	39	plant	HG	4.30	ppm			77	Acnid riz	HMDC 78
2148	39	plant	HG	.00	ppm			77	Acnid ste	HMDC 78
4315	41	plant	Hg	1.28	ppm				Phrag riz	HMDC 78
4316	41	plant	Hg	.17	ppm				Phrag ste	HMDC 78
4317	41	plant	Hg	.53	ppm				Phrag lf	HMDC 78
4318	41	plant	Hg	.62	ppm				Phrag ft.st	HMDC 78
4319	41	plant	Hg	2.34	ppm				Spar riz	HMDC 78
4320	41	plant	Hg	.11	ppm				Spar ste	HMDC 78
4321	41	plant	Hg	.79	ppm				Spar lf	HMDC 78
4322	41	plant	Hg	.59	ppm				Spar ft.st	HMDC 78
4323	41	plant	Hg	3.66	ppm				Atri riz	HMDC 78
4324	41	plant	Hg	.14	ppm				Atri ste	HMDC 78
4325	41	plant	Hg	2.81	ppm				Atri lf	HMDC 78
4326	41	plant	Hg	2.49	ppm				Atri ft.st	HMDC 78
2169	41	plant	HG	.49	ppm		5	78	Spar riz	HMDC 78
2170	41	plant	HG	.17	ppm		5	78	Spar ste	HMDC 78
2171	41	plant	HG	.65	ppm		5	78	Spar lf	HMDC 78
2172	41	plant	HG	.16	ppm		5	78	Spar fr	HMDC 78

829910332

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2173	41	plant	HG	1.10	ppm		5	78	Typha riz	HMDC 78
2174	41	plant	HG	.14	ppm		5	78	Typha ste	HMDC 78
2175	41	plant	HG	1.04	ppm		5	78	Typha lf	HMDC 78
2176	41	plant	HG	.12	ppm		5	78	Typha fr	HMDC 78
2177	41	plant	HG	1.59	ppm		5	78	Hemp riz	HMDC 78
2178	41	plant	HG	.12	ppm		5	78	Hemp ste	HMDC 78
2179	41	plant	HG	1.08	ppm		5	78	Hemp lf	HMDC 78
2180	41	plant	HG	2.03	ppm		5	78	Hemp fr	HMDC 78
2196	43	plant	HG	.25	ppm			77	Phrag riz	HMDC 78
2197	43	plant	HG	.11	ppm			77	Phrag ste	HMDC 78
2198	43	plant	HG	.51	ppm			77	Phrag lf	HMDC 78
2199	43	plant	HG	.25	ppm			77	Phrag fr	HMDC 78
2200	43	plant	HG	.19	ppm			77	Atri riz	HMDC 78
2201	43	plant	HG	.07	ppm			77	Atri ste	HMDC 78
2202	43	plant	HG	.69	ppm			77	Atri lf	HMDC 78
2203	43	plant	HG	.20	ppm			77	Atri fr	HMDC 78
2204	43	plant	HG	.59	ppm			77	Typha riz	HMDC 78
2205	43	plant	HG	.02	ppm			77	Typha ste	HMDC 78
2206	43	plant	HG	.32	ppm			77	Typha lf	HMDC 78
2207	43	plant	HG	.00	ppm			77	Typha fr	HMDC 78
1816	45	plant	Hg	.00	ppm		10	77	Typha ste	HMDC 78
1817	45	plant	Hg	.72	ppm		10	77	Typha lf	HMDC 78
1818	45	plant	Hg	.00	ppm		10	77	Typha fr	HMDC 78
1819	45	plant	Hg	.12	ppm		10	77	Spar ste	HMDC 78
1820	45	plant	Hg	1.70	ppm		10	77	Spar lf	HMDC 78
1821	45	plant	Hg	3.00	ppm		10	77	Hemp riz	HMDC 78
1857	48	plant	Hg	.28	ppm		10	76	Phrag ste	JMA 76
1858	48	plant	Hg	.10	ppm		10	76	Phrag ste	JMA 76
1859	48	plant	Hg	.83	ppm		10	76	Phrag lf	JMA 76
1860	48	plant	Hg	.88	ppm		10	76	Phrag lf	JMA 76
1861	48	plant	Hg	1.80	ppm		10	76	Phrag lf	JMA 76
1862	48	plant	Hg	.65	ppm		10	76	Phrag inflo	JMA 76
1863	48	plant	Hg	.98	ppm		10	76	Phrag inflo	JMA 76
1864	48	plant	Hg	1.20	ppm		10	76	Phrag inflo	JMA 76
1865	48	plant	Hg	.26	ppm		10	76	Phrag lf	JMA 76
4262	56	plant	Hg	.11	ppm				Phrag riz	HMDC 78
4263	56	plant	Hg	.33	ppm				Phrag ste	HMDC 78
4264	56	plant	Hg	.08	ppm				Phrag lf	HMDC 78
4265	56	plant	Hg	.40	ppm				Phrag ft.st	HMDC 78
4270	58	plant	Hg	.35	ppm				Hemp riz	HMDC 78
4271	58	plant	Hg	.24	ppm				Hemp ste	HMDC 78
4272	58	plant	Hg	.64	ppm				Hemp lf	HMDC 78

829910333

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4273	58	plant	Hg	.83	ppm				Hemp ft.st	HMDC 78
4274	58	plant	Hg	.11	ppm				Bullrush riz	HMDC 78
4275	58	plant	Hg	.27	ppm				Bullrush ste	HMDC 78
4276	58	plant	Hg	1.04	ppm				Bullrush ft.st	HMDC 78
4277	58	plant	Hg	.31	ppm				Spar riz	MHDC 78
4278	58	plant	Hg	.06	ppm				Spat ste	HMDC 78
4279	58	plant	Hg	.31	ppm				Spar lf	HMDC 78
4280	58	plant	Hg	.71	ppm				Spar ft.st	HMDC 78
4281	58	plant	Hg	.10	ppm				Phrag riz	HMDC 78
4282	58	plant	Hg	.12	ppm				Phrag ste	HMDC 78
4283	58	plant	Hg	.40	ppm				Phrag lf	HMDC 78
4284	58	plant	Hg	.09	ppm				Typha riz	HMDC 78
4285	58	plant	Hg	.22	ppm				Typha ste	HMDC 78
4286	58	plant	Hg	.29	ppm				Typha lf	HMDC 78
4287	58	plant	Hg	.11	ppm				Typha ft.st	HMDC 78
2270	58	plant	HG	.14	ppm		5	78	Phrag lf	HMDC 78
2271	58	plant	HG	.15	ppm		5	78	Phraf ste	HMDC 78
2272	58	plant	HG	.33	ppm		5	78	Phrag lf	HMDC 78
2273	58	plant	HG	.08	ppm		5	78	Phrag ste	HMDC 78
4266	59	plant	Hg	.14	ppm				Phrag riz	HMDC 78
4267	59	plant	Hg	.08	ppm				Phrag ste	HMDC 78
4268	59	plant	Hg	.23	ppm				Phrag lf	HMDC 78
4269	59	plant	Hg	.35	ppm				Phrag ft.st	HMDC 78
2291	60	plant	HG	.19	ppm		5	78	Phrag lf	HMDC 78
2292	60	plant	HG	.06	ppm		5	78	Phrag ste	HMDC 78
2293	60	plant	HG	.22	ppm		5	78	Phrag lf	HMDC 78
2294	60	plant	HG	.54	ppm		5	78	Phrag ste	HMDC 78
2313	62	plant	HG	.11	ppm		5	78	Phrag lf	HMDC 78
2314	62	plant	HG	.04	ppm		5	78	Phrag ste	HMDC 78
2315	62	plant	HG	.54	ppm		5	78	Phrag lf	HMDC 78
2316	62	plant	HG	.97	ppm		5	78	Phrag ste	HMDC 78
4258	83	plant	Hg	.31	ppm				Phrag riz	HMDC 78
4259	83	plant	Hg	.07	ppm				Phrag ste	HMDC 78
4260	83	plant	Hg	.50	ppm				Phrag lf	HMDC 78
4261	83	plant	Hg	.97	ppm				Phrag ft.st	HMDC 78
4288	94	plant	Hg	.83	ppm				Phrag riz	HMDC 78
4289	94	plant	Hg	.28	ppm				Phrag ste	HMDC 78
4290	94	plant	Hg	.60	ppm				Phrag lf	HMDC 78
4291	94	plant	Hg	.73	ppm				Phrag ft.st	HMDC 78
4292	94	plant	Hg	.00	ppm				Typha ste	HMDC 78
4293	94	plant	Hg	.72	ppm				Typha lf	HMDC 78
4294	94	plant	Hg	.00	ppm				Typha ft.st	HMDC 78

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4295	94	plant	Hg	.12	ppm				Spar ste	HMDC 78
4296	94	plant	Hg	1.67	ppm				Spar lf ·	HMDC 78
4297	94	plant	Hg	2.95	ppm				Hemp riz	HMDC 78
4298	94	plant	Hg	.83	ppm				Hemp ste	HMDC 78
4307	104	plant	Hg	.07	ppm				Phrag riz	HMDC 78
4308	104	plant	Hg	.05	ppm				Phrag ste	HMDC 78
4309	104	plant	Hg	.41	ppm				Phrag lf	HMDC 78
4310	104	plant	Hg	.81	ppm				Phrag ft.st	HMDC 78
4311	104	plant	Hg	.06	ppm				Phrag riz	HMDC 78
4312	104	plant	Hg	.50	ppm				Phrag ste	HMDC 78
4313	104	plant	Hg	.11	ppm				Phrag lf	HMDC 78
4314	104	plant	Hg	.79	ppm				Phrag ft.st	HMDC 78
1961	104	plant	Hg	.08	ppm		10	77	Phrag riz	HMDC 78
1962	104	plant	Hg	.15	ppm		10	77	Phrag ste	HMDC 78
1963	104	plant	Hg	.45	ppm		10	77	Phrag lf	HMDC 78
1964	104	plant	Hg	.37	ppm		10	77	Phrag fr	HMDC 78
1965	104	plant	Hg	.08	ppm		10	77	Spar riz	HMDC 78
1966	104	plant	Hg	.20	ppm		10	77	Spar ste	HMDC 78
1967	104	plant	Hg	.00	ppm		10	77	Spar lf	HMDC 78
1968	104	plant	Hg	.00	ppm		10	77	Spar fr	HMDC 78

314 Records Processed

829910335

APPENDIX 11a

MERCURY IN SEDIMENT (DRY WT.) - LARGE SCALE MAP

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2761	5	sed	Hg	882.00	ppm		6	77	0-3 inch	JMA 77
2762	5	sed	Hg	695.00	ppm		6	77	3-6inch	JMA 77
2763	5	sed	Hg	81.00	ppm		6	77	6-9inch	JMA 77
2764	5	sed	Hg	13.70	ppm		6	77	9-11inch	JMA 77
2766	6	sed	Hg	679.00	ppm		6	77	0-3inch	JMA 77
2767	6	sed	Hg	625.00	ppm		6	77	3-6inch	JMA 77
2768	6	sed	Hg	179.00	ppm		6	77	6-9inch	JMA 77
2770	7	sed	Hg	11.70	ppm		6	77	0-3inch	JMA 77
2771	7	sed	Hg	23.00	ppm		6	77	3-6inch	JMA 77
2772	7	sed	Hg	5.70	ppm		6	77	6-9inch	JMA 77
2773	7	sed	Hg	1.20	ppm		6	77	9-12inch	JMA 77
2779	8	sed	Hg	361.00	ppm		6	77	0-3inch	JMA 77
2780	8	sed	Hg	420.00	ppm		6	77	3-6inch	JMA 77
2781	8	sed	Hg	624.00	ppm		6	77	6-9inch	JMA 77
2782	8	sed	Hg	528.00	ppm		6	77	9-12inch	JMA 77
2788	9	sed	Hg	76.43	ppm		7	78	bk./br	Stop 78
2789	9	sed	Total Hg	82.00	ppm		2	84	PONAR Grab	Bart 84
2790	9	sed	Me Hg	.01	ppm		2	84	PONAR Grab	Bart 84
2791	9	sed	Hg	2825.00	ppm		6	77	0-3inch	JMA 77
2792	9	sed	Hg	39940.00	ppm		6	77	3-6inch	JMA 77
2793	9	sed	Hg	89162.00	ppm		6	77	6-9inch	JMA 77
2794	9	sed	Hg	66533.00	ppm		6	77	9-12inch	JMA 77
2795	9	sed	Hg	700.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2796	9	sed	Hg	165.00	ppm		2	75	ng	JMA 77
2799	10	sed	Hg	42.78	ppm		7	78	br. sand	Stop 78
2800	10	sed	Hg	993.00	ppm		6	77	0-3inch	JMA 77
2801	10	sed	Hg	307.00	ppm		6	77	3-6inch	JMA 77
2802	10	sed	Hg	23.00	ppm		6	77	6-9inch	JMA 77
2803	10	sed	Hg	14.70	ppm		6	77	9-12inch	JMA 77
2804	10	sed	Hg	410.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2805	10	sed	Hg	147.00	ppm		2	75	PONAR Grab	JMA 77
2810	11	sed	Hg	57.00	ppm		6	77	0-3 inch	JMA 77
2811	11	sed	Hg	24.00	ppm		6	77	3-6 inch	JMA 77
2812	11	sed	Hg	5.60	ppm		6	77	6-9inch	JMA 77
2813	11	sed	Hg	23.00	ppm		6	77	9-12inch	JMA 77
3084	23	sed	Hg	25.00	ppm		3	80	PONAR Grab	Aw 80
3085	23	sed	Hg	.33	ppm		3	80	PONAR Grab	Aw 80
3088	26	mrsh sed	Hg	19.00	ppm			72	0-2 inch	JMA 76
3089	26	mrsh sed	Hg	.00	ppm			72	2-4 inch	JMA 76
3090	26	mrsh sed	Hg	7.40	ppm			72	4-6 inch	JMA 76
3095	32	sed	Hg	68.00	ppm		3	80	PONAR Grab	Aw 80
3098	36	mrsh sed	Hg	27.00	ppm		3	76	PONAR Grab	JMA 76

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3099	36	mrsh sed	Hg	16.00	ppm		3	76	ng	JMA 76
3100	36	mrsh sed	Hg	15.00	ppm		3	76	ng	JMA 76
3101	36	mrsh sed	Hg	15.00	ppm		3	76	ng	JMA 76
3102	36	mrsh sed	Hg	30.00	ppm		3	76	ng	JMA 76
3103	36	mrsh sed	Hg	5.30	ppm		3	76	ng	JMA 76
3104	36	mrsh sed	Hg	22.00	ppm		3	76	ng	JMA 76
3105	36	mrsh sed	Hg	36.00	ppm		3	76	ng	JMA 76
3106	36	mrsh sed	Hg	30.00	ppm		3	76	ng	JMA 76
3107	36	mrsh sed	Hg	32.00	ppm		3	76	ng	JMA 76
3108	36	mrsh sed	Hg	3.90	ppm		3	76	ng	JMA 76
3109	36	mrsh sed	Hg	3.20	ppm		3	76	ng	JMA 76
3110	36	mrsh sed	Hg	3.60	ppm		3	76	ng	JMA 76
3111	38	sed	Hg	87.60	ppm		11	79	ng	Aw 79
2924	43	sed	Hg	83.32	ppm		7	78	bk,surface	Stop 78
2925	43	sed	Hg	150.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2926	44	sed	Hg	776.00	ppm		7	78	br.&bk.	Stop 78
2927	44	sed	Hg	420.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3117	44	mrsh sed	Hg	61.70	ppm			74	0-6 inch	JMA 76
3118	44	mrsh sed	Hg	8.30	ppm			74	30-36 inch	JMA 76
3119	44	mrsh sed	Hg	3.00	ppm			72	0-2 inch	JMA 76
3120	44	mrsh sed	Hg	208.00	ppm			72	4-6 inch	JMA 76
2928	45	sed	Hg	76.43	ppm		7	78	bk,br.	Stop 78
2929	46	sed	Hg	30.56	ppm		7	78	br. sand	Stop 78
2930	47	sed	Total Hg	9.20	ppm		2	84	PONAR Grab	Bart 84
2931	47	sed	Methyl Hg	.00	ppm		2	84	PONAR Grab	Bart 84
2934	48	sed	Total Hg	131.00	ppm		2	84	PONAR Grab	Bart 84
2935	48	sed	Methyl Hg	3.00	ppm		2	84	PONAR Grab	Bart 84
2936	48	sed	Hg	110.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2937	49	sed	Total Hg	192.50	ppm		2	84	PONAR Grab	Bart 84
2938	49	sed	Hg	570.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2939	49	sed	Hg	152.00	ppm		2	84	Lowtide 1	Weis 84
2940	49	sed	Hg	38.00	ppm		2	84	Lt 2	Weis 84
2941	49	sed	Hg	164.00	ppm		2	84	Lt 1	Weis 84
2942	49	sed	Hg	38.00	ppm		2	84	Lt 2	Weis 84
2943	49	sed	Hg	105.00	ppm		2	84	Lt 1	Weis 84
2944	49	sed	Hg	17.00	ppm		2	84	Lt 2	Weis 84
2945	49	sed	Hg	39.00	ppm		2	84	Lt 1	Weis 84
2946	49	sed	Hg	124.00	ppm		2	84	Lt 2	Weis 84
2947	49	sed	Hg	59.00	ppm		2	84	Lt 1	Weis 84
2948	49	sed	Hg	307.00	ppm		2	84	Lt 2	Weis 84
2949	49	sed	Hg	93.00	ppm		2	84	Lt 1	Weis 84
2950	49	sed	Hg	35.00	ppm		2	84	Lt 2	Weis 84

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2951	49	sed	Hg	182.00	ppm		2	84	Lt 1	Weis 84
2952	49	sed	Hg	271.00	ppm		2	84	Lt 2	Weis 84
2953	49	sed	Hg	74.00	ppm		2	84	Lt 1	Weis 84
2954	49	sed	Hg	70.00	ppm		2	84	Lt 2	Weis 84
2955	49	sed	Hg	152.00	ppm		2	84	Lt 1	Weis 84
2956	49	sed	Hg	346.00	ppm		2	84	Lt 2	Weis 84
2957	49	sed	Hg	122.00	ppm		2	84	Lt 1	Weis 84
2958	49	sed	Hg	44.00	ppm		2	84	Lt 2	Weis 84
2959	49	sed	Hg	133.00	ppm		2	84	Lt 1	Weis 84
2960	49	sed	Hg	40.00	ppm		2	84	Lt 2	Weis 84
2961	49	sed	Hg	32.00	ppm		2	84	Lt 1	Weis 84
2962	49	sed	Hg	93.00	ppm		2	84	Lt 2	Weis 84
2963	49	sed	Hg	57.00	ppm		2	84	Lt 1	Weis 84
2964	49	sed	Hg	74.00	ppm		2	84	Lt 2	Weis 84
2965	49	sed	Hg	137.00	ppm		2	84	Lt 1	Weis 84
2966	49	sed	Hg	45.00	ppm		2	84	Lt 2	Weis 84
2967	49	sed	Hg	67.00	ppm		2	84	Lt 1	Weis 84
2968	49	sed	Hg	186.00	ppm		2	84	Lt 2	Weis 84
2969	49	sed	Hg	82.00	ppm		2	84	Lt 1	Weis 84
2970	49	sed	Hg	383.00	ppm		2	84	Lt 2	Weis 84
2971	49	sed	Hg	276.00	ppm		2	84	Lt 1	Weis 84
2972	49	sed	Hg	807.00	ppm		2	84	Lt 2	Weis 84
2973	49	sed	Hg	1142.00	ppm		2	84	Lt 1	Weis 84
2974	49	sed	Hg	1392.00	ppm		2	84	Lt 2	Weis 84
3121	49	mrsh sed	Hg	40.60	ppm			74	0-6 inch	JMA 76
3122	49	mrsh sed	Hg	9.10	ppm			74	30-36 inch	JMA 76
2975	50	sed	Total Hg	576.00	ppm		2	84	PONAR Grab	Bart 84
2976	50	sed	Methyl Hg	.00	ppm		2	84	PONAR Grab	Bart 84
2977	50	sed	Hg	170.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2978	51	sed	Total Hg	452.00	ppm		2	84	PONAR Grab	Bart 84
2979	51	sed	Methyl Hg	.01	ppm		2	84	PONAR Grab	Bart 84
2980	51	sed	Hg	220.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2981	52	sed	Hg	3.80	ppm		4	80	dry avg.PONAR Grab	Aw 80
2982	53	sed	Hg	96.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2983	54	sed	Hg	140.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2984	55	sed	Hg	171.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2985	56	sed	Hg	38.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3175	56	sed	Hg	65.00	ppm		3	82	0-1inchinorganicHg	Wood 82
3176	56	sed	Hg	700.00	ppm		3	82	3-18inchinorganicH	Wood 82
3177	56	sed	Hg	1700.00	ppm		3	82	18-30inchinorganic	Wood 82
3178	56	sed	Hg	300.00	ppm		3	82	18-30inchorganic	Wood 82
3179	56	sed	Hg	9.20	ppm		3	82	3-18inchinorganic	Wood 82

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3180	56	sed	Hg	3.30	ppm		3	82	3-18inchorganic	Wood 82
3181	56	sed	Hg	6.30	ppm		3	82	18-36inchinorganic	Wood 82
3182	56	sed	Hg	5.40	ppm		3	82	18-36inchorganic	Wood 82
2986	57	sed	Hg	370.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2987	58	sed	Hg	140.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2988	59	sed	Hg	230.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2989	60	sed	Hg	120.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2990	60	sed	Hg	167.00	ppm		2	75	ng	JMA 77
2991	60	sed	Hg	35.00	ppm		11	75	ng	JMA 77
2992	60	sed	Hg	577.00	ppm		8	76	ng	JMA 77
3184	60	sed	Hg	.00	ppm		3	82	lotideinorganic	Wood 82
2993	61	sed	Hg	48.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3185	61	sed	Hg	4.85	ppm		2	83	PONAR grab	NJDEP 85
3186	61	sed	Hg	4.85	ppm		2	83	PONAR grab	NJDEP 85
2994	62	sed	Hg	140.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2995	63	sed	Hg	520.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2996	64	sed	Hg	130.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2997	65	sed	Hg	310.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3193	65	ch sed	Hg	349.26	ppm		10	81	west PONAR Grab	NJDEP 85
3194	65	ch sed	Hg	151.89	ppm		10	81	east PONAR Grab	NJDEP 85
3196	65	ch sed	Me Hg	.00	ppm	20.0	10	81	west Ponar Grab	NJDEP 85
3197	65	ch sed	MeHg	.00	ppm	0.2	10	81	east PONAR Grab	NJDEP 85
3198	65	ch sed	MeHg	.20	ppm	0.2	10	81	center PONAR grab	NJDEP 85
2998	66	sed	Hg	200.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
2999	67	sed	Hg	260.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3004	68	sed	Hg	490.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3199	68	ch sed	Hg	42.49	ppm		10	81	right PONAR grab	NJDEP 85
3200	68	ch sed	Hg	40.19	ppm		10	81	left PONAR grab	NJDEP 85
3201	68	ch sed	Hg	60.00	ppm		10	81	center PONAR grab	NJDEP 85
3202	68	ch sed	Me Hg	.00	ppm	.2	10	81	west PONAR Grab	NJDEP 85
3203	68	ch sed	Me Hg	.00	ppm	.2	10	81	east PONAR Grab	NJDEP 85
3204	68	ch sed	Me Hg	.00	ppm	.2	10	81	center PONAR Grab	NJDEP 85
3005	69	sed	Hg	160.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3006	70	sed	Hg	240.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3205	70	sed	Hg	38.00	ppm		3	82	0-1inchinorganic	Wood 82
3206	70	sed	Hg	17.00	ppm		3	82	1-30inchinorganic	Wood 82
3207	70	sed	Hg	5.60	ppm		3	82	30-42inchinorganic	Wood 82
3208	70	sed	Hg	5.40	ppm		3	82	30-42inchorganic	Wood 82
3007	71	sed	Hg	460.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3008	72	sed	Hg	79.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3009	73	sed	Hg	120.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3010	74	sed	Hg	260.00	ppm		4	80	dry avg.PONAR Grab	Aw 80

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M	DAT	STA	SA	...	ONT	ANT	UE.	UN	. L	. M	YE	DESC	ION	...	F..	...
3011		75		sed		Hg	240.00	ppm			4	80	dry avg.PONAR Grab		Aw	80
3012		76		sed		Hg	3.00	ppm			4	80	dry avg.PONAR Grab		Aw	80
3209		76		sed		Hg	30.00	ppm			3	82	0-1inchinorganic		Wood	82
3210		76		sed		Hg	6.60	ppm			3	82	0-1inchorganic		Wood	82
3211		76		sed		Hg	110.00	ppm			3	82	1-34inchinorganic		Wood	82
3212		76		sed		Hg	10.00	ppm			3	82	1-34inchorganic		Wood	82
3213		76		sed		Hg	2.60	ppm			3	82	34-42inchinorganic		Wood	82
3214		76		sed		Hg	.30	ppm			3	82	34-42inchorganic		Wood	82
3215		76	ch	sed		Hg	106.46	ppm			10	81	west PONAR Grab		NJDEP	85
3216		76	ch	sed		Hg	72.33	ppm			10	81	east PONAR Grab		NJDEP	85
3217		76	ch	sed		Hg	33.83	ppm			10	81	center PONAR Grab		NJDEP	85
3218		76	ch	sed	Me	Hg	.20	ppm			10	81	west PONAR Grab		NJDEP	85
3219		76	ch	sed	Me	Hg	.20	ppm			10	81	east PONAR Grab		NJDEP	85
3220		76	ch	sed	Me	Hg	.20	ppm			10	81	center PONAR Grab		NJDEP	85
3013		77		sed		Hg	350.00	ppm			4	80	dry avg.PONAR Grab		Aw	80
3014		78		sed		Hg	46.00	ppm			4	80	dry avg.PONAR Grab		Aw	80
3015		79		sed		Hg	44.00	ppm			4	80	dry avg.PONAR Grab		Aw	80
3016		80		sed		Hg	130.00	ppm			4	80	dry avg.PONAR Grab		Aw	80
3017		81		sed		Hg	100.00	ppm			4	80	dry avg.PONAR Grab		Aw	80
3018		82		sed		Hg	320.00	ppm			4	80	dry avg.PONAR Grab		Aw	80
3019		83		sed		Hg	220.00	ppm			4	80	dry avg.PONAR Grab		Aw	80
3020		83		sed		Hg	.30	ppm			11	75	ng		JMA	77
3021		83		sed		Hg	4480.00	ppm			8	76	ng		JMA	77
3022		84		sed		Hg	41.00	ppm			4	80	dry avg.PONAR Grab		Aw	80
3023		85		sed		Hg	150.00	ppm			4	80	top corePONAR Grab		Aw	80
3024		85		sed		Hg	9.40	ppm			4	80	bottom core PONAR		Aw	80
3221		85	ch	sed		Hg	4.05	ppm			10	81	west PONAR Grab		NJDEP	85
3222		85	ch	sed		Hg	116.07	ppm			10	81	east PONAR Grab		NJDEP	85
3223		85	ch	sed		Hg	118.47	ppm			10	81	center PONAR Grab		NJDEP	85
3224		85	ch	sed	Me	Hg	.20	ppm			10	81	west PONAR Grab		NJDEP	85
3225		85	ch	sed	Me	Hg	.20	ppm			10	81	east PONAR Grab		NJDEP	85
3226		85	ch	sed	Me	Hg	.20	ppm			10	81	center PONAR Grab		NJDEP	85
3025		86		sed		Hg	9.10	ppm			4	80	T.core PONAR Grab		Aw	80
3026		86		sed		Hg	1.50	ppm			4	80	center core PONAR		Aw	80
3027		87		sed		Hg	280.00	ppm			4	80	T.core PONAR Grab		Aw	80
3028		87		sed		Hg	280.00	ppm			4	80	center core PONAR		Aw	80
3029		87		sed		Hg	65.00	ppm			4	80	B.core PONAR Grab		Aw	80
3030		88		sed		Hg	30.00	ppm			4	80	T.core PONAR Grab		Aw	80
3031		88		sed		Hg	3.70	ppm			4	80	center core PONAR		Aw	80
3227		88		sed		Hg	45.00	ppm			3	82	0-1inchinorganic		Wood	82
3228		88		sed		Hg	110.00	ppm			3	82	1-26inchinorganic		Wood	82
3229		88		sed		Hg	10.00	ppm			3	82	1-26inchorganic		Wood	82

MAP DATA	STATION	SAMPLE		CONTAMINANT	VALUE	UNITS	LIMIT	MONTH	YEAR	DESCRIPTION	
3230	88		sed	Hg	2.30	ppm		3	82	26-48inchinorganic	Wood 82
3231	88		sed	Hg	2.30	ppm		3	82	26-48inchorganic	Wood 82
3032	89		sed	Hg	17.00	ppm		4	80	T.core PONAR Grab	Aw 80
3033	89		sed	Hg	1.70	ppm		4	80	bottom core PONAR	Aw 80
3034	90		sed	Hg	56.00	ppm		4	80	top corePONAR Grab	Aw 80
3035	90		sed	Hg	1.90	ppm		4	80	center core PONAR	Aw 80
3036	90		sed	Hg	.46	ppm		4	80	bottom core PONAR	Aw 80
3232	90	ch	sed	Hg	44.37	ppm		10	81	WEST PONAR Grab	NJDEP 85
3233	90	ch	sed	Hg	3.55	ppm		10	81	east PONAR Grab	NJDEP 85
3234	90	ch	sed	Hg	288.89	ppm		10	81	center PONAR Grab	NJDEP 85
3235	90	ch	sed	Me Hg	.00	ppm	.2	10	81	west PONAR Grab	NJDEP 85
3236	90	ch	sed	Me Hg	.00	ppm	.2	10	81	east PONAR Grab	NJDEP 85
3237	90	ch	sed	Me Hg	.00	ppm	.2	10	81	center PONAR Grab	NJDEP 85
3037	91		sed	Hg	52.00	ppm		4	80	T.core PONAR Grab	Aw 80
3038	91		sed	Hg	2.20	ppm		4	80	center core PONAR	Aw 80
3039	92		sed	Hg	2.50	ppm		4	80	dry avg.PONAR Grab	Aw 80
3040	93		sed	Hg	14.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3041	94		sed	Hg	35.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3042	95		sed	Hg	3.50	ppm		4	80	dry avg.PONAR Grab	Aw 80
3043	96		sed	Hg	35.00	ppm		4	80	dry avg.PONAR Grab	Aw 80
3238	96	ch	sed	Hg	2.90	ppm		10	81	west PONAR Grab	NJDEP 85
3239	96	ch	sed	Hg	108.33	ppm		10	81	center PONAR Grab	NJDEP 85
3240	96	ch	sed	Hg	121.28	ppm		10	81	east PONAR Grab	NJDEP 85
3241	96	ch	sed	Me Hg	.00	ppm	.2	10	81	west PONAR Grab	NJDEP 85
3242	96	ch	sed	Me Hg	.00	ppm	.2	10	81	center PONAR Grab	NJDEP 85
3243	96	ch	sed	Me Hg	.00	ppm	.2	10	81	east PONAR Grab	NJDEP 85
3244	119	ch	sed	Hg	128.47	ppm		10	81	west PONAR Grab	NJDEP 85
3245	119	ch	sed	Hg	100.00	ppm		10	81	east PONAR Grab	NJDEP 85
3246	119	ch	sed	Hg	275.27	ppm		10	81	center PONAR Grab	NJDEP 85
3247	119	ch	sed	Hg	.00	ppm	.2	10	81	west PONAR Grab	NJDEP 85
3248	119	ch	sed	Hg	.00	ppm	.2	10	81	east PONAR Grab	NJDEP 85
3249	119	ch	sed	Hg	.00	ppm	.2	10	81	center PONAR Grab	NJDEP 85
3267	126	ch	sed	Hg	128.00	ppm		9	83	composite	Crow 84
3271	129	ch	sed	Hg	331.00	ppm		9	83	composite	Crow 84
3273	130	ch	sed	Hg	99.50	ppm		9	83	composite	Crow 84
3275	131	ch	sed	Hg	25.20	ppm		9	83	composite	Crow 84

246 Records Processed

APPENDIX 11b

MERCURY IN SEDIMENT (WET WT.) - SMALL SCALE MAP (MAP 1)

MERCURY IN SEDIMENT (WET WT.) - LARGE SCALE MAP (MAP 2)

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
6673	2	sed	Hg	.78	ppm		6	77	bl,gy,org st	Huch 77
6680	10	sed	Hg	4.40	ppm		6	77	bl,cl/st	Huch 77
6679	12	sed	Hg	6.00	ppm		6	77	bl,cl/st 12inch	Huch 77
6668	21	sed	Hg	.74	ppm		6	77	br cl/st	Huch 77
6667	22	sed	Hg	.96	ppm		6	77	br cl/silt	Huch 77
6666	23	sed	Hg	3.10	ppm		6	77	bl silt	Huch 77
0009	24	ch sed	Hg	6.52	ppm		6	77	bl clay	Huch 77
6676	27	sed	Hg	18.30	ppm		6	77	bl st,cl 12 inch	Huch 77
6671	30	sed	Hg	2.38	ppm		6	77	bl silt	Huch 77
6674	32	sed	Hg	21.20	ppm		6	77	bl silt 18 inch	Huch 77
6691	40	sed	Hg	1.40	ppm		6	77	gy sd,red st/cl	Huch 77
6692	44	sed	Hg	1.44	ppm		6	77	fine sd,cl 3inch	Huch 77
6677	46	sed	Hg	.17	ppm		6	77	gy st/cl 2inch	Huch 77
6678	51	sed	Hg	.60	ppm		6	77	br,gy cl,st 10inch	Huch 77
6690	72	sed	Hg	.11	ppm		6	77	fine sd,bl st 3in	Huch 77
6669	85	sed	Hg	2.46	ppm		6	77	bl silt T	Huch 77
6670	85	sed	Hg	.47	ppm		6	77	gy silt	Huch 77
6672	86	sed	Hg	1.23	ppm		6	77	bl,br org st	Huch 77
6675	90	sed	Hg	45.40	ppm		6	77	gy st/cl 9 inch	Huch 77
9245	91	mrsh sed	Hg	14.40	ppm		6	77	cl,st	Huch 77
6681	92	sed	Hg	1.35	ppm		6	77	sd,bl,org st 8inch	Huch 77
6682	93	sed	Hg	.95	ppm		6	77	gy,red,st/cl 4inch	Huch 77
6683	94	sed	Hg	2.58	ppm		6	77	bl,org st 7inch	Huch 77
6684	95	sed	Hg	.39	ppm		6	77	bl,org st 4inch	Huch 77
6685	96	sed	Hg	.04	ppm		6	77	gy fine sd 4inch	Huch 77
6686	97	sed	Hg	.13	ppm		6	77	br st,fine sd 12 i	Huch 77
6687	98	sed	Hg	1.20	ppm		6	77	gy sd,bl st 2inch	Huch 77
6688	99	sed	Hg	.22	ppm		6	77	bl,org st 3inch	Huch 77
6689	100	sed	Hg	.26	ppm		6	77	fine sd,bl st 3inc	Huch 77
9731	102	mrsh sed	Hg	21.20	ppm		6	77	4 inch bl st	Huch 77
9733	103	mrsh sed	Hg	53.00	ppm		6	77	6 inch cl,st	Huch 77

31 Records Processed

829910344

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3086	26	sed	Hg	19.60	ppm		6	77	16inch bl silt	Huch 77
3087	26	sed	Hg	23.30	ppm		6	77	cl,st .	Huch 77
3096	35	sed	Hg	27.30	ppm		6	77	12inch cl,st top c	Huch 77
3097	35	sed	Hg	54.80	ppm		6	77	br,gy st,cl bottom	Huch 77
3116	40	sed	Hg	1.40	ppm		6	77	2inch cl,sd	Huch 77
3123	68	sed	Hg	6.50	ppm		6	77	14i;st,cl top core	Huch 77
3124	68	sed	Hg	20.40	ppm		6	77	gy clay bottom cor	Huch 77
3125	69	sed	Hg	16.70	ppm		6	77	5inch bl st	Huch 77
3126	71	sed	Hg	5.20	ppm		6	77	2inch st,sd	Huch 77
3127	92	sed	Hg	.59	ppm		6	77	3inch st,cl,sd	Huch 77
3128	98	sed	Hg	1.20	ppm		6	77	2inch st,sd	Huch 77
3129	99	sed	Hg	.22	ppm		6	77	3inch st,sd	Huch 77
3130	100	sed	Hg	.40	ppm		6	77	6inch st,sd	Huch 77
3131	101	sed	Hg	6.20	ppm		6	77	14inch st,sd top c	Huch 77
3132	101	sed	Hg	5.35	ppm		6	77	cl,st bottom core	Huch 77
3133	102	sed	Hg	21.20	ppm		6	77	4inch bk st top co	Huch 77
3134	102	sed	Hg	2.50	ppm		6	77	st/cl bottom core	Huch 77
3135	103	sed	Hg	2.00	ppm		6	77	3inch st/cl	Huch 77

18 Records Processed

829910345

APPENDIX 12

MERCURY IN SOIL - LARGE SCALE MAP

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3048	99	air	Hg	.35	ug/.5g		7	78	Hginsampl	Stop 78
3052	100	air	Hg	.00	ug/m3		7	78	airHglevl·	Stop 78
3053	101	air	Hg	.00	ug/m3		7	78	airHglevl	Stop 78
3171	102	air	Hg	.20	ug/m3		8	78	24hrtest	EPA 78
3172	102	air	Hg	2.09	ug/m3		8	78	24hrtest	EPA 78
3173	102	air	Hg	2.21	ug/m3		8	78	24hrtest	EPA 78
3054	103	air	Hg	.00	ug/m3		7	78	airHglevl	Stop 78
3055	104	air	Hg	.00	ug/m3		7	78	airHglevl	Stop 78
3056	105	air	Hg	.55	ug/.5g		7	78	Hginsampl	Stop 78
3057	105	air	Hg	20.00	ug/m3		7	78	airHglevl	Stop 78
3061	106	air	Hg	1.00	ug/m3		7	78	airHglevl	Stop 78
3062	107	air	Hg	.10	ug/.5g		7	78	Hginsample	Stop 78
3063	107	air	Hg	.00	ug/m3		7	78	airHglevl	Stop 78
3064	107	air	Hg	4.30	ug/m3		7	78	airHglevl	Stop 78
3065	108	air	Hg	.00	ug/m3		7	78	airHglevl	Stop 78
3066	109	air	Hg	35.00	ug/m3		7	78	airHglevl	Stop 78
3067	110	air	Hg	.00	ug/m3		7	78	airHglevl	Stop 78
3068	111	air	Hg	.00	ug/m3		7	78	airHglevl	Stop 78

60 Records Processed

829910347

APPENDIX 16

POTENTIAL CONTAMINANTS SEDIMENT - SMALL SCALE MAP

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2775	8	soil	Hg	2558.00	ppm		6	77	0-6inch	JMA 77
2776	8	soil	Hg	2885.00	ppm		6	77	6-12inch	JMA 77
2777	8	soil	Hg	3397.00	ppm		6	77	12-18inch	JMA 77
2778	8	soil	Hg	4719.00	ppm		6	77	18-24inch	JMA 77
2808	10	soil	Hg	6.10	ppm		6	77	0-6inch	JMA 77
2809	10	soil	Hg	2.60	ppm		6	77	6-12inch	JMA 77
2820	13	soil	Hg	24.41	ppm		7	78	br.,pebly	Stop 78
2822	14	soil	Hg	8.76	ppm		7	78	glassrust	Stop 78
2823	15	soil	Hg	5.70	ppm		6	77	0-6inch	JMA 77
2824	15	soil	Hg	5.50	ppm		6	77	6-12inch	JMA 77
2825	15	soil	Hg	6.80	ppm		6	77	12-18inch	JMA 77
2826	15	soil	Hg	9.80	ppm		6	77	18-24inch	JMA 77
2827	15	soil	Hg	5.43	ppm		7	78	gy.powder	Stop 78
2830	16	soil	Hg	18.00	ppm		3	80	0-8inch	Aw 80
2831	16	soil	Hg	60.00	ppm		3	80	8-16 inch	Aw 80
2832	16	soil	Hg	180.00	ppm		3	80	16-24inch	Aw 80
2828	16	soil	Hg	546.00	ppm		6	77	0-6inch	JMA 77
2829	16	soil	Hg	1444.00	ppm		6	77	6-12inch	JMA 77
2833	17	soil	Hg	1100.00	ppm		3	80	0-8inch	Aw 80
2834	17	soil	Hg	750.00	ppm		3	80	8-16inch	Aw 80
2835	17	soil	Hg	1000.00	ppm		3	80	16-24inch	Aw 80
2836	18	soil	Hg	8.00	ppm		3	80	0-8inch	Aw 80
2837	18	soil	Hg	120.00	ppm		3	80	8-16inch	Aw 80
2838	18	soil	Hg	28.00	ppm		3	80	16-24inch	Aw 80
2839	19	soil	Hg	800.00	ppm		3	80	0-8inch	Aw 80
2840	19	soil	Hg	940.00	ppm		3	80	8-16inch	Aw 80
2841	19	soil	Hg	510.00	ppm		3	80	16-24inch	Aw 80
2842	20	soil	Hg	1400.00	ppm		3	80	0-8inch	Aw 80
2843	20	soil	Hg	210.00	ppm		3	80	8-16inch	Aw 80
2844	20	soil	Hg	97.00	ppm		3	80	16-24inch	Aw 80
2845	21	soil	Hg	2000.00	ppm		3	80	0-8inch	Aw 80
2846	21	soil	Hg	610.00	ppm		3	80	8-16inch	Aw 80
2847	21	soil	Hg	260.00	ppm		3	80	16-24inch	Aw 80
2848	22	soil	Hg	400.00	ppm		3	80	0-8inch	Aw 80
2849	22	soil	Hg	1000.00	ppm		3	80	8-16inch	Aw 80
2850	22	soil	Hg	860.00	ppm		3	80	16-24inch	Aw 80
2851	23	soil	Hg	760.00	ppm		3	80	0-8inch	Aw 80
2852	23	soil	Hg	790.00	ppm		3	80	8-16 inch	Aw 80
2853	23	soil	Hg	880.00	ppm		3	80	16-24inch	Aw 80
2854	24	soil	Hg	1100.00	ppm		3	80	0-8inch	Aw 80
2855	24	soil	Hg	230.00	ppm		3	80	8-16inch	Aw 80
2856	24	soil	Hg	52.00	ppm		3	80	16-24inch	Aw 80

829910349

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2857	25	soil	Hg	18.00	ppm		3	80	0-8inch	Aw 80
2858	25	soil	Hg	7.40	ppm		3	80	8-16inch	Aw 80
2859	25	soil	Hg	.69	ppm		3	80	16-24inch	Aw 80
2860	26	soil	Hg	6.70	ppm		3	80	0-8inch	Aw 80
2861	26	soil	Hg	15.00	ppm		3	80	8-16inch	Aw 80
2863	26	soil	Hg	58.00	ppm		6	77	0-6 inch	JMA 77
2864	26	soil	Hg	117.00	ppm		6	77	6-12 inch	JMA 77
2865	26	soil	Hg	61.00	ppm		6	77	12-18 inch	JMA 77
2866	26	soil	Hg	850.00	ppm		6	77	18-24 inch	JMA 77
2867	27	soil	Hg	8.03	ppm		7	78	whitepowder	Stop 78
2868	28	soil	Hg	619.00	ppm		6	77	0-6inch	JMA 77
2869	28	soil	Hg	746.00	ppm		6	77	6-12 inch	JMA 77
2870	29	soil	Hg	2.40	ppm		6	77	0-6inch	JMA 77
2871	29	soil	Hg	18.50	ppm		6	77	6-12 inch	JMA 77
2872	30	soil	Hg	1.50	ppm		6	77	0-6 inch	JMA 77
2873	30	soil	Hg	2.00	ppm		6	77	6-12 inch	JMA 77
2874	31	soil	Hg	15.40	ppm		6	77	0-6 inch	JMA 77
2875	31	soil	Hg	4.70	ppm		6	77	6-12 inch	JMA 77
2876	31	soil	Hg	7.10	ppm		6	77	12-18 inch	JMA 77
2877	31	soil	Hg	3.90	ppm		6	77	18-24 inch	JMA 77
2878	32	soil	Hg	30.00	ppm		6	77	0-6 inch	JMA 77
2879	32	soil	Hg	23.00	ppm		6	77	6-12 inch	JMA 77
2880	32	soil	Hg	13.80	ppm		6	77	12-18 inch	JMA 77
2881	32	soil	Hg	8.40	ppm		6	77	18-24 inch	JMA 77
2882	33	soil	Hg	46.00	ppm		6	77	0-6 inch	JMA 77
2883	33	soil	Hg	8.60	ppm		6	77	6-12 inch	JMA 77
2884	33	soil	Hg	10.00	ppm		6	77	12-18 inch	JMA 77
2885	33	soil	Hg	13.70	ppm		6	77	18-24inch	JMA 77
2886	34	soil	Hg	25.00	ppm		6	77	0-6inch	JMA 77
2887	34	soil	Hg	14.10	ppm		6	77	6-12inch	JMA 77
2888	34	soil	Hg	19.50	ppm		6	77	12-18inch	JMA 77
2889	34	soil	Hg	32.00	ppm		6	77	18-24inch	JMA 77
2890	35	soil	Hg	22.00	ppm		6	77	0-6inch	JMA 77
2891	35	soil	Hg	25.00	ppm		6	77	6-12inch	JMA 77
2892	35	soil	Hg	43.00	ppm		6	77	12-18inch	JMA 77
2893	35	soil	Hg	116.00	ppm		6	77	18-24inch	JMA 77
2895	36	soil	Hg	151.00	ppm		6	77	0-6inch	JMA 77
2896	36	soil	Hg	2008.00	ppm		6	77	6-12inch	JMA 77
2897	36	soil	Hg	1294.00	ppm		6	77	12-18inch	JMA 77
2898	36	soil	Hg	654.00	ppm		6	77	18-24inch	JMA 77
2899	37	soil	Hg	221.00	ppm		6	77	0-6inch	JMA 77
2900	37	soil	Hg	276.00	ppm		6	77	6-12inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
2901	37	soil	Hg	63.00	ppm		6	77	12-18inch	JMA 77
2902	37	soil	Hg	123000.00	ppm		6	77	18-24inch	JMA 77
2903	38	soil	Hg	11.10	ppm		6	77	0-6inch	JMA 77
2904	38	soil	Hg	11.90	ppm		6	77	6-12inch	JMA 77
2905	38	soil	Hg	14.80	ppm		6	77	12-18inch	JMA 77
2906	38	soil	Hg	12.90	ppm		6	77	18-24inch	JMA 77
2910	39	soil	Hg	9.20	ppm		6	77	0-6 inch	JMA 77
2911	39	soil	Hg	3.90	ppm		6	77	6-12inch	JMA 77
2912	39	soil	Hg	5.20	ppm		6	77	12-18inch	JMA 77
2913	39	soil	Hg	19.90	ppm		6	77	18-24inch	JMA 77
2914	40	soil	Hg	23.00	ppm		6	77	0-6inch	JMA 77
2915	40	soil	Hg	18.40	ppm		6	77	6-12inch	JMA 77
2916	40	soil	Hg	197.00	ppm		6	77	12-18inch	JMA 77
2917	40	soil	Hg	328.00	ppm		6	77	18-24inch	JMA 77
2918	41	soil	Hg	75.00	ppm		6	77	0-6inch	JMA 77
2919	41	soil	Hg	34.00	ppm		6	77	6-12inch	JMA 77
2920	41	soil	Hg	19.40	ppm		6	77	12-18inch	JMA 77
2921	41	soil	Hg	15.10	ppm		6	77	18-24inch	JMA 77
2922	42	soil	Hg	367.00	ppm		6	77	0-6inch	JMA 77
2923	42	soil	Hg	1185.00	ppm		6	77	6-12inch	JMA 77
3250	120	soil	Hg	16.60	ppm		9	83	0-24 inch	Weh 83
3251	121	soil	Hg	10.80	ppm		9	83	0-24inch	Weh 83
3252	122	soil	Hg	59.10	ppm		9	83	composite	Crow 84
3253	122	soil	Hg	59.50	ppm		9	83	0 inch	Crow 84
3254	122	soil	Hg	37.80	ppm		9	83	4 inch	Crow 84
3255	122	soil	Hg	9.70	ppm		9	83	10 inch	Crow 84
3256	122	soil	Hg	7.10	ppm		9	83	16 inch	Crow 84
3257	122	soil	Hg	1.60	ppm		9	83	22 inch	Crow 84
3258	122	soil	Hg	2.40	ppm		9	83	34 inch	Crow 84
0001	123	soil	Hg	27.60	ppm		9	83	composite	Crow 84
3259	124	soil	Hg	73.50	ppm		9	83	composite	Crow 84
3260	125	soil	Hg	44.20	ppm		9	83	0 inch	Crow 84
3261	125	soil	Hg	327.00	ppm		9	83	4 inch	Crow 84
3262	125	soil	Hg	5.80	ppm		9	83	10 inch	Crow 84
3263	125	soil	Hg	6.80	ppm		9	83	16 inch	Crow 84
3264	125	soil	Hg	3.10	ppm		9	83	22 inch	Crow 84
3265	125	soil	Hg	.30	ppm		9	83	32 inch	Crow 84
3266	126	soil	Hg	234.00	ppm		9	83	composite	Crow 84
3268	127	soil	Hg	52.00	ppm		9	83	composite	Crow 84
3269	128	soil	Hg	.43	ppm		9	83	composite	Crow 84
3270	129	soil	Hg	5.70	ppm		9	83	composite	Crow 84
3272	130	soil	Hg	249.00	ppm		9	83	composite	Crow 84

829910351

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3274	131	soil	Hg	80.10	ppm		9	83	composite	Crow 84
3276	132	soil	Hg	216.00	ppm		9	83	composite	Crow 84
3277	133	soil	Hg	15.70	ppm		9	83	composite	Crow 84
3278	134	soil	Hg	28.90	ppm		9	83	composite	Crow 84
3279	135	soil	Hg	54.90	ppm		9	83	composite	Crow 84
3280	136	soil	Hg	55.20	ppm		9	83	composite	Crow 84
3281	137	soil	Hg	39.10	ppm		9	83	composite	Crow 84

133 Records Processed

829910352

APPENDIX 13

MERCURY IN SURFACE WATER - LARGE SCALE MAP

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
5350	1	sw	Hg	.70	ppb		11	79	Ht unf	Aw 79
5351	1	sw	Hg	2.70	ppb		11	79	Lt unf	Aw 79
5352	1	sw	Hg	.60	ppb		11	79	Lt filter	Aw 79
5353	2	sw	Hg	3.00	ppb		11	79	Ht unf	Aw 79
5354	3	sw	Hg	22.60	ppb	0.	6	77	unf	JMA 77
5355	4	sw	Hg	35.60	ppb	0.	6	77	unf	JMA 77
5356	5	sw	Hg	.50	ppb	0.	6	77	unf	JMA 77
5357	6	sw	Hg	2.90	ppb	0.	6	77	unf	JMA 77
5358	7	sw	Hg	23.00	ppb	0.	6	77	unf	JMA 77
5359	8	sw	Hg	3.70	ppb	0.	6	77	unf	JMA 77
5360	9	sw	Hg	13.00	ppb	0.	6	77	unf	JMA 77
8200	9	sw	Hg	.04	ppb		7	77	unf	JMA 77
5361	10	sw	Hg	2.20	ppb	0.	6	77	unf	JMA 77
8201	10	sw	Hg	.01	ppb		7	77	unf	JMA 77
5362	11	sw	Hg	1.90	ppb	0.	6	77	unf	JMA 77
8203	11	sw	Hg	.01	ppb		7	77	unf	JMA 77
5363	12	sw	Hg	.50	ppb	0.	3	80	unf	Aw 80
5364	12	sw	Hg	.00	ppb	0.	3	80	filtered	Aw 80
5365	12	sw	Hg	.00	ppb	0.	3	80	unf	Aw 80
5366	60	sw	Hg	1.00	ppb		3	82	Ht inorg unf	Wood 82
5367	60	sw	Hg	1.00	ppb		3	82	Lt inorg unf	Wood 82

21 Records Processed

829910354

APPENDIX 14

MERCURY IN GROUND WATER - LARGE SCALE MAP

15:48:40 26 SEP 1985

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3000	7	gw	Hg	.08	ppb	.1	6	77	unf Ht	JMA 77
3003	7	gw	Hg	.35	ppb	.1	6	77	unf Lt	JMA 77
3001	7	gw	Hg	.01	ppb		7	77	fil Ht	JMA 77
3002	7	gw	Hg	.01	ppb	.3	7	77	fil Lt	JMA 77
2784	8	gw	Hg	.74	ppb		6	77	unf. B	JMA 77
5369	8	gw	Hg	1.98	ppb		6	77	unf T	JMA 77
5381	8	gw	Hg	.57	ppb	.1	6	77	unf Lt	JMA 77
5382	8	gw	Hg	.23	ppb	.1	6	77	unf Ht	JMA 77
2785	8	gw	Hg	.00	ppb	.3	7	77	fil Ht	JMA 77
2786	8	gw	Hg	.00	ppb	.3	7	77	fil Lt	JMA 77
2907	47	gw	Hg	.01	ppb		6	77	unf. T	JMA 77
2909	47	gw	Hg	.05	ppb	.3	6	77	unf. B	JMA 77
5387	47	gw	Hg	.01	ppb	.1	6	77	unf Lt	JMA 77
5388	47	gw	Hg	.01	ppb	.1	6	77	unf Ht	JMA 77
2908	47	gw	Hg	.00	ppb	.3	7	77	unf Lt	JMA 77
5371	47	gw	Hg	.00	ppb	.3	7	77	fil Ht	JMA 77
7069	47	gw	Hg	.00	ppb	.30	7	77	fil Lt	JMA 77
3049	100	gw	Hg	2.10	ppb		6	77	unf T	JMA 77
5372	100	gw	Hg	1.94	ppb	.3	6	77	unf B	JMA 77
5379	100	gw	Hg	1.47	ppb	.1	6	77	unf Lt	JMA 77
5380	100	gw	Hg	.33	ppb	.1	6	77	unf Ht	JMA 77
3050	100	gw	Hg	.00	ppb	.3	7	77	fil Ht	JMA 77
3051	100	gw	Hg	.00	ppb	.3	7	77	fil Lt	JMA 77
3069	112	gw	Hg	.01	ppb		6	77	unf. T	JMA 77
3071	112	gw	Hg	.01	ppb		6	77	unf. B	JMA 77
5391	112	gw	Hg	.00	ppb	.1	6	77	unf Lt	JMA 77
5392	112	gw	Hg	.00	ppb	.1	6	77	unf Ht	JMA 77
3070	112	gw	Hg	.01	ppb	.3	7	77	fil Ht	JMA 77
5374	112	gw	Hg	.00	ppb	.3	7	77	fil Lt	JMA 77
3072	113	gw	Hg	.03	ppb		6	77	unf. T	JMA 77
3074	113	gw	Hg	.84	ppb		6	77	unf. B	JMA 77
5375	113	gw	Hg	.01	ppb	.3	6	77	fil Lt	JMA 77
5389	113	gw	Hg	.01	ppb	.1	6	77	unf Lt	JMA 77
5390	113	gw	Hg	.01	ppb	.1	6	77	unf Ht	JMA 77
3073	113	gw	Hg	.00	ppb	.30	7	77	fil Ht	JMA 77
3075	114	gw	Hg	.00	ppb		6	77	unf. T	JMA 77
3077	114	gw	Hg	.03	ppb		6	77	unf. B	JMA 77
5385	114	gw	Hg	.01	ppb	.1	6	77	unf Lt	JMA 77
5386	114	gw	Hg	.00	ppb	.1	6	77	unf Ht	JMA 77
3076	114	gw	Hg	.00	ppb	.3	7	77	fil Ht	JMA 77
5376	114	gw	Hg	.00	ppb	.3	7	77	fil Lt	JMA 77
3078	115	gw	Hg	.41	ppb	.1	6	77	unf Lt	JMA 77

829910356

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3081	115	gw	Hg	.16	ppb	.1	6	77	unf Ht	JMA 77
3079	115	gw	Hg	.09	ppb	.3	7	77	fil Ht	JMA 77
3080	115	gw	Hg	.04	ppb	.3	7	77	fil Lt	JMA 77
3058	116	gw	Hg	11.10	ppb		6	77	unf. T	JMA 77
3060	116	gw	Hg	37.70	ppb		6	77	unf B	JMA 77
5383	116	gw	Hg	10.77	ppm	.1	6	77	unf Lt	JMA 77
5384	116	gw	Hg	.68	ppb	.1	6	77	unf Ht	JMA 77
3059	116	gw	Hg	.00	ppb	.3	7	77	fil Ht	JMA 77
5373	116	gw	Hg	.00	ppb	.3	7	77	fil Lt	JMA 77
5377	117	gw	Hg	.02	ppb	.1	6	77	unf Lt	JMA 77
5378	117	gw	Hg	.01	ppb	.1	6	77	unf Ht	JMA 77
7072	117	gw	Hg	.01	ppb		6	77	unf T	JMA 77
7073	117	gw	Hg	.09	ppb		6	77	unf B	JMA 77
7070	117	gw	Hg	.00	ppb	.30	7	77	fil Ht	JMA 77
7071	117	gw	Hg	.00	ppb	.30	7	77	fil Lt	JMA 77

57 Records Processed

829910357

APPENDIX 15

MERCURY IN AIR - LARGE SCALE MAP

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3138	7	air	Hg	.38	ug/m3		8	78	8hr test	EPA 78
3139	7	air	Hg	1.02	ug/m3		8	78	24 hr test .	EPA 78
3140	7	air	Hg	.46	ug/m3		8	78	24hr test	EPA 78
3141	7	air	Hg	.52	ug/m3		8	78	24hr test	EPA 78
3142	7	air	Hg	1.01	ug/m3		8	78	24hr test	EPA 78
3143	7	air	Hg	.00	ppm		8	82	24hr test	EPA 78
3144	7	air	Hg	.47	ug/m3		8	78	12hr test	EPA 78
3145	7	air	Hg	.38	ug/m3		8	78	12hr test	EPA 78
3146	7	air	Hg	.79	ug/m3		8	78	12hr test	EPA 78
3147	7	air	Hg	1.65	ug/m3		8	78	12hr test	EPA 78
3148	7	air	Hg	1.54	ug/m3		8	78	12hr test	EPA 78
3149	7	air	Hg	.55	ug/m3		8	78	8hr test	EPA 78
3150	7	air	Hg	.38	ug/m3		8	78	8hr test	EPA 78
3151	7	air	Hg	.44	ug/m3		8	78	8hr test	EPA 78
3152	7	air	Hg	.72	ug/m3		8	78	8hr test	EPA 78
2783	8	air	Hg	.00	ug/m3		7	78	airHglevl	Stop 78
2797	9	air	Hg	.00	ug/m3		7	78	airHglevl	Stop 78
2806	10	air	Hg	.00	ug/m3		7	78	airHglevl	Stop 78
2818	13	air	Hg	.20	ug/.5g		7	78	Hginsample	Stop 78
2819	13	air	Hg	5.00	ug/m3		7	78	airHglevl	Stop 78
2821	14	air	Hg	.00	ug/m3		7	78	airHglevl	Stop 78
2894	35	air	Hg	.00	ug/m3		7	78	airHglevl	Stop 78
3153	36	air	Hg	.29	ug/m3		8	78	24hr test	EPA 78
3154	36	air	Hg	.29	ppm		8	78	24hr test	EPA 78
3155	36	air	Hg	.39	ug/m3		8	78	24hr test	EPA 78
3156	36	air	Hg	.27	ug/m3		8	78	24hr test	EPA 78
3157	36	air	Hg	1.02	ug/m3		8	78	24hr test	EPA 78
3158	36	air	Hg	.75	ug/m3		8	78	24hr test	EPA 78
3159	36	air	Hg	2.85	ug/m3		8	78	24hr test	EPA 78
3160	36	air	Hg	2.40	ug/m3		8	78	24hr test	EPA 78
3162	36	air	Hg	.21	ug/m3		8	78	12hr test	EPA 78
3163	36	air	Hg	.18	ug/m3		8	78	12hr test	EPA 78
3164	36	air	Hg	.38	ug/m3		8	78	12hr test	EPA 78
3165	36	air	Hg	1.00	ug/m3		8	78	12hr test	EPA 78
3166	36	air	Hg	1.68	ug/m3		8	78	8hr test	EPA 78
3167	36	air	Hg	.25	ug/m3		8	78	8hr test	EPA 78
3168	36	air	Hg	.50	ug/m3		8	78	8hr test	EPA 78
3169	36	air	Hg	1.37	ug/m3		8	78	8hr test	EPA 78
3170	36	air	Hg	3.26	ug/m3		8	78	8hr test	EPA 78
2932	47	air	Hg	54.00	ug/m3		7	78	airHglevl	Stop 78
2933	47	air	Hg	210.00	ug/m3		7	78	Hginsample	Stop 78
3047	99	air	Hg	9.90	ug/m3		7	78	airHglevl	Stop 78

8299910359

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3603	1	sed	As	12.40	ppm		10	81	PONAR Grab	NJDEP 85
3604	1	sed	Be	.90	ppm		10	81	PONAR Grab	NJDEP 85
3605	1	sed	Cd	8.50	ppm		10	81	PONAR Grab	NJDEP 85
3606	1	sed	Cu	218.00	ppm		10	81	PONAR Grab	NJDEP 85
3607	1	sed	Cr	300.00	ppm		10	81	PONAR Grab	NJDEP 85
3608	1	sed	Ni	47.00	ppm		10	81	PONAR Grab	NJDEP 85
3609	1	sed	Pb	10.00	ppm		10	81	PONAR Grab	NJDEP 85
3610	1	sed	Zn	490.00	ppm		10	81	PONAR Grab	NJDEP 85
3444	9	ch sed	As	1.40	ppm		8	78	0-6 inch.	Berg 78
3445	9	ch sed	As	1.10	ppm		8	78	6-12 inch	Berg 78
3446	9	ch sed	As	.01	ppm		8	78	12-24inch	Berg 78
3447	9	ch sed	As	.60	ppm		8	78	weightavg	Berg 78
3448	9	ch sed	Cd	4.00	ppm		8	78	0-6 inch	Berg 78
3449	9	ch sed	Cd	2.80	ppm		8	78	6-12inch	Berg 78
3450	9	ch sed	Cd	1.20	ppm		8	78	12-24inch	Berg 78
3451	9	ch sed	Cd	2.30	ppm		8	78	weightavg	Berg 78
3452	9	ch sed	Cr	78.00	ppm		8	78	0-6inch	Berg 78
3453	9	ch sed	Cr	72.00	ppm		8	78	6-12inch	Berg 78
3454	9	ch sed	Cr	37.00	ppm		8	78	12-24inch	Berg 78
3455	9	ch sed	Cr	56.00	ppm		8	78	weightavg	Berg 78
4029	10	sed	As	9.00	ppm		10	81	PONAR Grab	NJDEP 85
4030	10	sed	Ga	.64	ppm		10	81	PONAR Grab	NJDEP 85
4031	10	sed	Cd	9.50	ppm		10	81	PONAR Grab	NJDEP 85
4032	10	sed	Cu	148.00	ppm		10	81	PONAR Grab	NJDEP 85
4033	10	sed	Cr	170.00	ppm		10	81	PONAR Grab	NJDEP 85
4034	10	sed	Ni	40.00	ppm		10	81	PONAR Grab	NJDEP 85
4035	10	sed	Pb	10.00	ppm		10	81	PONAR Grab	NJDEP 85
4036	10	sed	Zn	390.00	ppm		10	81	PONAR Grab	NJDEP 85
4037	12	mrsh sed	As	2.52	ppm		8	78	0-6inch	Berg 78
4038	12	mrsh sed	As	2.46	ppm		8	78	6-12inch	Berg 78
4039	12	mrsh sed	As	1.18	ppm		8	78	12-24inch	Berg 78
4040	12	mrsh sed	As	1.84	ppm		8	78	weightavg	Berg 78
4041	12	mrsh sed	Cd	.35	ppm		8	78	0-6inch	Berg 78
4042	12	mrsh sed	Cd	.33	ppm		8	78	6-12inch	Berg 78
4043	12	mrsh sed	Cd	.39	ppm		8	78	12-24inch	Berg 78
4044	12	mrsh sed	Cd	.37	ppm		8	78	weightavg	Berg 78
4045	12	mrsh sed	Cr	40.00	ppm		8	78	0-6inch	Berg 78
4046	12	mrsh sed	Cr	19.00	ppm		8	78	6-12inch	Berg 78
4047	12	mrsh sed	Cr	34.00	ppm		8	78	12-24inch	Berg 78
4048	12	mrsh sed	Cr	32.00	ppm		8	78	weightavg	Berg 78
4049	12	mrsh sed	Cu	13.00	ppm		8	78	0-6inch	Berg 78
4050	12	mrsh sed	Cu	10.00	ppm		8	78	6-12inch	Berg 78

829910360

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4051	12	mrsh sed	Cu	11.00	ppm		8	78	12-24inch	Berg 78
4052	12	mrsh sed	Cu	11.00	ppm		8	78	weightavg	Berg 78
4053	12	mrsh sed	Fe	11000.00	ppm		8	78	0-6inch	Berg 78
4054	12	mrsh sed	Fe	9100.00	ppm		8	78	6-12inch	Berg 78
4055	12	mrsh sed	Fe	11500.00	ppm		8	78	12-24inch	Berg 78
4056	12	mrsh sed	Fe	10800.00	ppm		8	78	weightavg	Berg 78
4057	12	mrsh sed	Pb	.03	ppm		8	78	0-6inch	Berg 78
4058	12	mrsh sed	Pb	.09	ppm		8	78	6-12inch	Berg 78
4059	12	mrsh sed	Pb	.08	ppm		8	78	12-24inch	Berg 78
4060	12	mrsh sed	Pb	.07	ppm		8	78	weightavg	Berg 78
4061	12	mrsh sed	Ni	17.00	ppm		8	78	0-6inch	Berg 78
4062	12	mrsh sed	Ni	16.00	ppm		8	78	6-12inch	Berg 78
4063	12	mrsh sed	Ni	22.00	ppm		8	78	12-24inch	Berg 78
4064	12	mrsh sed	Ni	19.00	ppm		8	78	weightavg	Berg 78
4065	12	mrsh sed	Zn	47.00	ppm		8	78	0-6inch	Berg 78
4066	12	mrsh sed	Zn	40.00	ppm		8	78	6-12inch	Berg 78
4067	12	mrsh sed	Zn	41.00	ppm		8	78	12-24inch	Berg 78
4068	12	mrsh sed	Zn	42.00	ppm		8	78	weightavg	Berg 78
4069	20	mrsh sed	As	2.52	ppm		8	78	0-6inch	Berg 78
4070	20	mrsh sed	As	1.22	ppm		8	78	6-12inch	Berg 78
4071	20	mrsh sed	As	.54	ppm		8	78	12-24inch	Berg 78
4072	20	mrsh sed	As	1.21	ppm		8	78	weightavg	Berg 78
4073	20	mrsh sed	Cd	.80	ppm		8	78	0-6inch	Berg 78
4074	20	mrsh sed	Cd	.55	ppm		8	78	6-12inch	Berg 78
4075	20	mrsh sed	Cd	.37	ppm		8	78	12-24inch	Berg 78
4076	20	mrsh sed	Cd	.52	ppm		8	78	weightavg	Berg 78
4077	20	mrsh sed	Cr	68.00	ppm		8	78	0-6inch	Berg 78
4078	20	mrsh sed	Cr	24.00	ppm		8	78	6-12inch	Berg 78
4079	20	mrsh sed	Cr	9.00	ppm		8	78	12-24inch	Berg 78
4080	20	mrsh sed	Cr	28.00	ppm		8	78	weightavg	Berg 78
4081	20	mrsh sed	Cu	24.00	ppm		8	78	0-6inch	Berg 78
4082	20	mrsh sed	Cu	10.00	ppm		8	78	6-12inch	Berg 78
4083	20	mrsh sed	Cu	8.00	ppm		8	78	12-24inch	Berg 78
4084	20	mrsh sed	Cu	13.00	ppm		8	78	weightavg	Berg 78
4085	20	mrsh sed	Fe	8000.00	ppm		8	78	0-6inch	Berg 78
4086	20	mrsh sed	Fe	8800.00	ppm		8	78	6-12inch	Berg 78
4087	20	mrsh sed	Fe	9100.00	ppm		8	78	12-24inch	Berg 78
4088	20	mrsh sed	Fe	8800.00	ppm		8	78	weightavg	Berg 78
4089	20	mrsh sed	Pb	72.00	ppm		8	78	0-6inch	Berg 78
4090	20	mrsh sed	Pb	16.00	ppm		8	78	6-12inch	Berg 78
4091	20	mrsh sed	Pb	7.00	ppm		8	78	12-24inch	Berg 78
4092	20	mrsh sed	Pb	26.00	ppm		8	78	weightavg	Berg 78

829910361

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4093	20	mrsh sed	Ni	30.00	ppm		8	78	0-6inch	Berg 78
4094	20	mrsh sed	Ni	21.00	ppm		8	78	6-12inch	Berg 78
4095	20	mrsh sed	Ni	10.00	ppm		8	78	12-24inch	Berg 78
4096	20	mrsh sed	Ni	18.00	ppm		8	78	weightavg	Berg 78
4097	20	mrsh sed	Zn	96.00	ppm		8	78	0-6inch	Berg 78
4098	20	mrsh sed	Zn	56.00	ppm		8	78	6-12inch	Berg 78
4099	20	mrsh sed	Zn	28.00	ppm		8	78	12-24inch	Berg 78
4100	20	mrsh sed	Zn	52.00	ppm		8	78	weightavg	Berg 78
7779	23	ch sed	Zn	71.00	ppm		12	80	0-4 inch	HMDC 80
7780	23	ch sed	Zn	64.00	ppm		12	80	4-8 inch	HMDC 80
7781	23	ch sed	Cu	20.00	ppm		12	80	0-4 inch	HMDC 80
7782	23	ch sed	Cu	15.00	ppm		12	80	4-8 inch	HMDC 80
7783	23	ch sed	Ni	29.00	ppm		12	80	0-4 inch	HMDC 80
7784	23	ch sed	Ni	21.00	ppm		12	80	4-8 inch	HMDC 80
7785	23	ch sed	Pb	26.00	ppm		12	80	0-4 inch	HMDC 80
7786	23	sed	Pb	20.00	ppm		12	80	4-8	HMDC 80
7787	23	sed	Cr	22.00	ppm		12	80	0-4 in	HMDC 80
7788	23	sed	Cr	20.00	ppm		12	80	4-8 in	HMDC 80
7789	23	sed	Cd	.24	ppm		12	80	0-4 in	HMDC 80
7790	23	sed	Cd	.35	ppm		12	80	4-8 in	HMDC 80
3687	25	sed	Cr	560.00	ppm		10	81	PONAR Grab	NJDEP 85
3688	25	sed	Ni	42.00	ppm		10	81	PONAR Grab	NJDEP 85
4101	25	sed	As	20.00	ppm		10	81	PONAR Grab	NJDEP 85
4102	25	sed	Be	.87	ppm		10	81	PONAR Grab	NJDEP 85
4103	25	sed	Cd	15.50	ppm		10	81	PONAR Grab	NJDEP 85
4104	25	sed	Cu	258.00	ppm		10	81	PONAR Grab	NJDEP 85
4107	25	sed	Pb	195.00	ppm		10	81	PONAR Grab	NJDEP 85
4108	25	sed	Zn	940.00	ppm		10	81	PONAR Grab	NJDEP 85
4114	32	sed	Ni	45.00	ppm					NJDEP 85
3494	32	sed	ebenz	1.20	ppm		3	80	PONAR Grab	Aw 80
3495	32	sed	As	18.00	ppm		3	80	PONAR Grab	Aw 80
3496	32	sed	Be	.28	ppm		3	80	PONAR Grab	Aw 80
3497	32	sed	Cd	14.00	ppm		3	80	PONAR Grab	Aw 80
3498	32	sed	Cr	570.00	ppm		3	80	PONAR Grab	Aw 80
3499	32	sed	Cu	310.00	ppm		3	80	PONAR Grab	Aw 80
3500	32	sed	Pb	200.00	ppm		3	80	PONAR Grab	Aw 80
3501	32	sed	Ni	62.00	ppm		3	80	PONAR Grab	Aw 80
3502	32	sed	Se	.00	ppm		3	80	PONAR Grab	Aw 80
3503	32	sed	Ag	.30	ppm		3	80	PONAR Grab	Aw 80
3504	32	sed	Zn	2200.00	ppm		3	80	PONAR Grab	Aw 80
3505	32	sed	Flour	10.00	ppm	.50	3	80	PONAR Grab	Aw 80
3506	32	sed	Pyrene	9.00	ppm	.50	3	80	PONAR Grab	Aw 80

829910362

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3507	32	sed	Napth	.00	ppm	.50	3	80	PONAR Grab	Aw 80
3508	32	sed	EndoSul	.34	ppm	.02	3	80	PONAR Grab	Aw 80
3509	32	sed	-BHC	.03	ppm	.02	3	80	PONAR Grab	Aw 80
3510	32	sed	-BHC	.00	ppm	.02	3	80	PONAR Grab	Aw 80
3511	32	sed	S-BHC	.21	ppm	.02	3	80	PONAR Grab	Aw 80
3512	32	sed	Aldrin	.12	ppm	.02	3	80	PONAR Grab	Aw 80
3513	32	sed	Hept	.18	ppm	.02	3	80	PONAR Grab	Aw 80
3514	32	sed	Heptep	.23	ppm	.02	3	80	PONAR Grab	Aw 80
3515	32	sed	Dieldrin	.11	ppm	.02	3	80	PONAR Grab	Aw 80
3518	32	sed	Endrin	.25	ppm	.02	3	80	PONAR Grab	Aw 80
3519	32	sed	MeChl	.29	ppm		3	80	PONAR Grab	Aw 80
3520	32	sed	t-dce	.32	ppm		3	80	PONAR Grab	Aw 80
3521	32	sed	chlfrm	.36	ppm		3	80	PONAR Grab	Aw 80
3522	32	sed	tcd	.45	ppm		3	80	PONAR Grab	Aw 80
3523	32	sed	ttce	.69	ppm		3	80	PONAR Grab	Aw 80
3524	32	sed	toluene	.17	ppm		3	80	PONAR Grab	Aw 80
3525	32	sed	chlbenz	1.70	ppm		3	80	PONAR Grab	Aw 80
	32	sed	Ni	45.00	PPM		10	81	PONAR Grab	NJDEP 85
3692	32	sed	Ga	.70	ppm		10	81	PONAR Grab	NJDEP 85
3693	32	sed	Cd	31.50	ppm		10	81	PONAR Grab	NJDEP 85
3694	32	sed	Cu	532.00	ppm		10	81	PONAR Grab	NJDEP 85
3695	32	sed	Cr	605.00	ppm		10	81	PONAR Grab	NJDEP 85
3696	32	sed	Ni	45.00	ppm		10	81	PONAR Grab	NJDEP 85
3697	32	sed	Pb	380.00	ppm		10	81	PONAR Grab	NJDEP 85
3698	32	sed	Zn	2460.00	ppm		10	81	PONAR Grab	NJDEP 85
4109	32	sed	As	15.40	ppm		10	81	PONAR Grab	NJDEP 85
4110	32	sed	Ga	.70	ppm		10	81	PONAR Grab	NJDEP 85
4111	32	sed	Cd	31.50	ppm		10	81	PONAR Grab	NJDEP 85
4112	32	sed	Cu	532.00	ppm		10	81	PONAR Grab	NJDEP 85
4113	32	sed	Cr	605.00	ppm		10	81	PONAR Grab	NJDEP 85
4115	32	sed	Pb	380.00	ppm		10	81	PONAR Grab	NJDEP 85
4116	32	sed	Zn	2460.00	ppm		10	81	PONAR Grab	NJDEP 85
3699	50	mrsh sed	As	34.20	ppm			77	0-2 inch	JMA 78
3700	50	mrsh sed	As	33.60	ppm			77	3-5 inch	JMA 78
3701	50	mrsh sed	Cr	430.00	ppm			77	0-2 inch	JMA 78
3702	50	mrsh sed	Cr	740.00	ppm			77	3-5 inch	JMA 78
4117	70	mrsh sed	As	2.61	ppm		8	78	0-6inch	Berg 78
4118	70	mrsh sed	As	2.12	ppm		8	78	6-12inch	Berg 78
4119	70	mrsh sed	As	3.07	ppm		8	78	12-24inch	Berg 78
4120	70	mrsh sed	As	2.72	ppm		8	78	weightavg	Berg 78
4121	70	mrsh sed	Cd	1.36	ppm		8	78	0-6inch	Berg 78
4122	70	mrsh sed	Cd	.58	ppm		8	78	6-12inch	Berg 78

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4123	70	mrsh sed	Cd	.70	ppm		8	78	12-24inch	Berg 78
4124	70	mrsh sed	Cd	.84	ppm		8	78	weightavg	Berg 78
4125	70	mrsh sed	Cr	52.00	ppm		8	78	0-6inch	Berg 78
4126	70	mrsh sed	Cr	57.00	ppm		8	78	6-12inch	Berg 78
4127	70	mrsh sed	Cr	40.00	ppm		8	78	12-24inch	Berg 78
4128	70	mrsh sed	Cr	47.00	ppm		8	78	weightavg	Berg 78
4129	70	mrsh sed	Cu	32.00	ppm		8	78	0-6inch	Berg 78
4130	70	mrsh sed	Cu	21.00	ppm		8	78	6-12inch	Berg 78
4131	70	mrsh sed	Cu	21.00	ppm		8	78	12-24inch	Berg 78
4132	70	mrsh sed	Cu	24.00	ppm		8	78	weightavg	Berg 78
4133	70	mrsh sed	Fe	13900.00	ppm		8	78	0-6inch	Berg 78
4134	70	mrsh sed	Fe	19900.00	ppm		8	78	6-12inch	Berg 78
4135	70	mrsh sed	Fe	14500.00	ppm		8	78	12-24inch	Berg 78
4136	70	mrsh sed	Fe	15700.00	ppm		8	78	weightavg	Berg 78
4137	70	mrsh sed	Pb	66.00	ppm		8	78	0-6inch	Berg 78
4138	70	mrsh sed	Pb	29.00	ppm		8	78	6-12inch	Berg 78
4139	70	mrsh sed	Pb	30.00	ppm		8	78	12-24inch	Berg 78
4140	70	mrsh sed	Pb	39.00	ppm		8	78	weightavg	Berg 78
4141	70	mrsh sed	Ni	58.00	ppm		8	78	0-6inch	Berg 78
4142	70	mrsh sed	Ni	32.00	ppm		8	78	6-12inch	Berg 78
4143	70	mrsh sed	Ni	32.00	ppm		8	78	12-24inch	Berg 78
4144	70	mrsh sed	Ni	39.00	ppm		8	78	weightavg	Berg 78
4145	70	mrsh sed	Zn	154.00	ppm		8	78	0-6inch	Berg 78
4146	70	mrsh sed	Zn	97.00	ppm		8	78	6-12inch	Berg 78
4147	70	mrsh sed	Zn	101.00	ppm		8	78	12-24inch	Berg 78
4148	70	mrsh sed	Zn	113.00	ppm		8	78	weightavg	Berg 78
3562	105	mrsh sed	As	6.60	ppm		8	78	0-6inch	Berg 78
3563	105	mrsh sed	As	.85	ppm		8	78	6-12inch	Berg 78
3564	105	mrsh sed	As	.01	ppm		8	78	12-24inch	Berg 78
3565	105	mrsh sed	As	1.87	ppm		8	78	weightavg	Berg 78
3566	105	mrsh sed	Cd	.51	ppm		8	78	0-6inch	Berg 78
3567	105	mrsh sed	Cd	.61	ppm		8	78	6-12inch	Berg 78
3568	105	mrsh sed	Cd	.43	ppm		8	78	12-24inch	Berg 78
3569	105	mrsh sed	Cd	.50	ppm		8	78	weightavg	Berg 78
3570	105	mrsh sed	Cr	42.00	ppm		8	78	0-6inch	Berg 78
3571	105	mrsh sed	Cr	33.00	ppm		8	78	6-12inch	Berg 78
3572	105	mrsh sed	Cr	30.00	ppm		8	78	12-24inch	Berg 78
3573	105	mrsh sed	Cr	34.00	ppm		8	78	weightavg	Berg 78
3574	105	mrsh sed	Cu	31.00	ppm		8	78	0-6inch	Berg 78
3575	105	mrsh sed	Cu	32.00	ppm		8	78	6-12inch	Berg 78
3576	105	mrsh sed	Cu	24.00	ppm		8	78	12-24inch	Berg 78
3577	105	mrsh sed	Cu	28.00	ppm		8	78	weightavg	Berg 78

829910364

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3578	105	mrsh sed	Fe	30000.00	ppm		8	78	0-6inch	Berg 78
3579	105	mrsh sed	Fe	48100.00	ppm		8	78	6-12inch	Berg 78
3580	105	mrsh sed	Fe	22100.00	ppm		8	78	12-24inch	Berg 78
3581	105	mrsh sed	Fe	30600.00	ppm		8	78	weightavg	Berg 78
3582	105	mrsh sed	Pb	46.00	ppm		8	78	0-6inch	Berg 78
3583	105	mrsh sed	Pb	47.00	ppm		8	78	6-12inch	Berg 78
3584	105	mrsh sed	Pb	43.00	ppm		8	78	12-24inch	Berg 78
3585	105	mrsh sed	Pb	45.00	ppm		8	78	weightavg	Berg 78
3751	105	mrsh sed	Zn	101.00	ppm		8	78	0-6inch	Berg 78
3752	105	mrsh sed	Zn	82.00	ppm		8	78	6-12inch	Berg 78
3753	105	mrsh sed	Zn	54.00	ppm		8	78	12-24inch	Berg 78
3754	105	mrsh sed	Zn	73.00	ppm		8	78	weightavg	Berg 78
4153	106	sed	As	13.80	ppm		10	81	PONAR Grab	NJDEP 85
4154	106	sed	Be	.74	ppm		10	81	PONAR Grab	NJDEP 85
4155	106	sed	Cd	28.00	ppm		10	81	PONAR Grab	NJDEP 85
4156	106	sed	Cu	297:00	ppm		10	81	PONAR Grab	NJDEP 85
4157	106	sed	Cr	545.00	ppm		10	81	PONAR Grab	NJDEP 85
4158	106	sed	Ni	50.00	ppm		10	81	PONAR Grab	NJDEP 85
4159	106	sed	Pb	265.00	ppm		10	81	PONAR Grab	NJDEP 85
4160	106	sed	Zn	630.00	ppm		10	81	PONAR Grab	NJDEP 85
3763	113	ch sed	Cr	1900.00	ppm			77	0-2 inch	JMA 78
3764	113	ch sed	Cr	590.00	ppm			77	2-4 inch	JMA 78
3765	113	ch sed	Cr	30.00	ppm			77	4-6 inch	JMA 78
3766	113	ch sed	As	70.00	ppm			77	0-2 inch	JMA 78
3767	113	ch sed	As	26.30	ppm			77	2-4 inch	JMA 78
3768	113	ch sed	As	8.75	ppm			77	4-6 inch	JMA 78
3769	113	mrsh sed	As	29.80	ppm			77	0-2 inch	JMA 78
3770	113	mrsh sed	As	67.60	ppm			77	4-6 inch	JMA 78
3771	113	mrsh sed	Cr	620.00	ppm			77	0-2 inch	JMA 78
3772	113	mrsh sed	Cr	260.00	ppm			77	4-6 inch	JMA 78
3773	114	sed	As	13.00	ppm			77	0-2 inch	JMA 78
3774	114	sed	As	20.00	ppm			77	2-4 inch	JMA 78
3775	114	sed	As	22.00	ppm			77	4-6 inch	JMA 78
3776	114	sed	Cr	140.00	ppm			77	0-2 inch	JMA 78
3777	114	sed	Cr	370.00	ppm			77	2-4 inch	JMA 78
3778	114	sed	Cr	790.00	ppm			77	4-6 inch	JMA 78
3779	114	sed	Cu	75.00	ppm			77	0-2 inch	JMA 78
3780	114	sed	Cu	120.00	ppm			77	2-4 inch	JMA 78
3781	114	sed	Cu	140.00	ppm			77	4-6 inch	JMA 78
3782	114	sed	Pb	130.00	ppm			77	0-2 inch	JMA 78
3783	114	sed	Pb	170.00	ppm			77	2-4 inch	JMA 78
3784	114	sed	Pb	190.00	ppm			77	4-6 inch	JMA 78

829910365

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3785	114	sed	Zn	210.00	ppm			77	0-2 inch	JMA 78
3786	114	sed	Zn	300.00	ppm			77	2-4 inch	JMA 78
3787	114	sed	Zn	310.00	ppm			77	4-6 inch	JMA 78
4163	118	sed	As	16.00	ppm			77	4-6 inch	JMA 78
4164	118	sed	Cr	60.00	ppm			77	0-2 inch	JMA 78
4165	118	sed	Cr	65.00	ppm			77	2-4 inch	JMA 78
4166	118	sed	Cr	85.00	ppm			77	4-6 inch	JMA 78
4167	118	sed	Cu	70.00	ppm			77	0-2 inch	JMA 78
4168	118	sed	Cu	35.00	ppm			77	2-4 inch	JMA 78
4169	118	sed	Cu	55.00	ppm			77	4-6 inch	JMA 78
4170	118	sed	Pb	200.00	ppm			77	0-2 inch	JMA 78
4171	118	sed	Pb	70.00	ppm			77	2-4 inch	JMA 78
4172	118	sed	Pb	130.00	ppm			77	4-6 inch	JMA 78
4173	118	sed	Zn	200.00	ppm			77	0-2 inch	JMA 78
4174	118	sed	Zn	100.00	ppm			77	2-4 inch	JMA 78
4175	118	sed	Zn	170.00	ppm			77	4-6 inch	JMA 78
4176	119	sed	As	17.00	ppm			77	0-2 inch	JMA 78
4177	119	sed	As	12.00	ppm			77	2-4 inch	JMA 78
4178	119	sed	As	11.00	ppm			77	4-6 inch	JMA 78
4179	119	sed	Cr	260.00	ppm			77	0-2 inch	JMA 78
4180	119	sed	Cr	65.00	ppm			77	2-4 inch	JMA 78
4181	119	sed	Cr	55.00	ppm			77	4-6 inch	JMA 78
4182	119	sed	Cu	80.00	ppm			77	0-2 inch	JMA 78
4183	119	sed	Cu	38.00	ppm			77	2-4 inch	JMA 78
4184	119	sed	Cu	65.00	ppm			77	4-6 inch	JMA 78
4185	119	sed	Pb	200.00	ppm			77	0-2 inch	JMA 78
4186	119	sed	Pb	55.00	ppm			77	2-4 inch	JMA 78
4187	119	sed	Pb	95.00	ppm			77	4-6 inch	JMA 78
4188	119	sed	Zn	200.00	ppm			77	0-2 inch	JMA 78
4189	119	sed	Zn	53.00	ppm			77	2-4 inch	JMA 78
4190	119	sed	Zn	50.00	ppm			77	4-6 inch	JMA 78
4191	120	sed	As	2.00	ppm			77	0-2 inch	JMA 78
4192	120	sed	As	4.00	ppm			77	2-4 inch	JMA 78
4193	120	sed	As	13.00	ppm			77	4-6 inch	JMA 78
4194	120	sed	Cr	25.00	ppm			77	0-2 inch	JMA 78
4195	120	sed	Cr	13.00	ppm			77	2-4 inch	JMA 78
4196	120	sed	Cr	200.00	ppm			77	4-6 inch	JMA 78
4197	120	sed	Cu	10.00	ppm			77	0-2 inch	JMA 78
4198	120	sed	Cu	8.00	ppm			77	2-4 inch	JMA 78
4199	120	sed	Cu	80.00	ppm			77	4-6 inch	JMA 78
4200	120	sed	Pb	55.00	ppm			77	0-2 inch	JMA 78
4201	120	sed	Pb	18.00	ppm			77	2-4 inch	JMA 78

8299910366

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4202	120	sed	Pb	140.00	ppm		77		4-6 inch	JMA 78
4203	120	sed	Zn	40.00	ppm		77		0-2 inch	JMA 78
4204	120	sed	Zn	30.00	ppm		77		2-4 inch	JMA 78
4205	120	sed	Zn	200.00	ppm		77		4-6 inch	JMA 78
4206	121	sed	As	12.00	ppm		77		0-2 inch	JMA 78
4207	121	sed	As	10.00	ppm		77		2-4 inch	JMA 78
4208	121	sed	As	18.00	ppm		77		4-6 inch	JMA 78
4209	121	sed	Cr	80.00	ppm		77		0-2 inch	JMA 78
4210	121	sed	Cr	30.00	ppm		77		2-4 inch	JMA 78
4211	121	sed	Cr	140.00	ppm		77		4-6 inch	JMA 78
4212	121	sed	Cu	55.00	ppm		77		0-2 inch	JMA 78
4213	121	sed	Cu	20.00	ppm		77		2-4 inch	JMA 78
4214	121	sed	Cu	80.00	ppm		77		4-6 inch	JMA 78
4215	121	sed	Pb	140.00	ppm		77		0-2 inch	JMA 78
4216	121	sed	Pb	40.00	ppm		77		2-4 inch	JMA 78
4217	121	sed	Pb	140.00	ppm		77		4-6 inch	JMA 78
4218	121	sed	Zn	210.00	ppm		77		0-2 inch	JMA 78
4219	121	sed	Zn	70.00	ppm		77		2-4 inch	JMA 78
4220	121	sed	Zn	210.00	ppm		77		4-6 inch	JMA 78

313 Records Processed

829910367

APPENDIX 17

POTENTIAL CONTAMINANTS SOIL - SMALL SCALE MAP

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3470	22	soil	As	.10	ppm		8	78	leachate	Berg 78
3471	22	soil	As	2.09	ppm		8	78	solid	Berg 78
3472	22	soil	Cd	.01	ppm		8	78	leachate	Berg 78
3473	22	soil	Cd	2.18	ppm		8	78	solid	Berg 78
3474	22	soil	Cr	.13	ppm		8	78	leachate	Berg 78
3475	22	soil	Cr	19.20	ppm		8	78	solid	Berg 78
3476	22	soil	Cu	.18	ppm		8	78	leachate	Berg 78
3477	22	soil	Cu	34.20	ppm		8	78	solid	Berg 78
3478	22	soil	Fe	80.00	ppm		8	78	leachate	Berg 78
3479	22	soil	Fe	13800.00	ppm		8	78	solid	Berg 78
3480	22	soil	Pb	.62	ppm		8	78	leachate	Berg 78
3481	22	soil	Pb	275.00	ppm		8	78	solid	Berg 78
3482	22	soil	Ni	.01	ppm		8	78	leachate	Berg 78
3483	22	soil	Ni	9.80	ppm		8	78	solid	Berg 78
3484	22	soil	Zn	3.77	ppm		8	78	leachate	Berg 78
3485	22	soil	Zn	52.10	ppm		8	78	solid	Berg 78
3526	77	soil	As	.09	ppm		8	78	leachate	Berg 78
3527	77	soil	As	2.09	ppm		8	78	solid	Berg 78
3528	77	soil	Cd	.01	ppm		8	78	leachate	Berg 78
3529	77	soil	Cd	2.64	ppm		8	78	solid	Berg 78
3530	77	soil	Cr	.10	ppm		8	78	leachate	Berg 78
3531	77	soil	Cr	23.30	ppm		8	78	solid	Berg 78
3532	77	soil	Cu	.18	ppm		8	78	keachate	Berg 78
3533	77	soil	Cu	10.20	ppm		8	78	solid	Berg 78
3534	77	soil	Fe	95.00	ppm		8	78	leachate	Berg 78
3535	77	soil	Fe	18500.00	ppm		8	78	solid	Berg 78
3536	77	soil	Pb	.01	ppm		8	78	leachate	Berg 78
3537	77	soil	Pb	1470.00	ppm		8	78	solid	Berg 78
3538	77	soil	Ni	.15	ppm		8	78	leachate	Berg 78
3539	77	soil	Ni	45.20	ppm		8	78	solid	Berg 78
3540	77	soil	Zn	1.16	ppm		8	78	leachate	Berg 78
3541	77	soil	Zn	31.70	ppm		8	78	solid	Berg 78
3542	84	soil	Flour	.50	ppm		3	80	grab	Aw 80
3543	84	soil	Pyrene	.50	ppm		3	80	grab	Aw 80
3544	84	soil	4'4-DDT	.63	ppm		3	80	grab	Aw 80
3545	84	soil	-BHC	.02	ppm	.02	3	80	grab	Aw 80
3546	84	soil	S-BHC	.37	ppm		3	80	grab	Aw 80
3547	84	soil	Hept ep	.11	ppm		3	80	grab	Aw 80
3548	84	soil	Aldrin	.10	ppm		3	80	grab	Aw 80
3549	84	soil	Dieldrin	.10	ppm		3	80	grab	Aw 80
3550	84	soil	MeChl	.57	ppm		3	80	grab	Aw 80
3551	84	soil	ChCl3	1.40	ppm		3	80	grab	Aw 80

8299910369

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3552	84	soil	As	25.00	ppm		3	80	grab	Aw 80
3553	84	soil	Be	1.30	ppm		3	80	grab	Aw 80
3554	84	soil	Cd	19.00	ppm		3	80	grab	Aw 80
3555	84	soil	Cr	950.00	ppm		3	80	grab	Aw 80
3556	84	soil	Cu	330.00	ppm		3	80	grab	Aw 80
3557	84	soil	Pb	420.00	ppm		3	80	grab	Aw 80
3558	84	soil	Ni	700.00	ppm		3	80	grab	Aw 80
3559	84	soil	Se	1.50	ppm		3	80	grab	Aw 80
3560	84	soil	Ag	2.70	ppm		3	80	grab	Aw 80
3561	84	soil	Zn	2400.00	ppm		3	80	grab	Aw 80

52 Records Processed

829910370

APPENDIX 18

POTENTIAL CONTAMINANTS SURFACE WATER - SMALL SCALE MAP

MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3791	1	sw	MeChl	6.60	ppb		10	81	unf	NJDEP 85
3792	1	sw	ChCl3	.40	ppb		10	81	unf	NJDEP 85
3793	1	sw	tCle	.60	ppb		10	81	unf	NJDEP 85
3794	1	sw	tce	.30	ppb		10	81	unf	NJDEP 85
3795	1	sw	ttce	.90	ppb		10	81	unf	NJDEP 85
3436	9	sw	As	13.00	pbb		8	78	Ht unf	Berg 78
3437	9	sw	Cd	2.00	pbb		8	78	Ht unf	Berg 78
3438	9	sw	Cr	10.00	pbb		8	78	Ht unf	Berg 78
3439	9	sw	Cu	2.00	pbb		8	78	Ht unf	Berg 78
3440	9	sw	Fe	980.00	pbb		8	78	Ht unf	Berg 78
3441	9	sw	Pb	10.00	pbb		8	78	Ht unf	Berg 78
3442	9	sw	Ni	150.00	pbb		8	78	Ht unf	Berg 78
3443	9	sw	Zn	20.00	pbb		8	78	Ht unf	Berg 78
3788	10	sw	tce	.00	ppb		10	81	unf	NJDEP 85
3799	10	sw	MeChl	7.70	ppb		10	81	unf	NJDEP 85
3800	10	sw	ChCl3	.40	ppb		10	81	unf	NJDEP 85
3801	10	sw	tcle	.40	ppb		10	81	unf	NJDEP 85
3802	10	sw	ttce	1.20	ppb		10	81	unf	NJDEP 85
3462	11	sw	As	13.00	ppb		8	78	Ht unf	Berg 78
3463	11	sw	Cd	16.00	ppb		8	78	Ht unf	Berg 78
3464	11	sw	Cr	10.00	ppb		8	78	Ht unf	Berg 78
3465	11	sw	Cu	2.00	ppb		8	78	Ht unf	Berg 78
3466	11	sw	Fe	440.00	ppb		8	78	Ht unf	Berg 78
3467	11	sw	Pb	10.00	ppb		8	78	Ht unf	Berg 78
3468	11	sw	Ni	200.00	ppb		8	78	Ht unf	Berg 78
3469	11	sw	Zn	7.00	ppb		8	78	Ht unf	Berg 78
3486	23	sw	As	13.00	ppb		8	78	Ht unf	Berg 78
3487	23	sw	Cd	2.00	ppb		8	78	Ht unf	Berg 78
3488	23	sw	Cr	10.00	ppb		8	78	Ht unf	Berg 78
3489	23	sw	Cu	2.00	ppb		8	78	Ht unf	Berg 78
3490	23	sw	Fe	200.00	ppb		8	78	Ht unf	Berg 78
3491	23	sw	Pb	10.00	ppb		8	78	Ht unf	Berg 78
3492	23	sw	Ni	150.00	ppb		8	78	Ht unf	Berg 78
3493	23	sw	Zn	47.00	ppb		8	78	Ht unf	Berg 78
3806	23	sw	MeChl	27.20	ppb		10	81	unf	NJDEP 85
3807	23	sw	tcle	1.00	ppb		10	81	unf	NJDEP 85
3808	23	sw	tce	.60	ppb		10	81	unf	NJDEP 85
3809	23	sw	ttce	2.30	ppb		10	81	unf	NJDEP 85
3813	26	sw	MeChl	51.00	ppb		10	81	unf	NJDEP 85
3814	26	sw	CHCl3	5.0	ppb		10	81	unf	NJDEP 85
3815	26	sw	3Cl3Fle	.70	ppb		10	81	unf	NJDEP 85
3816	26	sw	tcle	1.20	ppb		10	81	unf	NJDEP 85

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MAP1DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
3817	26	sw	tce	.60	ppb		10	81	unf	NJDEP 85
3818	26	sw	ttce	1.30	ppb		10	81	unf	NJDEP 85
3586	106	sw	As	13.00	ppb		8	78	Ht unf	Berg 78
3587	106	sw	Cd	64.00	ppb		8	78	Ht unf	Berg 78
3588	106	sw	Cr	50.00	ppb		8	78	Ht unf	Berg 78
3589	106	sw	Cu	75.00	ppb		8	78	Ht unf	Berg 78
3590	106	sw	Fe	1460.00	ppb		8	78	Ht unf	Berg 78
3591	106	sw	Pb	10.00	ppb		8	78	Ht unf	Berg 78
3592	106	sw	Ni	300.00	ppb		8	78	Ht unf	Berg 78
3593	106	sw	Zn	250.00	ppb		8	78	Ht unf	Berg 78
3821	106	sw	CHCL3	.01	ppb		10	81	unf	NJDEP 85
3822	106	sw	MeChl	89.00	ppb		10	81	unf	NJDEP 85
3823	106	sw	tcle	1.30	ppb		10	81	unf	NJDEP 85
3824	106	sw	tce	1.70	ppb		10	81	unf	NJDEP 85
3825	106	sw	benzene	9.50	ppb		10	81	unf	NJDEP 85
3826	106	sw	ttce	2.10	ppb		10	81	unf	NJDEP 85
3827	106	sw	toluene	2.80	ppb		10	81	unf	NJDEP 85
3828	106	sw	ebenz	9.10	ppb		10	81	unf	NJDEP 85
3829	106	sw	o-xyl	13.80	ppb		10	81	unf	NJDEP 85
3830	106	sw	m-xyl	64.80	ppb		10	81	unf	NJDEP 85
3831	106	sw	p-xyl	28.40	ppb		10	81	unf	NJDEP 85
3594	107	sw	As	905.00	ppb		8	78	Ht unf	Berg 78
3595	107	sw	Cd	2.00	ppb		8	78	Ht unf	Berg 78
3596	107	sw	Cr	10.00	ppb		8	78	Ht unf	Berg 78
3597	107	sw	Cu	2.00	ppb		8	78	Ht unf	Berg 78
3598	107	sw	Fe	200.00	ppb		8	78	Ht unf	Berg 78
3599	107	sw	Pb	10.00	ppb		8	78	Ht unf	Berg 78
3600	107	sw	Ni	150.00	ppb		8	78	Ht unf	Berg 78
3601	107	sw	Zn	47.00	ppb		8	78	Ht unf	Berg 78

71 Records Processed

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APPENDIX 19

POTENTIAL CONTAMINANTS SEDIMENT - LARGE SCALE MAP

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4225	5	sed	As	5.00	ppm		6	77	0-3 inch	JMA 77
4226	5	sed	As	6.00	ppm		6	77	3-6 inch	JMA 77
4227	5	sed	As	7.00	ppm		6	77	6-9 inch	JMA 77
4228	5	sed	As	6.00	ppm		6	77	9-11 inch	JMA 77
4241	5	sed	Cd	.60	ppm		6	77	0-3 inch	JMA 77
4242	5	sed	Cd	1.30	ppm		6	77	3-6 inch	JMA 77
4243	5	sed	Cd	.60	ppm		6	77	6-9 inch	JMA 77
4244	5	sed	Cd	.50	ppm		6	77	9-11 inch	JMA 77
4234	5	sed	Ni	6.10	ppm		6	77	3-6 inch	JMA 77
4235	5	sed	Ni	3.30	ppm		6	77	6-9 inch	JMA 77
4236	5	sed	Ni	5.90	ppm		6	77	9-11 inch	JMA 77
4229	5	sed	Pb	21.00	ppm		6	77	0-3 inch	JMA 77
4230	5	sed	Pb	4.80	ppm		6	77	3-6 inch	JMA 77
4231	5	sed	Pb	.60	ppm		6	77	6-9 inch	JMA 77
4232	5	sed	Pb	1.00	ppm		6	77	9-11 inch	JMA 77
4237	5	sed	Zn	73.00	ppm		6	77	0-3 inch	JMA 77
4238	5	sed	Zn	63.00	ppm		6	77	3-6 inch	JMA 77
4239	5	sed	Zn	7.90	ppm		6	77	6-9 inch	JMA 77
4240	5	sed	Zn	35.00	ppm		6	77	9-11 inch	JMA 77
4247	6	sed	As	6.00	ppm		6	77	0-3 inch	JMA 77
4248	6	sed	As	7.00	ppm		6	77	3-6 inch	JMA 77
4249	6	sed	As	6.00	ppm		6	77	6-9 inch	JMA 77
4259	6	sed	Cd	4.60	ppm		6	77	0-3 inch	JMA 77
4260	6	sed	Cd	3.40	ppm		6	77	3-6 inch	JMA 77
4261	6	sed	Cd	40.00	ppm		6	77	6-9 inch	JMA 77
4253	6	sed	Ni	30.00	ppm		6	77	0-3 inch	JMA 77
4254	6	sed	Ni	23.00	ppm		6	77	3-6 inch	JMA 77
4255	6	sed	Ni	23.00	ppm		6	77	6-9 inch	JMA 77
4250	6	sed	Pb	155.00	ppm		6	77	0-3 inch	JMA 77
4251	6	sed	Pb	65.00	ppm		6	77	3-6 inch	JMA 77
4252	6	sed	Pb	37.00	ppm		6	77	6-9 inch	JMA 77
4256	6	sed	Zn	2116.00	ppm		6	77	0-3 inch	JMA 77
4257	6	sed	Zn	869.00	ppm		6	77	3-6 inch	JMA 77
4258	6	sed	Zn	189.00	ppm		6	77	6-9 inch	JMA 77
4268	7	sed	As	8.00	ppm		6	77	0-3 inch	JMA 77
4269	7	sed	As	14.00	ppm		6	77	3-6 inch	JMA 77
4270	7	sed	As	7.00	ppm		6	77	6-9 inch	JMA 77
4271	7	sed	As	6.00	ppm		6	77	9-12 inch	JMA 77
4264	7	sed	Cd	2.50	ppm		6	77	0-3 inch	JMA 77
4265	7	sed	Cd	45.00	ppm		6	77	3-6 inch	JMA 77
4266	7	sed	Cd	2.90	ppm		6	77	6-9 inch	JMA 77
4267	7	sed	Cd	1.50	ppm		6	77	9-12 inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4276	7	sed	Ni	17.00	ppm		6	77	0-3 inch	JMA 77
4277	7	sed	Ni	141.00	ppm		6	77	3-6 inch	JMA 77
4278	7	sed	Ni	15.00	ppm		6	77	6-9 inch	JMA 77
4279	7	sed	Ni	19.00	ppm		6	77	9-12 inch	JMA 77
4272	7	sed	Pb	31.00	ppm		6	77	0-3 inch	JMA 77
4273	7	sed	Pb	139.00	ppm		6	77	3-6 inch	JMA 77
4274	7	sed	Pb	36.00	ppm		6	77	6-9 inch	JMA 77
4275	7	sed	Pb	8.30	ppm		6	77	9-12 inch	JMA 77
4280	7	sed	Zn	267.00	ppm		6	77	0-3 inch	JMA 77
4281	7	sed	Zn	5187.00	ppm		6	77	3-6 inch	JMA 77
4282	7	sed	Zn	227.00	ppm		6	77	6-9 inch	JMA 77
4283	7	sed	Zn	40.00	ppm		6	77	9-12 inch	JMA 77
4290	8	sed	As	7.00	ppm		6	77	0-3 inch	JMA 77
4291	8	sed	As	4.00	ppm		6	77	3-6 inch	JMA 77
4292	8	sed	As	7.00	ppm		6	77	6-9 inch	JMA 77
4293	8	sed	As	4.00	ppm		6	77	9-12 inch	JMA 77
4286	8	sed	Cd	1.60	ppm		6	77	0-3 inch	JMA 77
4287	8	sed	Cd	.90	ppm		6	77	3-6 inch	JMA 77
4288	8	sed	Cd	1.00	ppm		6	77	6-9 inch	JMA 77
4289	8	sed	Cd	1.00	ppm		6	77	9-12 inch	JMA 77
4298	8	sed	Ni	21.00	ppm		6	77	0-3 inch	JMA 77
4299	8	sed	Ni	15.00	ppm		6	77	3-6 inch	JMA 77
4300	8	sed	Ni	16.00	ppm		6	77	6-9 inch	JMA 77
4301	8	sed	Ni	28.00	ppm		6	77	9-12 inch	JMA 77
4294	8	sed	Pb	162.00	ppm		6	77	0-3 inch	JMA 77
4295	8	sed	Pb	149.00	ppm		6	77	3-6 inch	JMA 77
4296	8	sed	Pb	234.00	ppm		6	77	6-9 inch	JMA 77
4297	8	sed	Pb	165.00	ppm		6	77	9-12 inch	JMA 77
4302	8	sed	Zn	428.00	ppm		6	77	0-3 inch	JMA 77
4303	8	sed	Zn	171.00	ppm		6	77	3-6 inch	JMA 77
4304	8	sed	Zn	193.00	ppm		6	77	6-9 inch	JMA 77
4305	8	sed	Zn	302.00	ppm		6	77	9-12 inch	JMA 77
4312	9	sed	As	23.00	ppm		6	77	0-3 inch	JMA 77
4313	9	sed	As	56.00	ppm		6	77	3-6 inch	JMA 77
4314	9	sed	As	25.00	ppm		6	77	6-9 inch	JMA 77
4315	9	sed	As	41.00	ppm		6	77	9-12 inch	JMA 77
4308	9	sed	Cd	19.00	ppm		6	77	0-3 inch	JMA 77
4309	9	sed	Cd	17.00	ppm		6	77	3-6 inch	JMA 77
4310	9	sed	Cd	12.00	ppm		6	77	6-9 inch	JMA 77
4311	9	sed	Cd	18.00	ppm		6	77	9-12 inch	JMA 77
4320	9	sed	Ni	81.00	ppm		6	77	0-3 inch	JMA 77
4321	9	sed	Ni	146.00	ppm		6	77	3-6 inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4322	9	sed	Ni	67.00	ppm		6	77	6-9 inch	JMA 77
4323	9	sed	Ni	91.00	ppm		6	77	9-12 inch	JMA 77
4316	9	sed	Pb	480.00	ppm		6	77	0-3 inch	JMA 77
4317	9	sed	Pb	554.00	ppm		6	77	3-6 inch	JMA 77
4318	9	sed	Pb	439.00	ppm		6	77	6-9 inch	JMA 77
4319	9	sed	Pb	450.00	ppm		6	77	9-12 inch	JMA 77
4324	9	sed	Zn	2723.00	ppm		6	77	0-3 inch	JMA 77
4325	9	sed	Zn	8615.00	ppm		6	77	3-6 inch	JMA 77
4326	9	sed	Zn	4032.00	ppm		6	77	6-9 inch	JMA 77
4327	9	sed	Zn	6153.00	ppm		6	77	9-12 inch	JMA 77
4339	10	sed	As	38.00	ppm		6	77	0-3 inch	JMA 77
4340	10	sed	As	21.00	ppm		6	77	3-6 inch	JMA 77
4341	10	sed	As	10.00	ppm		6	77	6-9 inch	JMA 77
4342	10	sed	As	6.00	ppm		6	77	9-12 inch	JMA 77
4335	10	sed	Cd	58.00	ppm		6	77	0-3 inch	JMA 77
4336	10	sed	Cd	2.10	ppm		6	77	3-6 inch	JMA 77
4337	10	sed	Cd	21.00	ppm		6	77	6-9 inch	JMA 77
4338	10	sed	Cd	12.00	ppm		6	77	9-12 inch	JMA 77
4347	10	sed	Ni	63.00	ppm		6	77	0-3 inch	JMA 77
4348	10	sed	Ni	36.00	ppm		6	77	3-6 inch	JMA 77
4349	10	sed	Ni	21.00	ppm		6	77	6-9 inch	JMA 77
4350	10	sed	Ni	29.00	ppm		6	77	9-12 inch	JMA 77
4343	10	sed	Pb	252.00	ppm		6	77	0-3 inch	JMA 77
4344	10	sed	Pb	26.00	ppm		6	77	3-6 inch	JMA 77
4345	10	sed	Pb	2.30	ppm		6	77	6-9 inch	JMA 77
4346	10	sed	Pb	3.20	ppm		6	77	9-12 inch	JMA 77
4351	10	sed	Zn	802.00	ppm		6	77	0-3 inch	JMA 77
4352	10	sed	Zn	518.00	ppm		6	77	3-6 inch	JMA 77
4353	10	sed	Zn	167.00	ppm		6	77	6-9 inch	JMA 77
4354	10	sed	Zn	240.00	ppm		6	77	9-12 inch	JMA 77
4366	11	sed	As	35.00	ppm		6	77	0-3 inch	JMA 77
4367	11	sed	As	21.00	ppm		6	77	3-6 inch	JMA 77
4368	11	sed	As	7.00	ppm		6	77	6-9 inch	JMA 77
4369	11	sed	As	11.00	ppm		6	77	9-12 inch	JMA 77
4362	11	sed	Cd	24.00	ppm		6	77	0-3 inch	JMA 77
4363	11	sed	Cd	6.60	ppm		6	77	3-6 inch	JMA 77
4364	11	sed	Cd	2.40	ppm		6	77	6-9 inch	JMA 77
4365	11	sed	Cd	6.90	ppm		6	77	9-12 inch	JMA 77
4374	11	sed	Ni	47.00	ppm		6	77	0-3 inch	JMA 77
4375	11	sed	Ni	44.00	ppm		6	77	3-6 inch	JMA 77
4376	11	sed	Ni	17.00	ppm		6	77	6-9 inch	JMA 77
4377	11	sed	Ni	18.00	ppm		6	77	9-12 inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4370	11	sed	Pb	75.00	ppm		6	77	0-3 inch	JMA 77
4371	11	sed	Pb	45.00	ppm		6	77	3-6 inch	JMA 77
4372	11	sed	Pb	148.00	ppm		6	77	6-9 inch	JMA 77
4373	11	sed	Pb	309.00	ppm		6	77	9-12 inch	JMA 77
4378	11	sed	Zn	774.00	ppm		6	77	0-3 inch	JMA 77
4379	11	sed	Zn	406.00	ppm		6	77	3-6 inch	JMA 77
4380	11	sed	Zn	683.00	ppm		6	77	6-9 inch	JMA 77
4381	11	sed	Zn	129.00	ppm		6	77	9-12 inch	JMA 77
4389	32	sed	T Ph	3.40	ppm		3	80	PONAR Grab	Aw 80
7911	61	sed	Cd	11.00	ppm		12	80	0-4 in	HMDC 80
7912	61	sed	Cd	2.00	ppm		12	80	4-8 in	HMDC 80
7909	61	sed	Cr	464.00	ppm		12	80	0-4 in	HMDC 80
7910	61	sed	Cr	23.00	ppm		12	80	4-8 in	HMDC 80
7904	61	sed	Cu	342.00	ppm		12	80	0-4 in	HMDC 80
7905	61	sed	Cu	19.00	ppm		12	80	4-8 in	HMDC 80
7906	61	sed	Ni	21.00	ppm		12	80	0-4 in	HMDC 80
7907	61	sed	Ni	25.00	ppm		12	80	4-8 in	HMDC 80
7908	61	sed	Pb	224.00	ppm		12	80	0-4 in	HMDC 80
7902	61	sed	Zn	1687.00	ppm		12	80	0-4 in	HMDC 80
7903	61	sed	Zn	127.00	ppm		12	80	4-8 in	HMDC 80
5167	65	sed	As	14.00	ppm		10	81	PONAR Grab	NJDEP 85
8400	65	sed	Be	.01	ppm		10	81	PONAR Grab	NJDEP 85
5168	65	sed	Cd	35.50	ppm		10	81	PONAR Grab	NJDEP 85
5170	65	sed	Cr	700.00	ppm		10	81	PONAR Grab	NJDEP 85
5169	65	sed	Cu	824.00	ppm		10	81	PONAR Grab	NJDEP 85
5171	65	sed	Ni	52.00	ppm		10	81	PONAR Grab	NJDEP 85
5172	65	sed	Pb	440.00	ppm		10	81	PONAR Grab	NJDEP 85
5173	65	sed	Zn	335.00	ppm		10	81	PONAR Grab	NJDEP 85
5181	68	sed	As	9.00	ppm		10	81	PONAR Grab	NJDEP 85
8401	68	sed	Be	.00	ppm		10	81	PONAR Grab	NJDEP 85
5182	68	sed	Cd	23.50	ppm		10	81	PONAR Grab	NJDEP 85
5184	68	sed	Cr	205.00	ppm		10	81	PONAR Grab	NJDEP 85
5183	68	sed	Cu	213.00	ppm		10	81	PONAR Grab	NJDEP 85
5185	68	sed	Ni	50.00	ppm		10	81	PONAR Grab	NJDEP 85
5186	68	sed	Pb	200.00	ppm		10	81	PONAR Grab	NJDEP 85
5187	68	sed	Zn	8010.00	ppm		10	81	PONAR Grab	NJDEP 85
5195	76	sed	As	8.00	ppm		10	81	PONAR Grab	NJDEP 85
8402	76	sed	Be	.00	ppm		10	81	PONAR Grab	NJDEP 85
5196	76	sed	Cd	17.50	ppm		10	81	PONAR Grab	NJDEP 85
5198	76	sed	Cr	190.00	ppm		10	81	PONAR Grab	NJDEP 85
5197	76	sed	Cu	162.00	ppm		10	81	PONAR Grab	NJDEP 85
5199	76	sed	Ni	40.00	ppm		10	81	PONAR Grab	NJDEP 85

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
5200	76	sed	Pb	145.00	ppm		10	81	PONAR Grab	NJDEP 85
5201	76	sed	Zn	128.00	ppm		10	81	PONAR Grab	NJDEP 85
5209	85	sed	As	13.80	ppm		10	81	PONAR Grab	NJDEP 85
8403	85	sed	Be	.01	ppm		10	81	PONAR Grab	NJDEP 85
5210	85	sed	Cd	882.00	ppm		10	81	PONAR Grab	NJDEP 85
5212	85	sed	Cr	435.00	ppm		10	81	PONAR Grab	NJDEP 85
5211	85	sed	Cu	444.00	ppm		10	81	PONAR Grab	NJDEP 85
5213	85	sed	Ni	28.00	ppm		10	81	PONAR Grab	NJDEP 85
5214	85	sed	Pb	305.00	ppm		10	81	PONAR Grab	NJDEP 85
5215	85	sed	Zn	201.00	ppm		10	81	PONAR Grab	NJDEP 85
5223	90	sed	As	12.80	ppm		10	81	PONAR Grab	NJDEP 85
8404	90	sed	Be	.00	ppm		10	81	PONAR Grab	NJDEP 85
5224	90	sed	Cd	21.50	ppm		10	81	PONAR Grab	NJDEP 85
5226	90	sed	Cr	345.00	ppm		10	81	PONAR Grab	NJDEP 85
5225	90	sed	Cu	441.00	ppm		10	81	PONAR Grab	NJDEP 85
5227	90	sed	Ni	46.00	ppm		10	81	PONAR Grab	NJDEP 85
5228	90	sed	Pb	300.00	ppm		10	81	PONAR Grab	NJDEP 85
5229	90	sed	Zn	122.00	ppm		10	81	PONAR Grab	NJDEP 85
5237	96	sed	As	13.20	ppm		10	81	PONAR Grab	NJDEP 85
8405	96	sed	Be	.01	ppm		10	81	PONAR Grab	NJDEP 85
5238	96	sed	Cd	23.50	ppm		10	81	PONAR Grab	NJDEP 85
5240	96	sed	Cr	374.00	ppm		10	81	PONAR Grab	NJDEP 85
5239	96	sed	Cu	388.00	ppm		10	81		NJDEP 85
5241	96	sed	Ni	47.00	ppm		10	81	PONAR Grab	NJDEP 85
5242	96	sed	Pb	185.00	ppm		10	81	PONAR Grab	NJDEP 85
5243	96	sed	Zn	148.00	ppm		10	81	PONAR Grab	NJDEP 85
5261	119	sed	As	9.50	ppm		10	81	PONAR Grab	NJDEP 85
5262	119	sed	Cd	25.50	ppm		10	81	PONAR Grab	NJDEP 85
5264	119	sed	Cr	505.00	ppm		10	81	PONAR Grab	NJDEP 85
5263	119	sed	Cu	297.00	ppm		10	81		NJDEP 85
5265	119	sed	Ni	60.00	ppm		10	81	PONAR Grab	NJDEP 85
5266	119	sed	Pb	267.00	ppm		10	81	PONAR Grab	NJDEP 85
5267	119	sed	Zn	205.00	ppm		10	81	PONAR Grab	NJDEP 85
8406	119	sed	Be	.00	ppm		10	81	PONAR Grab	NJDEP 85

202 Records Processed

8299910379

APPENDIX 20

POTENTIAL CONTAMINANTS SOIL - LARGE SCALE MAP

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4408	8	soil	As	5.00	ppm		5	77	0-2 inch	JMA 77
4409	8	soil	As	11.00	ppm		5	77	2-4 inch	JMA 77
4410	8	soil	As	6.00	ppm		5	77	4-6 inch	JMA 77
4411	8	soil	As	5.00	ppm		5	77	8-10 inch	JMA 77
4412	8	soil	As	4.00	ppm		5	77	12-14 inch	JMA 77
4413	8	soil	As	6.00	ppm		5	77	14-16 inch	JMA 77
4592	8	soil	Cd	4.00	ppm	.30	5	77	0-2 inch	JMA 77
4593	8	soil	Cd	2.00	ppm	.30	5	77	2-4 inch	JMA 77
4594	8	soil	Cd	2.00	ppm	.30	5	77	4-6 inch	JMA 77
4595	8	soil	Cd	.30	ppm	.30	5	77	8-10 inch	JMA 77
4596	8	soil	Cd	.30	ppm	.30	5	77	12-14 inch	JMA 77
4597	8	soil	Cd	.50	ppm	.30	5	77	14-16 inch	JMA 77
4420	8	soil	Ni	90.00	ppm		5	77	0-2 inch	JMA 77
4421	8	soil	Ni	73.00	ppm		5	77	2-4 inch	JMA 77
4422	8	soil	Ni	33.00	ppm		5	77	4-6 inch	JMA 77
4423	8	soil	Ni	12.00	ppm		5	77	8-10 inch	JMA 77
4424	8	soil	Ni	17.00	ppm		5	77	12-14 inch	JMA 77
4425	8	soil	Ni	28.00	ppm		5	77	14-16 inch	JMA 77
4414	8	soil	Pb	280.00	ppm		5	77	0-2 inch	JMA 77
4415	8	soil	Pb	470.00	ppm		5	77	2-4 inch	JMA 77
4416	8	soil	Pb	160.00	ppm		5	77	4-6 inch	JMA 77
4417	8	soil	Pb	10.00	ppm		5	77	8-10 inch	JMA 77
4418	8	soil	Pb	10.00	ppm		5	77	12-14 inch	JMA 77
4419	8	soil	Pb	17.00	ppm		5	77	14-16 inch	JMA 77
4426	8	soil	Zn	2600.00	ppm		5	77	0-2 inch	JMA 77
4427	8	soil	Zn	1500.00	ppm		5	77	2-4 inch	JMA 77
4428	8	soil	Zn	680.00	ppm		5	77	4-6 inch	JMA 77
4429	8	soil	Zn	29.00	ppm		5	77	8-10 inch	JMA 77
4430	8	soil	Zn	50.00	ppm		5	77	12-14 inch	JMA 77
4431	8	soil	Zn	72.00	ppm		5	77	14-16 inch	JMA 77
4600	10	soil	As	6.00	ppm		6	77	0-6 inch	JMA 77
4601	10	soil	As	10.00	ppm		6	77	6-12 inch	JMA 77
4783	10	soil	Cd	1.70	ppm		6	77	0-6 inch	JMA 77
4784	10	soil	Cd	1.50	ppm		6	77	6-12 inch	JMA 77
4602	10	soil	Ni	26.00	ppm		6	77	0-6 inch	JMA 77
4603	10	soil	Ni	30.00	ppm		6	77	6-12 inch	JMA 77
4598	10	soil	Pb	40.00	ppm		6	77	0-6 inch	JMA 77
4599	10	soil	Pb	40.00	ppm		6	77	0-6 inch	JMA 77
4781	10	soil	Zn	42.00	ppm		6	77	0-6 inch	JMA 77
4782	10	soil	Zn	56.00	ppm		6	77	6-12 inch	JMA 77
4604	11	soil	As	19.00	ppm		6	77	0-6 inch	JMA 77
4605	11	soil	As	30.00	ppm		6	77	6-12 inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4606	14	soil	As	21.00	ppm		6	77	12-18 inch	JMA 77
4607	14	soil	As	22.00	ppm		6	77	18-24 inch	JMA 77
4789	14	soil	Cd	18.00	ppm		6	77	0-6 inch	JMA 77
4790	14	soil	Cd	15.00	ppm		6	77	6-12 inch	JMA 77
4791	14	soil	Cd	12.00	ppm		6	77	12-18 inch	JMA 77
4792	14	soil	Cd	13.00	ppm		6	77	18-24 inch	JMA 77
4785	14	soil	Ni	195.00	ppm		6	77	0-6 inch	JMA 77
4786	14	soil	Ni	157.00	ppm		6	77	6-12 inch	JMA 77
4787	14	soil	Ni	216.00	ppm		6	77	12-18 inch	JMA 77
4788	14	soil	Ni	132.00	ppm		6	77	18-24 inch	JMA 77
4608	14	soil	Pb	672.00	ppm		6	77	0-6 inch	JMA 77
4609	14	soil	Pb	896.00	ppm		6	77	6-12 inch	JMA 77
4610	14	soil	Pb	970.00	ppm		6	77	12-18 inch	JMA 77
4611	14	soil	Pb	990.00	ppm		6	77	18-24 inch	JMA 77
4612	15	soil	As	9.00	ppm		6	77	0-6 inch	JMA 77
4613	15	soil	As	6.00	ppm		6	77	6-12 inch	JMA 77
4614	15	soil	As	8.00	ppm		6	77	12-18 inch	JMA 77
4615	15	soil	As	11.00	ppm		6	77	18-24 inch	JMA 77
4801	15	soil	Cd	3.10	ppm		6	77	0-6 inch	JMA 77
4802	15	soil	Cd	1.80	ppm		6	77	6-12 inch	JMA 77
4803	15	soil	Cd	3.70	ppm		6	77	12-18 inch	JMA 77
4804	15	soil	Cd	3.10	ppm		6	77	18-24 inch	JMA 77
4793	15	soil	Ni	38.00	ppm		6	77	0-6 inch	JMA 77
4794	15	soil	Ni	35.00	ppm		6	77	6-12 inch	JMA 77
4795	15	soil	Ni	95.00	ppm		6	77	12-18 inch	JMA 77
4796	15	soil	Ni	37.00	ppm		6	77	18-24 inch	JMA 77
4616	15	soil	Pb	79.00	ppm		6	77	0-6 inch	JMA 77
4617	15	soil	Pb	215.00	ppm		6	77	6-12 inch	JMA 77
4618	15	soil	Pb	490.00	ppm		6	77	12-18 inch	JMA 77
4619	15	soil	Pb	388.00	ppm		6	77	18-24 inch	JMA 77
4797	15	soil	Zn	115.00	ppm		6	77	0-6 inch	JMA 77
4798	15	soil	Zn	180.00	ppm		6	77	6-12 inch	JMA 77
4799	15	soil	Zn	405.00	ppm		6	77	12-18 inch	JMA 77
4800	15	soil	Zn	294.00	ppm		6	77	18-24 inch	JMA 77
4620	16	soil	As	49.00	ppm		6	77	0-6 inch	JMA 77
4621	16	soil	As	82.00	ppm		6	77	6-12 inch	JMA 77
4809	16	soil	Cd	43.00	ppm		6	77	0-6 inch	JMA 77
4810	16	soil	Cd	7.50	ppm		6	77	6-12 inch	JMA 77
4805	16	soil	Ni	103.00	ppm		6	77	0-6 inch	JMA 77
4806	16	soil	Ni	21.00	ppm		6	77	6-12 inch	JMA 77
4622	16	soil	Pb	390.00	ppm		6	77	0-6 inch	JMA 77
4623	16	soil	Pb	125.00	ppm		6	77	6-12 inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4807	16	soil	Zn	15051.00	ppm		6	77	0-6 inch	JMA 77
4808	16	soil	Zn	502.00	ppm		6	77	6-12 inch	JMA 77
4626	28	soil	As	58.00	ppm		6	77	0-6 inch	JMA 77
4627	28	soil	As	64.00	ppm		6	77	6-12 inch	JMA 77
4813	28	soil	Cd	78.00	ppm		6	77	0-6 inch	JMA 77
4814	28	soil	Cd	72.00	ppm		6	77	6-12 inch	JMA 77
4628	28	soil	Ni	86.00	ppm		6	77	0-6 inch	JMA 77
4629	28	soil	Ni	95.00	ppm		6	77	6-12 inch	JMA 77
4624	28	soil	Pb	321.00	ppm		6	77	6-12 inch	JMA 77
4625	28	soil	Pb	111.00	ppm		6	77	6-12 inch	JMA 77
4811	28	soil	Zn	28832.00	ppm		6	77	0-6 inch	JMA 77
4812	28	soil	Zn	25208.00	ppm		6	77	6-12 inch	JMA 77
4632	29	soil	As	20.00	ppm		6	77	0-6 inch	JMA 77
4633	29	soil	As	14.00	ppm		6	77	6-12 inch	JMA 77
4817	29	soil	Cd	4.20	ppm		6	77	0-6 inch	JMA 77
4818	29	soil	Cd	3.60	ppm		6	77	6-12 inch	JMA 77
4634	29	soil	Ni	23.00	ppm		6	77	0-6 inch	JMA 77
4635	29	soil	Ni	20.00	ppm		6	77	6-12 inch	JMA 77
4630	29	soil	Pb	512.00	ppm		6	77	0-6 inch	JMA 77
4631	29	soil	Pb	287.00	ppm		6	77	0-6 inch	JMA 77
4815	29	soil	Zn	426.00	ppm		6	77	0-6 inch	JMA 77
4816	29	soil	Zn	284.00	ppm		6	77	6-12 inch	JMA 77
4638	30	soil	As	18.00	ppm		6	77	0-6 inch	JMA 77
4639	30	soil	As	11.00	ppm		6	77	6-12 inch	JMA 77
4821	30	soil	Cd	2.00	ppm		6	77	0-6 inch	JMA 77
4822	30	soil	Cd	3.60	ppm		6	77	6-12 inch	JMA 77
4640	30	soil	Ni	13.00	ppm		6	77	0-6 inch	JMA 77
4641	30	soil	Ni	41.00	ppm		6	77	6-12 inch	JMA 77
4636	30	soil	Pb	433.00	ppm		6	77	6-12 inch	JMA 77
4637	30	soil	Pb	594.00	ppm		6	77	6-12 inch	JMA 77
4819	30	soil	Zn	180.00	ppm		6	77	0-6 inch	JMA 77
4820	30	soil	Zn	267.00	ppm		6	77	6-12 inch	JMA 77
4646	32	soil	As	5.00	ppm		6	77	0-6 inch	JMA 77
4647	32	soil	As	6.00	ppm		6	77	6-12 inch	JMA 77
4648	32	soil	As	7.00	ppm		6	77	12-18 inch	JMA 77
4649	32	soil	As	7.00	ppm		6	77	18-24 inch	JMA 77
4827	32	soil	Cd	1.70	ppm		6	77	0-6 inch	JMA 77
4828	32	soil	Cd	3.30	ppm		6	77	6-12 inch	JMA 77
4829	32	soil	Cd	2.60	ppm		6	77	12-18 inch	JMA 77
4830	32	soil	Cd	3.70	ppm		6	77	18-24 inch	JMA 77
4650	32	soil	Ni	29.00	ppm		6	77	0-6 inch	JMA 77
4651	32	soil	Ni	80.00	ppm		6	77	6-12 inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4652	32	soil	Ni	27.00	ppm		6	77	12-18 inch	JMA 77
4653	32	soil	Ni	86.00	ppm		6	77	18-24 inch	JMA 77
4642	32	soil	Pb	44.00	ppm		6	77	0-6 inch	JMA 77
4643	32	soil	Pb	117.00	ppm		6	77	6-12 inch	JMA 77
4644	32	soil	Pb	88.00	ppm		6	77	12-18 inch	JMA 77
4645	32	soil	Pb	198.00	ppm		6	77	18-24 inch	JMA 77
4823	32	soil	Zn	13454.00	ppm		6	77	0-6 inch	JMA 77
4824	32	soil	Zn	480.00	ppm		6	77	6-12 inch	JMA 77
4825	32	soil	Zn	495.00	ppm		6	77	12-18 inch	JMA 77
4826	32	soil	Zn	1254.00	ppm		6	77	18-24 inch	JMA 77
4658	33	soil	As	15.00	ppm		6	77	0-6 inch	JMA 77
4659	33	soil	As	10.00	ppm		6	77	6-12 inch	JMA 77
4660	33	soil	As	12.00	ppm		6	77	12-18 inch	JMA 77
4661	33	soil	As	18.00	ppm		6	77	18-24 inch	JMA 77
4835	33	soil	Cd	6.70	ppm		6	77	0-6 inch	JMA 77
4836	33	soil	Cd	3.80	ppm		6	77	6-12 inch	JMA 77
4837	33	soil	Cd	9.10	ppm		6	77	12-18 inch	JMA 77
4838	33	soil	Cd	6.40	ppm		6	77	18-24 inch	JMA 77
4662	33	soil	Ni	80.00	ppm		6	77	0-6 inch	JMA 77
4663	33	soil	Ni	51.00	ppm		6	77	6-12 inch	JMA 77
4664	33	soil	Ni	66.00	ppm		6	77	12-18 inch	JMA 77
4665	33	soil	Ni	62.00	ppm		6	77	18-24 inch	JMA 77
4654	33	soil	Pb	1225.00	ppm		6	77	0-6 inch	JMA 77
4655	33	soil	Pb	11.00	ppm		6	77	6-12 inch	JMA 77
4656	33	soil	Pb	749.00	ppm		6	77	12-18 inch	JMA 77
4657	33	soil	Pb	2071.00	ppm		6	77	18-24 inch	JMA 77
4831	33	soil	Zn	1100.00	ppm		6	77	0-6 inch	JMA 77
4832	33	soil	Zn	553.00	ppm		6	77	6-12 inch	JMA 77
4833	33	soil	Zn	608.00	ppm		6	77	12-18 inch	JMA 77
4834	33	soil	Zn	586.00	ppm		6	77	18-24 inch	JMA 77
4670	34	soil	As	6.00	ppm		6	77	0-6 inch	JMA 77
4671	34	soil	As	6.00	ppm		6	77	6-12 inch	JMA 77
4672	34	soil	As	5.00	ppm		6	77	12-18 inch	JMA 77
4673	34	soil	As	6.00	ppm		6	77	18-24 inch	JMA 77
4843	34	soil	Cd	4.00	ppm		6	77	0-6 inch	JMA 77
4844	34	soil	Cd	2.80	ppm		6	77	6-12 inch	JMA 77
4845	34	soil	Cd	3.80	ppm		6	77	12-18 inch	JMA 77
4846	34	soil	Cd	27.00	ppm		6	77	18-24 inch	JMA 77
4674	34	soil	Ni	135.00	ppm		6	77	0-6 inch	JMA 77
4675	34	soil	Ni	33.00	ppm		6	77	6-12 inch	JMA 77
4676	34	soil	Ni	42.00	ppm		6	77	12-18 inch	JMA 77
4677	34	soil	Ni	161.00	ppm		6	77	18-24 inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4666	34	soil	Pb	913.00	ppm		6	77	0-6 inch	JMA 77
4667	34	soil	Pb	462.00	ppm		6	77	6-12 inch	JMA 77
4668	34	soil	Pb	1089.00	ppm		6	77	12-18 inch	JMA 77
4669	34	soil	Pb	473.00	ppm		6	77	18-24 inch	JMA 77
4839	34	soil	Zn	488.00	ppm		6	77	0-6 inch	JMA 77
4840	34	soil	Zn	316.00	ppm		6	77	6-12 inch	JMA 77
4841	34	soil	Zn	475.00	ppm		6	77	12-18 inch	JMA 77
4842	34	soil	Zn	408.00	ppm		6	77	18-24 inch	JMA 77
4678	35	soil	As	7.00	ppm		6	77	0-6 inch	JMA 77
4679	35	soil	As	11.00	ppm		6	77	6-12 inch	JMA 77
4680	35	soil	As	10.00	ppm		6	77	12-18 inch	JMA 77
4681	35	soil	As	13.00	ppm		6	77	18-24 inch	JMA 77
4855	35	soil	Cd	3.50	ppm		6	77	0-6 inch	JMA 77
4856	35	soil	Cd	7.90	ppm		6	77	6-12 inch	JMA 77
4857	35	soil	Cd	8.40	ppm		6	77	12-18 inch	JMA 77
4858	35	soil	Cd	86.00	ppm		6	77	18-24 inch	JMA 77
4847	35	soil	Ni	41.00	ppm		6	77	0-6 inch	JMA 77
4848	35	soil	Ni	77.00	ppm		6	77	6-12 inch	JMA 77
4849	35	soil	Ni	135.00	ppm		6	77	12-18 inch	JMA 77
4850	35	soil	Ni	240.00	ppm		6	77	18-24 inch	JMA 77
4682	35	soil	Pb	132.00	ppm		6	77	0-6 inch	JMA 77
4683	35	soil	Pb	899.00	ppm		6	77	6-12 inch	JMA 77
4684	35	soil	Pb	312.00	ppm		6	77	12-18 inch	JMA 77
4685	35	soil	Pb	614.00	ppm		6	77	18-24 inch	JMA 77
4851	35	soil	Zn	550.00	ppm		6	77	0-6 inch	JMA 77
4852	35	soil	Zn	1320.00	ppm		6	77	6-12 inch	JMA 77
4853	35	soil	Zn	2065.00	ppm		6	77	12-18 inch	JMA 77
4854	35	soil	Zn	2772.00	ppm		6	77	18-24 inch	JMA 77
4686	36	soil	As	5.00	ppm		6	77	0-6 inch	JMA 77
4687	36	soil	As	14.00	ppm		6	77	6-12 inch	JMA 77
4688	36	soil	As	16.00	ppm		6	77	12-18 inch	JMA 77
4689	36	soil	As	14.00	ppm		6	77	18-24 inch	JMA 77
4867	36	soil	Cd	8.30	ppm		6	77	0-6 inch	JMA 77
4868	36	soil	Cd	9.30	ppm		6	77	6-12 inch	JMA 77
4869	36	soil	Cd	18.00	ppm		6	77	12-18 inch	JMA 77
4870	36	soil	Cd	10.00	ppm		6	77	18-24 inch	JMA 77
4859	36	soil	Ni	52.00	ppm		6	77	0-6 inch	JMA 77
4860	36	soil	Ni	35.00	ppm		6	77	6-12 inch	JMA 77
4861	36	soil	Ni	58.00	ppm		6	77	12-18 inch	JMA 77
4862	36	soil	Ni	158.00	ppm		6	77	18-24 inch	JMA 77
4690	36	soil	Pb	3518.00	ppm		6	77	0-6 inch	JMA 77
4691	36	soil	Pb	3926.00	ppm		6	77	6-12 inch	JMA 77

829910385

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4692	36	soil	Pb	2629.00	ppm		6	77	12-18 inch	JMA 77
4693	36	soil	Pb	2166.00	ppm		6	77	18-24 inch	JMA 77
4863	36	soil	Zn	1800.00	ppm		6	77	0-6 inch	JMA 77
4864	36	soil	Zn	1979.00	ppm		6	77	6-12 inch	JMA 77
4865	36	soil	Zn	1998.00	ppm		6	77	12-18 inch	JMA 77
4866	36	soil	Zn	3139.00	ppm		6	77	18-24 inch	JMA 77
4694	37	soil	As	6.00	ppm		6	77	0-6 inch	JMA 77
4695	37	soil	As	6.00	ppm		6	77	6-12 inch	JMA 77
4696	37	soil	As	9.00	ppm		6	77	12-18 inch	JMA 77
4697	37	soil	As	11.00	ppm		6	77	18-24 inch	JMA 77
4879	37	soil	Cd	7.60	ppm		6	77	0-6 inch	JMA 77
4880	37	soil	Cd	4.70	ppm		6	77	6-12 inch	JMA 77
4881	37	soil	Cd	3.60	ppm		6	77	12-18 inch	JMA 77
4882	37	soil	Cd	6.90	ppm		6	77	18-24 inch	JMA 77
4871	37	soil	Ni	49.00	ppm		6	77	0-6 inch	JMA 77
4872	37	soil	Ni	45.00	ppm		6	77	6-12 inch	JMA 77
4873	37	soil	Ni	65.00	ppm		6	77	12-18 inch	JMA 77
4874	37	soil	Ni	91.00	ppm		6	77	18-24 inch	JMA 77
4698	37	soil	Pb	270.00	ppm		6	77	0-6 inch	JMA 77
4699	37	soil	Pb	196.00	ppm		6	77	6-12 inch	JMA 77
4700	37	soil	Pb	502.00	ppm		6	77	12-18 inch	JMA 77
4701	37	soil	Pb	322.00	ppm		6	77	18-24 inch	JMA 77
4875	37	soil	Zn	17510.00	ppm		6	77	0-6 inch	JMA 77
4876	37	soil	Zn	6866.00	ppm		6	77	6-12 inch	JMA 77
4877	37	soil	Zn	3437.00	ppm		6	77	12-18 inch	JMA 77
4878	37	soil	Zn	4584.00	ppm		6	77	18-24 inch	JMA 77
4702	39	soil	As	7.00	ppm		6	77	0-6 inch	JMA 77
4703	39	soil	As	7.00	ppm		6	77	6-12 inch	JMA 77
4704	39	soil	As	5.00	ppm		6	77	12-18 inch	JMA 77
4705	39	soil	As	9.00	ppm		6	77	18-24 inch	JMA 77
4891	39	soil	Cd	4.80	ppm		6	77	0-6 inch	JMA 77
4892	39	soil	Cd	29.00	ppm		6	77	6-12 inch	JMA 77
4893	39	soil	Cd	8.90	ppm		6	77	12-18 inch	JMA 77
4894	39	soil	Cd	8.40	ppm		6	77	18-24 inch	JMA 77
4883	39	soil	Ni	37.00	ppm		6	77	0-6 inch	JMA 77
4884	39	soil	Ni	37.00	ppm		6	77	6-12 inch	JMA 77
4885	39	soil	Ni	32.00	ppm		6	77	12-18 inch	JMA 77
4886	39	soil	Ni	45.00	ppm		6	77	18-24 inch	JMA 77
4706	39	soil	Pb	354.00	ppm		6	77	0-6 inch	JMA 77
4707	39	soil	Pb	298.00	ppm		6	77	6-12 inch	JMA 77
4708	39	soil	Pb	214.00	ppm		6	77	12-18 inch	JMA 77
4709	39	soil	Pb	385.00	ppm		6	77	18-24 inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4887	39	soil	Zn	564.00	ppm		6	77	0-6 inch	JMA 77
4888	39	soil	Zn	4491.00	ppm		6	77	6-12 inch	JMA 77
4889	39	soil	Zn	362.00	ppm		6	77	12-18 inch	JMA 77
4890	39	soil	Zn	711.00	ppm		6	77	18-24 inch	JMA 77
4710	40	soil	As	4.00	ppm		6	77	0-6 inch	JMA 77
4711	40	soil	As	1.00	ppm		6	77	6-12 inch	JMA 77
4712	40	soil	As	7.00	ppm		6	77	12-18 inch	JMA 77
4713	40	soil	As	12.00	ppm		6	77	18-24 inch	JMA 77
4903	40	soil	Cd	4.90	ppm		6	77	0-6 inch	JMA 77
4904	40	soil	Cd	2.60	ppm		6	77	6-12 inch	JMA 77
4905	40	soil	Cd	2.60	ppm		6	77	12-18 inch	JMA 77
4906	40	soil	Cd	6.00	ppm		6	77	18-24 inch	JMA 77
4895	40	soil	Ni	213.00	ppm		6	77	0-6 inch	JMA 77
4896	40	soil	Ni	19.00	ppm		6	77	6-12 inch	JMA 77
4897	40	soil	Ni	44.00	ppm		6	77	12-18 inch	JMA 77
4898	40	soil	Ni	33.00	ppm		6	77	18-24 inch	JMA 77
4714	40	soil	Pb	257.00	ppm		6	77	0-6 inch	JMA 77
4715	40	soil	Pb	164.00	ppm		6	77	6-12 inch	JMA 77
4716	40	soil	Pb	1314.00	ppm		6	77	12-18 inch	JMA 77
4717	40	soil	Pb	580.00	ppm		6	77	18-24 inch	JMA 77
4899	40	soil	Zn	535.00	ppm		6	77	0-6 inch	JMA 77
4900	40	soil	Zn	313.00	ppm		6	77	6-12 inch	JMA 77
4901	40	soil	Zn	6725.00	ppm		6	77	12-18 inch	JMA 77
4902	40	soil	Zn	13634.00	ppm		6	77	18-24 inch	JMA 77
4718	41	soil	As	6.00	ppm		6	77	0-6 inch	JMA 77
4719	41	soil	As	6.00	ppm		6	77	6-12 inch	JMA 77
4720	41	soil	As	4.00	ppm		6	77	12-18 inch	JMA 77
4721	41	soil	As	7.00	ppm		6	77	18-24 inch	JMA 77
4915	41	soil	Cd	1.80	ppm		6	77	0-6 inch	JMA 77
4916	41	soil	Cd	1.90	ppm		6	77	6-12 inch	JMA 77
4917	41	soil	Cd	2.20	ppm		6	77	12-18 inch	JMA 77
4918	41	soil	Cd	2.20	ppm		6	77	18-24 inch	JMA 77
4907	41	soil	Ni	21.00	ppm		6	77	0-6 inch	JMA 77
4908	41	soil	Ni	21.00	ppm		6	77	6-12 inch	JMA 77
4909	41	soil	Ni	26.00	ppm		6	77	12-18 inch	JMA 77
4910	41	soil	Ni	19.00	ppm		6	77	18-24 inch	JMA 77
4722	41	soil	Pb	125.00	ppm		6	77	0-6 inch	JMA 77
4723	41	soil	Pb	216.00	ppm		6	77	6-12 inch	JMA 77
4724	41	soil	Pb	362.00	ppm		6	77	12-18 inch	JMA 77
4725	41	soil	Pb	395.00	ppm		6	77	18-24 inch	JMA 77
4911	41	soil	Zn	112.00	ppm		6	77	0-6 inch	JMA 77
4912	41	soil	Zn	122.00	ppm		6	77	6-12 inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4913	41	soil	Zn	183.00	ppm		6	77	12-18 inch	JMA 77
4914	41	soil	Zn	202.00	ppm		6	77	18-24 inch	JMA 77
4726	42	soil	As	45.00	ppm		6	77	0-6 inch	JMA 77
4727	42	soil	As	148.00	ppm		6	77	6-12 inch	JMA 77
4923	42	soil	Cd	31.00	ppm		6	77	0-6 inch	JMA 77
4924	42	soil	Cd	71.00	ppm		6	77	6-12 inch	JMA 77
4919	42	soil	Ni	211.00	ppm		6	77	0-6 inch	JMA 77
4920	42	soil	Ni	289.00	ppm		6	77	6-12 inch	JMA 77
4728	42	soil	Pb	430.00	ppm		6	77	0-6 inch	JMA 77
4729	42	soil	Pb	396.00	ppm		6	77	6-12 inch	JMA 77
4921	42	soil	Zn	4286.00	ppm		6	77	0-6 inch	JMA 77
4922	42	soil	Zn	10670.00	ppm		6	77	6-12 inch	JMA 77
4390	47	soil	As	4.00	ppm		5	77	0-2 inch	JMA 77
4391	47	soil	As	16.00	ppm		5	77	2-4 inch	JMA 77
4392	47	soil	As	.60	ppm		5	77	10-12 inch	JMA 77
4393	47	soil	As	.90	ppm		5	77	12-14 inch	JMA 77
4394	47	soil	As	10.00	ppm		5	77	14-16 inch	JMA 77
4447	47	soil	Cd	2.00	ppm		5	77	0-2 inch	JMA 77
4448	47	soil	Cd	9.00	ppm		5	77	2-4 inch	JMA 77
4449	47	soil	Cd	.60	ppm		5	77	10-12 inch	JMA 77
4450	47	soil	Cd	.30	ppm		5	77	12-14 inch	JMA 77
4451	47	soil	Cd	.30	ppm		5	77	14-16 inch	JMA 77
4437	47	soil	Ni	20.00	ppm		5	77	0-2 inch	JMA 77
4438	47	soil	Ni	54.00	ppm		5	77	2-4 inch	JMA 77
4439	47	soil	Ni	6.00	ppm		5	77	10-12 inch	JMA 77
4440	47	soil	Ni	13.00	ppm		5	77	12-14 inch	JMA 77
4441	47	soil	Ni	28.00	ppm		5	77	14-16 inch	JMA 77
4432	47	soil	Pb	170.00	ppm		5	77	0-2 inch	JMA 77
4433	47	soil	Pb	900.00	ppm		5	77	2-4 inch	JMA 77
4434	47	soil	Pb	10.00	ppm		5	77	10-12 inch	JMA 77
4435	47	soil	Pb	6.00	ppm		5	77	12-14 inch	JMA 77
4436	47	soil	Pb	15.00	ppm		5	77	14-16 inch	JMA 77
4442	47	soil	Zn	340.00	ppm		5	77	0-2 inch	JMA 77
4443	47	soil	Zn	1500.00	ppm		5	77	2-4 inch	JMA 77
4444	47	soil	Zn	28.00	ppm		5	77	10-12 inch	JMA 77
4445	47	soil	Zn	34.00	ppm		5	77	12-14 inch	JMA 77
4446	47	soil	Zn	64.00	ppm		5	77	14-16 inch	JMA 77
4395	84	soil	T Pb	3.70	ppm		3	80		Aw 80
4452	100	soil	As	20.00	ppm		5	77	0-2 inch	JMA 77
4453	100	soil	As	16.00	ppm		5	77	2-4 inch	JMA 77
4454	100	soil	As	4.00	ppm		5	77	4-6 inch	JMA 77
4455	100	soil	As	7.00	ppm		5	77	6-8 inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4456	100	soil	As	4.00	ppm		5	77	8-10 inch	JMA 77
4730	100	soil	Cd	1.00	ppm	.30	5	77	0-2 inch	JMA 77
4731	100	soil	Cd	1.00	ppm	.30	5	77	2-4 inch	JMA 77
4732	100	soil	Cd	2.00	ppm	.30	5	77	4-6 inch	JMA 77
4733	100	soil	Cd	1.00	ppm	.30	5	77	6-8 inch	JMA 77
4734	100	soil	Cd	.30	ppm	.30	5	77	8-10 inch	JMA 77
4462	100	soil	Ni	11.00	ppm		5	77	0-2 inch	JMA 77
4463	100	soil	Ni	12.00	ppm		5	77	2-4 inch	JMA 77
4464	100	soil	Ni	16.00	ppm		5	77	4-6 inch	JMA 77
4465	100	soil	Ni	11.00	ppm		5	77	6-8 inch	JMA 77
4466	100	soil	Ni	17.00	ppm		5	77	8-10 inch	JMA 77
4457	100	soil	Pb	190.00	ppm		5	77	0-2 inch	JMA 77
4458	100	soil	Pb	170.00	ppm		5	77	2-4 inch	JMA 77
4459	100	soil	Pb	81.00	ppm		5	77	4-6 inch	JMA 77
4460	100	soil	Pb	85.00	ppm		5	77	6-8 inch	JMA 77
4461	100	soil	Pb	12.00	ppm		5	77	8-10 inch	JMA 77
4467	100	soil	Zn	170.00	ppm		5	77	0-2 inch	JMA 77
4468	100	soil	Zn	240.00	ppm		5	77	2-4 inch	JMA 77
4469	100	soil	Zn	120.00	ppm		5	77	4-6 inch	JMA 77
4470	100	soil	Zn	100.00	ppm		5	77	6-8 inch	JMA 77
4471	100	soil	Zn	47.00	ppm		5	77	8-10 inch	JMA 77
4735	103	soil	As	29.00	ppm		6	77	0-6 inch	JMA 77
4736	103	soil	As	9.00	ppm		6	77	6-12 inch	JMA 77
4737	103	soil	As	9.00	ppm		6	77	12-18 inch	JMA 77
4738	103	soil	As	11.00	ppm		6	77	18-24 inch	JMA 77
4935	103	soil	Cd	3.30	ppm		6	77	0-6 inch	JMA 77
4936	103	soil	Cd	5.50	ppm		6	77	6-12 inch	JMA 77
4937	103	soil	Cd	8.70	ppm		6	77	12-18 inch	JMA 77
4938	103	soil	Cd	9.20	ppm		6	77	18-24 inch	JMA 77
4927	103	soil	Ni	130.00	ppm		6	77	0-6 inch	JMA 77
4928	103	soil	Ni	49.00	ppm		6	77	6-12 inch	JMA 77
4929	103	soil	Ni	78.00	ppm		6	77	12-18 inch	JMA 77
4930	103	soil	Ni	85.00	ppm		6	77	18-24 inch	JMA 77
4739	103	soil	Pb	844.00	ppm		6	77	0-6 inch	JMA 77
4740	103	soil	Pb	670.00	ppm		6	77	6-12 inch	JMA 77
4741	103	soil	Pb	2717.00	ppm		6	77	12-18 inch	JMA 77
4742	103	soil	Pb	964.00	ppm		6	77	18-24 inch	JMA 77
4931	103	soil	Zn	1053.00	ppm		6	77	0-6 inch	JMA 77
4932	103	soil	Zn	715.00	ppm		6	77	6-12 inch	JMA 77
4933	103	soil	Zn	965.00	ppm		6	77	12-18 inch	JMA 77
4934	103	soil	Zn	1204.00	ppm		6	77	18-24 inch	JMA 77
4396	112	soil	As	6.00	ppm		5	77	0-2 inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4397	112	soil	As	5.00	ppm		5	77	2-4 inch	JMA 77
4398	112	soil	As	6.00	ppm		5	77	4-6 inch	JMA 77
4399	112	soil	As	2.00	ppm		5	77	6-8 inch	JMA 77
4400	112	soil	As	1.00	ppm		5	77	8-10 inch	JMA 77
4401	112	soil	As	2.00	ppm		5	77	10-12 inch	JMA 77
4490	112	soil	Cd	4.00	ppm	.30	5	77	0-2 inch	JMA 77
4491	112	soil	Cd	5.00	ppm		5	77	2-4 inch	JMA 77
4492	112	soil	Cd	5.00	ppm		5	77	4-6 inch	JMA 77
4493	112	soil	Cd	.30	ppm		5	77	6-8 inch	JMA 77
4494	112	soil	Cd	.00	ppm		5	77	8-10 inch	JMA 77
4495	112	soil	Cd	.00	ppm		5	77	10-12 inch	JMA 77
4478	112	soil	Ni	110.00	ppm		5	77	0-2 inch	JMA 77
4479	112	soil	Ni	94.00	ppm		5	77	2-4 inch	JMA 77
4480	112	soil	Ni	39.00	ppm		5	77	4-6 inch	JMA 77
4481	112	soil	Ni	12.00	ppm		5	77	6-8 inch	JMA 77
4482	112	soil	Ni	17.00	ppm		5	77	8-10 inch	JMA 77
4483	112	soil	Ni	14.00	ppm		5	77	10-12 inch	JMA 77
4472	112	soil	Pb	75.00	ppm		5	77	0-2 inch	JMA 77
4473	112	soil	Pb	100.00	ppm		5	77	2-4 inch	JMA 77
4474	112	soil	Pb	50.00	ppm		5	77	4-6 inch	JMA 77
4475	112	soil	Pb	26.00	ppm		5	77	6-8 inch	JMA 77
4476	112	soil	Pb	9.00	ppm		5	77	8-10 inch	JMA 77
4477	112	soil	Pb	11.00	ppm		5	77	10-12 inch	JMA 77
4484	112	soil	Zn	6000.00	ppm		5	77	0-2 inch	JMA 77
4485	112	soil	Zn	11500.00	ppm		5	77	2-4 inch	JMA 77
4486	112	soil	Zn	2200.00	ppm		5	77	4-6 inch	JMA 77
4487	112	soil	Zn	56.00	ppm		5	77	6-8 inch	JMA 77
4488	112	soil	Zn	44.00	ppm		5	77	8-10 inch	JMA 77
4489	112	soil	Zn	44.00	ppm		5	77	10-12 inch	JMA 77
4402	113	soil	As	3.00	ppm		5	77	0-2 inch	JMA 77
4403	113	soil	As	3.00	ppm		5	77	2-4 inch	JMA 77
4404	113	soil	As	2.00	ppm		5	77	4-6 inch	JMA 77
4405	113	soil	As	11.00	ppm		5	77	6-8 inch	JMA 77
4406	113	soil	As	8.00	ppm		5	77	8-10 inch	JMA 77
4407	113	soil	As	8.00	ppm		5	77	16-18 inch	JMA 77
4514	113	soil	Cd	2.00	ppm		5	77	0-2 inch	JMA 77
4515	113	soil	Cd	5.00	ppm		5	77	2-4 inch	JMA 77
4516	113	soil	Cd	4.00	ppm		5	77	4-6 inch	JMA 77
4517	113	soil	Cd	26.00	ppm		5	77	6-8 inch	JMA 77
4518	113	soil	Cd	36.00	ppm		5	77	8-10 inch	JMA 77
4519	113	soil	Cd	13.00	ppm		5	77	16-18 inch	JMA 77
4502	113	soil	Ni	29.00	ppm		5	77	0-2 inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4503	113	soil	Ni	36.00	ppm		5	77	2-4 inch	JMA 77
4504	113	soil	Ni	54.00	ppm		5	77	4-6 inch	JMA 77
4505	113	soil	Ni	22.00	ppm		5	77	6-8 inch	JMA 77
4506	113	soil	Ni	32.00	ppm		5	77	8-10 inch	JMA 77
4507	113	soil	Ni	24.00	ppm		5	77	16-18 inch	JMA 77
4496	113	soil	Pb	37.00	ppm		5	77	0-2 inch	JMA 77
4497	113	soil	Pb	95.00	ppm		5	77	2-4 inch	JMA 77
4498	113	soil	Pb	530.00	ppm		5	77	4-6 inch	JMA 77
4499	113	soil	Pb	12900.00	ppm		5	77	6-8 inch	JMA 77
4500	113	soil	Pb	14300.00	ppm		5	77	8-10 inch	JMA 77
4501	113	soil	Pb	80.00	ppm		5	77	16-18 inch	JMA 77
4508	113	soil	Zn	580.00	ppm		5	77	0-2 inch	JMA 77
4509	113	soil	Zn	1100.00	ppm		5	77	2-4 inch	JMA 77
4510	113	soil	Zn	1200.00	ppm		5	77	4-6 inch	JMA 77
4511	113	soil	Zn	1900.00	ppm		5	77	6-8 inch	JMA 77
4512	113	soil	Zn	2000.00	ppm		5	77	8-10 inch	JMA 77
4513	113	soil	Zn	3900.00	ppm		5	77	16-18 inch	JMA 77
4520	114	soil	As	6.00	ppm		5	77	0-2 inch	JMA 77
4521	114	soil	As	7.00	ppm		5	77	2-4 inch	JMA 77
4522	114	soil	As	16.00	ppm		5	77	10-12 inch	JMA 77
4523	114	soil	As	25.00	ppm		5	77	12-14 inch	JMA 77
4524	114	soil	As	.90	ppm		5	77	14-16 inch	JMA 77
4525	114	soil	As	4.00	ppm		5	77	16-18 inch	JMA 77
4743	114	soil	Cd	2.00	ppm	.30	5	77	0-2 inch	JMA 77
4744	114	soil	Cd	3.00	ppm	.30	5	77	2-4 inch	JMA 77
4745	114	soil	Cd	26.00	ppm	.30	5	77	10-12 inch	JMA 77
4746	114	soil	Cd	120.00	ppm	.30	5	77	12-14 inch	JMA 77
4747	114	soil	Cd	.40	ppm	.30	5	77	14-16 inch	JMA 77
4748	114	soil	Cd	.30	ppm	.30	5	77	16-18 inch	JMA 77
4532	114	soil	Ni	19.00	ppm		5	77	0-2 inch	JMA 77
4533	114	soil	Ni	18.00	ppm		5	77	2-4 inch	JMA 77
4534	114	soil	Ni	68.00	ppm		5	77	10-12 inch	JMA 77
4535	114	soil	Ni	69.00	ppm		5	77	12-14 inch	JMA 77
4536	114	soil	Ni	6.00	ppm		5	77	14-16 inch	JMA 77
4537	114	soil	Ni	21.00	ppm		5	77	16-18 inch	JMA 77
4526	114	soil	Pb	32.00	ppm		5	77	0-2 inch	JMA 77
4527	114	soil	Pb	670.00	ppm		5	77	2-4 inch	JMA 77
4528	114	soil	Pb	1400.00	ppm		5	77	10-12 inch	JMA 77
4529	114	soil	Pb	230.00	ppm		5	77	12-14 inch	JMA 77
4530	114	soil	Pb	8.00	ppm		5	77	14-16 inch	JMA 77
4531	114	soil	Pb	11.00	ppm		5	77	16-18 inch	JMA 77
4538	114	soil	Zn	840.00	ppm		5	77	0-2 inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4539	114	soil	Zn	1000.00	ppm		5	77	2-4 inch	JMA 77
4540	114	soil	Zn	1800.00	ppm		5	77	10-12 inch	JMA 77
4541	114	soil	Zn	2800.00	ppm		5	77	12-14 inch	JMA 77
4542	114	soil	Zn	23.00	ppm		5	77	14-16 inch	JMA 77
4543	114	soil	Zn	65.00	ppm		5	77	16-18 inch	JMA 77
4749	115	soil	As	6.00	ppm		6	77	0-6 inch	JMA 77
4750	115	soil	As	7.00	ppm		6	77	6-12 inch	JMA 77
4751	115	soil	As	8.00	ppm		6	77	12-18 inch	JMA 77
4752	115	soil	As	8.00	ppm		6	77	18-24 inch	JMA 77
4953	115	soil	Cd	2.70	ppm		6	77	0-6 inch	JMA 77
4954	115	soil	Cd	3.70	ppm		6	77	6-12 inch	JMA 77
4955	115	soil	Cd	4.00	ppm		6	77	12-18 inch	JMA 77
4956	115	soil	Cd	2.20	ppm		6	77	18-24 inch	JMA 77
4945	115	soil	Ni	58.00	ppm		6	77	0-6 inch	JMA 77
4946	115	soil	Ni	58.00	ppm		6	77	6-12 inch	JMA 77
4947	115	soil	Ni	55.00	ppm		6	77	12-18 inch	JMA 77
4948	115	soil	Ni	27.00	ppm		6	77	18-24 inch	JMA 77
4753	115	soil	Pb	117.00	ppm		6	77	0-6 inch	JMA 77
4754	115	soil	Pb	179.00	ppm		6	77	6-12 inch	JMA 77
4755	115	soil	Pb	190.00	ppm		6	77	12-18 inch	JMA 77
4756	115	soil	Pb	344.00	ppm		6	77	18-24 inch	JMA 77
4949	115	soil	Zn	1573.00	ppm		6	77	0-6 inch	JMA 77
4950	115	soil	Zn	2032.00	ppm		6	77	6-12 inch	JMA 77
4951	115	soil	Zn	12372.00	ppm		6	77	12-18 inch	JMA 77
4952	115	soil	Zn	818.00	ppm		6	77	18-24 inch	JMA 77
4544	116	soil	As	4.00	ppm		5	77	0-2 inch	JMA 77
4545	116	soil	As	12.00	ppm		5	77	2-4 inch	JMA 77
4546	116	soil	As	10.00	ppm		5	77	4-6 inch	JMA 77
4547	116	soil	As	11.00	ppm		5	77	6-8 inch	JMA 77
4548	116	soil	As	18.00	ppm		5	77	8-10 inch	JMA 77
4549	116	soil	As	2.00	ppm		5	77	12-14 inch	JMA 77
4757	116	soil	Cd	2.00	ppm	.30	5	77	0-2 inch	JMA 77
4758	116	soil	Cd	4.00	ppm	.30	5	77	2-4 inch	JMA 77
4759	116	soil	Cd	4.00	ppm	.30	5	77	4-6 inch	JMA 77
4760	116	soil	Cd	4.00	ppm	.30	5	77	6-8 inch	JMA 77
4761	116	soil	Cd	9.00	ppm	.30	5	77	8-10 inch	JMA 77
4762	116	soil	Cd	.00	ppm	.30	5	77	12-14 inch	JMA 77
4556	116	soil	Ni	18.00	ppm		5	77	0-2 inch	JMA 77
4557	116	soil	Ni	32.00	ppm		5	77	2-4 inch	JMA 77
4558	116	soil	Ni	51.00	ppm		5	77	4-6 inch	JMA 77
4559	116	soil	Ni	37.00	ppm		5	77	6-8 inch	JMA 77
4560	116	soil	Ni	60.00	ppm		5	77	8-10 inch	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4561	116	soil	Ni	14.00	ppm		5	77	12-14 inch	JMA 77
4550	116	soil	Pb	160.00	ppm		5	77	0-2 inch	JMA 77
4551	116	soil	Pb	610.00	ppm		5	77	2-4 inch	JMA 77
4552	116	soil	Pb	730.00	ppm		5	77	4-6 inch	JMA 77
4553	116	soil	Pb	280.00	ppm		5	77	6-8 inch	JMA 77
4554	116	soil	Pb	610.00	ppm		5	77	8-10 inch	JMA 77
4555	116	soil	Pb	11.00	ppm		5	77	12-14 inch	JMA 77
4562	116	soil	Zn	850.00	ppm		5	77	0-2 inch	JMA 77
4563	116	soil	Zn	800.00	ppm		5	77	2-4 inch	JMA 77
4564	116	soil	Zn	4500.00	ppm		5	77	4-6 inch	JMA 77
4565	116	soil	Zn	820.00	ppm		5	77	6-8 inch	JMA 77
4566	116	soil	Zn	660.00	ppm		5	77	8-10 inch	JMA 77
4567	116	soil	Zn	48.00	ppm		5	77	12-14 inch	JMA 77
4568	117	soil	As	5.00	ppm		5	77	0 2 inch	JMA 77
4569	117	soil	As	5.00	ppm		5	77	2-4 inch	JMA 77
4570	117	soil	As	.00	ppm		5	77	4-6 inch	JMA 77
4571	117	soil	As	2.00	ppm		5	77	8-10 inch	JMA 77
4572	117	soil	As	1.00	ppm		5	77	10-12 inch	JMA 77
4573	117	soil	As	1.00	ppm		5	77	12-14 inch	JMA 77
4763	117	soil	Cd	.90	ppm	.30	5	77	0-2 inch	JMA 77
4764	117	soil	Cd	.90	ppm	.30	5	77	2-4 inch	JMA 77
4765	117	soil	Cd	.30	ppm	.30	5	77	4-6 inch	JMA 77
4766	117	soil	Cd	.00	ppm	.30	5	77	8-10 inch	JMA 77
4767	117	soil	Cd	.00	ppm	.30	5	77	10-12 inch	JMA 77
4768	117	soil	Cd	.00	ppm	.30	5	77	12-14 inch	JMA 77
4580	117	soil	Ni	14.00	ppm		5	77	0-2 inch	JMA 77
4581	117	soil	Ni	14.00	ppm		5	77	2-4 inch	JMA 77
4582	117	soil	Ni	8.00	ppm		5	77	4-6 inch	JMA 77
4583	117	soil	Ni	10.00	ppm		5	77	8-10 inch	JMA 77
4584	117	soil	Ni	7.00	ppm		5	77	10-12 inch	JMA 77
4585	117	soil	Ni	11.00	ppm		5	77	12-14 inch	JMA 77
4574	117	soil	Pb	81.00	ppm		5	77	0-2 inch	JMA 77
4575	117	soil	Pb	110.00	ppm		5	77	2-4 inch	JMA 77
4576	117	soil	Pb	11.00	ppm		5	77	4-6 inch	JMA 77
4577	117	soil	Pb	7.00	ppm		5	77	8-10 inch	JMA 77
4578	117	soil	Pb	5.00	ppm		5	77	10-12 inch	JMA 77
4579	117	soil	Pb	7.00	ppm		5	77	12-14 inch	JMA 77
4586	117	soil	Zn	280.00	ppm		5	77	0-2 inch	JMA 77
4587	117	soil	Zn	190.00	ppm		5	77	2-4 inch	JMA 77
4588	117	soil	Zn	110.00	ppm		5	77	4-6 inch	JMA 77
4589	117	soil	Zn	27.00	ppm		5	77	8-10 inch	JMA 77
4590	117	soil	Zn	19.00	ppm		5	77	10-12 inch	JMA 77

829910393

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4591	117	soil	Zn	24.00	ppm		5	77	12-14 inch	JMA 77
4773	118	soil	As	5.00	ppm		6	77	0-6 inch	JMA 77
4774	118	soil	As	14.00	ppm		6	77	6-12 inch	JMA 77
4775	118	soil	As	11.00	ppm		6	77	12-18 inch	JMA 77
4776	118	soil	As	13.00	ppm		6	77	18-24 inch	JMA 77
4961	118	soil	Cd	3.90	ppm		6	77	0-6 inch	JMA 77
4962	118	soil	Cd	2.30	ppm		6	77	6-12 inch	JMA 77
4963	118	soil	Cd	33.00	ppm		6	77	12-18 inch	JMA 77
4964	118	soil	Cd	14.00	ppm		6	77	18-24 inch	JMA 77
4777	118	soil	Ni	52.00	ppm		6	77	0-6 inch	JMA 77
4778	118	soil	Ni	49.00	ppm		6	77	6-12 inch	JMA 77
4779	118	soil	Ni	45.00	ppm		6	77	12-18 inch	JMA 77
4780	118	soil	Ni	40.00	ppm		6	77	18-24 inch	JMA 77
4769	118	soil	Pb	479.00	ppm		6	77	0-6 inch	JMA 77
4770	118	soil	Pb	184.00	ppm		6	77	6-12 inch	JMA 77
4771	118	soil	Pb	885.00	ppm		6	77	12-18 inch	JMA 77
4772	118	soil	Pb	671.00	ppm		6	77	18-24 inch	JMA 77
4957	118	soil	Zn	1183.00	ppm		6	77	0-6 inch	JMA 77
4958	118	soil	Zn	315.00	ppm		6	77	6-12 inch	JMA 77
4959	118	soil	Zn	860.00	ppm		6	77	12-18 inch	JMA 77
4960	118	soil	Zn	1391.00	ppm		6	77	18-24 inch	JMA 77
4965	145	soil	Zn	4719.00	ppm		6	77	0-6 inch	JMA 77
4966	145	soil	Zn	3392.00	ppm		6	77	6-12 inch	JMA 77
4967	145	soil	Zn	4382.00	ppm		6	77	12-18 inch	JMA 77
4968	145	soil	Zn	3770.00	ppm		6	77	18-24 inch	JMA 77

571 Records Processed

829910394

APPENDIX 21

POTENTIAL CONTAMINANTS SURFACE WATER - LARGE SCALE MAP

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
7074	3	sw	As	.0	ppb	10	6	77	unf	JMA 77
4222	3	sw	Cd	.00	ppb	50	6	77	unf	JMA 77
7076	3	sw	Ni	.0	ppb	200	6	77	unf	JMA 77
7075	3	sw	Pb	.0	ppb	500	6	77	unf	JMA 77
5370	3	sw	Zn	160.00	ppb		6	77	unf	JMA 77
4224	4	sw	Cd	.00	ppb	50	6	77	unf	JMA 77
7079	4	sw	Ni	.0	ppb	200	6	77	unf	JMA 77
7078	4	sw	Pb	.0	ppb	500	6	77	unf	JMA 77
4223	4	sw	Zn	230.00	ppb		6	77	unf	JMA 77
7077	4	sw	As	30.00	ppb	10	6	77	unf	JMA 77
7080	5	sw	As	.0	ppb	10	6	77	unf	JMA 77
4246	5	sw	Cd	.00	ppb	50	6	77	unf	JMA 77
7082	5	sw	Ni	.0	ppb	200	6	77	unf	JMA 77
7081	5	sw	Pb	.0	ppb	500	6	77	unf	JMA 77
4245	5	sw	Zn	30.00	ppb		6	77	unf	JMA 77
7083	6	sw	As	.0	ppb	10	6	77	unf	JMA 77
4263	6	sw	Cd	.00	ppb	50	6	77	unf	JMA 77
7085	6	sw	Ni	.0	ppb	200	6	77	unf	JMA 77
7084	6	sw	Pb	.0	ppb	500	6	77	unf	JMA 77
4262	6	sw	Zn	40.00	ppb		6	77	unf	JMA 77
7086	7	sw	As	.0	ppb	10	6	77	unf	JMA 77
4285	7	sw	Cd	.00	ppb	50	6	77	unf	JMA 77
7088	7	sw	Ni	.0	ppb	200	6	77	unf	JMA 77
7087	7	sw	Pb	.0	ppb	500	6	77	unf	JMA 77
4284	7	sw	Zn	90.00	ppb		6	77	unf	JMA 77
7089	8	sw	As	.0	ppb	10	6	77	unf	JMA 77
4307	8	sw	Cd	.00	ppb	50	6	77	unf	JMA 77
7091	8	sw	Ni	.0	ppb	200	6	77	unf	JMA 77
7090	8	sw	Pb	.0	ppb	500	6	77	unf	JMA 77
4306	8	sw	Zn	80.00	ppb		6	77	unf	JMA 77
7092	9	sw	As	.0	ppb	10	6	77	unf	JMA 77
4330	9	sw	As	.00	ppb	20	7	77	unf	JMA 77
4329	9	sw	Cd	.00	ppb	50	6	77	unf	JMA 77
4334	9	sw	Cd	10.00	ppb	3	7	77	unf	JMA 77
7094	9	sw	Ni	.0	ppb	200	6	77	unf	JMA 77
4332	9	sw	Ni	.00	ppb	100	7	77	unf	JMA 77
7093	9	sw	Pb	.0	ppb	500	6	77	unf	JMA 77
4331	9	sw	Pb	.00	ppb	10	7	77	unf	JMA 77
4328	9	sw	Zn	180.00	ppb		6	77	unf	JMA 77
4333	9	sw	Zn	140.00	ppb		7	77	unf	JMA 77
7095	10	sw	As	.0	ppb	10	6	77	unf	JMA 77
4357	10	sw	As	.00	ppb	20	7	77	unf	JMA 77

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MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4356	10	sw	Cd	.00	ppb	50	6	77	unf	JMA 77
4361	10	sw	Cd	10.00	ppb	3	7	77	unf	JMA 77
7097	10	sw	Ni	.0	ppb	200	6	77	unf	JMA 77
4359	10	sw	Ni	.00	ppb	100	7	77	unf	JMA 77
7096	10	sw	Pb	.0	ppb	500	6	77	unf	JMA 77
4358	10	sw	Pb	.00	ppb	10	7	77	unf	JMA 77
4355	10	sw	Zn	90.00	ppb		6	77	unf	JMA 77
4360	10	sw	Zn	100.00	ppb		7	77	unf	JMA 77
7098	11	sw	As	.0	ppb	10	6	77	unf	JMA 77
4384	11	sw	As	.00	ppb	20	7	77	unf	JMA 77
4383	11	sw	Cd	.00	ppb	50	6	77	unf	JMA 77
4388	11	sw	Cd	10.00	ppb	3	7	77	unf	JMA 77
7100	11	sw	Ni	.0	ppb	200	6	77	unf	JMA 77
4386	11	sw	Ni	.00	ppb	100	7	77	unf	JMA 77
7099	11	sw	Pb	.0	ppb	500	6	77	unf	JMA 77
4385	11	sw	Pb	.00	ppb	10	7	77	unf	JMA 77
4382	11	sw	Zn	130.00	ppb		6	77	unf	JMA 77
4387	11	sw	Zn	90.00	ppb		7	77	unf	JMA 77
7115	40	sw	Be	1.00	ppb		10	81	unf	NJDEP 85
5159	40	sw	Cd	1.00	ppb		10	81	unf	NJDEP 85
5161	40	sw	Cr	10.20	ppb		10	81	unf	NJDEP 85
5160	40	sw	Cu	9.00	ppb		10	81	unf	NJDEP 85
5162	40	sw	Ni	8.00	ppb		10	81	unf	NJDEP 85
5163	40	sw	Pb	10.00	ppb		10	81	unf	NJDEP 85
5164	40	sw	Zn	35.00	ppb		10	81	unf	NJDEP 85
5283	40	sw	tce	10.50	ppb		10	81	unf	NJDEP 85
5282	40	sw	tcle	7.40	ppb		10	81	unf	NJDEP 85
5284	40	sw	ttce	33.80	ppb		10	81	unf	NJDEP 85
5280	40	sw	CHCl3	5.10	ppb		10	81	unf	NJDEP 85
5279	40	sw	MeChl	5.90	ppb		10	81	unf	NJDEP 85
5281	40	sw	3CL3Fle	60.40	ppb		10	81	unf	NJDEP 85
7108	65	sw	Ag	1.00	ppb		10	81	unf	NJDEP 85
5174	65	sw	As	2.10	ppb		10	81	unf	NJDEP 85
7109	65	sw	Be	1.00	ppb		10	81	unf	NJDEP 85
5175	65	sw	Cd	1.00	ppb		10	81	unf	NJDEP 85
5177	65	sw	Cr	13.00	ppb		10	81	unf	NJDEP 85
5176	65	sw	Cu	42.00	ppb		10	81	unf	NJDEP 85
5178	65	sw	Ni	12.00	ppb		10	81	unf	NJDEP 85
5179	65	sw	Pb	46.60	ppb		10	81	unf	NJDEP 85
5180	65	sw	Zn	230.00	ppb		10	81	unf	NJDEP 85
5292	65	sw	tce	3.80	ppb		10	81	unf	NJDEP 85
5291	65	sw	tcle	2.30	ppb		10	81	unf	NJDEP 85

829910397

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
5293	65	sw	ttce	14.30	ppb		10	81	unf	NJDEP 85
5289	65	sw	CHCl3	2.30	ppb		10	81	unf	NJDEP 85
5288	65	sw	MeChl	11.70	ppb		10	81	unf	NJDEP 85
5290	65	sw	3CL3Fle	17.50	ppb		10	81	unf	NJDEP 85
7110	68	sw	Ag	1.00	ppb		10	81	unf	NJDEP 85
5188	68	sw	As	1.60	ppb		10	81	unf	NJDEP 85
7111	68	sw	Be	1.00	ppb		10	81	unf	NJDEP 85
5189	68	sw	Cd	1.00	ppb		10	81	unf	NJDEP 85
5191	68	sw	Cr	5.00	ppb		10	81	unf	NJDEP 85
5190	68	sw	Cu	11.00	ppb		10	81	unf	NJDEP 85
5192	68	sw	Ni	16.00	ppb		10	81	unf	NJDEP 85
5193	68	sw	Pb	23.30	ppb		10	81	unf	NJDEP 85
5194	68	sw	Zn	275.00	ppb		10	81	unf	NJDEP 85
5301	68	sw	tce	1.50	ppb		10	81	unf	NJDEP 85
5300	68	sw	tcle	1.00	ppb		10	81	unf	NJDEP 85
5302	68	sw	ttce	1.10	ppb		10	81	unf	NJDEP 85
5298	68	sw	CHCl3	.60	ppb		10	81	unf	NJDEP 85
5297	68	sw	MeChl	19.60	ppb		10	81	unf	NJDEP 85
5299	68	sw	3CL3Fle	1.20	ppb		10	81	unf	NJDEP 85
7112	76	sw	Ag	1.00	ppb		10	81	unf	NJDEP 85
5202	76	sw	As	1.50	ppb		10	81	unf	NJDEP 85
7113	76	sw	Be	1.00	ppb		10	81	unf	NJDEP 85
5203	76	sw	Cd	1.00	ppb		10	81	unf	NJDEP 85
5205	76	sw	Cr	16.00	ppb		10	81	unf	NJDEP 85
5204	76	sw	Cu	11.00	ppb		10	81	unf	NJDEP 85
5206	76	sw	Ni	21.00	ppb		10	81	unf	NJDEP 85
5207	76	sw	Pb	28.00	ppb		10	81	unf	NJDEP 85
5208	76	sw	Zn	265.00	ppb		10	81	unf	NJDEP 85
5310	76	sw	tce	3.30	ppb		10	81	unf	NJDEP 85
5309	76	sw	tcle	1.80	ppb		10	81	unf	NJDEP 85
5295	76	sw	ttce	.10	ppb		10	81	unf	NJDEP 85
5307	76	sw	CHCl3	1.60	ppb		10	81	unf	NJDEP 85
5306	76	sw	MeChl	13.80	ppb		10	81	unf	NJDEP 85
5308	76	sw	3CL3Fle	11.60	ppb		10	81	unf	NJDEP 85
7101	85	sw	Ag	1.00	ppb		10	81	unf	NJDEP 85
5216	85	sw	As	2.70	ppb		10	81	unf	NJDEP 85
7102	85	sw	Be	1.00	ppb		10	81	unf	NJDEP 85
5217	85	sw	Cd	1.00	ppb		10	81	unf	NJDEP 85
5219	85	sw	Cr	19.00	ppb		10	81	unf	NJDEP 85
5218	85	sw	Cu	17.00	ppb		10	81	unf	NJDEP 85
5220	85	sw	Ni	18.00	ppb		10	81	unf	NJDEP 85
5221	85	sw	Pb	65.30	ppb		10	81	unf	NJDEP 85

8299910398

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
5222	85	sw	Zn	215.00	ppb		10	81	unf	NJDEP 85
5318	85	sw	tce	.70	ppb		10	81	unf	NJDEP 85
5317	85	sw	tcle	.80	ppb		10	81	unf	NJDEP 85
5319	85	sw	ttce	.80	ppb		10	81	unf	NJDEP 85
5315	85	sw	CHCl3	.50	ppb		10	81	unf	NJDEP 85
5314	85	sw	MeChl	13.60	ppb		10	81	unf	NJDEP 85
5316	85	sw	3CL3Fle	1.40	ppb		10	81	unf	NJDEP 85
7103	90	sw	Ag	1.00	ppb		10	81	unf	NJDEP 85
5230	90	sw	As	3.00	ppb		10	81	unf	NJDEP 85
7104	90	sw	Be	1.00	ppb		10	81	unf	NJDEP 85
5231	90	sw	Cd	1.00	ppb		10	81	unf	NJDEP 85
5233	90	sw	Cr	10.00	ppb		10	81	unf	NJDEP 85
5232	90	sw	Cu	7.00	ppb		10	81	unf	NJDEP 85
5234	90	sw	Ni	16.00	ppb		10	81	unf	NJDEP 85
5235	90	sw	Pb	42.00	ppb		10	81	unf	NJDEP 85
5236	90	sw	Zn	170.00	ppb		10	81	unf	NJDEP 85
5327	90	sw	tce	1.40	ppb		10	81	unf	NJDEP 85
5326	90	sw	tcle	1.20	ppb		10	81	unf	NJDEP 85
5328	90	sw	ttce	3.50	ppb		10	81	unf	NJDEP 85
5324	90	sw	CHCl3	1.20	ppb		10	81	unf	NJDEP 85
5323	90	sw	MeChl	15.50	ppb		10	81	unf	NJDEP 85
5325	90	sw	3Cl3Fle	4.90	ppb		10	81	unf	NJDEP 85
7105	96	sw	Ag	.00	ppb	100	10	81	unf	NJDEP 85
5244	96	sw	As	2.70	ppb		10	81	unf	NJDEP 85
7106	96	sw	Be	.00	ppb	100	10	81	unf	NJDEP 85
5245	96	sw	Cd	1.30	ppb		10	81	unf	NJDEP 85
5247	96	sw	Cr	14.20	ppb		10	81	unf	NJDEP 85
5246	96	sw	Cu	7.50	ppb		10	81	unf	NJDEP 85
5248	96	sw	Ni	19.00	ppb		10	81	unf	NJDEP 85
5249	96	sw	Pb	23.30	ppb		10	81	unf	NJDEP 85
5250	96	sw	Zn	110.00	ppb		10	81	unf	NJDEP 85
5337	96	sw	tce	2.20	ppb		10	81	unf	NJDEP 85
5336	96	sw	tcle	1.60	ppb		10	81	unf	NJDEP 85
5338	96	sw	ttce	1.80	ppb		10	81	unf	NJDEP 85
5334	96	sw	CHCl3	2.40	ppb		10	81	unf	NJDEP 85
5335	96	sw	DiCle	25.90	ppb		10	81	unf	NJDEP 85
5332	96	sw	MeChl	38.30	ppb		10	81	unf	NJDEP 85
5333	96	sw	t-dce	3.40	ppb		10	81	unf	NJDEP 85
5339	96	sw	chlben	.30	ppb		10	81	unf	NJDEP 85
5275	119	sw	Ag	1.00	ppb		10	81	unf	NJDEP 85
5268	119	sw	As	1.40	ppb		10	81	unf	NJDEP 85
7107	119	sw	Be	1.00	ppb		10	81	unf	NJDEP 85

829910399

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
5269	119	sw	Cd	1.00	ppb		10	81	unf	NJDEP 85
5271	119	sw	Cr	12.00	ppb		10	81	unf	NJDEP 85
5270	119	sw	Cu	11.20	ppb		10	81	unf	NJDEP 85
5272	119	sw	Ni	28.00	ppb		10	81	unf	NJDEP 85
5273	119	sw	Pb	46.60	ppb		10	81	unf	NJDEP 85
5274	119	sw	Zn	245.00	ppb		10	81	unf	NJDEP 85
5348	119	sw	tce	2.80	ppb		10	81	unf	NJDEP 85
5347	119	sw	tcle	1.60	ppb		10	81	unf	NJDEP 85
5349	119	sw	ttce	9.40	ppb		10	81	unf	NJDEP 85
5313	119	sw	CHCL3	.01	ppb		10	85	unf	NJDEP 85
5345	119	sw	CHCl3	1.40	ppb		10	81	unf	NJDEP 85
5344	119	sw	MeChl	11.50	ppb		10	81	unf	NJDEP 85
5346	119	sw	3CL3Fle	10.80	ppb		10	81	unf	NJDEP 85

181 Records Processed

829910400

APPENDIX 22

POTENTIAL CONTAMINANTS GROUND WATER - LARGE SCALE MAP

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
4971	7	gw	As	.02	ppm	.01	6	77	unf Lt	JMA 77
4972	7	gw	As	.00	ppm	.01	6	77	unf Ht	JMA 77
5157	7	gw	As	.00	ppm	.02	7	77	fil Ht	JMA 77
5158	7	gw	As	.00	ppm	.02	7	77	fil Lt	JMA 77
4979	7	gw	Cd	.00	ppm	.05	6	77	unf Lt	JMA 77
4980	7	gw	Cd	.00	ppm	.05	6	77	unf Ht	JMA 77
7041	7	gw	Cd	.01	ppm	0.0003	6	77	fil Ht	JMA 77
7042	7	gw	Cd	.01	ppm	0.0003	6	77	fil Lt	JMA 77
4975	7	gw	Ni	.00	ppm	.20	6	77	unf Lt	JMA 77
4976	7	gw	Ni	.00	ppm	.20	6	77	unf Ht	JMA 77
7000	7	gw	Ni	.00	ppm	.10	7	77	fil Ht	JMA 77
7010	7	gw	Ni	.00	ppm	.10	7	77	fil Lt	JMA 77
4973	7	gw	Pb	.00	ppm	.50	6	77	unf Lt	JMA 77
4974	7	gw	Pb	.00	ppm	.50	6	77	unf Ht	JMA 77
7062	7	gw	Pb	.00	ppm	10	7	77	fil Lt	JMA 77
4977	7	gw	Zn	4.50	ppm		6	77	unf Lt	JMA 77
4978	7	gw	Zn	3.40	ppm		6	77	unf Ht	JMA 77
7019	7	gw	Zn	4.70	ppm		7	77	fil Ht	JMA 77
7031	7	gw	Zn	2.80	ppm		7	77	fil Lt	JMA 77
4981	8	gw	As	.00	ppm	.01	6	77	unf Lt	JMA 77
4982	8	gw	As	.00	ppm	.01	6	77	unf Ht	JMA 77
4988	8	gw	As	.00	ppm	.01	6	77	1-1.5'T	JMA 77
4989	8	gw	As	.00	ppm	.01	6	77	1' B	JMA 77
4999	8	gw	As	.00	ppm	.02	7	77	filter Ht	JMA 77
5000	8	gw	As	.00	ppm	.02	7	77	filter Lt	JMA 77
4987	8	gw	Cd	.00	ppm	.05	6	77	unf Lt	JMA 77
4995	8	gw	Cd	.00	ppm	.05	6	77	1-1.5'T	JMA 77
4996	8	gw	Cd	.00	ppm	.05	6	77	1' B	JMA 77
4997	8	gw	Cd	.00	ppm	.05	6	77	unf Ht	JMA 77
7043	8	gw	Cd	.00	ppm	.0003	6	77	fil Ht	JMA 77
7044	8	gw	Cd	.01	ppm	.0003	6	77	fil Lt	JMA 77
4985	8	gw	Ni	.00	ppm	.20	6	77	unf Lt	JMA 77
4986	8	gw	Ni	.00	ppm	.20	6	77	unf Ht	JMA 77
4991	8	gw	Ni	.00	ppm	.20	6	77	1-1.5'T	JMA 77
4992	8	gw	Ni	.00	ppm	.20	6	77	1' B	JMA 77
7001	8	gw	Ni	.00	ppm	.10	7	77	fil Ht	JMA 77
7011	8	gw	Ni	.00	ppm	.10	7	77	fil Lt	JMA 77
4983	8	gw	Pb	.00	ppm	.50	6	77	unf Lt	JMA 77
4984	8	gw	Pb	.00	ppm	.50	6	77	unf Ht	JMA 77
4990	8	gw	Pb	.00	ppm	.05	6	77	1-1.5'T	JMA 77
4998	8	gw	Pb	.00	ppm	.05	6	77	1'B	JMA 77
7063	8	gw	Pb	.00	ppm	10	7	77	fil Ht	JMA 77

829910402

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
7064	8	gw	Pb	.00	ppm	10	7	77	fil Lt	JMA 77
4969	8	gw	Zn	.07	ppm		6	77	unf Lt	JMA 77
4970	8	gw	Zn	.03	ppm		6	77	unf Ht	JMA 77
4993	8	gw	Zn	.24	ppm		6	77	1-1.5'T	JMA 77
4994	8	gw	Zn	.15	ppm		6	77	1' B	JMA 77
7029	8	gw	Zn	.07	ppm		6	77	unf Lt	JMA 77
7030	8	gw	Zn	.03	ppm		6	77	unf Ht	JMA 77
7020	8	gw	Zn	3.6	ppm		7	77	fil Ht	JMA 77
7032	8	gw	Zn	.02	ppm		7	77	fil Lt	JMA 77
5007	47	gw	As	.00	ppm	.01	6	77	1-1.5'T	JMA 77
5008	47	gw	As	.01	ppm	.01	6	77	1' B	JMA 77
5019	47	gw	As	.00	ppm	.02	7	77	filter Ht	JMA 77
5020	47	gw	As	.00	ppm	.02	7	77	filter Lt	JMA 77
5015	47	gw	Cd	.00	ppm	.05	6	77	1-1.5'T	JMA 77
5016	47	gw	Cd	.00	ppm	.05	6	77	1' B	JMA 77
5017	47	gw	Cd	.00	ppm	.05	6	77	unf Lt	JMA 77
5018	47	gw	Cd	.00	ppm	.05	6	77	unf Ht	JMA 77
7045	47	gw	Cd	.00	ppm	.0003	6	77	fil Ht	JMA 77
7046	47	gw	Cd	.00	ppm	.0003	6	77	fil Lt	JMA 77
5003	47	gw	Ni	.00	ppm	.20	6	77	unf Lt	JMA 77
5004	47	gw	Ni	.00	ppm	.20	6	77	unf Ht	JMA 77
5011	47	gw	Ni	.00	ppm	.20	6	77	1-1.5'T	JMA 77
5012	47	gw	Ni	.00	ppm	.20	6	77	1' B	JMA 77
7002	47	gw	Ni	.00	ppm	.10	7	77	fil Ht	JMA 77
7012	47	gw	Ni	.00	ppm	.10	7	77	fil Lt	JMA 77
5001	47	gw	Pb	.00	ppm	.50	6	77	unf Lt	JMA 77
5002	47	gw	Pb	.00	ppm	.50	6	77	unf Ht	JMA 77
5009	47	gw	Pb	.00	ppm	.05	6	77	1-1.5'T	JMA 77
5010	47	gw	Pb	.00	ppm	.05	6	77	1' B	JMA 77
5165	47	gw	Pb	.00	ppm	.01	7	77	filter Ht	JMA 77
5166	47	gw	Pb	.00	ppm	.01	7	77	filter Lt	JMA 77
5005	47	gw	Zn	.06	ppm		6	77	unf Lt	JMA 77
5006	47	gw	Zn	.04	ppm		6	77	unf Ht	JMA 77
5013	47	gw	Zn	.06	ppm		6	77	1-1.5'T	JMA 77
5014	47	gw	Zn	.15	ppm		6	77	1' B	JMA 77
7021	47	gw	Zn	.14	ppm		7	77	fil Ht	JMA 77
7033	47	gw	Zn	.04	ppm		7	77	fil Lt	JMA 77
5021	100	gw	As	.00	ppm	.01	6	77	unf Lt	JMA 77
5022	100	gw	As	.01	ppm	.01	6	77	unf Ht	JMA 77
5030	100	gw	As	.00	ppm	.01	6	77	1-1.5'T	JMA 77
5031	100	gw	As	.01	ppm	.01	6	77	1' B	JMA 77
5041	100	gw	As	.00	ppm	.02	7	77	filter Ht	JMA 77

829910403

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
5042	100	gw	As	.00	ppm	.02	7	77	filter Lt	JMA 77
5029	100	gw	Cd	.00	ppm	.05	6	77	unf Lt	JMA 77
5037	100	gw	Cd	.00	ppm	.05	6	77	1-1.5'T	JMA 77
5038	100	gw	Cd	.00	ppm	.05	6	77	1' B	JMA 77
5039	100	gw	Cd	.00	ppm	.05	6	77	unfHt	JMA 77
7047	100	gw	Cd	.00	ppm	.0003	6	77	fil Ht	JMA 77
7048	100	gw	Cd	.00	ppm	.0003	6	77	fil Lt	JMA 77
5025	100	gw	Ni	.00	ppm	.20	6	77	unf Lt	JMA 77
5026	100	gw	Ni	.00	ppm	.20	6	77	unf Ht	JMA 77
5033	100	gw	Ni	.00	ppm	.20	6	77	1-1.5'T	JMA 77
5034	100	gw	Ni	.00	ppm	.20	6	77	1' B	JMA 77
7003	100	gw	Ni	.00	ppm	.10	7	77	fil Ht	JMA 77
7013	100	gw	Ni	.00	ppm	.10	7	77	fil Lt	JMA 77
5023	100	gw	Pb	.00	ppm	.50	6	77	unf Lt	JMA 77
5024	100	gw	Pb	.00	ppm	.50	6	77	unf Ht	JMA 77
5032	100	gw	Pb	.00	ppm	.05	6	77	1-1.5'T	JMA 77
5040	100	gw	Pb	.00	ppm	.05	6	77	1'B	JMA 77
5027	100	gw	Zn	.19	ppm		6	77	unf Lt	JMA 77
5028	100	gw	Zn	.18	ppm		6	77	unf Ht	JMA 77
5035	100	gw	Zn	.25	ppm		6	77	1-1.5'T	JMA 77
5036	100	gw	Zn	.38	ppm		6	77	1' B	JMA 77
7022	100	gw	Zn	.04	ppm		7	77	fil Ht	JMA 77
7034	100	gw	Zn	.13	ppm		7	77	fil Lt	JMA 77
5051	112	gw	As	.00	ppm	.01	6	77	1-1.5'T	JMA 77
5052	112	gw	As	.00	ppm	.01	6	77	1' B	JMA 77
5061	112	gw	As	.00	ppm	.02	7	77	filter Ht	JMA 77
5062	112	gw	As	.00	ppm	.02	7	77	filter Lt	JMA 77
5049	112	gw	Cd	.00	ppm	.05	6	77	unfHt	JMA 77
5050	112	gw	Cd	.00	ppm	.05	6	77	unf Lt	JMA 77
5059	112	gw	Cd	.00	ppm	.05	6	77	1-1.5'T	JMA 77
5060	112	gw	Cd	.00	ppm	.05	6	77	1' B	JMA 77
7049	112	gw	Cd	.00	ppm	.0003	6	77	fil Ht	JMA 77
7050	112	gw	Cd	.00	ppm	.0003	6	77	fil Lt	JMA 77
5045	112	gw	Ni	.00	ppm	.20	6	77	unf Lt	JMA 77
5046	112	gw	Ni	.00	ppm	.20	6	77	unf Ht	JMA 77
5055	112	gw	Ni	.00	ppm	.20	6	77	1-1.5'T	JMA 77
5056	112	gw	Ni	.00	ppm	.20	6	77	1' B	JMA 77
7004	112	gw	Ni	.00	ppm	.10	7	77	fil Ht	JMA 77
7014	112	gw	Ni	.00	ppm	.10	7	77	fil Lt	JMA 77
5043	112	gw	Pb	.00	ppm	.50	6	77	unf Lt	JMA 77
5044	112	gw	Pb	.00	ppm	.50	6	77	unf Ht	JMA 77
5053	112	gw	Pb	.00	ppm	.05	6	77	1-1.5'T	JMA 77

829910404

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
5054	112	gw	Pb	.00	ppm	.05	6	77	1' B	JMA 77
5251	112	gw	Pb	.00	ppm	.01	7	77	filter Ht	JMA 77
5252	112	gw	Pb	.00	ppm	.01	7	77	filter Lt	JMA 77
5047	112	gw	Zn	.08	ppm		6	77	unf Lt	JMA 77
5048	112	gw	Zn	.08	ppm		6	77	unf Ht	JMA 77
5057	112	gw	Zn	.10	ppm		6	77	1-1.5'T	JMA 77
5058	112	gw	Zn	.17	ppm		6	77	1' B	JMA 77
7023	112	gw	Zn	.16	ppm		7	77	fil Ht	JMA 77
7035	112	gw	Zn	.15	ppm		7	77	fil Lt	JMA 77
5070	113	gw	As	.00	ppm	.01	6	77	1-1.5'T	JMA 77
5071	113	gw	As	.01	ppm	.01	6	77	1' B	JMA 77
5081	113	gw	As	.00	ppm	.02	7	77	filter Ht	JMA 77
5082	113	gw	As	.00	ppm	.02	7	77	filter Lt	JMA 77
5069	113	gw	Cd	.00	ppm	.05	6	77	unf Lt	JMA 77
5078	113	gw	Cd	.00	ppm	.05	6	77	1-1.5'T	JMA 77
5079	113	gw	Cd	.00	ppm	.05	6	77	1' B	JMA 77
5080	113	gw	Cd	.00	ppm	.05	6	77	unf Ht	JMA 77
7051	113	gw	Cd	.00	ppm	.0003	6	77	fil Ht	JMA 77
7052	113	gw	Cd	.00	ppm	.0003	6	77	fil Lt	JMA 77
5065	113	gw	Ni	.00	ppm	.20	6	77	unf Lt	JMA 77
5066	113	gw	Ni	.00	ppm	.20	6	77	unf Ht	JMA 77
5074	113	gw	Ni	.00	ppm	.20	6	77	1-1.5'T	JMA 77
5075	113	gw	Ni	.00	ppm	.20	6	77	1' B	JMA 77
5063	113	gw	Pb	.00	ppm	.50	6	77	unf Lt	JMA 77
5064	113	gw	Pb	.00	ppm	.50	6	77	unf Ht	JMA 77
5072	113	gw	Pb	.00	ppm	.05	6	77	1-1.5'T	JMA 77
5073	113	gw	Pb	.00	ppm	.05	6	77	1' B	JMA 77
5253	113	gw	Pb	.00	ppm	.01	7	77	filter Ht	JMA 77
5254	113	gw	Pb	.00	ppm	.01	7	77	filter Lt	JMA 77
5067	113	gw	Zn	.05	ppm		6	77	unf Lt	JMA 77
5068	113	gw	Zn	.04	ppm		6	77	unf Ht	JMA 77
5076	113	gw	Zn	.11	ppm		6	77	1-1.5'T	JMA 77
5077	113	gw	Zn	22.40	ppm		6	77	1' B	JMA 77
7024	113	gw	Zn	.11	ppm		7	77	fil Ht	JMA 77
7036	113	gw	Zn	.10	ppm		7	77	fil Lt	JMA 77
5090	114	gw	As	.00	ppm	.01	6	77	1-1.5'T	JMA 77
5091	114	gw	As	.00	ppm	.01	6	77	1' B	JMA 77
5101	114	gw	As	.00	ppm	.02	7	77	filter Ht	JMA 77
5102	114	gw	As	.00	ppm	.02	7	77	filter Lt	JMA 77
5089	114	gw	Cd	.00	ppm	.05	6	77	unf Lt	JMA 77
5098	114	gw	Cd	.00	ppm	.05	6	77	1-1.5'T	JMA 77
5099	114	gw	Cd	.00	ppm	.05	6	77	1' B	JMA 77

8299910405

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
5100	114	gw	Cd	.00	ppm	.05	6	77	unfHt	JMA 77
7053	114	gw	Cd	.0	ppm	.0003	6	77	fil Ht	JMA 77
7054	114	gw	Cd	.00	ppm	.0003	6	77	fil Lt	JMA 77
7006	114	gw	Ni	.00	ppm	.10	7	77	fil Ht	JMA 77
5085	114	gw	Ni	.00	ppm	.20	6	77	unf Lt	JMA 77
5086	114	gw	Ni	.00	ppm	.20	6	77	unf Ht	JMA 77
5094	114	gw	Ni	.00	ppm	.20	6	77	1-1.5'T	JMA 77
5095	114	gw	Ni	.00	ppm	.20	6	77	1' B	JMA 77
7015	114	gw	Ni	.00	ppm	.10	7	77	fil Lt	JMA 77
5083	114	gw	Pb	.00	ppm	.50	6	77	unf Lt	JMA 77
5084	114	gw	Pb	.00	ppm	.50	6	77	unf Ht	JMA 77
5092	114	gw	Pb	.00	ppm	.05	6	77	1-1.5'T	JMA 77
5093	114	gw	Pb	.00	ppm	.05	6	77	1' B	JMA 77
5255	114	gw	Pb	.00	ppm	.01	7	77	filter Ht	JMA 77
5256	114	gw	Pb	.00	ppm	.01	7	77	filter Lt	JMA 77
5087	114	gw	Zn	.04	ppm		6	77	unf Lt	JMA 77
5088	114	gw	Zn	.02	ppm		6	77	unf Ht	JMA 77
5096	114	gw	Zn	.03	ppm		6	77	1-1.5'T	JMA 77
5097	114	gw	Zn	.16	ppm		6	77	1' B	JMA 77
7025	114	gw	Zn	.04	ppm		7	77	fil Ht	JMA 77
7037	114	gw	Zn	.02	ppm		7	77	fil Lt	JMA 77
5103	115	gw	As	.08	ppm	.01	6	77	unf Lt	JMA 77
5104	115	gw	As	.07	ppm	.01	6	77	unf Ht	JMA 77
5257	115	gw	As	.00	ppm	.02	7	77	filter Ht	JMA 77
5258	115	gw	As	.00	ppm	.02	7	77	filter Lt	JMA 77
5111	115	gw	Cd	.00	ppm	.05	6	77	unf Lt	JMA 77
5112	115	gw	Cd	.00	ppm	.05	6	77	unf Ht	JMA 77
7055	115	gw	Cd	.00	ppm	.0003	6	77	fil Ht	JMA 77
7056	115	gw	Cd	.01	ppm	.0003	6	77	fil Lt	JMA 77
7065	115	gw	Cd	.00	ppm	10	7	77	fil Ht	JMA 77
5107	115	gw	Ni	.00	ppm	.20	6	77	unf Lt	JMA 77
5108	115	gw	Ni	.00	ppm	.20	6	77	unf Ht	JMA 77
7016	115	gw	Ni	.00	ppm	.10	7	77	fil Lt	JMA 77
7007	115	gw	Ni	.00	ppm	.10	7	77	fil Ht	JMA 77
5105	115	gw	Pb	.00	ppm	.50	6	77	unf Lt	JMA 77
5106	115	gw	Pb	.00	ppm	.50	6	77	unf Ht	JMA 77
7066	115	gw	Pb	.00	ppm	10	7	77	fil Lt	JMA 77
5109	115	gw	Zn	.05	ppm		6	77	unf Lt	JMA 77
5110	115	gw	Zn	.02	ppm		6	77	unf Ht	JMA 77
7026	115	gw	Zn	.09	ppm		7	77	fil Ht	JMA 77
7038	115	gw	Zn	.10	ppm		7	77	fil Lt	JMA 77
5113	116	gw	As	.03	ppm	.01	6	77	unf Lt	JMA 77

829910406

MAP2DATA.. 07:42:14 27 SEP 1985

STATION	SAMPLE....	CONTAMINANT	VALUE.....	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
5114	116	gw	As	.01 ppm	.01	6	77	unf Ht	JMA 77
5121	116	gw	As	.01 ppm	.01	6	77	1-1.5'T	JMA 77
5122	116	gw	As	.03 ppm	.01	6	77	1' B	JMA 77
5133	116	gw	As	.00 ppm	.02	7	77	filter Ht	JMA 77
5134	116	gw	As	.00 ppm	.02	7	77	filter Lt	JMA 77
5129	116	gw	Cd	.00 ppm	.05	6	77	1-1.5'T	JMA 77
5130	116	gw	Cd	.00 ppm	.05	6	77	1' B	JMA 77
5131	116	gw	Cd	.00 ppm	.05	6	77	unf Ht	JMA 77
5132	116	gw	Cd	.00 ppm	.05	6	77	unf Lt	JMA 77
7057	116	gw	Cd	.01 ppm	.0003	6	77	fil Ht	JMA 77
7058	116	gw	Cd	.00 ppm	.0003	6	77	fil Lt	JMA 77
5117	116	gw	Ni	.00 ppm	.20	6	77	unf Lt	JMA 77
5118	116	gw	Ni	.00 ppm	.20	6	77	unf Ht	JMA 77
5125	116	gw	Ni	.00 ppm	.20	6	77	1-1.5'T	JMA 77
5126	116	gw	Ni	.00 ppm	.20	6	77	1' B	JMA 77
7008	116	gw	Ni	.00 ppm	.10	7	77	fil Ht	JMA 77
7017	116	gw	Ni	.00 ppm	.10	7	77	fil Lt	JMA 77
5115	116	gw	Pb	1.40 ppm	.50	6	77	unf Lt	JMA 77
5116	116	gw	Pb	.00 ppm	.50	6	77	unf Ht	JMA 77
5123	116	gw	Pb	1.00 ppm	.05	6	77	1-1.5'T	JMA 77
5124	116	gw	Pb	3.00 ppm	.05	6	77	1' B	JMA 77
5259	116	gw	Pb	.00 ppm	.01	7	77	filter Ht	JMA 77
5260	116	gw	Pb	.00 ppm	.01	7	77	filter Lt	JMA 77
5119	116	gw	Zn	11.20 ppm		6	77	unf Lt	JMA 77
5120	116	gw	Zn	2.80 ppm		6	77	unf Ht	JMA 77
5127	116	gw	Zn	21.30 ppm		6	77	1-1.5'T	JMA 77
5128	116	gw	Zn	25.20 ppm		6	77	1' B	JMA 77
7027	116	gw	Zn	.01 ppm		7	77	fil Ht	JMA 77
7039	116	gw	Zn	.30 ppm		7	77	fil Lt	JMA 77
5135	117	gw	As	.00 ppm	.01	6	77	unf Lt	JMA 77
5136	117	gw	As	.00 ppm	.01	6	77	unf Ht	JMA 77
5144	117	gw	As	.00 ppm	.01	6	77	1-1.5'T	JMA 77
5145	117	gw	As	.00 ppm	.01	6	77	1' B	JMA 77
5155	117	gw	As	.00 ppm	.02	7	77	filter Ht	JMA 77
5156	117	gw	As	.00 ppm	.02	7	77	filter Lt	JMA 77
5143	117	gw	Cd	.00 ppm	5	6	77	unf Lt	JMA 77
5151	117	gw	Cd	.00 ppm	.05	6	77	1-1.5'T	JMA 77
5152	117	gw	Cd	.00 ppm	.05	6	77	1' B	JMA 77
5153	117	gw	Cd	.05 ppm	.05	6	77	unf Ht	JMA 77
7059	117	gw	Cd	.01 ppm	.0003	6	77	fil Ht	JMA 77
7060	117	gw	Cd	.01 ppm	.0003	6	77	fil Lt	JMA 77

8299910407

MAP2DATA..	STATION	SAMPLE....	CONTAMINANT	VALU	UNITS.	LIMIT.	MONTH	YEAR	DESCIPTION.....	REF.....
7068	117	gw	Cd	.0	ppm	10	7	77	fil Lt	JMA 77
5139	117	gw	Ni	.00	ppm	.20	6	77	unf Lt	JMA 77
5140	117	gw	Ni	.00	ppm	.20	6	77	unf Ht	JMA 77
5147	117	gw	Ni	.00	ppm	.20	6	77	1-1.5'T	JMA 77
5148	117	gw	Ni	.02	ppm	.20	6	77	1' B	JMA 77
7009	117	gw	Ni	.00	ppm	.10	7	77	fil Ht	JMA 77
7018	117	gw	Ni	.00	ppm	.10	7	77	fil Lt	JMA 77
5137	117	gw	Pb	.00	ppm	.50	6	77	unf Lt	JMA 77
5138	117	gw	Pb	.00	ppm	.50	6	77	unf Ht	JMA 77
5146	117	gw	Pb	.00	ppm	.05	6	77	1-1.5'T	JMA 77
5154	117	gw	Pb	.00	ppm	.05	6	77	1'B	JMA 77
7067	117	gw	Pb	.00	ppm	10	7	77	fil Ht	JMA 77
5141	117	gw	Zn	.05	ppm		6	77	unf Lt	JMA 77
5142	117	gw	Zn	.04	ppm		6	77	unf Ht	JMA 77
5149	117	gw	Zn	.09	ppm		6	77	1-1.5'T	JMA 77
5150	117	gw	Zn	.28	ppm		6	77	1' B	JMA 77
7028	117	gw	Zn	.05	ppm		7	77	fil Ht	JMA 77
7040	117	gw	Zn	.04	ppm		7	77	fil Lt	JMA 77

271 Records Processed

8299910408