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FINAL REMEDIAL ACTION REPORT
FOR
VARIOUS REMOVAL ACTIONS AT THE DERECKTOR SHIPYARD
AND MISCELLANEOUS INVESTIGATIONS AT
NAVAL STATION NEWPORT (NSN)
NEWPORT, RHODE ISLAND

Issued:

July 25, 2002

Prepared for:

Naval Facilities Engineering Command
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N62472-99-D-0032	**0035**	**Naval Station Newport - Newport, RI**

PROJECT TITLE:
Closeout Report and Response to Comments – Derecktor Shipyard

FROM:	DATE
Foster Wheeler Environmental Corp.: Program QC Manager Thomas Kelly	July 25, 2002
TO:	DATE
S. Beebe (CD-Copy)	July 25, 2002

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Thomas Joseph Kelly JULY 25, 2002
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ITEM NO.	SUBMITTAL DESCRIPTION	PREPARED/ SUBMITTED BY	APPROVED	DISAPPROVED	REMARKS
1	SD-18, Records; Final Remedial Action Report for Various Removal Actions at the Derecktor Shipyard and Miscellaneous Investigations (R3)	Thomas Kelly			

FOSTER WHEELER ENVIRONMENTAL CORPORATION

July 25, 2002
File #2282-0035-02-0152

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Boston, MA 02114-2023

Mr. Paul Kulpa
Office of Waste Management
Rhode Island Department of Environmental Management
235 Promenade Street
Providence, RI 02908

Dear Ms. Keckler and Mr. Kulpa:

Foster Wheeler Environmental Corporation is pleased to present, on behalf of the US Navy, the Final Remedial Action Report for Various Removal Actions at the Derecktor Shipyard and Miscellaneous Investigations at Naval Station Newport (NSN), Newport, Rhode Island. Included with this letter are responses to USEPA and RIDEM comments on the previous Draft Final Remedial Action Report.

Should you have any questions or comments, please address them to Mr. Jim Shafer at EFANE, Lester, PA at (610) 595-0567 x241.

Very truly yours,

Thomas Joseph Kelly
for

Alan Finio
Project Manager

cc: S. Beebe – EFANE
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I. INTRODUCTION

I.A. ACTIVITY HISTORY

Government involvement with lands in the Newport, Rhode Island area dates to the mid-1600s when property was first purchased from the Aquidneck Indians. Throughout the 1700s and 1800s, the presence of the US Navy grew in the Newport area with the development of naval training facilities and the establishment of the Naval War College. Military activities increased sharply at the outbreak of World War I and again at the start of World War II.

Coddington Cove was acquired in 1940 for use as a supply station. Prior to this time, the Coddington Cove area was farmland with few buildings. During World War II, the Coddington Cove area experienced major development, including construction of barracks, warehouse space, and hundreds of Quonset huts. Although naval activity diminished following the end of World War II, some construction at Coddington Cove continued. In 1955, Pier 1 was completed to replace pier space lost in 1954 to Hurricane Carol. The adjacent Pier 2 was added in 1957. See Figure 1.

In 1962, Newport became headquarters to the Commander Cruiser-Destroyer Force Atlantic. Dozens of naval warships and auxiliary support ships were home-ported at Newport.

This use of the Coddington Cove area continued until the April 17, 1973, announcement of the Navy's Shore Establishment Realignment (SER) Program. The SER resulted in a reorganization of naval forces at Newport and the transfer of ships and activities to other naval stations. The SER also directed transferring or excessing non-essential land and facilities. The 41 acres of land leased to RIPAEDC and subleased to Derecktor Shipyard was included in the excessing package. The Derecktor Shipyard operated from 1979 until January 1992, when Derecktor filed for Chapter 11 bankruptcy.

The site was used by Derecktor to repair, maintain, and construct private and military ships. Repair and maintenance operations were concentrated around Pier 1. These operations consisted of grit blasting and painting, hull inspections, and other on-board ship repairs. Floating dry docks were moored at Pier 1. A large ferry known as the Greenport Ferry was moored between Buildings A18 and 234 and used as workspace.

Derecktor also constructed new ships under contract to the US Coast Guard and the US Army. These ships were steel-structured, such as cutters and tugboats, built from the keel up, and outfitted for initial sea trials. Construction included cutting and welding steel, grit blasting, priming and painting the structure, and assembling the ship. Ship assembly was primarily conducted in Building 234. Supporting the ship maintenance and construction operations was an engineering department, a machine shop, an electrical shop, a pipe shop, and a vehicle maintenance shop.

I.B SURROUNDING LAND USE

The former Derecktor Shipyard area is surrounded entirely by the US naval facilities. The Naval Station Newport Facilities (NAVSTA) are generally situated at a higher elevation than those at Derecktor Shipyard. The majority of the NAVSTA buildings surrounding the site are used for administration, training or naval research.

Abutting the site to the south is a NAVSTA public works garage and vehicle maintenance building, and an oil-fired heating plant. The public works transportation shop and heating plant directly abut the Derecktor property and are immediately south of Buildings 3 and 5, respectively.

Further south of the site (approximately 500 yards) is a military housing development (Range Road). Additional housing (Simonpietri Drive) is present 150 yards east of the site (up gradient). Commercial fishermen use Coddington Cove for lobster and crab fishing. The Navy has mothballed ships secured in this area and this area is restricted, but generally there are no restrictions on access to the shipyard by water.

No natural fresh water bodies were observed within the Derecktor Shipyard. Approximately 80 percent of the shipyard is covered by buildings or pavement. Because precipitation cannot readily percolate through paved surfaces, water will tend to accumulate on the ground surface, which, in this case, consists of depressions in the pavement.

I.C GEOLOGY

NAVSTA is located at the southeastern end of the Narragansett Basin. Narragansett Basin is an ancient north to south trending structural basin originating near Hanover, Massachusetts.

The bedrock of the Narragansett Basin has been divided into the following five units: the Rhode Island Formation, Dighton Conglomerate, Wansulta Formation, Pondville Conglomerate, and Felsite at Diamond Hill. At NAVSTA and most of the surround area, the bedrock is composed entirely of the Rhode Island Formation.

Included within the Rhode Island Formation are the fine to coarse conglomerate, sandstone, lithic graywacke, arkose, shale, and a small amount of meta-anthracite and anthracite. Most of the rock is gray, dark gray, and greenish, but the shale and anthracite are often black. Cross bedding and irregular, discontinuous bedding is characteristic of the formation. Rock is the southern portion of the basin, where the NAVSTA is located, is metamorphosed, and contains quartz-mica schist, feldspathic quartzite, garnet-staurolite schist, and some quartz-mica-sillimanite schist. The beds of meta-anthracite and anthracite are mostly thin, but many areas within the basin have been mined. Vein quartz, fibrous quartz, and pyrite are commonly associated with these coal layers, and the ash content is high.

I.D HYDROGEOLOGY

Many areas on Aquidneck Island, on which NAVSTA is located, obtain their water supply from wells. Areas relying on groundwater are mostly north of the Middletown area, but wells exist throughout the island. Most groundwater is used for domestic needs, although some is used by small industries and businesses.

Groundwater on Aquidneck Island is obtained from the unconsolidated glacial deposits of till and outwash and from the underlying Pennsylvanian bedrock. Throughout the area, depth to groundwater ranges from less than 1 foot to about 30 feet, depending upon the topographic location, time of year, and character of subsurface deposits. The average depth to groundwater is approximately 14 feet on Aquidneck Island.

The chemical characteristics of the groundwater are similar throughout the area; water quality is generally satisfactory for most ordinary uses. Most groundwater in the area is soft or only moderately hard.

The groundwater at NAVSTA is shallow (less than 10 feet below the surface in most areas). The soils occurring at NAVSTA have permeability's that are moderate to moderately rapid, so they do not restrict the vertical movement of water.

The Rhode Island Department of Environmental Management (RIDEM) has established a state and groundwater classification system to protect groundwater resources. The groundwater at Derecktor Shipyard is classified as GB. Groundwater classified as GB may not be suitable for drinking water without treatment due to known or presumed degradation.

I.E FINDINGS OF THE PRELIMINARY SITE ASSESSMENT

- Derecktor Shipyard operation generated large quantities of hazardous waste. These wastes included waste oil, paints, solvents, thinner, sodium hydroxide, and other waste solids and liquids.

- Housekeeping and hazardous material handling practices at the facility were poor. General debris and scrap materials were widely scattered around the facility.

- Waste materials were known to be disposed of on the property, including spent blast grit, oily liquids, and bilge water from the dry dock. These liquids were reportedly placed in a small pit on the northern side of Building 42, which has since been filled.

- Releases of hazardous material to the ground in the hazardous waste storage area (North Waterfront) and the pipe shop (Building 6) are suspected but have not been confirmed.

- Interior areas of some buildings, most notably Buildings 42, 234, and 6, have been significantly impacted by Derecktor Shipyard operations. Depending on the intended reuse of these buildings, significant cleaning or floor and wall restoration may be necessary.

- The presence of asbestos-containing materials (ACM) is suspected in most of the buildings. If renovation or demolition of the buildings is intended, the presence of ACM would need to be confirmed.

- The primary pathways for contaminants to migrate from the site would be through the storm drain system and groundwater flow. Coddington Cove would be the primary receptor of the contaminants through these pathways.

I.F RECENT ACTIVITIES

Since the Preliminary Site Assessment was issued, the site has undergone several major changes. Derecktor Shipyard's oversized Building 234 was removed, leaving the original Building 234 damaged, but in place, with the north and south walls demolished. All the material, machinery, and equipment in this building have been removed. Buildings 40 and 41 and Huts 3 and 4 were removed. The dry docks were removed, and the Greenport Ferry, once tied at the base of the pier to Building A18, was removed.

After bankruptcy proceedings, and during the shutdown and auction of the saleable materials, debris from building demolition and unwanted material was scattered throughout the site. NAVSTA Newport has performed a surface cleaning at the site that consisted of removing remaining debris, surface cleaning grossly contaminated concrete, and closing and removing underground storage tanks (USTs).

In August 1995, NAVSTA contracted with OHM Corp to perform a removal action to excavate and dispose of sandblast grit that was known to be present on the ground to the north and east of Building 42. OHM removed this material, and covered the exposed ground with a sand and crushed stone mix. As part of this effort, the embankment to the east of Building 42 was excavated and repaired.

The Preliminary Assessment did not include the area designated as the South Waterfront as a part of the study area. NAVSTA representatives have indicated that this area has had fill materials placed on it by Robert E. Derecktor Inc. so it was evaluated as a part of the Site Assessment Screening Evaluation (SASE) Report, which is summarized here.

I.G. SITE ASSESSMENT SCREENING EVALUATION CONTAMINANTS DETECTED

Assessment findings indicate that several different contaminant groups are associated with different locations. Contaminants present in the soils and groundwater are localized ("hot spots"), and do not represent a site wide contamination situation. So called "hot spots" are summarized below:

- Elevated concentrations of phenolic compounds and PAHs were detected in the area around Huts 1 & 2 (TP16 and TP17). Surficial contamination in this area indicates that the contaminants can probably be associated with the former activities of the vehicle maintenance operations, which were performed in these huts. None of the noted compounds exceeded the Rhode Island Residential Direct Exposure Criteria. No further remedial activities were undertaken with regard to this area.

- Elevated concentrations of PCBs, PAH compounds and metals were found in the unpaved areas northeast of Building 6 (TP14), which receives surface runoff from the Penn-Central Railway, the electrical transformer pad, and the paved areas east of Building 6. The former "pipe shop" was located in the northeast corner of Building 6 and is suspected to discharge to this area. Concentrations of PCBs and Arsenic were found to exceed the Rhode Island Residential as well as the Industrial/Commercial Direct Exposure Criteria. Remedial activities performed with regard to this area are summarized in Part II C 'Test Pit 14 – PCB Contaminated Soil Removal' and detailed in Part III C 'Test Pit 14 – PCB Contaminated Soil Removal'.

- Elevated concentrations of PAHs and metals were found in the former location of a bilge water disposal area north of Building 42 (MW05). Concentrations of Arsenic were found to exceed the Rhode Island Residential as well as the Industrial/Commercial Direct Exposure Criteria. Further investigational as well as remedial activities were performed with regard to this area. These activities are summarized in Part II E 'Exploratory Trenching, Former Disposal Pits' and detailed in Part III E 'Exploratory Trenching, Former Disposal Pits'.

- Elevated concentrations of pesticides and leachable metals were detected in the area south of Building 42 (MW07 and TP11), which was a former bulk material storage area. Concentrations of Arsenic were found to exceed the Rhode Island Residential as well as the Industrial/Commercial Direct Exposure Criteria. No further remedial activities were undertaken with regard to this area.

- Elevated concentrations of phthalate compounds were detected in the soils south of Building 234 (TP07 and TP08), which was an area of suspected chemical discharge described in the preliminary assessment report. Concentrations of Bis(2-ethylhexyl)phthalate were found to exceed the Rhode Island Residential as well as the Industrial/Commercial Direct Exposure Criteria. Additional investigational activities were performed in this area. These activities are summarized in Part II F 'Test Pit (7 Feet South of MW-09)' and detailed in Part III F 'Test Pit (7 Feet South of MW-09)'.

- High concentrations of semivolatile organic compounds and butyltin compounds were detected in the soils under Building 42, apparently due to past discharges from sumps within the building. Concentrations of some of the noted compounds were found to exceed the Rhode Island Residential Direct Exposure Criteria but not the Industrial/Commercial Direct Exposure Criteria. Remedial activities performed with regard to this area are summarized in Part II B 'Building 42 S42-1 Sump Pit Removal' and Part II D 'Building 42 S42-5 Sump Investigation and Remediation' and detailed in Part III B 'Building 42 S42-1 Sump Pit Removal' and Part III D 'Building 42 S42-5 Sump Investigation and Remediation'.

- Petroleum contaminants were found in the former parking area east (up gradient) of Huts 1 & 2, however, this contamination appears to be a result of up gradient releases from former USTs. This situation is being investigated as part of a separate study.

- Low concentrations of fuel components were detected in the shallow soils north of Building 234, which are expected to be residual contaminants from former USTs in this area. No fuel components exceeded the Rhode Island Residential Direct Exposure Criteria. No further remedial activities were undertaken with regard to this area.

I.H. SITE ASSESSMENT SCREENING EVALUATION – OTHER FINDINGS

- Blasting grit, which was found widely scattered across the site during the Preliminary Assessment, was removed in 1995 by OHM Corporation. The results of the soil analysis from samples collected under these former locations indicate that metals did not leach into the soils from the sand blast grit. In addition, no large deposits of sand blast grit were found.

- The soil piles in the South Waterfront were found to be most likely excavated soils from other portions of the base. While concrete and other evidence of demolition debris were noted, no large quantities of waste material was present. Remedial activities performed with regard to this area are summarized in Part II A 'Derecktor Shipyard Berm Removal (South Waterfront)' and detailed in Part III A 'Derecktor Shipyard Berm Removal (South Waterfront)'.

I.I. PRESENTATION OF LABORATORY DATA

- The comparative criteria for all remedial and investigative work at Derecktor Shipyard was the Rhode Island Residential and Commercial/Industrial Direct Exposure Criteria (March 31, 1993, amended August 1996)

- All laboratory data is presented in designated appendices.

- Each laboratory data appendix begins with a data summary sheet followed by the raw laboratory data.

- All data summary sheets are organized to directly compare the obtained laboratory results to both the Rhode Island Residential Direct Exposure Criteria and the Rhode Island Commercial/Industrial Direct Exposure Criteria.

- All obtained laboratory results that exceed the Rhode Island Residential Direct Exposure Criteria are highlighted on associated data summary sheets.

- Laboratory analysis sometimes included compounds that were additional to those requested and required under the state of Rhode Island's Direct Exposure Criteria (DEC). The analytical results for these compounds are reported in the raw data, but are not included on the data summary sheets in order to present a consistent reporting format across multiple samples when comparing results only to the Rhode Island DEC.

II. OPERABLE UNIT BACKGROUND

II.A. DERECKTOR SHIPYARD BERM REMOVAL (SOUTH WATERFRONT)

- Clear and grub the site to gain accesses to the berms and establish working areas;
- Remove material associated with the berms;
- Material that is removed, to be sampled and tested to determined optimum disposal. Disposal options are offsite disposal, onsite disposal, recycling or a combination.
- Segregate soil, and debris such as concrete, wood, plastics, asphalt, and metals for recycling and disposal options;
- Establish a final grade that slopes evenly from the existing steam line to the high water elevation of the Narragansett Bay;
- Maintain the existing shoreline stabilization by adding riprap to the existing stabilized areas and stabilizing with riprap the two outfall pipes, which currently discharge into the Narragansett Bay.
- Saw-cut, remove, and dispose of the elevated concrete wall which was an extension of the existing retaining wall;
- Remove the existing fence adjacent to the steam line and install fencing adjacent to the retaining wall, securing the abandoned Derecktor slab area;
- Properly dispose of all wastes generated;
- Seed and mulch affected areas.

II.B. BUILDING 42 S42-1 SUMP PIT REMOVAL

- Remove and containerize the water contained within the sump pit;
- Remove the steel plated sump and surrounding concrete to gain access to the contaminated soils;
- Remove the contaminated soils;
- Obtain confirmatory samples from within the excavation;
- Restore the disturbed area by placing 3 inch minus material within the excavation;
- Characterize and dispose of all wastes generated;
- Secure the exposed area, in the floor, created by the removal of the sump pit.

II.C. TEST PIT 14 – PCB CONTAMINATED SOIL REMOVAL

- Field screen and remove contaminated soils;
- Sample the perimeter and possible source areas near test pit 14 to determine the extent of contamination;
- Take confirmatory samples from within the excavation area;
- Characterize and dispose of all wastes generated;
- Restore the disturbed area.

II.D. BUILDING 42 S52-5 SUMP INVESTIGATION AND REMEDIATION

- Remove sump water and pump it to the POTW;
- Excavate and expose concrete sump and valve chamber;
- Excavate and field screen surrounding soils and segregate for disposal or backfill use;
- Characterize and dispose of all wastes generated;
- Investigate all inlet/outlet pipes from the sump and valve chamber;
- Remove and dispose all piping;
- Demolish and remove sump and valve chamber;
- Take confirmation soil samples;
- Restore all disturbed areas.

II.E. EXPLORATORY TRENCHING, FORMER DISPOSAL PITS

- Perform exploratory trenching in the area northeast of Building 42 and field screen soils for volatile organics;
- Sample areas within the trench that indicate signs of contamination;
- Remove and dispose (as directed) of areas of contamination.

II.F. TEST PIT (7 FEET SOUTH OF MW-09)

- Sample and analyze the reddish soil at a location that is 7 feet south of MW-09.

II.G. SOUTH OF PIER 1 (SAMPLING FOR PCBs)

- Sample and analyze for the presence of PCBs adjacent to, and south of Pier 1.

II.H. BUILDING 54, SUBSTATION 16 (SAMPLING FOR PCBs)

- Sample upgradient and down gradient of the transformer pad for the presence of PCBs at what was once known as the Building 54 Substation 16.

II.I. STANDARDS

- The Rhode Island Residential and Industrial/Commercial Direct Exposure Criteria is to be used as the analytical chemical standard, for all investigations, removals and disposals.

III. CONSTRUCTION ACTIVITIES

III.A DERECKTOR SHIPYARD BERM REMOVAL (SOUTH WATERFRONT)

III.A.1 Pre-Field Work Preparation

Foster Wheeler Environmental Corp. (FWENC) obtained a dig safe permit from the Naval Education and Training Center (NAVSTA) prior to the start of the excavation. A dig safe permit was received on September 15, 1997 to begin the removal of the berms.

III.A.2 Mobilization and Duration

Mobilization began with site preparation activities on September 15, 1997 and continued with berm removal and site restoration activities through November 6, 1998. See Figure 2.

III.A.3 Site Preparation

Security for the work area was achieved by installing a temporary four-foot high fence along the northern and southern ends of the berm-removal area. This four-foot high fence was attached to the existing chain-link fence adjacent to the steam line. These fences secured the work area. Warning signs posted in the area included the following: "DANGER, Authorized Personnel Only", "Caution, Eye Protection and Hard Hat Must be Worn in This Area", "No Smoking, Matches, or Open Flames", and "DANGER Hearing Protection Required in This Area". These control measures remained in place for the duration of the work until all hazards were eliminated or removed.

The site was cleared of vegetation with a hydraulic excavator with a flail mower attachment. The excavator's attachment chipped vegetation to the ground surface. The chipped vegetation was spread evenly over the ground surface during the mowing process. All stumps and root mass were removed and disposed of off-site at a Navy approved facility. The chipped vegetation was removed with the soils during excavation.

III.A.4 Berm Removal

A Komatsu PC 400 hydraulic excavator was used to excavate the berm material. Segregation of the soils from the debris was achieved by selective excavation and manual removal. Debris consisted of plastic bottles, old tires, concrete, asphalt, miscellaneous steel debris, wooden timbers and planking. The material was loaded directly into dump trucks and relocated to staging areas. There were two staging areas. One area was on the large concrete slab area, which was referred to as the Building 234 area. The other area was directly east of the building 234 area on the upper side of the concrete retaining wall. A Komatsu WA 450 Loader was used to process delivered loads. Soils were placed in 100 cubic yard stockpiles. Asphalt debris laden soils were also placed in 100 cubic yard stockpiles.

All soil stockpiles generated during the berm removal were tracked utilizing a working field sketch, shown in this report as Figure 3. Each 100 cubic yard stockpile is represented on the sketch with a stockpile number inside a circle. These Stockpile 'circles' are clustered together in

groups designated by a Section Number (SN) that indicates which of the six section of the berm that particular pile came from. The berm was divided up into six equal size sections, designated as I, II, III, IV, V & VI. The sketch also indicates which of the two types of soil they are by their location within the stockpile staging area. As noted before, there were two types of soils placed in this area. One type was 'as found' berm soils laden with asphalt and the other type as 'as found' berm soils not laden with asphalt debris. Stockpiles of asphalt debris-laden soils are designated on the sketch (Figure 3) as 'Asphalt mix' or Asphalt'.

In the field, each pile was clearly identified by a sign placed at each pile identifying its' Section Number, stockpile number and if it was asphalt-laden or not. This allowed the field crew to track stockpile status for sampling/analysis as well as disposal efforts.

Segregated debris such as rubber, wood, plastics, and metals were placed into roll-off containers. Concrete was segregated and placed into two separate stockpiles stained and unstained. All stockpiles were surrounded by hay bales to prevent erosion of soils from the staging areas.

During the soil removal, a Flame Ionization Detector (FID) was used for continuous field screening to monitor total Volatile Organic Compounds (VOCs). FID readings along with visual field observations were also used to segregate potentially impacted soils from unimpacted soils. Potentially impacted soils were staged on and covered with 10-mil polyethylene sheeting.

III.A.5 Soil Classification

The entire berm was divided into six equal sections. As soils were removed and placed into 100 cubic yard stockpiles, the first two 100 cubic yard stockpiles generated from each section had a five-point composite sample collected and analyzed for the following: VOCs (EPA Method 8260), SVOCs (EPA Method 8270), RCRA Metals (EPA Method 6010 and 7471A for mercury), EDB (EPA Method 8260), TPH (EPA Method 418.1), and PCBs (EPA Method 8080). The analytical results were then reviewed and compared to the Rhode Island Direct Exposure Criteria. Appendix A includes a data summary and laboratory reports for these samples..

A review of the analytical results indicate that there were exceedances of the Rhode Island Residential Direct Exposure Criteria for semivolatiles and a metal, specifically Arsenic. Exceedances of the Rhode Island Industrial/Commercial Direct Exposure Criteria were for only Arsenic. These exceedances are presented in Table 1.

The remaining 100 cubic yard stockpiles from each section were analyzed for total Lead/total Arsenic (EPA Method 6010A), and PCBs (EPA Method 8080). The analysis from these samples was also compared to the Rhode Island Residential Direct Exposure Criteria. The results of this comparison showed that all soils exceeded the Residential Standards for Arsenic, a portion exceeded for Lead and none exceeded the PCB criteria.

Appendix A includes a report presented to the Navy in 1997, summarizing the results of the stockpile soil classification. This report includes tables summarizing the results of the lead/arsenic/PCBs analysis for all of the Berm-Removal soil stockpiles. Appendix A also includes a majority of the laboratory reports for the lead/arsenic/PCB sample analysis. While compiling Appendix A for this report, it was discovered that hardcopy of 1997 laboratory data reports for some lead/arsenic/PCB stockpile samples were missing. The laboratory, MITKEM,

spent several weeks attempting to recover the missing reports from their archives, but was unsuccessful. A table listing the missing laboratory reports has been included with Appendix A.

As discussed below and in Section III.A.9, asphalt stockpiles were all shipped to an approved off-site facility for disposal and were not sampled under this task.

Soil Disposal Screening

The Navy reached an agreement with RIDEM, that stated any soils which contained asphalt debris or contained Arsenic levels above 12 ppm or Lead levels above 150 ppm would be transported off-site for disposal. Soils which were free of debris and with Arsenic level at 12 ppm or below or with lead levels at 150 ppm or below could be re-utilized as backfill material at Tank Farm 4.

Table 1 – Berm Removal Soil Classification Sample Results: Exceedances of Residential Criteria

Analyte→		Acenaphthene	Benzo(a)pyrene	Benzo(b)fluoranthene	Chysene	Arsenic
RIDEM DEC→	Residential	43	0.4	0.9	0.4	1.7
RIDEM DEC→	Industrial/ Commercial	10,000	0.8	7.8	780	3.8
Section 1	Pile 1	-	-	-	-	19
	Pile 2	-	-	-	-	11
Section 2	Pile 1	-	-	-	-	12
	Pile 2	-	-	-	-	11
Section 3	Pile 1	-	-	-	-	10
	Pile 2	-	-	-	-	8
Section 4	Pile 1	-	-	-	-	11
	Pile 2	-	-	-	-	13
Section 5	Pile 1	98	-	-	0.46	11
	Pile 2	98	-	-	0.46	11
Section 6	Pile 1	-	-	-	-	15
	Pile 2	-	0.7	1.0	0.8	14

Legend: (1) '-' Value is not an exceedance of the RI Residential Direct Exposure Criteria
(2) All values are ppm unless noted.

III.A.6. Concrete Removal, Processing and Classification

Concrete debris was generated from the removal of the berms and from the cutting and removal of the extended portion of the existing retaining wall. Concrete associated with the berm removal was visually screened and segregated based on signs of staining. Concrete containing signs of discoloration, staining or black mastic material, which was typically the type of staining which was present, it was separated from concrete which was not stained. Two concrete stockpiles were generated.

The Navy reached agreement with RIDEM that concrete with staining or black mastic material on it would have to be transported off-site for disposal. Concrete that was visually clean and had exposed rebar removed could be re-used as fill material at Tank Farm 4 and Tank Farm 5.

The extension on the retaining wall was cut at the elevation at which the remainder of the wall was located. The wall was pushed over and processed. All concrete was processed into manageable pieces with a hydraulic hammer mounted on a hydraulic excavator. Exposed rebar was removed by torch cutting the rebar from the concrete piece. Exposed rebar was placed in the metal recycling containers. A grapple attachment mounted to an excavator was used to handle and load the concrete for either off-site disposal or for relocation to the Tank Farms for use as fill material.

III.A.7 Waste Disposal – General

All excavated soil, and miscellaneous material including concrete, metals, rubber, and asphalt resulting from the Derecktor berm demolition were either used as backfill, recycled or transported to an off-site disposal facility in accordance with all applicable permits and Federal, State, and Local regulations. All transporters and disposal facilities were pre-approved by Foster Wheeler in accordance with Foster Wheeler Environmental Corporation Regulatory Compliance Procedures.

III.A.8 Soil Disposal

As discussed, in Section III.A.5 Soil Classification, an agreement between the Navy and RIDEM determined which soils could be used as fill material at the Tank Farms and which soils must go off-site for disposal. From the soils removed from the berm, 64 stockpiles (approximately 6,400 cubic yards) were transferred to Tank Farm 4 for re-use as fill material. The Arsenic levels of these stockpiles were at or below 12 ppm and their Lead levels were at or below 150 ppm. Between January 28,1998 and February 2, 1998, 283 truckloads were transferred to Tank Farm 4 and placed into Tank 43 as fill material. The remaining soil was shipped off-site for disposal.

The soils with Arsenic level exceeding 12 ppm or lead levels exceeding 150 ppm were transported and disposed at Central Landfill in Johnston Rhode Island. A total of 15,158.92 tons were shipped between March 12, 1998 and March 26, 1998. Soils were used as daily cover soil.

III.A.9 Asphalt Disposal

All asphalt-laden soils were transported and disposed at Crapo Hill Landfill New Bedford Massachusetts for use as cover soil. A total of 12,004.33 tons of asphalt laden soils were shipped off-site during June 22, 1998 through September 1, 1998.

III.A.10 Concrete Disposal

Clean concrete segregated during the berm removal effort and generated from the removal of the elevated portion of the berm was relocated to the Tank Farms and placed as fill material. The clean concrete from the berm removal was placed into Tank 46 at Tank Farm 4. The portion of retaining wall removed was placed into Tank 57 at Tank Farm 5.

The stained concrete was transported and disposed at the Pond View Recycling Facility in Providence Rhode Island. A total of 974.06 tons was shipped between July 15, 1998 and July 29, 1998.

III.A.11 Miscellaneous Debris Disposal

The miscellaneous material, consisting of plastic debris, old tires, wood, and metals was segregated from the soils. The NAVSTA provided roll-off containers for recyclable metals. These containers were received by the facility for transfer to their recycling facilities. Once the recyclable material was removed, any remaining material was staged for later disposal. This material was consolidated with other similar debris generated during the ongoing remedial efforts for later disposal.

III.A.12 Site Restoration

To restore areas affected by the berm removals and maintenance stabilization features along the shoreline, Foster Wheeler completed the following activities:

Foster Wheeler regraded and sloped the southern Berm Area #2 slightly from the easterly steam line to the high water elevation on the shoreline. The area was then seeded and mulched. At the northern end of Berm Area #2 the shorelines existing riprap was overlaid with 6-12 inch stone. The 6-12 inch stone was also extended around the existing outfall and 10 feet to the south to provide slope protection.

Because of the elevation of existing grade for Berm Area #1, the slope from the steam line to the high water elevation increased. After placing and spreading topsoil, a soil erosion control mat was used to stabilize the slopes, until vegetation was established. The southern end of Berm Area #1 had 6-12 inch stone placed at the corner of the beach and jetty with riprap extending north along the beach to the top of jetty. At the northern end, a portion of existing riprap was overlaid with 6-12 inch stone. The riprap now extends 15 feet on both sides of an out-fall headwall to just above the headwall.

Foster Wheeler also installed a fence, which connects to the existing fence at the northern most end of the retaining wall. The new fence extends along the retaining wall and ends, where the newly created slope meets the Building 235 area concrete slab.

III.B BUILDING 42 S42-1 SUMP PIT REMOVAL

III.B.1 Mobilization and Duration

Mobilization and site activities began on May 18, 1998 and completed the restoration of the effected area on June 2, 1998.

III.B.2 Initial Conditions

Sump pit S42-1 was located in Building 42 in a room once used as a paint room. The sump was measured to be 5 feet long, 5 feet wide and 5 feet in deep. The sump was constructed of welded steel plate and had a discharge hole at the bottom, which was plugged with cement. High concentrations of semivolatile organic compounds and butyltin compounds were the expected contaminants in this area. See Figure 4.

Based on field observations, the sump appeared to contain storm water from a leaking roof. There was approximately 2 to 3 feet of water in the sump. The water was relatively clear with a slight sheen on the surface.

III.B.3 Sump Removal

The activities began with the removal of the water within the sump. The water was pumped into drums. The sump was then cleaned and sediments at the bottom of the sump were manually removed and placed in drums. There was a minimal amount of sediment remaining upon completion of the water removal. The sediment appeared to consist mostly of rust from the surface of the surrounding metal.

There was no noticeable olfactory evidence of contamination. The PID reading taken during the 5/18/98 confined space entry into the sump pit ranged from 1.3 ppm to 1.5 ppm. These readings were collected every 15 minutes for a period of 2.5 hours.

Once the contents were removed, the sump interior was washed with a 3,000 psi steam cleaner. All wash waters were drummed.

The interior of the sump was visually inspected upon completion of the cleaning process. There was no evidence of holes or deterioration in the sidewalls or the bottom of the sump. The sump pit was removed by cutting and removing sections of the metal walls with a cutting torch.

During the sump removal effort, it was observed that the sump was suspended about 3 inches above the ground surface. There was no drainage piping below the sump pit. If the drain plug was unplugged or it leaked, the discharge would have been directly on the ground surface below.

III.B.4 Soil And Concrete Removal

Broken concrete debris, which surrounded the sump area, was removed and placed into a lined roll off container. The concrete debris may have been generated when the sump was installed through the existing concrete floor.

After the concrete was removed the remaining ground surface was observed as consisting of a dense graded aggregate. Whether or not this soil supported water infiltration was not determined. The ground surface appeared relatively flat based on the observation that the building is supported on pile caps with concrete column supports extending from the ground surface to the floor and there appears to be an equal distance between the floor and the ground surface at all of these supports.

The soils beneath the sump pit prior to removal had evidence of loose rust scale that appeared to have fallen from the sump pit. There was one area adjacent to the plugged drain that appeared to be discolored. The soil was moist but there was no evidence of ponded water. Jar headspace samples collected during the removal action and analyzed with a PID revealed one location with an elevated reading of 2 ppm.

Soils were loosened with a pick ax and removed with the aid of a Bobcat skid steer loader with an excavating attachment and manually shoveling material to the Bobcat bucket.

Excavation began directly below the sump pit radiating outwards from the sump pit sides a distance of 3 feet. The excavation was 1 foot in depth creating a removal of an area 11 feet x 11 feet x 1 foot in depth. All of the concrete debris and soil was placed directly into a lined roll-off container.

III.B.5 Confirmatory Sampling

Upon completing excavation, confirmatory samples were collected six inches below grade surface on each sidewall and from one location on the floor of excavation. The samples were analyzed for VOCs (EPA Method 8260), SVOCs (EPA Method 8270), TPH (EPA Method 8015), TPH (EPA Method 418.1), RCRA 8 Metals, and PCB and Pesticides (EPA Method 8080).

The results of the confirmatory analytical were compared to the Rhode Island Residential and Industrial/Commercial Direct Exposure Criteria. See Appendix B for Sump S42-1 Confirmatory Sample Summary and Laboratory Results. A review of the analytical results indicate that there were exceedances of the both the Rhode Island Residential Direct Exposure Criteria and the Rhode Island Industrial/Commercial Direct Exposure Criteria for metals (Arsenic only). The concentration exceedances for Arsenic ranged from 15.4 ppm to 22.0 ppm. See Part VIII, Section I, ‘Observation: Arsenic’.

Table 2 – Sump 42-1 Confirmatory Sample Results: Exceedances of Residential Criteria

Analyte→	**Arsenic**
RIDEM Residential DEC	1.7
RIDEM Industrial/ Commercial DEC	3.8
Wall 1	22.0
Wall 2	20.7
Wall 3	15.4
Wall 4	19.3
Floor 1	17.2

Legend: (1) All values are ppm unless noted.

This review of the analytical data and results also indicated that the method detection limits for several VOC and SVOC compounds were above their associated Rhode Island Residential Direct Exposure Criteria but below the Commercial/Industrial Criteria. See Table 3 for details.

Table 3 – Sump 42-1 Confirmatory Sample Detection Limit Discrepancies

RIDEM DEC →	Residential (mg/kg)	Commercial/Industrial (mg/kg)	Detection Limit (mg/kg)
↓ COMPOUND ↓			
Bromomethane	0.8	2,900	1.0
Vinyl chloride	0.02	3	0.2
Benzo(a)pyrene	0.4	0.8	0.7
Bis(2-chloroethyl)ether	0.6	5.2	0.7
Chrysene	0.4	780	0.7
Dibenzo(a,h)anthracene	0.4	0.8	0.7
Hexachlorobenzene	0.4	3.6	0.7

Based on a review of all the data, including the higher detection limits shown in Table 3, no further remedial activities were required and restoration was initiated.

III.B.6 Waste Disposal

Three waste streams were generated by the removal of the sump. The waste streams included the contents of the sump, steel plate from the sump walls and bottom and the soil/concrete debris.

There were 385 gallons (7 drums) of liquid and sludge removed from the sump including decontamination water. A total of 15 cubic yards of soil/concrete was removed from the sump pit.

The liquid/sludge waste was sampled and characterized prior to disposal. On July 1, 1998 all seven drums were transported to General Chemical Corp. of Framingham, MA for disposal. See Appendix C for waste profile and manifest.

The soil/concrete was transported and disposed at the Crapo Hill Landfill in New Bedford, MA. See Appendix D for waste profile and manifest.

III.B.7 Site Restoration

Site restoration consisted of placing clean backfill material into the excavation up to the surrounding existing grade. The opening in the floor, which was created by the removal of the sump pit, was covered with a steel plate and the entire building had all openings secured with plywood.

III.C TEST PIT 14 PCB CONTAMINATED SOIL REMOVAL

III.C.1 Initial Conditions

The Test Pit 14 area was located approximately forty feet north of the northeast corner of the loading dock portion of Building #6, just off the asphalt building apron on a vegetated slope. The asphalt building apron was generally flat and the terrain sloped upward from the northern edge of the asphalt approximately forty feet towards a flat fenced-in storage area. The sloped area ran at a consistent angle, (about 20 degrees) along its length from Defense Highway on the westerly end to the railroad tracks, on the east. See Figure 5 for details. The scope of work for all the soil removal actions at Test Pit 14 and associated areas was to delineate and remove PCB-infected soils.

III.C.2 Mobilization and Duration

Mobilization and site activities began on June 1, 1998. Excavation activities along with field investigations continued until site restoration was completed on February 22, 1999.

III.C.3 Initial Excavation

The initial excavation was performed utilizing a Caterpillar 416 rubber tire backhoe to a depth of approximately one foot over the entire area. See Figure 5. Soils were loaded directly into lined roll-off containers and staged adjacent to the excavation. The initial removal of contaminated soils was initiated and completed on June 1, 1998. A total of 21.66 tons of contaminated soil was generated during this phase of work.

Upon completing the initial excavation, the in-place soil appeared dark in coloration throughout the entire excavated area. There was no evidence of random staining. There was a slight petroleum odor. Fourteen jar headspace samples were collected and analyzed using an FID. Only one of the samples had an elevated reading of 2 ppm.

On June 3, 1998, nine post-excavation samples were collected. The samples consisted of four excavation walls, 1 excavation floor sample, and 4 samples along the potential migration pathways as determined by a representative of the Rhode Island Department of Environmental

Management (RIDEM). Sidewall samples were collected just above the Test Pit floor. Samples were collected as a screening tool to justify the lateral extent of the excavation within the scope of the soil removal parameters. See Appendix E for the 'Initial Post-Excavation Sample Results-TP14' Summary and Laboratory Results. These nine sample locations are included on Figure 5.

Table 4 – Test Pit 14 Post Initial Excavation Sample Results: Exceedances of Residential Criteria

Analyte→	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Chrysene	Fluoranthene	Pyrene	PCBs	Arsenic	Lead	TPH
RIDEM DEC Residential	0.9	0.4	0.9	0.9	0.4	20	13	10	1.7	150	500
RIDEM DEC Industrial/ Commercial	7.8	0.8	7.8	78	780	10,000	10,000	10	3.8	500	2,500
TP14W-1	-	-	9.9	-	-	-	-	1900	29.6	305	820
TP14W-2	12	10	15	8.2	12	26	22	-	18.9	334	-
TP14W-3	7.3	-	10	-	7.1	-	-	2000	19	-	-
TP14W-4	-	-	-	-	-	-	-	12	6.8	-	5300
TP14F-1	-	-	-	-	-	-	-	37	16.8	-	-
TP14MP-1	-	-	-	-	-	-	-	23	21.7	264	-
TP14MP-2	-	-	10	-	7	-	-	27	73.3	254	860
TP14MP-3	16	13	20	8.8	15	34	28	20	15.9	699	5000
TP14MP-4	-	-	7.2	-	-	-	-	-	8.61	-	570

Legend:
(1) '-' Value was either not an exceedance of the RI Residential Direct Exposure Criteria or was not found below method detection limit.
(2) All values are ppm unless noted.
W – Test pit Wall sample.
F – Test pit Floor sample.
MP – Migration Pathway sample.

All of the samples exhibited an exceedances of either Poly-chlorinated bi-phenyls (PCBs), Lead, Arsenic, Total Petroleum Hydrocarbons (TPH) or Semi-Volatile Organic compounds. See Table 4 – Test Pit 14 Post Initial Excavation Sample Results: Exceedances of Residential Criteria. A wetland area borders the east side of the excavation. The migratory pathway samples indicate the presence of lead, arsenic, TPH, PCBs and some Semi-Volatile Organic compounds.

This review of the analytical data and results also indicated that the method detection limits for several VOC and SVOC compounds were above their associated Rhode Island Residential Direct

Exposure Criteria but below the Commercial/Industrial Criteria. Additionally, the review of the data also indicates that the method detection limits for some SVOC and Pesticide compounds were above their associated Rhode Island Commercial/Industrial Criteria. The higher detection limits for pesticides was confined to only two of the associated nine samples. See Table 5 for details

Table 5 – Test Pit 14 Post Initial Excavation Sample Result Detection Limit Discrepancies

RIDEM DEC →	Residential (mg/kg)	Commercial/Industrial (mg/kg)	Detection Limit (mg/kg)
↓ COMPOUND ↓			
Bromomethane	0.8	2,900	1.0
Vinyl chloride	0.02	3	0.2
Benzo(a)anthracene	0.9	7.8	7
Benzo(a)pyrene	0.4	0.8	7
Benzo(g,h,I)perylene	0.8	10,000	7
Benzo(k)fluoranthene	0.9	78	7
Bis(2-chloroethyl)ether	0.6	5.2	7
Chrysene	0.4	780	7
Dibenzo(a,h)anthracene	0.4	0.8	7
3,3-Dichlorobenzidine	1.4	13	7
2,4-Dinitrotoluene	0.9	8.4	7
Hexachlorobenzene	0.4	3.6	7
Indeno(1,2,3-cd)pyrene	0.9	7.8	7
Pentachlorophenol	5.3	48	7
Chlordane	0.5	4.4	25*
Dieldrin	0.04	0.4	5*

* For samples TP14W-1 and TP14W-3 only

Based on a review of all the data, including the higher detection limits shown in Table 5, further action was required in this area mainly due to the continued presence of elevated levels of the main contaminant of concern, PCBs.

III.C.4 Field Investigation

In response to the initial soils removal and sampling analytical results, a field investigation was planned and executed. The Site Assessment Screening Evaluation Report dated June 1997 identified Aroclor 1260 (PCBs) as the primary contaminant for this site (i.e. the contaminant responsible for the majority of potential risk). The Building 6 Final Work Plan Addendum (Sampling and Analysis Plan) prepared by Foster Wheeler for the Navy in July 1998, specified that further delineation of the area for PCBs only would be accomplished. Further discussions between the Navy and RIDEM resulted in the agreement that the site would be remediated for PCBs. However, for completeness, confirmatory sampling was accomplished for other analytes as well (i.e. VOCs, SVOCs, TPH, metals and pesticides), after performing the initial removal action.

The field investigation was conducted by Foster Wheeler on September 2, 1998 and September 3, 1998 to determine the extent of PCB contamination. The field investigation included collecting surface and subsurface soil samples, sediment samples, liquid and/or sludge samples, and stone/concrete chip samples from the vicinity of Building 6 to further delineate the extent of PCB contamination and further determine potential source areas.

In accordance with the Sampling Analysis Plan, 12 soil samples were collected in six locations in the vegetated mound, located adjacent to and upgradient, of previously excavated test pit (TP14). The mound traverses upgradient from the asphalt parking lot to the southern extent of the 100-foot by 40-foot storage area.

The first set of samples was collected approximately 6 feet north of TP 14, at approximately 12 foot spacing, on the side of the embankment. In an attempt to obtain horizontal delineation, the second set of samples was collected approximately 30 feet north of TP 14, on the concrete transformer pads located in the storage area, at 21.5 foot spacing.

To investigate the storage area and concrete pads and footings, concrete chip samples were collected from the portions of the pad, which exhibited visible staining. Three samples were also collected from gravels in this area that appeared to be downgradient from the storage pad and appeared to accumulate potential PCB contamination during runoff.

A drainage basin exists to the east of Building 6, in the center of the driveway between Building 6 and the railroad tracks. This basin is surrounded by topographically low areas containing sediment piles. The basin and surrounding area were dry. However, two sediment samples were collected; one sediment sample was collected from the topographically low area and another sediment sample was collected from within the basin. Because no free water was encountered either in or around the basin, an aqueous sample was not collected.

Four surface soil samples were collected in the area located east of test pit TP-14 at the edge of the wetlands located adjacent to the railroad tracks. The samples began 20 feet south of the overpass crossing the railroad tracks and continued every 40 feet thereafter. Soils were collected from grade to a depth of 6-inches below ground surface.

The results of this sampling effort were compared to the Rhode Island Residential and Industrial/Commercial Direct Exposure Criteria for PCBs, which for both is 10 ppm. See Appendix F for a summary of results and the laboratory data. A review of the analytical results indicate that there were no exceedances for PCBs in any of the samples. Based on these results, the PCB contamination appears to exist within the areas bordering the northern, southern, and eastern extents of the sample locations and the Test Pit (TP-14) location.

Additionally, based on the above results, no further investigation or action was required at the drainage basin located just east of Building 6, in the center of the driveway between Building 6 and the railroad tracks, and a determination if this basin functioned as a UIC was not made.

III.C.5 Expanded Excavation

A dig safe permit was obtained from the NAVSTA on November 13, 1998. Between November 23, 1998 and November 25, 1998, the excavation was expanded in an attempt to remove additional PCB contaminated soils from Building 6 and the Test Pit 14 area. See Figure 6. The expanded area excavation involved extending the original TP-14 eastern border into the drainage swale to a depth of 2 feet below grade. This portion of the excavation encroached the 30-inch wide stream that bisects this portion of the grid. The western border of TP-14 excavation area was extended 12 feet to a depth of 2 feet bgs. The southern extent of TP-14 excavation was extended by 5 feet into the paved area, to a depth of 2 feet bgs.

The center of TP-14, which had been previously excavated to 2 feet bgs was expanded to 5.5 feet bgs, the top of fractured bedrock. The southern extent of this portion (including the paved area) was extended an additional two feet south for a total of seven feet beyond the asphalt/vegetation boundary in an attempt to abate visible soil staining and odor in this area.

Lastly, a 6-foot by 6-foot grid around the northeast footing of the dock stairs at Building 6 was excavated to a total depth of 2 feet bgs. This was the extent of the excavation activities that occurred at the Building 6 dock stairs. The excavation generated 101.66 tons of contaminated soil**.**

During these excavation activities, fourteen samples were collected from the floors and walls of the expanded area of excavation. The soil samples collected were taken from locations selected based on FID reading and jar headspace results. See Appendix G for a summary of results and the laboratory data along with Table 6 below, for exceedances. In accordance with the approved Work Plan, the samples were collected and analyzed for all or a subset of the following analyses: VOCs by USEPA Method 8260, SVOCs by USEPA Method 8270, TPH by USEPA Methods 8015 and 418.1, RCRA 8 Metals, PCBs, and Pesticides by USEPA Method 8080. All samples were analyzed for PCBs with a only a subset (6 of 14 samples) analyzed for the full range of analysis noted above based on the field screening results from the FID and jar headspace results. The results from this sampling indicate that a potential zone of contamination has migrated south an unknown distance under the paved area and to the east, and into the drainage swale. There were no exceedances of the Residential Standards in the upgradient or west portions of TP-14 expanded area of excavation.

Three confirmatory samples were collected from the Building 6 Dock Area. One sample revealed the exceedance for PCBs in the center of the 6 foot by 6 foot grid, adjacent to the stair footing.

During the performance of this activity, it became evident that this sampling effort, intended to be confirmation sampling, was not, and instead became the basis for additional excavations.

Based on the above-referenced sample analysis indicating exceedances for PCBs, further excavation was required. Foster Wheeler began further excavation on January 19, 1999. Prior to excavation work, Foster Wheeler placed a sump pit up-gradient, within a verified clean area of the existing swale. This sump pit collected and diverted storm event water and a 2-inch float

activated submersible pump diverted the water to a catch basin adjacent to the site. This catch basin is the existing discharge point of the storm event waters that travel the swale.

TABLE 6 - Expanded Area of Investigation Sample Results: Exceedances of Residential Criteria

Sample → / Analyte ↓	RIDEM DEC Residential	RIDEM DEC Industrial/ Commercial	EAETP14F1	EAETP14F3	EAETP14F5	EAETP14W4	EAETP14W9	EAETP14W10
Acenaphthene	43	10,000	-	-	-	-	-	52.0
Anthracene	35	10,000	-	-	50	8.2	-	93.0
Benzo(a)anthracene	0.9	7.8	0.92 J	4.9 J	100.0	3.8	-	200 D
Benzo(a)Pyrene	0.4	0.8	0.7 J	4.4 J	78.0	3.4 J	0.7 J	160 D
Benzo(b)fluoranthene	0.9	7.8	1.0 J	6.0 J	100.0	4.9 J	-	190 D
Benzo(g,h,i)perylene	0.8	10,000	-	3.0 J	40.0	2.2 J	-	73.0
Benzo(k)fluoranthene	0.9	78	-	1.9 J	27.0	1.7 J	-	50.0
Chrysene	0.4	780	0.87 J	5.4 J	90.0	4.4 J	0.69 J	180 D
Dibenzo(a,h)anthracene	0.4	0.8	-	0.9 J	12.0	-	-	20.0
Fluoranthene	20	10,000	-	-	260 D	-	-	480 D
Fluorene	28	10,000	-	-	-	-	-	53.0
Indeno(1,2,3-cd)pyrene	0.9	7.8	-	2.8 J	40.0	2.1 J	-	70.0
Phenanthrene	40	10,000	-	-	240 D	-	-	470 D
Pyrene	13	10,000	-	-	190 D	-	-	350 D
Chlordane	0.5	4.4	2.1 P	-	-	-	-	-
Dieldrin	0.04	0.4	9.5	0.29	-	-	-	-
PCBs	10	10	950 D	50 D	43 D	-	-	-
Arsenic	1.7	3.8	7.0	15	8.0	11.0	7.0	16.0
TPH(8015M)	500	2,500	830	7,600	8,700	660	2,400	5,400
TPH(418.1)	500	2,500	-	5,800	930	-	-	-

Legend:
(1) '-' Value is not an exceedance of the RI Residential Direct Exposure Criteria
(2) All values are ppm unless noted.
(3) J = The compound was detected at below the reporting limit.
(4) D = Concentration was obtained from a diluted analysis.
(5) P= There was a greater than 40% difference for detected concentrations between the primary and confirmation columns of the GC. This usually indicates an interference and the lower of the two are reported.

Prior to starting activities it was necessary to remove storm event water that had collected in the excavation. Two Vac Trucks were used for the water removal. A total of 7,300 gallons of water was transported off-site for disposal.

A Komatsu PC 150 hydraulic excavator was used to remove soils. To deepen the existing excavation, soils were removed from areas that are currently 2 feet (bgs). The limit of this excavation is 4 feet bgs or to the top of bedrock. The excavation continues south from the current location approximately 29 feet. The excavation also continued east into the drainage swale a distance of approximately 10 feet. This was approximately the previous site characterization sample locations, which indicated PCB levels were below the RIDEM Residential Limits. Excavation ceased at a depth of 3 feet bgs, where bedrock was encountered.

During the soil removal process, soils were field screened using a Flame Ionization Detector (FID), immunoassay PCB screening kit, visual field observations, and FID jar headspace analysis. Observations indicated that there was no visible staining of the soils above the fractured bedrock. Where the bedrock was exposed, it exhibited patches of black/brown staining or discoloration.

The soils were loaded directly into a ten-wheel dump truck. The dump truck was loaded adjacent to the soil removal area and was not driven within the contaminated area. The truck was inspected prior to exiting the area to ensure that tracking and/or spillage of any soils did not occur. The soils were transferred from the dump truck to the staging area at the Derecktor Shipyard.

On January 20, 1999 and January 21, 1999, confirmatory samples were collected from each expanded excavation as outlined in the Workplan Addendum. See Figure 7. Samples were collected from the sidewalls and floors of the new excavation areas resulting in a total of 8 samples. Sidewall samples were collected from a depth of 6 ½ feet bgs. Sample locations were chosen from areas based on the immunoassay PCB test kit results that verify PCB readings less than 10 ppm, jar headspace sample results and discoloration. Soil samples were collected within a 12-inch radius of the sample location using a decontaminated stainless steel spoon or trowel and placed in decontaminated stainless steel bowls. Samples were collected as a screening tool to justify the lateral extent of the excavation within the scope of the soil removal parameters.

Confirmatory samples for VOCs were collected at a minimum of 3 to 6 inches below the depth of the excavation and placed in laboratory provided bottleware preserved with methanol. The remaining sample was thoroughly mixed, aliquots were placed into appropriate bottleware, and the sample bottles were placed in iced coolers. The samples were delivered to Mitkem Laboratory for analyses of Volatile Organic compounds (VOCs) by USEPA Method 8260, Semi-Volatile Organic compounds (SVOCs) by USEPA Method 8270, TPH by USEPA Method 8015, TPH by USEPA Method 418.1, RCRA 8 Metals, PCB by Method 8082 and Pesticides by USEPA Method 8081.

The results of the confirmatory analytical were compared to the Rhode Island Residential and Industrial/Commercial Direct Exposure Criteria. See Appendix H for confirmatory sample results summary and laboratory data along with Table 7 below, for exceedances. A review of the analytical results indicate that one perimeter sample (B6-S4) had exceedances of the Rhode Island Residential Direct Exposure Criteria for some semi-volatile organic compounds and some

of these were also an exceedance of the Rhode Island Commercial/Industrial Direct Exposure Criteria. All samples exceeded the Rhode Island Industrial/Commercial Direct Exposure Criteria for metals (Arsenic only). The concentration exceedances for Arsenic ranged from 9.0 ppm to 17.0 ppm. See Part VIII, Section I, 'Observation: Arsenic'.

TABLE 7 – Additional Expanded Area Excavation (Confirmation Sampling): Exceedances of Residential Criteria

Sample → / Analyte ↓	RIDEM DEC Residential	RIDEM DEC Industrial/ Commercial	B6-S1	B6-S2	B6-S3	B6-S4	B6-S5	B6-S6	B6-S7	B6-S8
Benzo(a)anthracene	0.9	7.8	-	-	-	1.1	-	-	-	-
Benzo(a)Pyrene	0.4	0.8	-	-	-	0.97	-	-	-	-
Benzo(b)fluoranthene	0.9	7.8	-	-	-	1.2	-	-	-	-
Chrysene	0.4	780	-	-	-	1.2	-	-	-	-
Arsenic	1.7	3.8	13.0	17.0	9.0	10.0	12.0	16.0	11.0	12.0

Legend: (1) '-' Value is not an exceedance of the RI Residential Direct Exposure Criteria
(2) All values are ppm unless noted.

On February 22, 1999, approximately 15 cu-yds of asphalt and soil were removed to a depth of 3 feet bgs in the immediate location of sample B6-S4. See Figure 8. The sample was collected from the western wall at a depth of 5 ½ feet bgs and just above the groundwater infiltrate collecting in this portion of the excavation. This sample (B6-S4B) was analyzed for Benzo(a)pyrene. Samples were collected as a screening tool to justify the lateral extent of the excavation within the scope of the soil removal parameters.

Analytical results from this sample indicate that the concentration for Benzo(a)pyrene was below the Rhode Island Residential Standard. See Appendix I for the sample results. The excavation was cleared to begin restoration activities.

III.C.6 Soil Stockpiling

Between January 19, 1999 and January 21, 1999, soils from the Building 6 additional excavation were staged in 100 cubic yard stockpiles at the Derecktor Shipyard. Approximately 300 cubic yards of soil was removed, creating 3 separate stockpile areas.

The containment for the soils consisted of a 40-mil liner placed on the concrete surface. Hay bales were placed around the perimeter. The liner was brought up and over the hay bales and secured with sandbags, to create a containment berm. Soils were dumped directly on the liner. To prevent the possibility of spreading contamination from the liner to the concrete surface, care was taken to prevent tire contact with any previously dumped soil. The stockpiles were covered with 10-mil polypropylene sheeting in a manner to prevent contact with soils or storm water collection within the containments.

Three composite samples, one composite sample per 100 cubic yards of soils was collected for waste disposal purposes on February 22, 1999. These samples were collected with a

decontaminated, stainless steel hand auger advancing from the top of the pile, and collecting a sample every two feet and compositing the intervals into one representative aliquot. Samples representative of the stockpiled soils were collected on February 22, 1999 and analyzed for PCBs, VOCs, SVOCs, TPH, reactivity, ignitability, corrosivity, paint filter and RCRA 8 metals. See Appendix J for a summary of sampling results and laboratory data along with Table 8 below, for exceedances.

TABLE 8 – STOCKPILE SAMPLING: Exceedances of Residential Criteria

Sample → / Analyte ↓	RIDEM DEC Residential	RIDEM DEC Industrial/ Commercial	B6-WC-01	B6-WC-02	B6-WC-03
Benzo(a)anthracene	0.9	7.8	-	0.93	2.4
Benzo(a)pyrene	0.4	0.8	-	0.76	2.0
Benzo(b)fluoranthene	0.9	7.8	-	0.99	2.7
Benzo(g,h,i)perylene	0.8	10,000	-	-	0.86 J
Benzo(k)fluoranthene	0.9	78	-	-	1.3
Chrysene	0.4	780	-	0.83	2.2
Dieldrin	0.04	0.4	-	170 D	1.2 D
PCBs	10.0	10.0	-	27	180
Arsenic	1.7	3.8	11.0	12.0	14.0

Legend: (1) '-' Value is not an exceedance of the RI Residential Direct Exposure Criteria
(2) All values are ppm unless noted.
(3) J = The compound was detected at below the reporting limit.

III.C.7 Waste Disposal

Between March 30 and March 31, 1999 approximately 430 tons of PCB regulated waste soil was transported and disposed of at CWM Chemical Services, Inc. located in Model City, New York. See Appendix K for disposal documentation.

III.D BUILDING 42 S42-5 SUMP INVESTIGATION AND REMEDIATION

III.D.1 Previous Investigative Field Work

During March of 1999, FWENC performed multiple attempts to investigate the Building 42 S42-5 Sump Pit. The first attempt failed due to infiltration of water into the sump pit. Subsequently, FWENC then obtained approval from the Navy to mobilize dewatering equipment and remobilized to the site. The sump was then accessed and the interior was photographed and the interior pipe penetrations into the vault were mapped. An attempt to determine the outfall of the pipes by utilizing a transmitter on the end of a pipe snake was unsuccessful.

III.D.2 Field Work Preparation

Foster Wheeler began this construction activity at the S42-5 Sump on May 15, 2000 after approval of the Work Plan in March 2000. Construction activities were initiated upon receiving a dig safe permit. Utilities located in the vicinity of the excavation area were clearly marked to identify underground utilities.

Prior to beginning excavation activities, water within the concrete sump was removed. This water had been sampled during previous activities at the site and Foster Wheeler had received authorization to discharge the water into the POTW. Water pumped out of the sump was discharged directly to the POTW under the existing permit.

See Figure 9 for sump location and sump discharge points.

III.D.3 Excavation Activities

After pumping out the water within the sump, the soil above and around the sump was excavated to expose the concrete sump and the valve chamber. Excavated soil was field screened to segregate clean soil from contaminated soil. Field screening consisted of using jar headspace analysis with a Flame Ionization Detector (FID). Contaminated soil was segregated and stockpiled on polyethylene sheeting prior to disposal. The remaining clean soil was stockpiled in a separate area to be used as backfill following completion of excavation activities.

A waste disposal characterization sample of the contaminated soil was collected to satisfy the requirements of the off-site disposal facility. The sample was analyzed for VOCs, SVOCs, RCRA 8 Metals, PCBs, and TPH. Damian Associates, L.L.C. was contracted to provide transportation and disposal services at the site. Damian Associates was responsible for scheduling trucks, providing waste manifests, and tracking the manifests. Contaminated soil was loaded into trucks for off-site disposal at the Crapo Hill Landfill in New Bedford, Massachusetts. A total of 155.78 tons of non-hazardous contaminated soil were disposed. Copies of the non-hazardous manifests are provided in Appendix H.

III.D.4 Pipeline Investigations/Removal

Once the concrete sump and valve chamber was exposed, pipes from the sump pump and valve chamber were traced to determine locations and destinations of the pipes. Smoke tests were used for pipes that were difficult to trace. Foster Wheeler obtained a burn permit prior to performing smoke tests.

The interior of the chamber was in good condition and had no observable cracks. Several pipelines exiting the concrete sump were identified. A pump was located in the sump. The pipe exiting the west side of the sump (Pipe N2), turns north, then run into under the building, was determined to be part of the interior floor drain system of Building 42. The pipe exiting the north side of the sump (Pipe N1), turns north and runs along side of Building 42, connect to roof drains and meets up with a catch basin located to the north of Building 42. The two pipes exiting the south side of the sump lead into the valve chamber. The final pipe exiting the concrete sump was from the roof and appeared to be used as a vent line.

Several pipelines were also identified from the valve chamber. The pipe exiting the east side of the valve chamber tied into an abandoned forced sewer line and was labeled as E1. The line exiting from the south side of the valve chamber ended a short distance from the valve chamber and was labeled as S1. Line S1 was not broken, but abruptly ended in the soil.

There was an additional catch basin system with associated piping located immediately south of Building 42, they were not connected to the S42-5 sump.

Figure 10 details the concrete sump and valve chamber with associated piping. Pipes identified were removed and disposed of off-site. Metal pipes removed were disposed of at an off-site metal recycling facility. Approximately 20 tons of metal was sent off-site for disposal.

III.D.5 Sump and Valve Chamber Demolition

The concrete sump and the valve chamber were demolished using a Kobelco 220 hydraulic excavator with a hammer attachment to break up the concrete. Concrete rubble removed from the site was loaded into dump trucks and disposed of off-site at a concrete recycling facility. A total of 41.61 tons of concrete were disposed. The foundation of the concrete sump was determined to be 2 to 2.5 feet thick, making it difficult to remove. The concrete foundation did not exhibit any sign of cracking and the foundation was subsequently left in place.

III.D.6 Confirmation Sampling

Following excavation of contaminated soil within the sump and valve chamber area, field sampling and confirmation samples were collected. See Table 9 (S42-5 Sump Pit Field Sampling Results), for field sample results.

When reviewing Table 9, the values for jar headspace and PetroFLAG® results appear to not be consistent with each other. The results in Table 9 are presented for documentation purposes only. Note that the FID headspace monitoring was considered a screening tool for relative comparisons and potential presence or absence only and should never be considered a reliable measure of, or comparison to actual soil contaminant concentrations.

In general, the FID headspace results are considered much less reliable as a measure of actual conditions than the PetroFLAG® results. While none of theses conditions were measured in the field, the FID in all cases is much more sensitive to sample handling, outside temperature, soil temperature, soil organic content, air and soil moisture than the PetroFLAG®. The PetroFLAG® results are a measure from an actual extraction of soil contaminants under more controlled conditions. In contrast, the FID headspace monitoring is an indirect measure of volatilized material only.

Soil samples for off-site laboratory analysis were collected on all four sidewalls of the area. Since the concrete foundation of the sump was left in place, the bottom sample was collected from a location beside and below the concrete foundation. Figure 10 provides the sample locations. Samples were analyzed for VOCs, SVOCs, RCRA 8 Metals, PCBs, and TPH. Samples were collected from the excavator bucket, at a minimum depth of 3-in below the surface of the excavation, utilizing dedicated sampling equipment. Sample containers were labeled and placed

on ice in a sample cooler. Samples for VOC analysis were preserved with methanol and sodium bisulfate.

TABLE 9 – S42-5 SUMP PIT FIELD SAMPLING RESULTS

Sample ID	Headspace Results (ppm)	PetroFLAG® Results (ppm)
S42BOT	10.6	84
S42SWS	1450	46
S42SWE	0	48
S42SWN	0	125
S42SWW	2464	405
N1-0	4905	NC
N1A	50	2050
N1-50	5034	687
N1-B	30	324
N1-100	183	115
N1-C	241	68
N1-150	4050	98
N1-D	867	222
N1-200	891	152
N1-E	1697	187
N1-250	611	90
N1-F	0	42
N1-300	1.9	116
N1-G	NC	NC
NC = not collected		

The five sump confirmatory samples analytical results were compared to the Rhode Island Residential and Industrial/Commercial Direct Exposure Criteria. See Appendix L for a confirmatory sample results summary and laboratory data along with Table 10 below, for exceedances. A review of the analytical results indicates that sample S42-SWN had an exceedance of the Rhode Island Residential Direct Exposure Criteria for a Semi-volatile Organic compound. All samples exceeded the Rhode Island Commercial\Industrial Direct Exposure Criteria for Arsenic. See Part VIII, Section I, 'Observation: Arsenic'.

TABLE 10 – SUMP S42-5 CONFIRMATION SAMPLING: Exceedances of Residential Criteria

Sample → / Analyte ↓	RIDEM DEC Residential	RIDEM DEC Industrial/ Commercial	S42-SWE	S42-BOT	S42-SWS	S42-SWW	S42-SWN
Chrysene	0.4	780	-	-	-	-	0.46
Arsenic	1.7	3.8	21.0	16.0	21.0	15.0	22.0

Legend: (1) '-' Value is not an exceedance of the RI Residential Direct Exposure Criteria
(2) All values are ppm unless noted.

No visual, olfactory, or field instrument evidence of contamination was observed prior to commencement of excavation. As the tracing of the pipes continued, soil was segregated by elevated FID readings, visual observations, or olfactory methods. Soils located on the west side of the sump and along the edge of Building 42 with elevated headspace readings were separated for disposal. A small portion of soils north of the sump, under pipe N2 had petroleum odor and staining. This soil was stockpiled for disposal.

Following removal of pipes N1, E1, and S1, soil around the former pipes was sampled for laboratory analysis to determine if the presence of contamination remained. One sample was collected from E1 and one sample collected from S1, where the pipe dead-ended in the local soil. Also, eleven samples along the N1 pipeline were collected for laboratory analysis. These eleven samples were co-located and taken at the same time as with their corresponding PetroFLAG® and jar headspace field samples. These sample locations are shown in Figure 10.

See Table 9 (S42-5 Sump Pit Field Sampling Results) for field sample screening performed prior to above sampling. The field sampling consisted of jar headspace as well as PetroFLAG® field tests. In reviewing Table 9, note that the user's manual for the PetroFLAG® test kits indicate that the results of the kit may be affected by naturally occurring hydrocarbons. The manual indicates that sampling of organic matter, sampling under certain types of trees, or sampling near roots should be avoided. The manual also indicates that temperature, soil type, and moisture content may affect the sample results. (PetroFLAG® Hydrocarbon Analyzer, User's Manual, Revision 3, Dexsil Corporation, 5/6/97). Additionally, procedural errors may also affect the test kit results. Field personnel were trained by a company representative in the proper use of the test kits, however, a fixed laboratory has better established QA/QC capabilities than a temporary field-based laboratory. Since offsite laboratory QA/QC controls are better established and maintained, when instances of conflicting field results occurred, results from fixed laboratories were used.

For jar headspace field testing, the photovac FID is also affected by moisture, which may have contributed to the differences between the PetroFLAG ® and jar headspace results.

These thirteen confirmatory sample analytical results were compared to the Rhode Island Residential and Industrial/Commercial Direct Exposure Criteria. See Appendix M for the confirmatory sample results summary and laboratory data along with and Table 11 below, for exceedances. A review of the analytical results indicate that sample N1-B had an exceedances of the Rhode Island Residential Direct Exposure Criteria for several Semi-volatile Organic compounds, but none exceeded the Rhode Island Commercial\Industrial Direct Exposure Criteria for Semi-Volatile Compounds. All samples exceeded the Rhode Island Commercial\Industrial Direct Exposure Criteria for Arsenic. See Part VIII, Section I 'Observation: Arsenic.

All confirmation samples were analyzed for VOCs, SVOCs, RCRA 8 Metals, PCBs and TPH. The concentration of arsenic ranged from 10 mg/kg to 27 mg/kg.

TABLE 11 – SUMP S42-5 PIPELINE CONFIRMATION SAMPLING:
Exceedances of Residential Criteria

Analyte → / Sample ↓	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Chrysene	Arsenic
RIDEM DEC Residential	0.9	0.4	0.9	0.4	1.7
RIDEM DEC Industrial/ Commercial	7.8	0.8	7.8	780	3.8
S1	-	-	-	-	25.0
E1	-	-	-	-	25.0
N1-0	-	-	-	-	10.0
N1-50	-	-	-	-	17.0
N1-100	-	-	-	-	15.0
N1-150	-	-	-	-	18.0
N1-200	-	-	-	-	20.0
N1-250	-	-	-	-	11.0
N1-A	-	-	-	-	19.0
N1-B	1.3	0.69	0.91	1.3	27.0
N1-C	-	-	-	-	20.0
N1-D	-	-	-	-	16.0
N1-E	-	-	-	-	21.0

Legend: (1) '-' Value is not an exceedance of the RI Residential Direct Exposure Criteria
(2) All values are ppm unless noted.

III.D.7 Sand Blast Grit (Black Beauty)

Limited amounts of blasting grit, 'Black Beauty' were randomly located in the vicinity of the sump. Sampling and analysis of this material was not part of FWENC's scope of work or in the approved work plan. The Navy requested that a sample jar of 'black beauty' be prepared and made available to the state, which was done.

III.D.8 Restoration

Following receipt of analytical results, The Navy directed the excavated areas to be backfilled. Excavated areas were backfilled with stockpiled clean soils previously excavated. Backfilled

areas were compacted using the excavator bucket and areas were sloped to allow drainage on the east side of Building 42. Former grass areas were seeded and mulched and roadway areas were covered with 1.5-in stone.

III.E EXPLORATORY TRENCHING, FORMER DISPOSAL PITS

III.E.1 Task

Search for signs of oil contamination through exploratory trenching, in an area which was thought to be the area of former disposal pits for bilge water.

III.E.2 Mobilization and Site Preparation

Foster Wheeler commenced field operations on February 17, 1999 by installing a 2-foot silt fence fabric, buried 4 inches. The silt fence was installed to the west (down-gradient) of the proposed trench locations.

III.E.3 Excavation and Sampling

Once proper erosion controls were in place, the Caterpillar 416 Backhoe was used to excavate the primary trench 5 feet north of Building 42. This excavation was located and excavation limits were specified by the Navy. The trenches were located, staked out and measured in the field with a tape measure. The direction of the trench was west-east, from the midpoint of the length of Building 42 to the NE corner of the building. See Figure 11. The trench was 3 ft in width by 80 feet in length trending west-east and to a depth of 6-7 ft bgs. Weeping soils were encountered at 5-ft bgs with free-water starting to infiltrate the excavation at 7-8 ft bgs. Due to collapse of the walls from softening by infiltration, 6-7 feet bgs was determined to be the final depth of this excavation.

Soils were screened every 15 minutes from the bucket of the excavator with the Foxboro OVA-128 (organic vapor analyzer) to detect volatile organic compounds. Detections above background were segregated and deposited on 10-mil polyethylene sheeting, while non-detect soils were deposited on the neighboring ground surface away from the current excavation. The highest concentration detected with the OVA-128 was 120 ppm in the soils at 6-ft bgs at the western extent of the primary trench. Sample DPSOIL01 was collected from these soils and analyzed for VOCs, SVOCs and TPH 8015M. See Appendix R for details of Method 8015M for TPH determination. Soils above this depth exhibited OVA detections from 0-30 ppm. Though there were low OVA detections elsewhere in the excavation, none were sustained.

Once the primary trench was cut, a second trench (#2) was excavated perpendicular to the primary and 26.5 feet east of the western extent. Approximately 15 feet north along this trench excavation, there was a lens of black soils resembling moist bedding sand at approximately 3 feet bgs. The soils exhibited a slight petroleum odor and registered 200 ppm on the OVA-128. Sample DPSOIL02 was collected from these soils for the above referenced analysis. From lengths 60 to 70 feet north of the primary trench, the soils of trench #2 at 6 to 7 feet bgs revealed detections of 70-100 ppm. A slight petroleum odor and possible staining was noted. The final length of the trench was 70 feet long.

Trench #3 was positioned 25 feet east of trench #2 and perpendicular to the primary trench. At 30 to 40 feet north of the primary trench, red bricks and brick fragments were located within the walls of the excavation at 2 to 3 feet below ground surface. Several other pieces of concrete and rocks were also mixed in the soils indicating a disposal pit. At 53 feet north of the primary trench, a concrete slab or footing was discovered 2 - 3 feet bgs. The slab was left in place due to possible structural integrity issues of the excavation walls. At 68 feet north of the primary trench and 5 feet bgs, soils in the excavator bucket emitted a slight odor and registered 100 ppm on the OVA- 128. Sample DPSOIL03 was collected from this location and analyzed as referenced above. The final length of the trench was 70 feet long.

Sample DPSOIL04 was collected from the soils extracted at the eastern most extent of the primary trench, which exhibited no unusual odors or staining. The OVA readings from these soils were not above background. The purpose of this sample was to delineate contamination to the extent of our excavation. This sample was analyzed as referenced above.

All soils from Trenches # 2 and # 3 and the eastern portion of the primary trench were placed on 10-mil polyethylene sheeting to separate potential contaminated soils from the underlying ground surface.

III.E.4 Initial Restoration

The site was initially restored to original grade by placing soils back into the excavation. Care was taken to place soils in the approximate location from which they were removed. Seed, mulch, fertilizer and hay were then placed over the entire area of concern. Silt fencing remained in place until sufficient vegetative growth was restored to the area. This initial restoration was performed to preclude any open trench safety concerns during a temporary halt to operations pending upcoming Navy-Foster Wheeler contract modifications to complete this work.

III.E.5 Initial Sample Results

The sample results were compared to the Rhode Island Residential and Industrial/Commercial Direct Exposure Criteria. See Appendix N for a sample results summary and laboratory data along with Table 12 below, for exceedances. A review of the analytical results indicate that there were exceedances of the Rhode Island Residential Direct Exposure Criteria for SVOCs for sample DPSOIL1 and DPSOIL4 and for TPH at sample DPSOIL1. The Rhode Island Industrial/Commercial Direct Exposure Criteria was exceeded for and SVOC (Benzo(a)pyrene) for sample DPSOIL1 only.

TABLE 12 – EXPLORATORY TRENCHING, FORMER DISPOSAL PITS (Initial Sampling): Exceedances of Residential Criteria

Analyte → Sample ↓	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Chrysene	TPH (8015M)
RIDEM DEC Residential	0.9	0.4	0.9	0.4	500
RIDEM DEC Industrial/ Commercial	7.8	0.8	7.8	780	2,500
DPSOIL1	1.2	1.0	1.3	1.1	1,600
DPSOIL4	-	0.56	-	0.62	-

Legend: (1) '-' Value is not an exceedance of the RI Residential Direct Exposure Criteria
(2) All values are ppm unless noted.

III.E.6 Hotspot Removal

The area around soil sample DPSOIL1 was considered a hotspot based on a review of the laboratory results which indicated an exceedance of the Rhode Island Industrial/Commercial Direct Exposure Criteria for Benzo(a)pyrene. Based on a review of the laboratory results, the area around soil sample DPSOIL4 had no further action was taken since there were no exceedances of the Rhode Island Industrial/Commercial Direct Exposure Criteria.

On August 16, 1999 the site was remobilized to the location of sample DPSOIL1 and excavated approximately 25 cubic yards of soil from around this former sample point. See Figure 12 for details of hotspot location and excavation.

The location of the hotspot was determined by field observation. The outline of the previously filled-in trench was visible and identifiable due to settlement of the backfill within the confines of the trench as shown on the exploratory trench field sketch Figure 13. Additionally, the hotspot was located at the western extent of the original trench, which was coincident with the North-South centerline of Building 42. Each trench sidewall was parallel to the north face of Building 42, being 5' and 8' respectively off the building.

During the operation to remove the hotspot, there were no detections with the FID in the excavation, nor were there any visual or olfactory indications of contamination.

Confirmatory soil samples were obtained from each sidewall approximately 5 ½ feet bgs and one from the excavation bottom at approximately 6 ½ feet bgs and were analyzed for TPH (EPA Method 8015). A review of the analysis indicates that the results of all samples were below the Rhode Island Residential Direct Exposure Criteria for TPH.

All the removed soil was staged on polyethylene sheeting adjacent to the excavation area. From these soils a composite sample was collected and analyzed for VOCs (EPA Method 8260),

SVOCs (EPA Method 8270), RCRA 8 Metals (EPA Method 6010/7471A), PCBs (EPA Method 8082) and TPH (EPA Method 8100). A review of the analysis indicates that the soil was below the Rhode Island Residential Exposure Criteria with the exception of Arsenic, which exceeded both the Rhode Island Residential and Commercial/Industrial Direct Exposure Criteria with 18.8 ppm. See Appendix O for a sample results summary and laboratory results.

These soils were disposed of at a Navy approved facility and the site received final restoration.

III.F TEST PIT (7 FEET SOUTH OF MW-09)

III.F.1 Location and Site Preparation

Monitoring Well 09 (MW-09) is located south of the former Derecktor Shipyard building foundation and on the east shore of the eastern passage to the Narragansett Bay. See Figure 14.

Field activities began on February 19, 1999 with the installation of soil erosion control silt fencing fabric to the west (down-gradient) and traversing upgradient to the south of the proposed test pit excavation.

This test pit area was to be excavated in the vicinity of the former Southern Hazardous Waste Storage area used by the former Derecktor Shipyard. The Preliminary Assessment noted that the encountered reddish soil observed appeared to have been created by dumping from the southern door of the Main Assemble Building.

III.F.2 Excavation

A CAT 416 Backhoe was used to excavate a pit one-bucket width and below ground surface to a depth necessary to encounter suspected red colored soils. Excavated soils were placed on 10-mil polyethylene sheeting as a barrier between the ground surface and potentially contaminated soil.

Between 6 inches to 1 foot below ground surface (bgs), a layer of reddish soils were encountered and screened with the Foxboro OVA-128 in the backhoe bucket. The OVA did not detect any volatile organic compounds above background. A jar of the soils was placed on a heater in the field vehicle to volatilize the sample and encourage a detection with the OVA-128. The jar headspace screening of the soils with the OVA also revealed no detection for volatile organic compounds. There was no unusual odor or characteristics about the soils except for the reddish color indicating possible heavy metals contamination. A sample was collected from these red soils for VOCs (EPA Method 8260), SVOCs (EPA Method 8270), TPH (EPA Method 8015), PCB (EPA Method 8082), Pesticides (EPA Method 8081) and the Target Analyte List for 23 Metals (EPA Method 6010/7471).

The final depth of the test pit was 1.5 feet bgs. The extracted soils were pushed back into the excavation and tamped down with the excavator bucket. Seed and mulch were placed over the area and covered with hay. Silt fencing remained in place until vegetative growth was restored.

The results of the confirmatory analytical sample were compared to the Rhode Island Residential and Industrial/Commercial Direct Exposure Criteria. See Appendix P for a confirmatory sample results summary and laboratory data, along with Table 13 below, for exceedances.

TABLE 13 – TEST PIT (7 FEET SOUTH OF MW-09) SAMPLE RESULTS: Exceedances of Residential Criteria

Analyte → / Sample ↓	Arsenic	Manganese	Zinc
RIDEM DEC Residential	1.7	390	6,000
RIDEM DEC Industrial/ Commercial	3.8	10,000	10,000
MW09TP01	13	760	7,200

Legend: (1) All values are ppm unless noted.

A review of the analytical results indicate exceedances of the Rhode Island Residential Direct Exposure Criteria for Arsenic, Manganese and Zinc and one exceedance of the Rhode Island Commercial/Industrial Direct Exposure Criteria (Arsenic). No further action was taken.

III.G SOUTH OF PIER 1 (SAMPLING FOR PCBs)

A soil sample was collected adjacent to the transformer pad south of Pier 1 in a location identified during a January 21, 1999 site walk, which was attended by NORHTDIV, NAVSTA, RIDEM and Foster Wheeler. The surface of the sample location was covered with loose asphalt, gravel and concrete. The sample was obtained from 1 foot below the ground surface. The soil type was medium to fine black sand, trace brick fragments, gritty loose and moist. No odor or staining was noted. The sample was analyzed for PCBs EPA Method 8082. A review of the analysis indicates that Aroclor-1254 was detected at 0.1 ppm. The Rhode Island Residential Direct Exposure Criteria for PCBs is 10 ppm. This sample did not exceed this standard.

III.H BUILDING 54, SUBSTATION 16 (SAMPLING FOR PCBs)

Two soil samples were collected from the soils adjacent to the transformer pad associated with Building 54, Substation 16. The samples were analyzed for PCBs (EPA Method 8082). There was no staining observed on the concrete pad or the adjacent soil. A review of the analysis indicated the following: The down-gradient sample was non-detect for PCBs. The up-gradient sample had a detection of 0.039 ppm Aroclor-1254. The Rhode Island Residential Direct Exposure Criteria for PCBs is 10 ppm. Neither of the two samples exceeded these criteria.

IV. CHRONOLOGY OF EVENTS

January, 1992	Derecktor Shipyard file for Chapter 11 bankruptcy
May, 1993	Preliminary Assessment performed
January, 1997	Site Assessment Screening Evaluation performed
September, 1997	Initiated removal of the Derecktor Shipyard Berm at the South Waterfront
May, 1998	Initiated removal of Building 42 – Sump Pit S42-1
June, 1998	Initiated PCB contaminated soil removal at TP-14
June, 1998	Completed removal and restoration of Sump Pit S42-1 at Building 42
November, 1998	Completed removal of the Derecktor Shipyard Berm and subsequent restoration of the South Waterfront
January, 1999	Collected a soil sample for analysis south of Pier 1 (Sampling for PCBs)
February, 1999	Completed PCB contaminated soil removal and restoration at TP-14
February, 1999	Initiated exploratory trenching at former disposal pits
February, 1999	Initiated and completed excavation, sampling, restoration at the test pit (7 feet south of MW-09)
February, 1999	Collected two soil samples at Building 54, Substation 16 (Sampling for PCBs)
March, 1999	First (Initial) attempt to investigate Building 42 S42-5 Sump Pit
August, 1999	Completed and restored exploratory trenches at the former disposal pits
May, 2000	Second (Final) effort to investigate and remediate the Building 42 S42-5 Sump Pit
August, 2000	Completed Building 42 S42-5 Sump Pit removal, investigation and restoration

V. PERFORMANCE STANDARDS AND CONSTRUCTION QUALITY CONTROL

Quality Control was maintained at the various task locations by the FWENC Quality Control Representative during all phases of the work. The Quality Control Representative was present at Derecktor Shipyard at all times that work was performed. Each definitive feature of work were subjected to the ongoing inspection process which included visual inspection, testing, review of submittals, plans and analytical data.

Testing and analysis of water, soils and other media were conducted in accordance with approved plans

All reports, inspection and contractor reports documenting all the work performed by FWENC at Derecktor Shipyard are located in the project file and were submitted to the US Navy on a frequent basis.

VI FINAL INSPECTION AND CERTIFICATIONS

A representative of the US Navy ROICC office performed inspections throughout the course of the work. These inspections were performed at the initiation of the work, during the progression of the work and at the conclusion of the work. At the conclusion of each task a representative of the US Navy ROICC office would inspect the work along with a FWENC representative, (either the project superintendent or project manager) and would produce a punchlist of items that remain to be completed by FWENC. Once all punchlist items (if any), have been completed to Navy satisfaction and there are no remaining punchlist items, the field work portion of the work is then certified complete. See Exhibit 1 – ROICC Acceptance Letter (Next Page).

EXHIBIT 1 – ROICC ACCEPTANCE LETTER

DEPARTMENT OF THE NAVY
NORTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
OFFICER IN CHARGE OF CONTRACTS
RESIDENT OFFICER IN CHARGE OF CONSTRUCTION
NAVAL ACTIVITIES NARRAGANSETT BAY AREA
ONE SIMONPIETRI DRIVE NETC
NEWPORT RI 02841-1712

5000 IN REPLY REFER TO:
ROICC/M209
27 March 2001

MEMORANDUM

From: Officer in Charge of Contracts, Newport, RI
To: RAC COTR, NORTHNAVFACENGCOM

Subj: CONTRACT N62472-94-D-0398, DELIVERY ORDERS 013 & 060, FORMER DERECKTOR SHIPYARD, NEWPORT, RI

1. An authorized representative of the Naval Facilities Engineering Command has accepted as usably complete the work accomplished under this contract as indicated:

a) Derecktor Shipyard Berm Removal (South Waterfront) under DO #13 – November, 1998;
b) Building 42 S42-1 Sump Pit Removal under DO #13 – June, 1998;
c) Test Pit 14 - PCB Contaminated Soil Removal under DO #13 – February, 1999;
d) Building 42 S42-5 Sump Investigiation and Remediation under DO #60 – August, 2000;
e) Exploratory Trenching, Former Disposal Pits (Northeast of Building 42) under DO #13 – August, 1999;
f) Test Pit Investigation (7 Feet South of MW-09) under DO #13 – February, 1999;
g) South of Pier 1 (Sampling for PCBs) under DO #13 – January, 1999;
h) Building 54, Substation 16 (Sampling for PCBs) under DO #13 – February, 1999.

2. This acceptance does not waive any of the remaining requirements of the contract.

Copy to:
NAVSTA Code 44

FOSTER WHEELER ENVIRONMENTAL CORP.
1290 WALL STREET WEST
LYNDHURST NJ 07071-0661

Sincerely,

R. KRIVINSKAS
Civil Engineer

VII. SUMMARY OF PROJECT COSTS

Original Budget: $1,146,896.00

Actual : $1,170,631.00

VIII. OBSERVATIONS AND CONCLUSIONS

VIII.A DERECKTOR SHIPYARD BERM REMOVAL (SOUTH WATERFRONT)

- All work was performed in accordance with the approved work.
- All removed material was either shipped offsite for disposal, shipped offsite for recycling or utilized as backfill at Tank Farm 4.
- Material utilized as backfill at Tank Farm 4 and 5 was done after a review of the analytical data from sampling of this material and concurrence that this material met the acceptance criteria and was acceptable as backfill material in the intended location. The criteria was that Total Lead was at or below a concentration of 150 ppm and Total Arsenic was at or below 12 ppm.
- The area was restored in accordance with the approved work plan
- A review of the analytical results show that Arsenic was found in all the soil piles and had concentrations ranging from a low of 8 ppm to a high value of 19 ppm. The Rhode Island Residential Direct Exposure Criteria for Arsenic is 1.7 ppm and the Industrial/Commercial Direct Exposure Criteria for Arsenic is 3.8.

VIII.B BUILIDING 42 S42-1 SUMP PIT REMOVAL

- The sump and associated liquids, soils and concrete were removed in accordance to the approved work plan
- The former sump was secured.
- A review of the analytical results from the confirmation samples show that Arsenic was found in all the soil samples and had concentrations ranging from a low of 15.4 ppm to a high value of 22.0 ppm. The Rhode Island Residential Direct Exposure Criteria for Arsenic is 1.7 ppm and the Industrial/Commercial Direct Exposure Criteria for Arsenic is 3.8. There were no other contaminants found.

VIII.C TEST PIT 14 – PCB CONTAMINATED SOIL REMOVAL

- The area around TP14 was excavated, investigated and restored in accordance with the approved work plan.
- A review of the final confirmatory sample results shows that Arsenic was found in all soil samples and had concentrations ranging from a low of 9.0 ppm to a high value of 17.0 ppm. The Rhode Island Residential Direct Exposure Criteria for Arsenic is 1.7 ppm and the Industrial/Commercial Direct Exposure Criteria for Arsenic is 3.8.
- A review of the final confirmatory sample results for one sample (B6-S4) showed elevated SVOC concentrations for Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene and Chrysene above the Rhode Island Residential Direct Exposure Criteria for these materials.

Benzo(a)pyrene was the only SVOC that was also above the Rhode Island Industrial/Commercial Direct Exposure Criteria. The criteria is 0.8 ppm and the result was 0.97 ppm

- After additional excavation at the location of sample B6-S4, an additional confirmation sample was taken (B6-S4B) and analyzed for Benzo(a)pyrene. A review of the sample results for this sample shows that the concentration of Benzo(a)pyrene was below the Rhode Island Residential Direct Exposure Criteria of 0.4 ppm.

VIII.D BUILDING 42 S52-5 SUMP INVESTIGATION AND REMEDIATION

- The sump, valve chamber and associated piping were excavated, investigated and restored in accordance with the approved work plan
- A review of the confirmatory sample results shows that Arsenic was found in all soil samples and had concentrations ranging from a low of 10.0 ppm to a high value of 27.0 ppm. The Rhode Island Residential Direct Exposure Criteria for Arsenic is 1.7 ppm and the Industrial/Commercial Direct Exposure Criteria for Arsenic is 3.8.
- A review of the confirmatory sample results for sample S42-SWN show an elevated SVOC concentration for Chrysene above the Rhode Island Residential Direct Exposure Criteria for these materials. The residential criteria is 0.4 ppm and the result was 0.46 ppm. The concentration of Chrysene was not above the Rhode Island Industrial/Commercial Direct Exposure Criteria, which is 780 ppm.
- A review of the confirmatory sample results for pipeline sample N1-B, showed elevated SVOC concentrations for Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene and Chrysene above the Rhode Island Residential Direct Exposure Criteria for these materials. None of these SVOCs were above the Rhode Island Industrial/Commercial Direct Exposure Criteria.

VIII.E EXPLORATORY TRENCHING, FORMER DISPOSAL PITS

- The exploratory trenching area, northeast of Building 42 was excavated, analyzed, soils disposed of and the area restored in accordance with the approved work plan.
- A review of the exploratory trenching sample results for sample DPSOIL1 showed elevated SVOC concentrations for Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene and Chrysene above the Rhode Island Residential Direct Exposure Criteria for these materials. Benzo(a)pyrene was the only SVOC that was also above the Rhode Island Industrial/Commercial Direct Exposure Criteria. The criteria is 0.8 ppm and the result was 1.00 ppm
- After additional excavation at the location of sample DPSOIL1, additional confirmation sample were taken (B6-S4B) and analyzed for TPH. A review of the sample results for these samples shows that the concentration of TPH was below the Rhode Island Residential Direct Exposure Criteria of 500 ppm.
- A review of the exploratory trenching stockpile results shows an elevated Arsenic concentration of 18.8 ppm, which is above the Rhode Island Residential Direct Exposure Criteria of 1.7 ppm. This stockpile result is also above the Rhode Island Industrial/Commercial Direct Exposure Criteria for Arsenic (3.8 ppm).

VIII.F TEST PIT (7 FEET SOUTH OF MW-09)

- The test pit (7 feet south of MW-09) was excavated, sampled, the sample analyzed and the area restored in accordance with the approved work plan.
- A review of the sample results shows an elevated Arsenic concentration of 13.0 ppm, which is above the Rhode Island Residential Direct Exposure Criteria of 1.7 ppm. This result is also above the Rhode Island Industrial/Commercial Direct Exposure Criteria for Arsenic (3.8 ppm). Additionally, there were exceedances of the Rhode Island Residential Direct Exposure Criteria for Manganese (760 ppm) and Zinc (7,200 ppm). There were no other exceedances of the Rhode Island Residential Direct Exposure Criteria.

VIII.G SOUTH OF PIER 1 (SAMPLING FOR PCBs)

- The presence of PCBs did not exceed the Rhode Island Residential Direct Exposure Criteria.

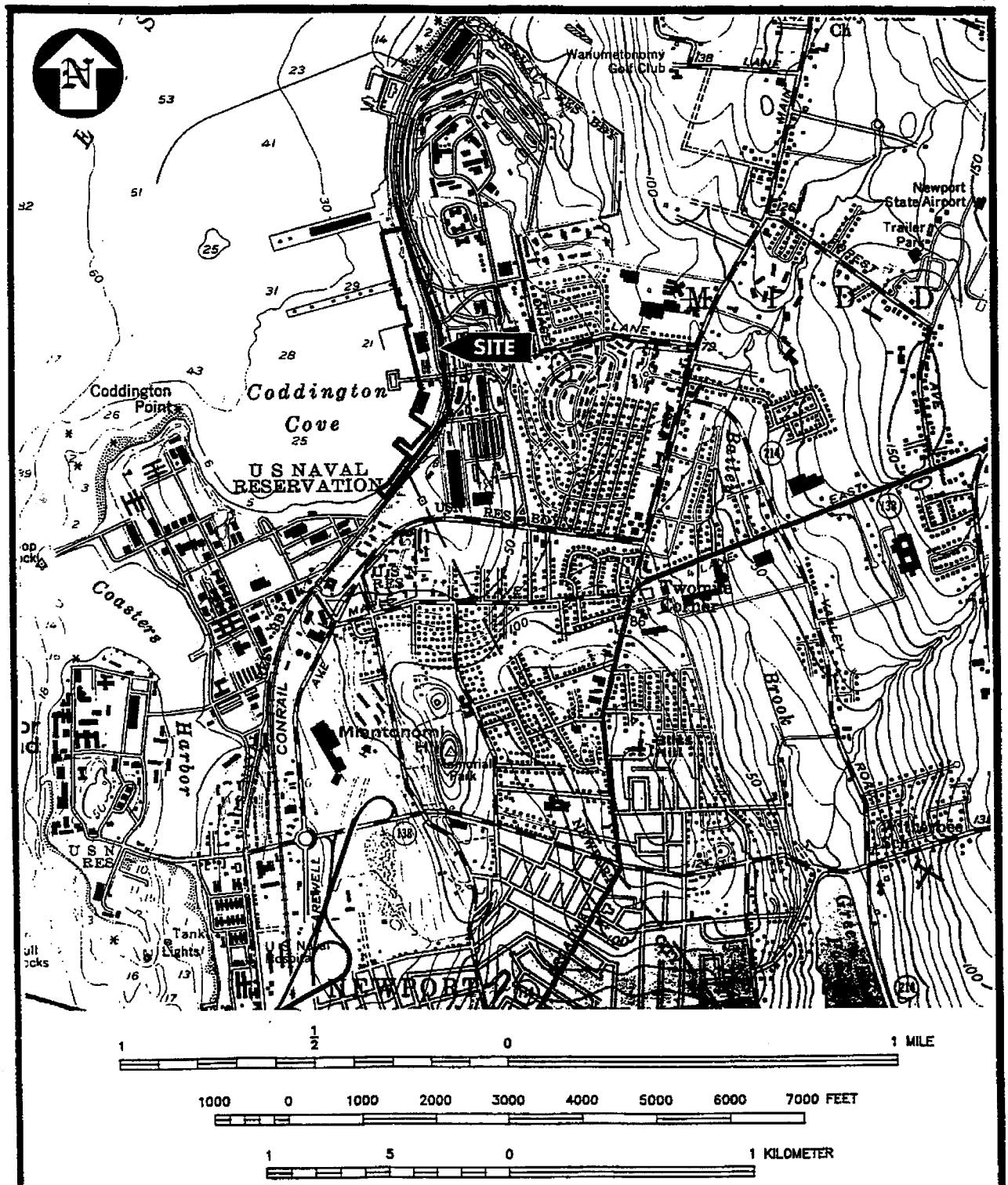
VIII.H BUILDING 54, SUBSTATION 16 (SAMPLING FOR PCBs)

- The presence of PCBs did not exceed the Rhode Island Residential Direct Exposure Criteria.

VIII.I OBSERVATION: ARSENIC

- In the course of investigating and remediating the hotspots at Derecktor Shipyard, it was observed that Arsenic was always present and always above the Rhode Island Industrial/Commercial Direct Exposure Criteria. Delineation or remedeation of arsenic concentrations in soils for the site was not included in the Scope of work and a formal Background Certification would have to be performed in order to determine whether the observed levels are natural.

Figures



SITE LOCATION MAP
DERECKTOR SHIPYARD
NEWPORT, RHODE ISLAND

Foster Wheeler Environmental Corp.

FIGURE 1

FIGURE 2: SHORELINE BERM REMOVAL AREA

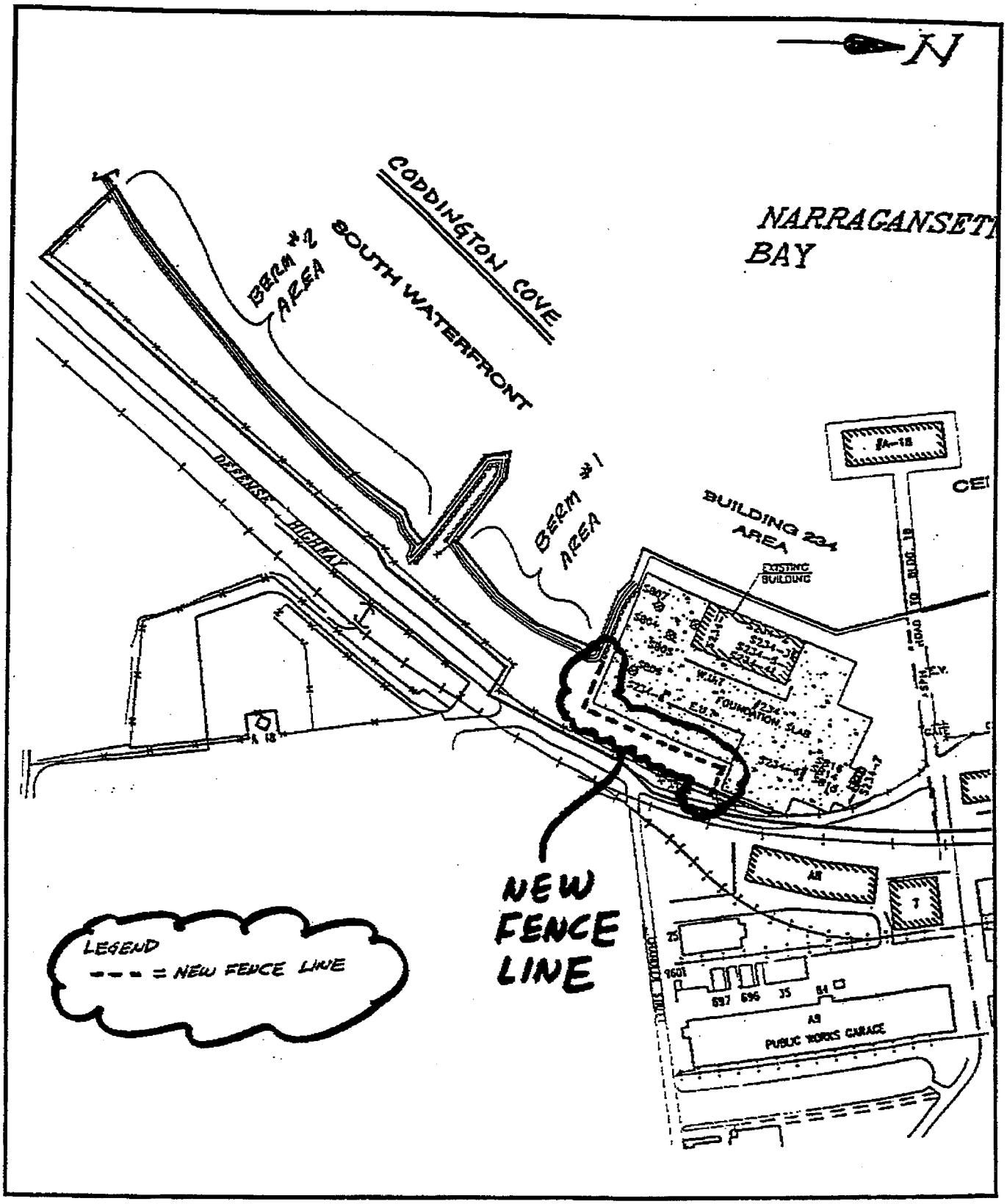


FIGURE 3

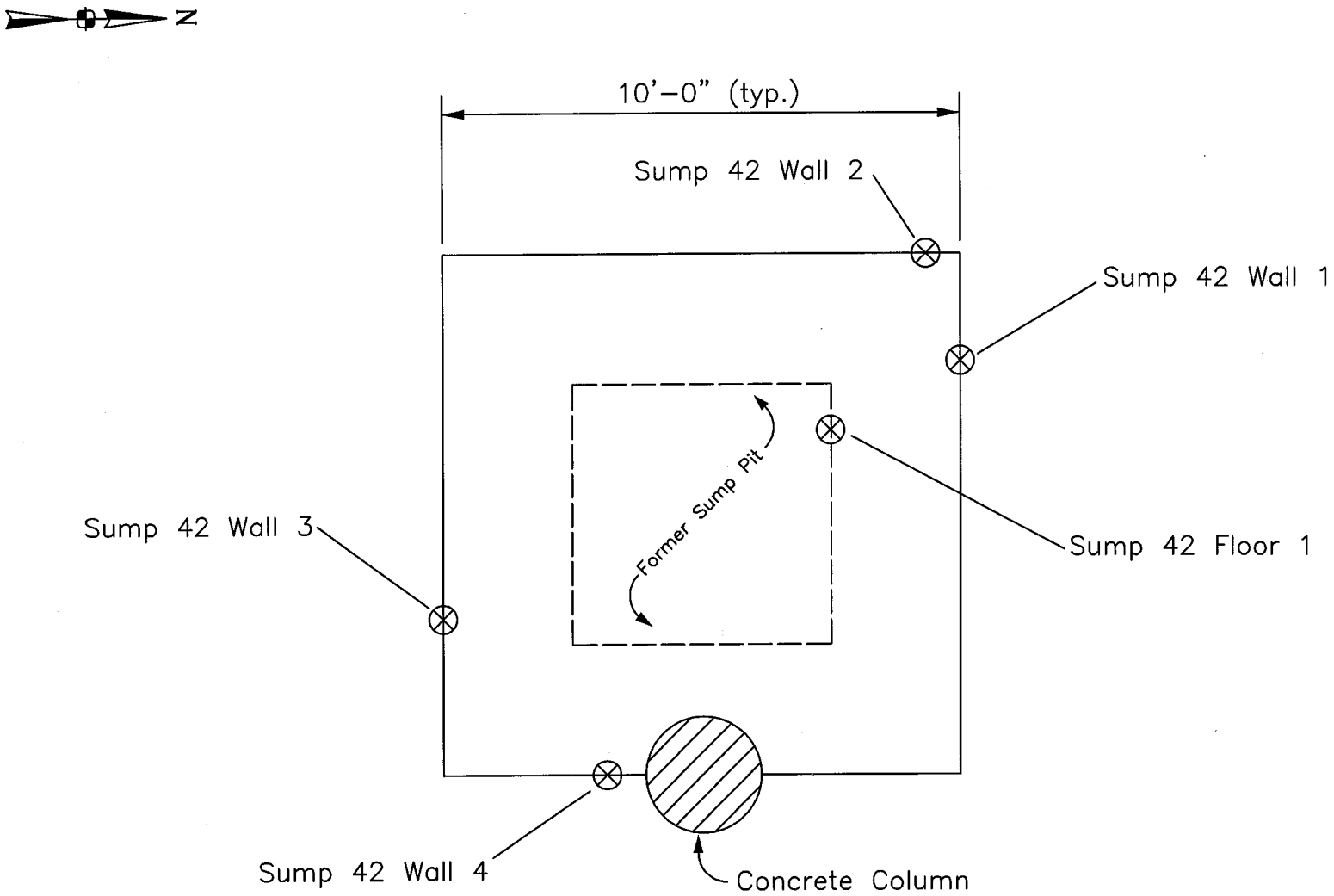
DERECKTOR SHIPYARD
BERM REMOVAL STOCKPILES

SN- Denotes section soil was removed from

O with a number inside - Denotes stockpile number in that section

Field Sketch
Not to Scale

	Piles to landfill	>12 ppm Arsenic or >150 ppm lead
	Piles to Tank 43	≤ 12 ppm Arsenic or ≤ 150 ppm Lead
	Asphalt Piles	Asphalt piles were all shipped to an approved off-site facility.

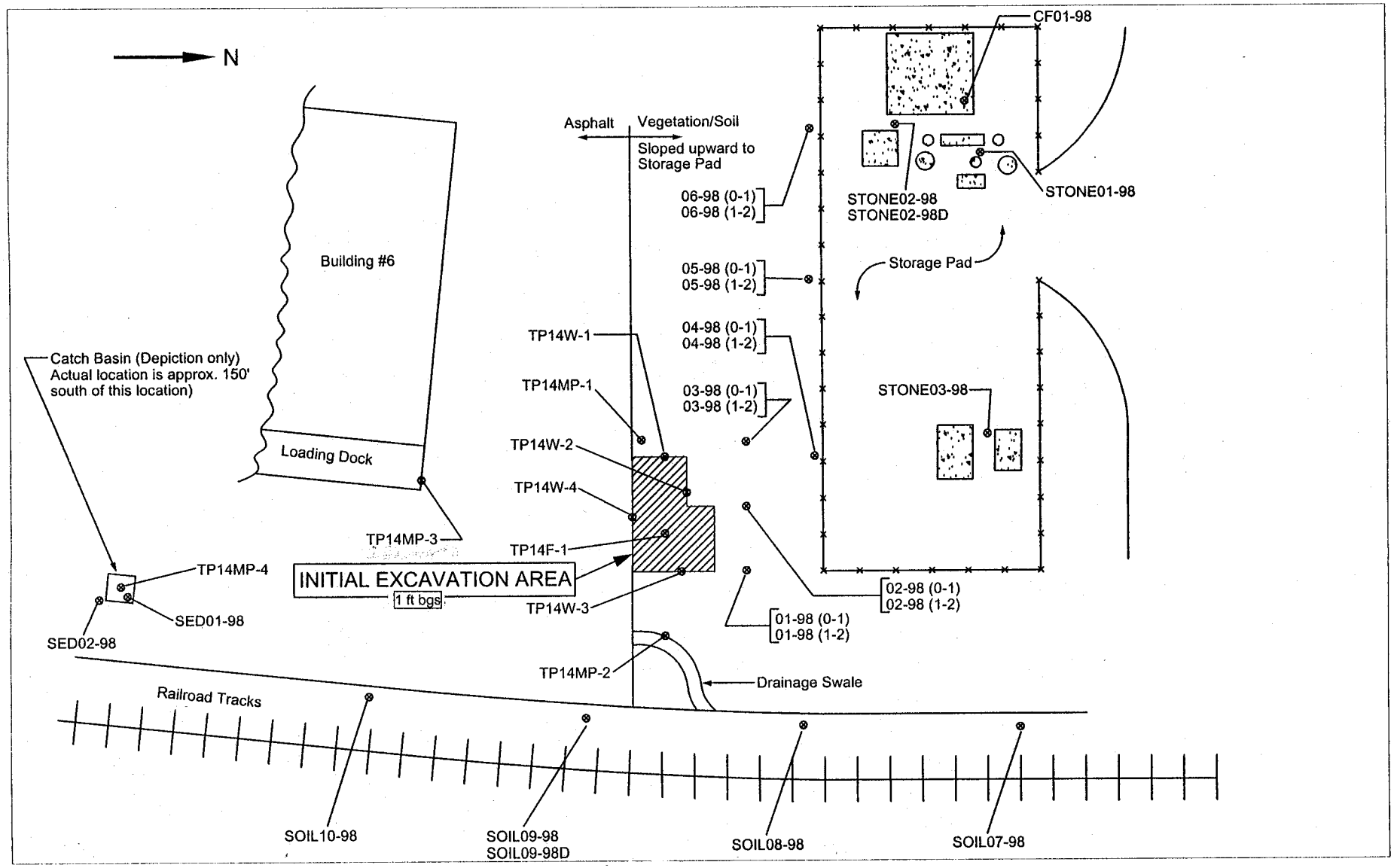


NOT TO SCALE

U.S. Navy RAC
Derecktor Shipyard, Newport, RI

Figure 4
Plan View
Sump Removal – Building 42 S42–1
and Confirmation Sample Locations

FOSTER WHEELER ENVIRONMENTAL CORPORATION



Legend:

⊗ – Sample Location	01-98 (0-1) – Vegetated Mound Surface Soil Samples
TP – Test Pit Samples	MP – Migration Pathway
SED – Sediment Samples	CF - Concrete Floor Chip Samples
W – TP Sidewall	Stone – Stone Samples
F – TP Floor	Soil - Soil Samples

Notes:

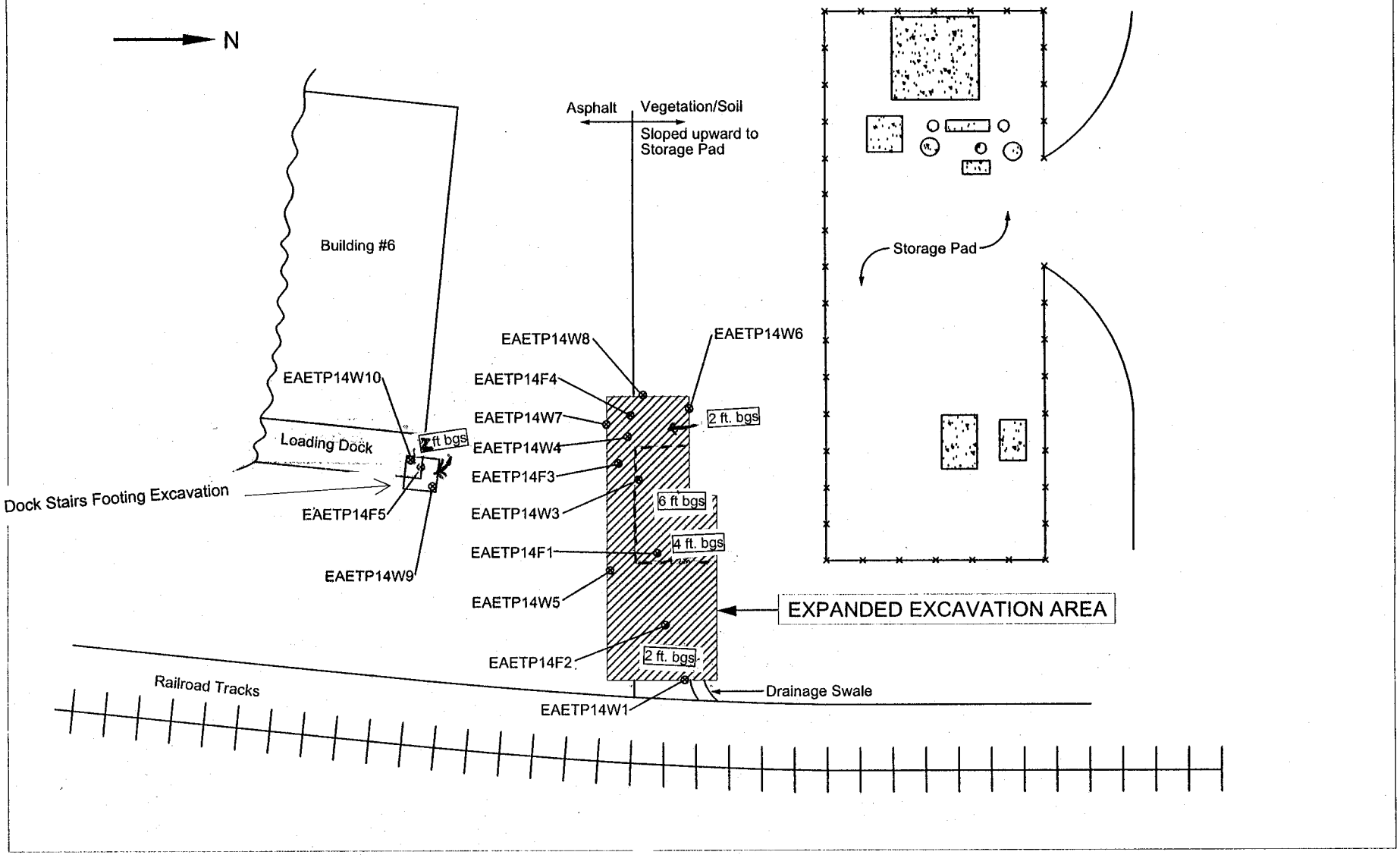
See Sections III.C.3 and III.C.4

0 10 20
FEET

U.S. Navy RAC
Derecktor Ship Yard
Newport, Rhode Island

Figure 5
Test Pit 14 – PCB Contaminated Soil Removal
Initial Excavation Area & Sample Locations

FOSTER WHEELER ENVIRONMENTAL CORPORATION



Legend:

EAETP14F1 – Confirmation Soil Sample Locations (excavation floor) 3-6 in. depth
EAETP14W1 – Confirmation Soil Sample Locations (excavation sidewall)

⊗ – Sample Location

Notes:

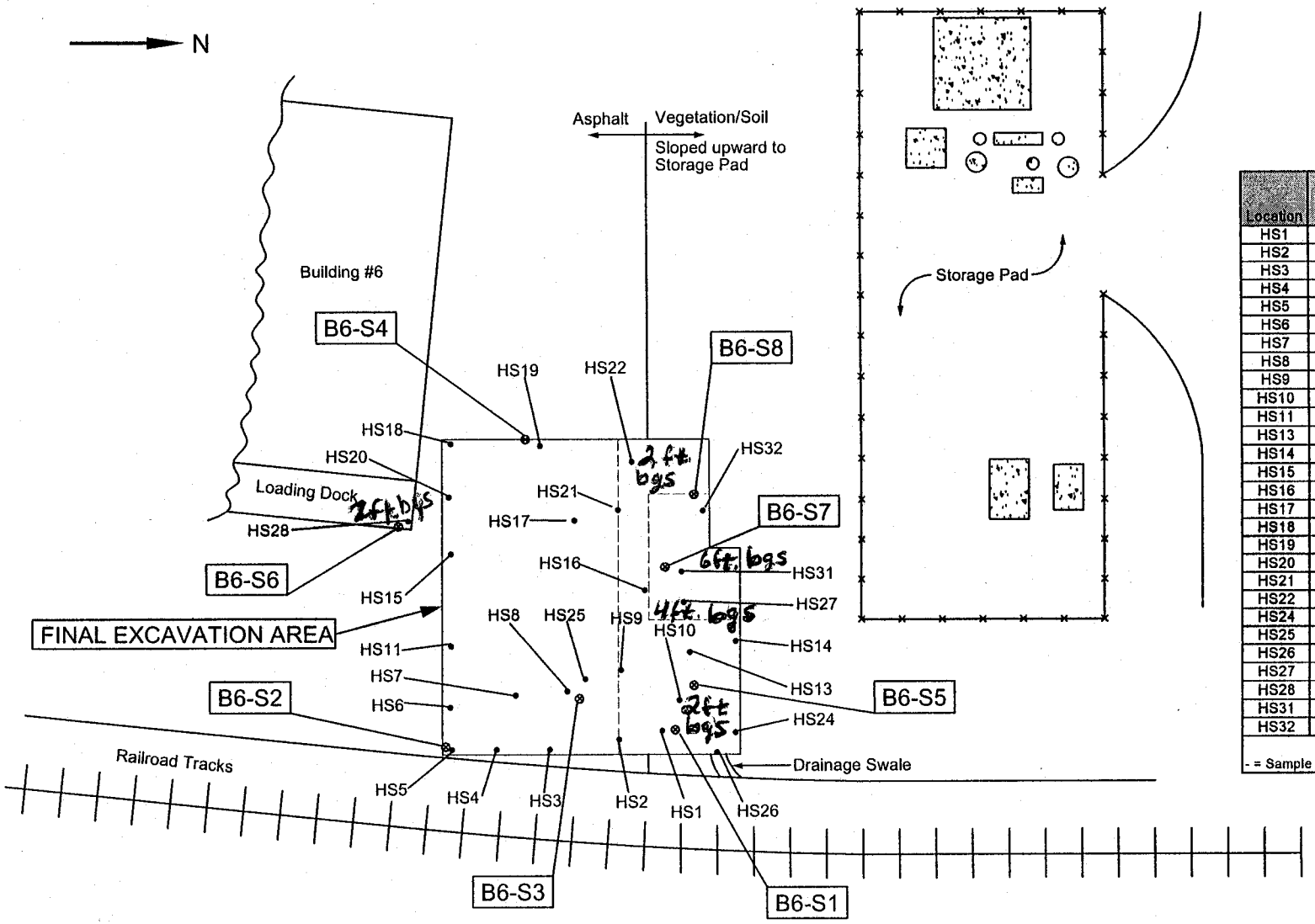
See Section III.C.5

0 10 20
FEET

U.S. Navy RAC
Derecktor Ship Yard
Newport, Rhode Island

Figure 6
Test Pit 14 – PCB Contaminated Soil Removal
Expanded Excavation Area & Sample Locations

FOSTER WHEELER ENVIRONMENTAL CORPORATION



Location	Headspace Reading	Rapid PCB Assay Kit Results
HS1	0.50	< 10
HS2	0.25	-
HS3	0.25	< 10
HS4	0.50	-
HS5	0.00	< 10
HS6	0.00	< 10
HS7	1.25	-
HS8	0.00	> 10
HS9	0.00	-
HS10	0.25	> 10
HS11	0.00	< 10
HS13	0.00	> 10
HS14	0.00	= 10
HS15	0.00	< 10
HS16	0.00	-
HS17	0.00	-
HS18	0.00	-
HS19	0.00	< 10
HS20	0.00	< 10
HS21	0.00	< 10
HS22	0.00	< 10
HS24	0.00	< 10
HS25	-	< 10
HS26	-	> 10
HS27	-	> 10
HS28	-	< 10
HS31	-	< 10
HS32	-	= 10

- = Sample not taken at this location

Legend:

B6-S1 – Confirmation Soil Sample Locations

⊗ – Sample Location

HS1 – Field Head Space Test Sample Locations

Notes:

See section III.C.5
Sidewall saamples B6-S2 & B6-S4 approx. 6.5- ft. bgs
Excavation floor samples B6-S1, B6-S3, B6-S5, B6-S7 & B6-S8 approx. 3-6 in. below excavation floor.
Sidewall sample B6-S6 approx. 1 ft. bgs.

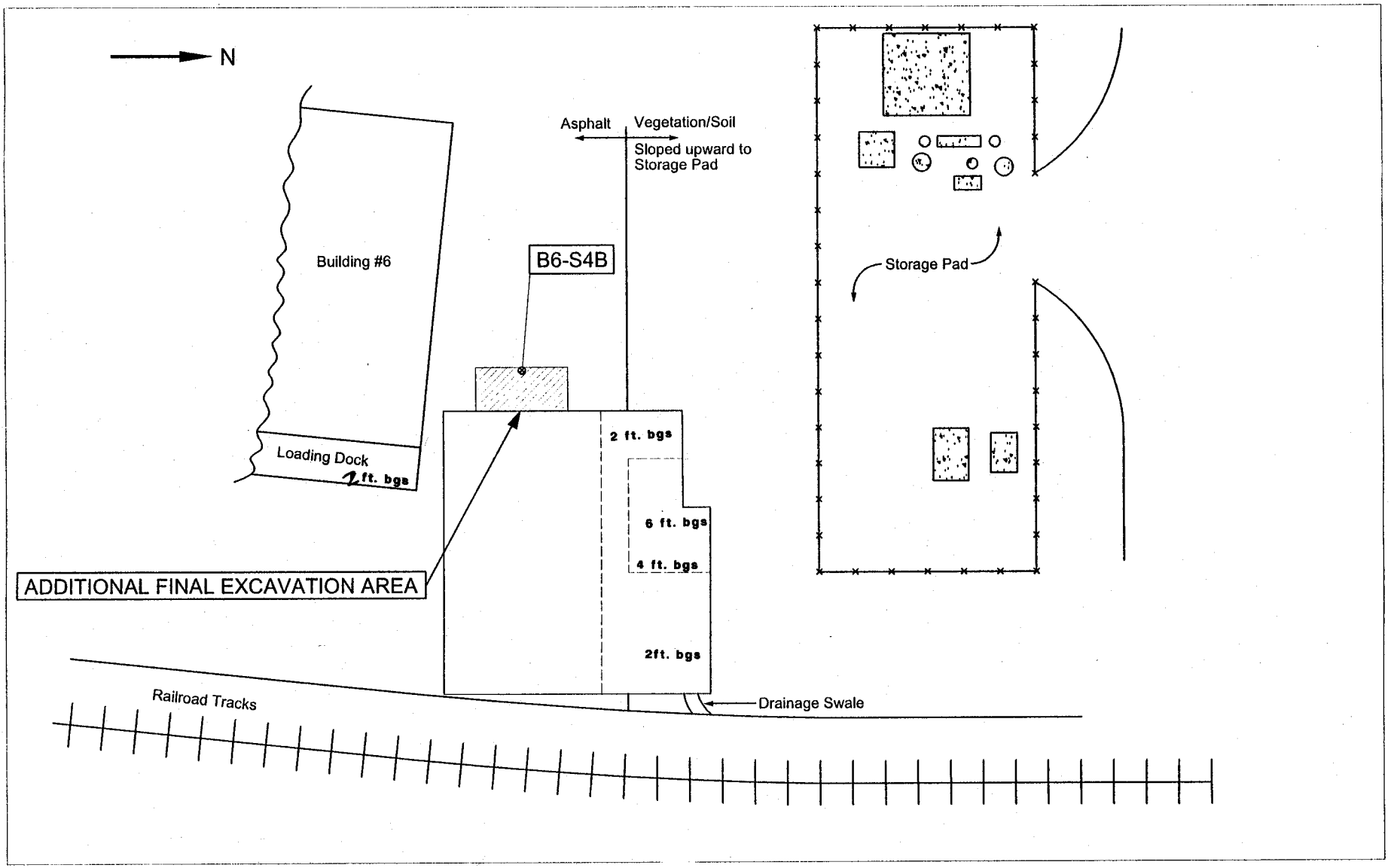
0 10 20
FEET

U.S. Navy RAC
Derecktor Ship Yard
Newport, Rhode Island

Figure 7

Test pit 14 – PCB Contaminated Soil Removal
Additional Excavation Area & Confirmation Sample Locations

FOSTER WHEELER ENVIRONMENTAL CORPORATION



Notes:

See Section III.C.5
Soil Sample B6-S4B collected approximately 5.5-ft. bgs.

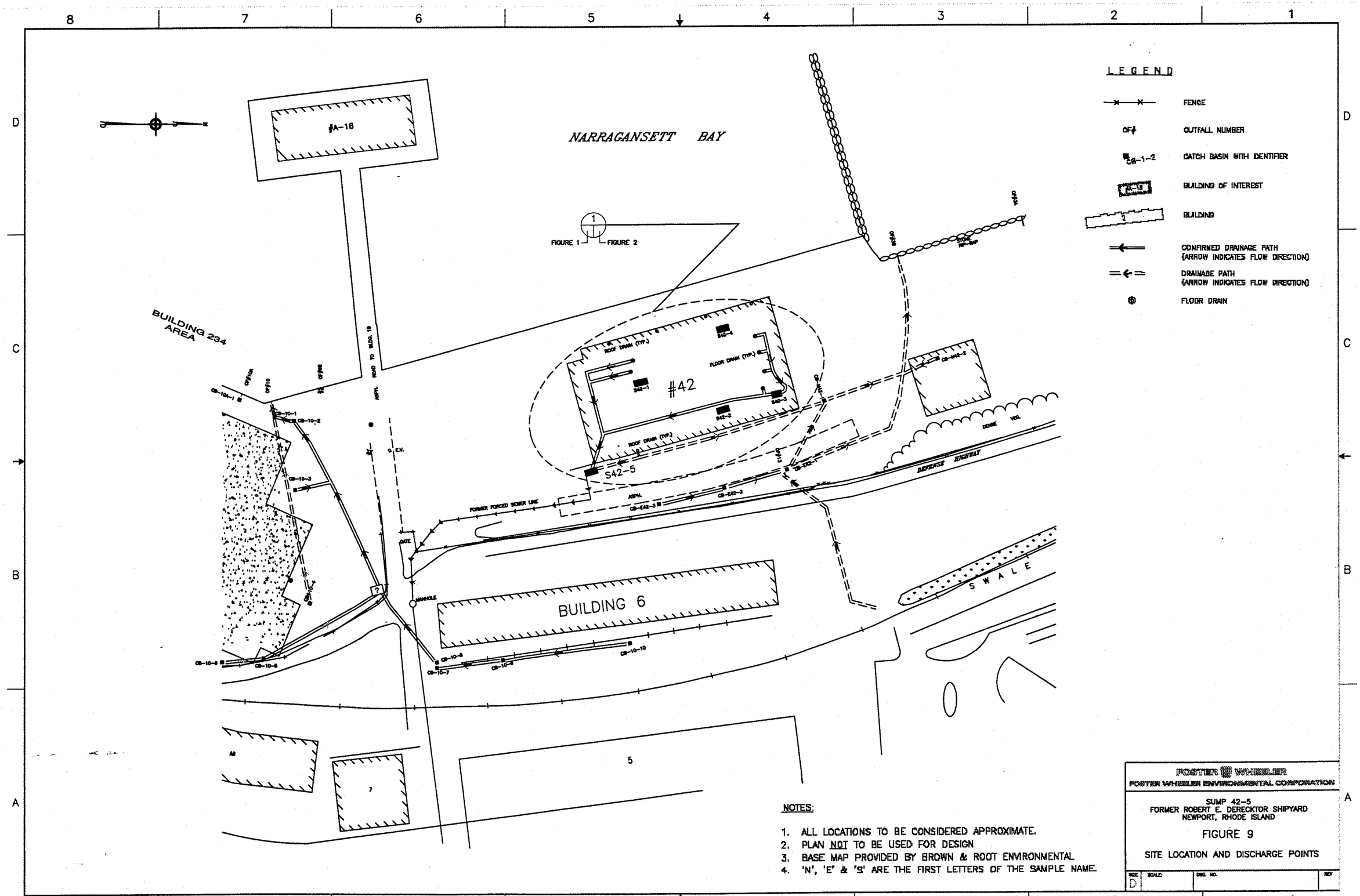
⊗ – Sample Location

0 10 20
FEET

U.S. Navy RAC
Derecktor Ship Yard
Newport, Rhode Island

Figure 8
Test Pit 14 – PCB Contaminated Soil Removal
Additional Final Excavation Area
& Confirmation Sample Location

FOSTER WHEELER ENVIRONMENTAL CORPORATION



NOTES:

1. ALL LOCATIONS TO BE CONSIDERED APPROXIMATE.
2. PLAN NOT TO BE USED FOR DESIGN
3. BASE MAP PROVIDED BY BROWN & ROOT ENVIRONMENTAL
4. 'N', 'E' & 'S' ARE THE FIRST LETTERS OF THE SAMPLE NAME.

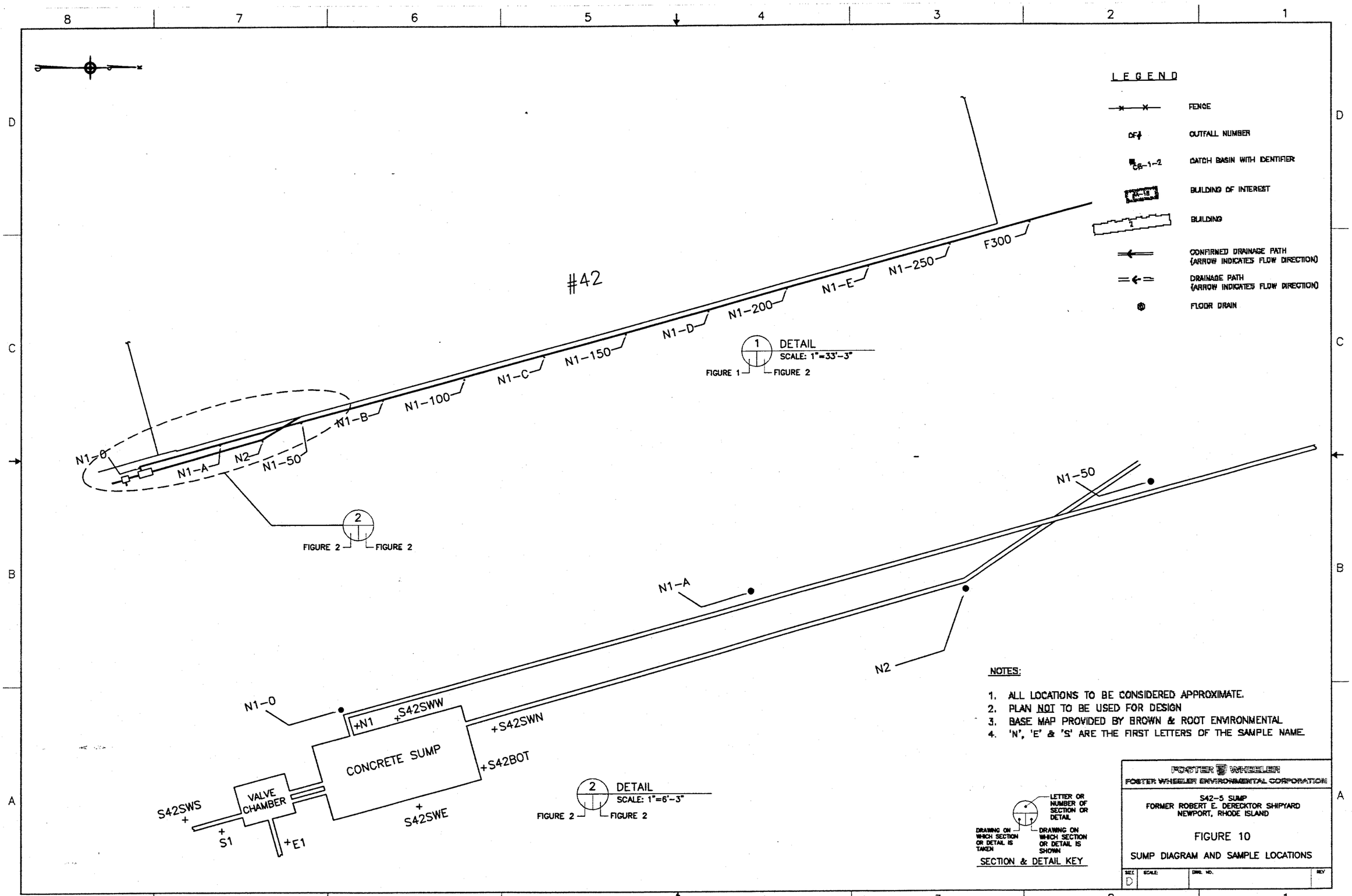
FOSTER WHEELER
FOSTER WHEELER ENVIRONMENTAL CORPORATION

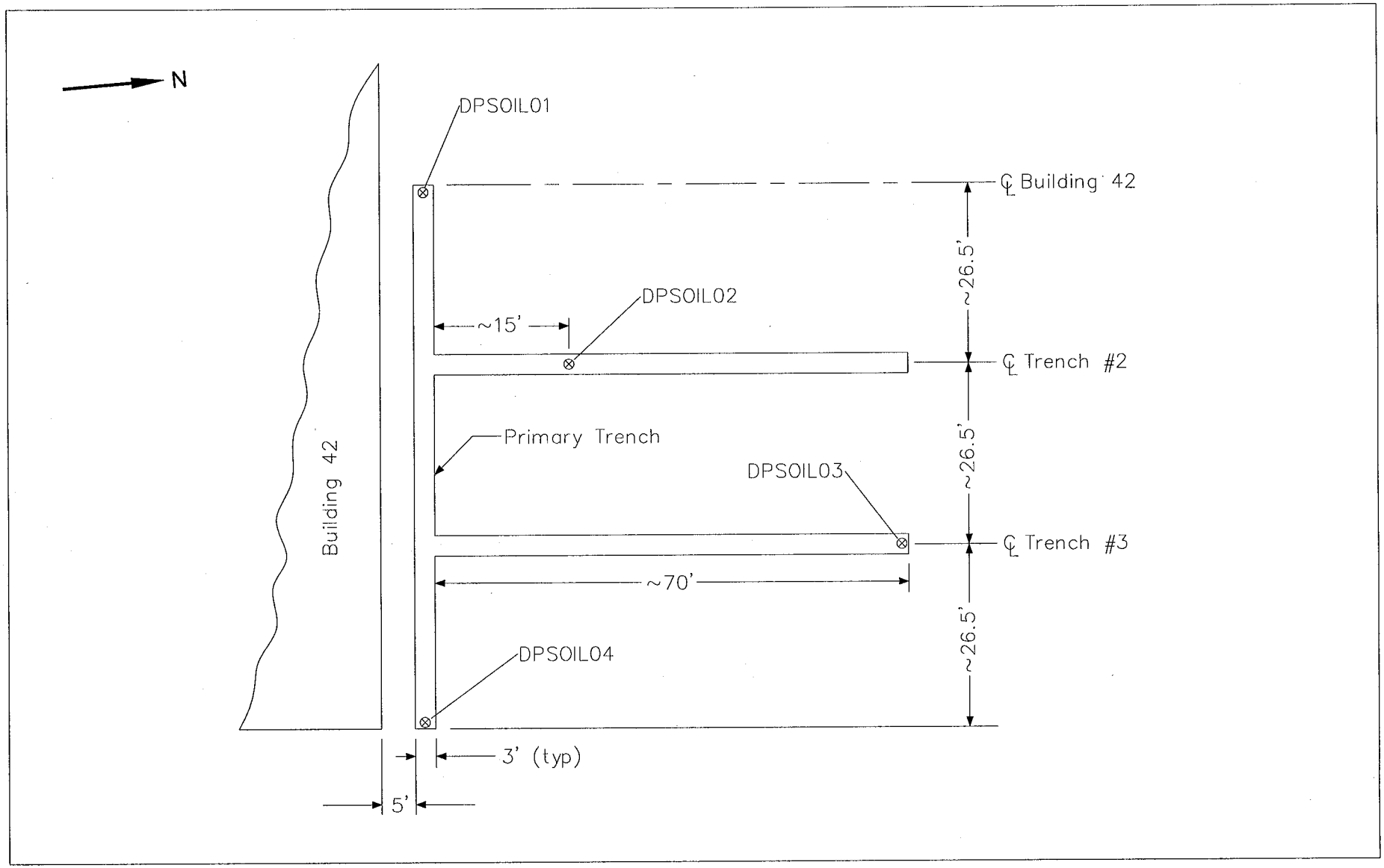
SUMP 42-5
FORMER ROBERT E. DERECKTOR SHIPYARD
NEWPORT, RHODE ISLAND

FIGURE 9

SITE LOCATION AND DISCHARGE POINTS

SIZE D | SCALE: | DWG. NO. | REV


LEGEND
FENCE
OUTFALL NUMBER
CATCH BASIN WITH IDENTIFIER
BUILDING OF INTEREST
BUILDING
CONFIRMED DRAINAGE PATH (ARROW INDICATES FLOW DIRECTION)
DRAINAGE PATH (ARROW INDICATES FLOW DIRECTION)
FLOOR DRAIN
#42
F300
N1-250
N1-E
N1-200
N1-D
N1-150
N1-C
N1-100
N1-B
N1-50
N2
N1-A
N1-0
1 DETAIL
SCALE: 1"=33'-3"
FIGURE 1
FIGURE 2
2
FIGURE 2
FIGURE 2
N1-50
N1-A
N2
N1-0
+N1
+S42SWW
+S42SWN
CONCRETE SUMP
+S42BOT
+S42SWE
VALVE CHAMBER
S42SWS
+S1
+E1
2 DETAIL
SCALE: 1"=6'-3"
FIGURE 2
FIGURE 2
LETTER OR NUMBER OF SECTION OR DETAIL
DRAWING ON WHICH SECTION OR DETAIL IS TAKEN
DRAWING ON WHICH SECTION OR DETAIL IS SHOWN
SECTION & DETAIL KEY
NOTES:
1. ALL LOCATIONS TO BE CONSIDERED APPROXIMATE.
2. PLAN NOT TO BE USED FOR DESIGN
3. BASE MAP PROVIDED BY BROWN & ROOT ENVIRONMENTAL
4. 'N', 'E' & 'S' ARE THE FIRST LETTERS OF THE SAMPLE NAME.
FOSTER WHEELER
FOSTER WHEELER ENVIRONMENTAL CORPORATION
S42-5 SUMP
FORMER ROBERT E. DERECKTOR SHIPYARD
NEWPORT, RHODE ISLAND
FIGURE 10
SUMP DIAGRAM AND SAMPLE LOCATIONS
SIZE D
SCALE
DWG. NO.
REV

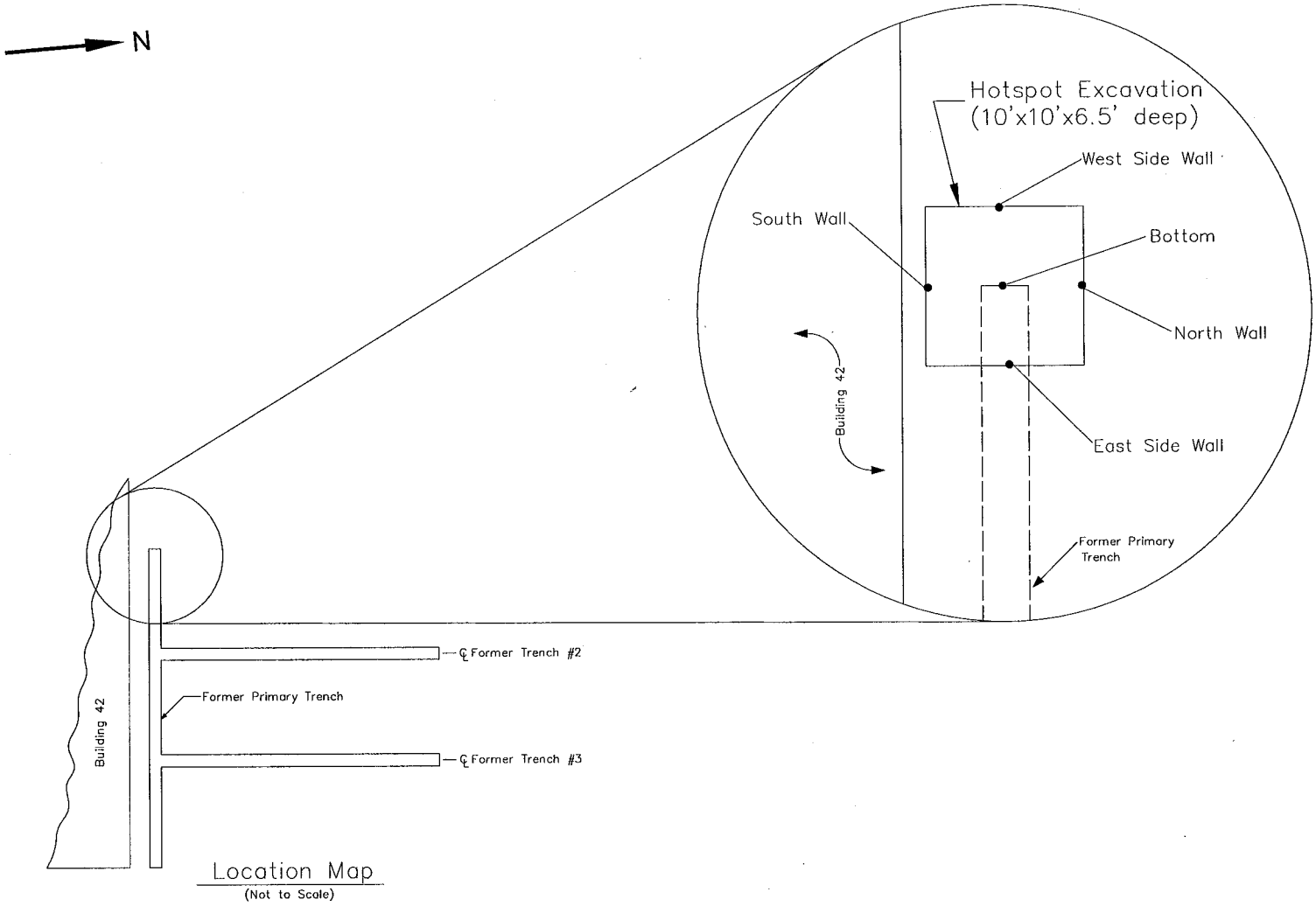


0 10 20
FEET

U.S. Navy RAC
Derecktor Ship Yard
Newport, Rhode Island

Figure 11
Exploratory Trenching – Former Disposal Pits
Site and Sample Locations

FOSTER WHEELER ENVIRONMENTAL CORPORATION



0 5 10
FEET

U.S. Navy RAC
Derecktor Ship Yard
Newport, Rhode Island

Figure 12
Exploratory Trenching – Former Disposal Pits
Hotspot Removal and Sample Locations

FOSTER WHEELER ENVIRONMENTAL CORPORATION

Tank Farm 5 / DSY

2/18/99 HTS Log D013

0630 Daily HTS and Assignment Briefing. Topic: speed and Mulch trench and Test Pit. Wear rain gear, be careful of slippery conditions.

0730 Complete Building 179 Closeout, Closure Reports and DSY Closeout Report.

1000 Clean and package MSA passport EW# 00181 to return to HARCO. Return OVA 128 ~~[illegible]~~ 1015 HARCO Loaner #3600 to HARCO. FEDEX to pickup today.

Figure 13

Exploratory Trenching: Field Sketch

Andrew Prophet 2/18/99

Tank Farm 5 / DSY

2/18/99 HTS Log D013

Disposal pit trenches

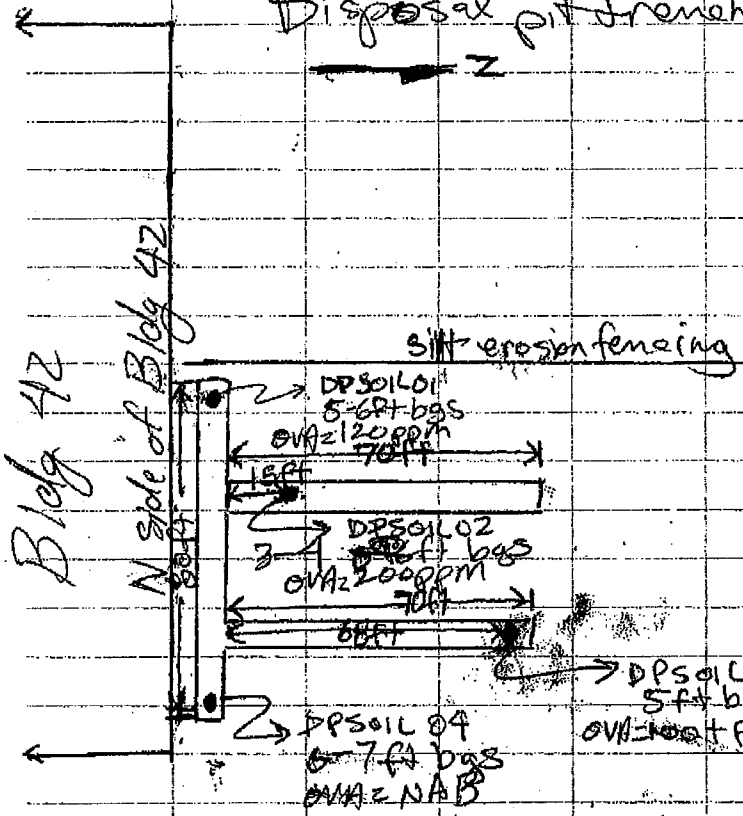
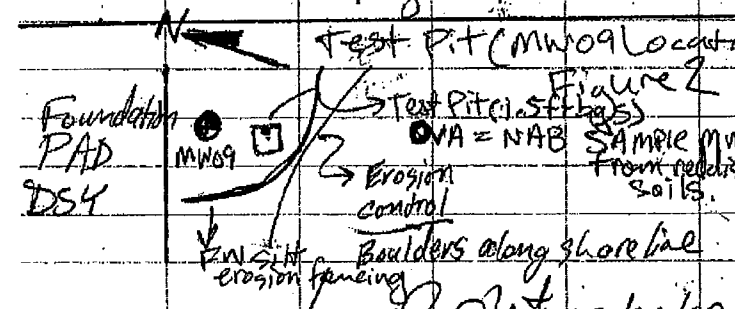
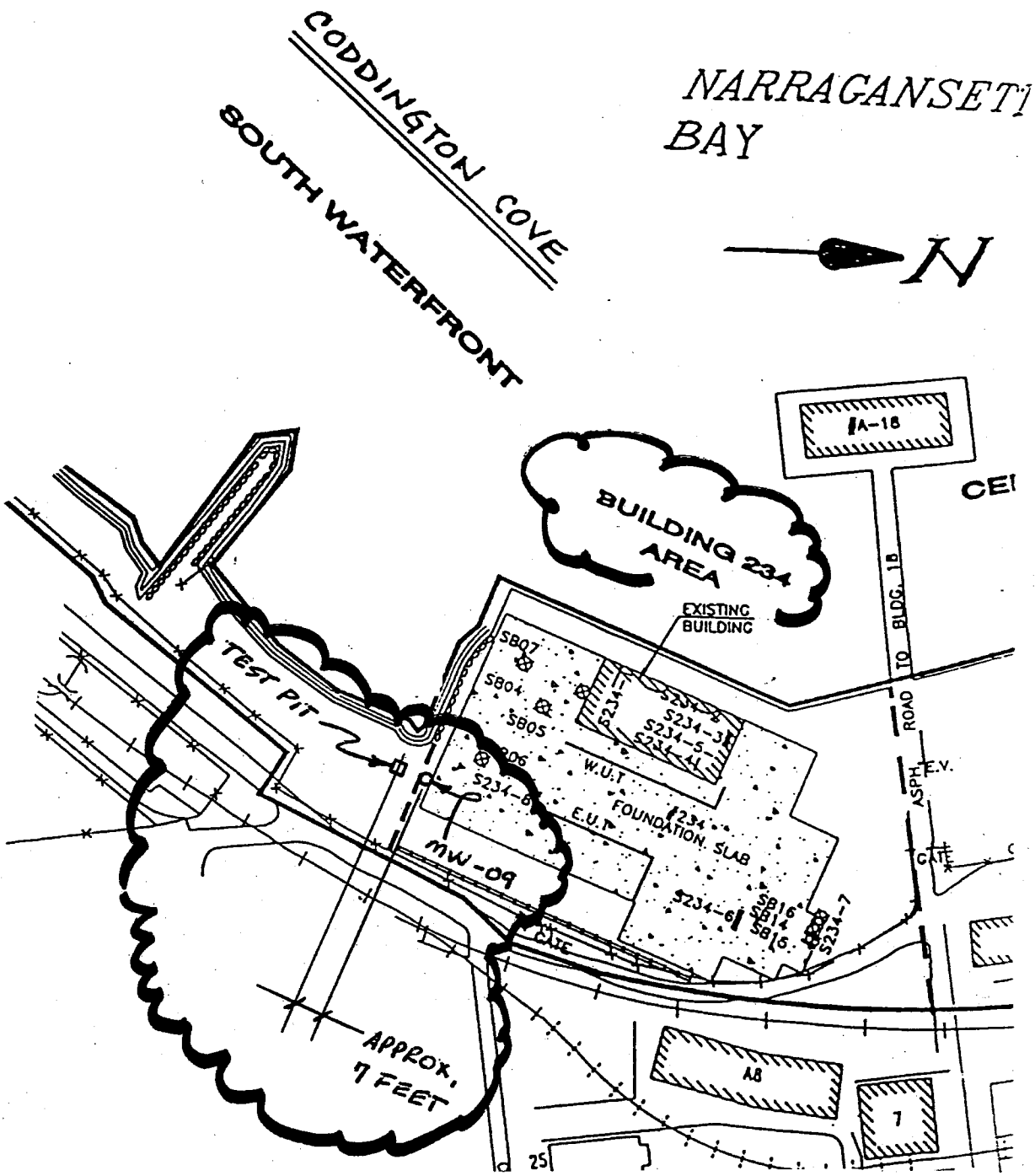


Figure 1



Andrew Prophet 2/18/99



U.S. Navy RAC
Derecktor Shipyard, Newport, RI

Figure 14

Miscellaneous Investigation Activities
Test Pit (7 Feet South of MW-09) Location

NOT TO SCALE

FOSTER WHEELER ENVIRONMENTAL CORPORATION

Appendix A

Berm Removal Sample Results Summary and Laboratory Data

FOSTER WHEELER ENVIRONMENTAL CORPORATION
U.S. NAVY NORTHERN DIVISION REMEDIAL ACTION CONTRACT (RAC)
CONTRACT N62472-94-D-0398 DELIVERY ORDER 13 AND 60

DERECKTOR SHIPYARD BERM REMOVAL - SUMMARY OF ANALYTICAL RESULTS

RIDEM Direct Exposure Criteria --->	Residential	Commercial/Industrial	SECTION 1		SECTION 2		SECTION 3		SECTION 4		SECTION 5		SECTION 6	
			Soil Pile 1	Soil Pile 2	Soil Pile 1	Soil Pile 2	Soil Pile 1	Soil Pile 2	Soil Pile 1	Soil Pile 2	Soil Pile 1	Soil Pile 2	Soil Pile 1	Soil Pile 2
Volatile Organics														
Acetone	7,800.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	2.5	200.0	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	10.0	92.0	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform	81.0	720.0	-	-	-	-	-	-	-	-	-	-	-	-
Bromomethane	0.8	2,900.0	-	-	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	1.5	44.0	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	210.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	1.2	940.0	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	7.6	68.0	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	920.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	0.9	63.0	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	0.2	9.5	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	630.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	1,100.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	1.9	84.0	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	71.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-
Isopropyl benzene	27.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-
Methyl ethyl ketone	10,000.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-
Methyl-tert-butyl-ether	390.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride	45.0	760.0	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	13.0	190.0	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1,2 Tetrachloroethane	2.2	220.0	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2 Tetrachloroethane	1.3	29.0	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	190.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	540.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	3.6	100.0	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	0.02	3.00	-	-	-	-	-	-	-	-	-	-	-	-
Total Xylenes	110.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-
Semivolatiles														
Acenaphthene	43.0	10,000.0	0.039	0.049	-	-	-	-	-	-	98.0	98.0	-	0.140
Acenaphthylene	23.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene	35.0	10,000.0	0.074	-	0.047	-	-	0.099	-	-	0.200	0.200	0.043	0.250
Benzo(a)anthracene	0.9	7.8	0.190	0.180	0.180	0.063	0.075	0.350	0.068	0.050	0.460	0.460	0.180	0.780
Benzo(a)pyrene	0.4	0.8	0.190	0.180	0.170	0.067	0.056	0.330	0.058	0.049	0.380	0.380	0.160	0.700
Benzo(b)fluoranthene	0.9	7.8	0.270	0.240	0.220	0.093	0.098	0.440	0.078	0.067	0.560	0.560	0.240	1.000
Benzo(g,h,I)perylene	0.8	10,000.0	0.076	0.066	-	-	-	0.110	-	-	0.100	0.100	-	0.220
Benzo(k)fluoranthene	0.9	78.0	0.110	0.097	0.100	0.050	-	0.220	-	-	0.230	0.230	0.110	0.380
Bis(2-ethylhexyl)phthalate	46.0	410.0	0.081	-	-	-	-	-	-	-	0.300	0.300	-	-
Bis(2-chloroethyl)ether	0.6	5.2	-	-	-	-	-	-	-	-	-	-	-	-
4,(p-)Chloroaniline	310.0	82.0	-	-	-	-	-	-	-	-	-	-	-	-
2-Chlorophenol	50.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene	0.4	780.0	0.200	0.200	0.180	-	0.079	0.370	0.070	0.056	0.460	0.460	0.170	0.800
Dibenzo(a,h)anthracene	0.4	0.8	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	510.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	430.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	27.0	240.0	-	-	-	-	-	-	-	-	-	-	-	-
3,3-Dichlorobenzidine	1.4	13.0	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	30.0	6,100.0	-	-	-	-	-	-	-	-	-	-	-	-
Diethyl phthalate	340.0	10,000.0	0.046	-	-	-	-	-	-	-	-	-	-	-
2,4-Dimethyl phenol	1,400.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-
Dimethyl phthalate	1,900.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dinitrophenol	160.0	4,100.0	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dinitrotoluene	0.9	8.4	-	-	-	-	-	-	-	-	-	-	-	-
Fluoranthene	20.0	10,000.0	0.430	0.450	0.300	0.100	0.160	0.670	0.100	0.086	0.940	0.940	0.290	1.600
Fluorene	28.0	10,000.0	-	0.043	-	-	-	-	-	-	0.086	0.086	-	-
Hexachlorobenzene	0.4	3.6	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobutadiene	8.2	73.0	-	-	-	-	-	-	-	-	-	-	-	-
Hexachloroethane	46.0	410.0	-	-	-	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	0.9	7.8	0.073	0.065	0.053	-	-	0.110	-	-	0.120	0.120	-	0.230
2-Methyl naphthalene	123.0	10,000.0	-	0.056	-	-	-	-	-	-	-	-	-	-
Naphthalene	54.0	10,000.0	0.060	0.046	-	-	-	-	-	-	-	-	-	-
Pentachlorophenol	5.3	48.0	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	40.0	10,000.0	0.300	0.360	0.170	0.061	0.053	0.410	0.043	0.047	0.760	0.760	0.160	1.300
Phenol	6,000.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene	13.0	10,000.0	0.360	0.380	0.370	0.140	0.140	0.640	0.100	0.084	0.940	0.940	0.330	1.600
1,2,4-Trichlorobenzene	96.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	330.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	58.0	520.0	-	-	-	-	-	-	-	-	-	-	-	-
Pesticides/PCBs														
Chlordane	0.5	4.4	-	-	-	-	-	-	-	-	-	-	-	-
Dieldrin	0.04	0.40	-	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated biphenyls	10.0	10.0	0.100	0.044	-	-	-	-	-	-	-	-	-	-
Inorganics														
Arsenic	1.7	3.8	19	11	12	11	10	8	11	13	11	11	15	14
Barium	5,500.0	10,000.0	36	25	21	22	16	23	25	15	25	25	30	19
Cadmium	39.0	1,000.0	1.2	0.9	-	-	-	-	-	-	-	-	-	-
Chromium (Total)	na	na	17	16	13	12	12	19	16	13	18	18	17	14
Lead	150.0	500.0	72	81	17	25	13	62	22	14	71	71	55	45
Mercury	23.0	610.0	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	390.0	10,000.0	0.04	-	-	-	-	-	-	-	-	-	-	-
Silver	200.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-
TPH (418.1)	500.0	2,500.0	93	37	-	150	36	230	130	220	260	260	120	80

= Exceeds RIDEM Residential Exposure Criteria

- = Non-Detect Result

All results in mg/kg unless otherwise noted

n = Not Analyzed

MITKEM CORPORATION

SEC I ⊖

September 25, 1997

Foster Wheeler Environmental Corp.
P.O. Box 4749
Portsmouth, RI 02842
Attn: Mr. Mark Gouveia

RE: Client Project #: Derecktor Shipyard
Lab Project #: D1468

Dear Mr. Gouveia:

Enclosed please find the data report of the required analyses for the samples associated with the above referenced project. If you have any questions regarding this report, please call me.

We appreciate your business.

Sincerely,

Edward A. Lawler
Laboratory Operations Manager

175 Metro Center Boulevard • Warwick, Rhode Island 02886-1755 • (401) 732-3400 Fax (401) 732-3499
1232 East Broadway Road, Suite 210 • Tempe, Arizona 85282 • (602) 303-9535 • Fax (602) 921-2883
email: mitkem19@mail.idt.net

MITKEM CORPORATION

Client: Foster Wheeler Environmental Corp.

Client Project: Derecktor Shipyard

Lab Project: D1468

Date samples received: 9/22/97

Project Narrative

This data report includes the analysis results for three (3) soil samples that were received from the Derecktor Shipyard site from Foster Wheeler Environmental Corp. on September 22, 1997. Analyses were performed per specification in the Chain of Custody form. For reference, a copy of the Mitkem Sample Log-In form is included for cross-referencing the client sample ID and laboratory sample ID.

All of the analyses were performed according to method specifications. No unusual occurrences were noted during sample analysis.

This data report has been reviewed and is authorized for release as evidenced by the signature below.

Edward A. Lawler
Laboratory Operations Manager

Data Qualifiers:

J This flag indicates an estimated value due to either
- the compound was detected at below the Reporting Limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the analyte was also detected in the associated Method Blank

D This flag indicates the analyte concentration was obtained from a diluted analysis

E This flag indicates the analyte concentration exceeded the Calibration Range

P This flag is used for Pesticides/PCB/Herbicide analyte when there is a greater than 50% difference for detected concentration between the two GC columns used for Primary and Confirmation analyses. The lower of the two values is reported in the Analysis Report.

MITKEM CORPORATION

Analysis Report: Total Petroleum Hydrocarbons

Client: Foster Wheeler Environmental Corp.
Analysis: Method 418.1
Matrix: Soil
Concentration in: mg/kg, dry weight basis

Lab ID	Client ID	Result	Reporting Limit	% Solid	Analysis Date
D1468-01	DSY-SP1	93	24	92	9/23/97
D1468-02	DSY-SP2	37	24	93	9/23/97
D1468-03	DSY-DRG-1	59	23	96	9/23/97

QA/QC

Method Blank			
I0922-B1	ND	22	9/23/97
Lab Control Sample (% Recovery)			
I0922-LCS1	96		9/23/97

ND = Not detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP1
Lab ID: D1468-01
Analysis: Method 8080

Analysis Date: 9/23/97
Matrix: Soil, 92% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	36
Aroclor-1221	ND	72
Aroclor-1232	ND	36
Aroclor-1242	ND	36
Aroclor-1248	ND	36
Aroclor-1254	ND	36
Aroclor-1260	100	36

QC Batch: P0922-B2

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	105%
Decachlorobiphenyl	72%

ND=Not Detected

004

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP2
Lab ID: D1468-02
Analysis: Method 8080

Analysis Date: 9/23/97
Matrix: Soil, 93% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	35
Aroclor-1221	ND	71
Aroclor-1232	ND	35
Aroclor-1242	ND	35
Aroclor-1248	ND	35
Aroclor-1254	ND	35
Aroclor-1260	44	35

QC Batch: P0922-B2

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	116%
Decachlorobiphenyl	78%

ND=Not Detected

005

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-DRG-1
Lab ID: D1468-03
Analysis: Method 8080

Analysis Date: 9/23/97
Matrix: Soil, 96% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	34
Aroclor-1221	ND	69
Aroclor-1232	ND	34
Aroclor-1242	ND	34
Aroclor-1248	ND	34
Aroclor-1254	ND	34
Aroclor-1260	ND	34

QC Batch: P0922-B2

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	20%
Decachlorobiphenyl	17%

ND=Not Detected

006

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, P0922-B2
Analysis: Method 8080

Analysis Date: 9/23/97
Matrix: Solid
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	33
Aroclor-1221	ND	66
Aroclor-1232	ND	33
Aroclor-1242	ND	33
Aroclor-1248	ND	33
Aroclor-1254	ND	33
Aroclor-1260	ND	33

QC Batch: P0922-B2

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	99%
Decachlorobiphenyl	75%

ND=Not Detected

007

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCBs)

Lab Control Summary

Client: Foster Wheeler Environmental Corp.
Lab ID for Blank Spike: P0922-LCS3
Analysis: Method 8080

Matrix: Solid
Analysis Date for Blank Spike: 9/23/97

Analyte	% Recovery
Aroclor 1260	101

QC Batch: P0922-B2

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP1
Lab ID: D1468-01
Analysis Method: 7471A (Mercury)
6010A (Others)

Matrix: Soil, 92% Solids
Concentration in: mg/kg, dry weight basis
Analysis Date: 9/24/97

Analyte	Results	Reporting Limit
Arsenic	19	1
Barium	36	1
Cadmium	1.2	0.5
Chromium	17	1
Lead	72	0.5
Mercury	ND	0.3
Selenium	ND	4
Silver	ND	1

QC Batch: 0923PBS

ND = Not detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP2
Lab ID: D1468-02
Analysis Method: 7471A (Mercury)
6010A (Others)

Matrix: Soil, 93% Solids
Concentration in: mg/kg, dry weight basis
Analysis Date: 9/24/97

Analyte	Results	Reporting Limit
Arsenic	11	1
Barium	25	1
Cadmium	0.9	0.5
Chromium	16	1
Lead	81	0.5
Mercury	ND	0.3
Selenium	ND	4
Silver	ND	1

QC Batch: 0923PBS

ND = Not detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-DRG-1
Lab ID: D1468-03
Analysis Method: 7471A (Mercury)
6010A (Others)

Matrix: Soil, 96% Solids
Concentration in: mg/kg, dry weight basis
Analysis Date: 9/24/97

Analyte	Results	Reporting Limit
Arsenic	12	1
Barium	20	1
Cadmium	0.8	0.5
Chromium	12	1
Lead	33	0.5
Mercury	ND	0.3
Selenium	ND	4
Silver	ND	1

QC Batch: 0923PBS

ND = Not detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, 0923PBS
Analysis Method: 7471A (Mercury)
6010A (Others)

Concentration in: mg/kg
Analysis Date: 9/24/97

Analyte	Results	Reporting Limit
Arsenic	ND	1
Barium	ND	1
Cadmium	ND	0.5
Chromium	ND	1
Lead	ND	0.5
Mercury	ND	0.3
Selenium	ND	4
Silver	ND	1

QC Batch: 0923PBS

ND = Not detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Lab Control Sample, 0923LCS
Analysis Method: 7471A (Mercury)
6010A (Others)

Matrix: Soil
Analysis Date: 9/24/97

Analyte	% Recovery
Arsenic	92
Barium	92
Cadmium	97
Chromium	94
Lead	91
Mercury	71
Selenium	82
Silver	106

QC Batch: 0923PBS

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP1
Lab ID: D1468-01
Analysis: Method 8260

Analysis Date: 9/23/97
Matrix: Soil, 91% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Carbon disulfide	ND	5
Iodomethane	ND	5
Acetone	ND	5
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Vinyl acetate	ND	5
2,2-Dichloropropane	ND	5
cis-1,2-Dichloroethene	ND	5
Methyl ethyl ketone	ND	5
Bromochloromethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
1,1-Dichloropropene	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Dibromomethane	ND	5
Bromodichloromethane	ND	5
2-Chloroethyl vinyl ether	ND	5
cis-1,3-Dichloropropene	ND	5
4-Methyl-2-pentanone	ND	5
Toluene	ND	5

MITKEM CORPORATION

Client ID: DSY-SP1 Lab ID: D1468-01

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,3-Dichloropropane	ND	5
2-Hexanone	ND	5
Dibromochloromethane	ND	5
1,2-Dibromoethane (EDB)	ND	5
Chlorobenzene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Ethylbenzene	ND	5
Xylenes, total	ND	5
Styrene	ND	5
Bromoform	ND	5
Isopropylbenzene	ND	5
Bromobenzene	ND	5
1,1,2,2-Tetrachloroethane	ND	5
1,2,3-Trichloropropane	ND	5
n-Propylbenzene	ND	5
2-Chlorotoluene	ND	5
4-Chlorotoluene	ND	5
1,3,5-Trimethylbenzene	ND	5
tert-Butylbenzene	ND	5
1,2,4-Trimethylbenzene	ND	5
sec-Butylbenzene	ND	5
1,3-Dichlorobenzene	ND	5
4-Isopropyltoluene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5
n-Butylbenzene	ND	5
1,2-Dibromo-3-chloropropane	ND	5
1,2,4-Trichlorobenzene	ND	5
Hexachlorobutadiene	ND	5
1,2,3-Trichlorobenzene	ND	5
MTBE	ND	5
Naphthalene	ND	5

Surrogate Recovery:	
1,2-Dichloroethane-d4	100%
Toluene-d8	103%
Bromofluorobenzene	107%

QC Batch: V1B0923A

ND = Not detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP2
Lab ID: D1468-02
Analysis: Method 8260

Analysis Date: 9/23/97
Matrix: Soil, 92% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Carbon disulfide	ND	5
Iodomethane	ND	5
Acetone	ND	5
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Vinyl acetate	ND	5
2,2-Dichloropropane	ND	5
cis-1,2-Dichloroethene	ND	5
Methyl ethyl ketone	ND	5
Bromochloromethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
1,1-Dichloropropene	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Dibromomethane	ND	5
Bromodichloromethane	ND	5
2-Chloroethyl vinyl ether	ND	5
cis-1,3-Dichloropropene	ND	5
4-Methyl-2-pentanone	ND	5
Toluene	ND	5

MITKEM CORPORATION

Client ID: DSY-SP2 Lab ID: D1468-02

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,3-Dichloropropane	ND	5
2-Hexanone	ND	5
Dibromochloromethane	ND	5
1,2-Dibromoethane (EDB)	ND	5
Chlorobenzene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Ethylbenzene	ND	5
Xylenes, total	ND	5
Styrene	ND	5
Bromoform	ND	5
Isopropylbenzene	ND	5
Bromobenzene	ND	5
1,1,2,2-Tetrachloroethane	ND	5
1,2,3-Trichloropropane	ND	5
n-Propylbenzene	ND	5
2-Chlorotoluene	ND	5
4-Chlorotoluene	ND	5
1,3,5-Trimethylbenzene	ND	5
tert-Butylbenzene	ND	5
1,2,4-Trimethylbenzene	ND	5
sec-Butylbenzene	ND	5
1,3-Dichlorobenzene	ND	5
4-Isopropyltoluene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5
n-Butylbenzene	ND	5
1,2-Dibromo-3-chloropropane	ND	5
1,2,4-Trichlorobenzene	ND	5
Hexachlorobutadiene	ND	5
1,2,3-Trichlorobenzene	ND	5
MTBE	ND	5
Naphthalene	ND	5

Surrogate Recovery:	
1,2-Dichloroethane-d4	100%
Toluene-d8	102%
Bromofluorobenzene	106%

QC Batch: V1B0923A

ND = Not detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-DRG1
Lab ID: D1468-03
Analysis: Method 8260

Analysis Date: 9/23/97
Matrix: Soil, 96% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Carbon disulfide	ND	5
Iodomethane	ND	5
Acetone	ND	5
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Vinyl acetate	ND	5
2,2-Dichloropropane	ND	5
cis-1,2-Dichloroethene	ND	5
Methyl ethyl ketone	ND	5
Bromochloromethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
1,1-Dichloropropene	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Dibromomethane	ND	5
Bromodichloromethane	ND	5
2-Chloroethyl vinyl ether	ND	5
cis-1,3-Dichloropropene	ND	5
4-Methyl-2-pentanone	ND	5
Toluene	ND	5

MITKEM CORPORATION

Client ID: DSY-DRG1 Lab ID: D1468-03

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,3-Dichloropropane	ND	5
2-Hexanone	ND	5
Dibromochloromethane	ND	5
1,2-Dibromoethane (EDB)	ND	5
Chlorobenzene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Ethylbenzene	ND	5
Xylenes, total	ND	5
Styrene	ND	5
Bromoform	ND	5
Isopropylbenzene	ND	5
Bromobenzene	ND	5
1,1,2,2-Tetrachloroethane	ND	5
1,2,3-Trichloropropane	ND	5
n-Propylbenzene	ND	5
2-Chlorotoluene	ND	5
4-Chlorotoluene	ND	5
1,3,5-Trimethylbenzene	ND	5
tert-Butylbenzene	ND	5
1,2,4-Trimethylbenzene	ND	5
sec-Butylbenzene	ND	5
1,3-Dichlorobenzene	ND	5
4-Isopropyltoluene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5
n-Butylbenzene	ND	5
1,2-Dibromo-3-chloropropane	ND	5
1,2,4-Trichlorobenzene	ND	5
Hexachlorobutadiene	ND	5
1,2,3-Trichlorobenzene	ND	5
MTBE	ND	5
Naphthalene	ND	5

QC Batch: V1B0923A

Surrogate Recovery:	
1,2-Dichloroethane-d4	102%
Toluene-d8	102%
Bromofluorobenzene	103%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method blank, V1B0923A
Analysis: Method 8260

Analysis Date: 9/23/97
Matrix: Solid
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Carbon disulfide	ND	5
Iodomethane	ND	5
Acetone	ND	5
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Vinyl acetate	ND	5
2,2-Dichloropropane	ND	5
cis-1,2-Dichloroethene	ND	5
Methyl ethyl ketone	ND	5
Bromochloromethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
1,1-Dichloropropene	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Dibromomethane	ND	5
Bromodichloromethane	ND	5
2-Chloroethyl vinyl ether	ND	5
cis-1,3-Dichloropropene	ND	5
4-Methyl-2-pentanone	ND	5
Toluene	ND	5

MITKEM CORPORATION

Client ID:

Lab ID: Method blank, V1B0923A

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,3-Dichloropropane	ND	5
2-Hexanone	ND	5
Dibromochloromethane	ND	5
1,2-Dibromoethane (EDB)	ND	5
Chlorobenzene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Ethylbenzene	ND	5
Xylenes, total	ND	5
Styrene	ND	5
Bromoform	ND	5
Isopropylbenzene	ND	5
Bromobenzene	ND	5
1,1,2,2-Tetrachloroethane	ND	5
1,2,3-Trichloropropane	ND	5
n-Propylbenzene	ND	5
2-Chlorotoluene	ND	5
4-Chlorotoluene	ND	5
1,3,5-Trimethylbenzene	ND	5
tert-Butylbenzene	ND	5
1,2,4-Trimethylbenzene	ND	5
sec-Butylbenzene	ND	5
1,3-Dichlorobenzene	ND	5
4-Isopropyltoluene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5
n-Butylbenzene	ND	5
1,2-Dibromo-3-chloropropane	ND	5
1,2,4-Trichlorobenzene	ND	5
Hexachlorobutadiene	ND	5
1,2,3-Trichlorobenzene	ND	5
MTBE	ND	5
Naphthalene	ND	5

Surrogate Recovery:		QC Batch: V1B0923A
1,2-Dichloroethane-d4	99%	
Toluene-d8	104%	
Bromofluorobenzene	110%	

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP1
Lab ID: D1468-01
Analysis: Method 8270

Analysis Date: 9/24/97
Matrix: Soil, 92% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Phenol	ND	360
bis(2-Chloroethyl)ether	ND	360
2-Chlorophenol	ND	360
1,3-Dichlorobenzene	ND	360
1,4-Dichlorobenzene	ND	360
1,2-Dichlorobenzene	ND	360
2-Methylphenol	ND	360
2,2'-oxybis(1-Chloropropane)	ND	360
4-Methylphenol	ND	360
n-Nitroso-di-n-propylamine	ND	360
Hexachloroethane	ND	360
Nitrobenzene	ND	360
Isophorone	ND	360
2-Nitrophenol	ND	360
2,4-Dimethylphenol	ND	360
bis(2-Chloroethoxy)methane	ND	360
2,4-Dichlorophenol	ND	360
1,2,4-Trichlorobenzene	ND	360
Naphthalene	60 J	360
4-Chloroaniline	ND	360
Hexachlorobutadiene	ND	360
4-Chloro-3-methylphenol	ND	360
2-Methylnaphthalene	ND	360
Hexachlorocyclopentadiene	ND	360
2,4,6-Trichlorophenol	ND	360
2,4,5-Trichlorophenol	ND	900
2-Chloronaphthalene	ND	360
2-Nitroaniline	ND	900
Dimethylphthalate	ND	360
Acenaphthylene	ND	360
2,6-Dinitrotoluene	ND	360
3-Nitroaniline	ND	900
Acenaphthene	39 J	360
2,4-Dinitrophenol	ND	900
4-Nitrophenol	ND	900
Dibenzofuran	ND	360
2,4-Dinitrotoluene	ND	360

022

MITKEM CORPORATION

Client ID: DSY-SP1 Lab ID: D1468-01

Analyte	Results	Reporting Limits
Diethylphthalate	46 J	360
Fluorene	ND	360
4-Chlorophenyl-phenylether	ND	360
4-Nitroaniline	ND	900
4,6-Dinitro-2-methylphenol	ND	900
n-Nitrosodiphenylamine	ND	360
4-Bromophenyl-phenylether	ND	360
Hexachlorobenzene	ND	360
Pentachlorophenol	ND	900
Phenanthrene	300 J	360
Anthracene	74 J	360
Di-n-butylphthalate	ND	360
Carbazole	45 J	360
Fluoranthene	430	360
Pyrene	360	360
Butylbenzylphthalate	ND	360
Benzo(a)anthracene	190 J	360
Chrysene	200 J	360
3,3'-Dichlorobenzidine	ND	360
bis(2-Ethylhexyl)phthalate	81 J	360
Di-n-octylphthalate	ND	360
Benzo(b)fluoranthene	270 J	360
Benzo(k)fluoranthene	110 J	360
Benzo(a)pyrene	190 J	360
Indeno(1,2,3-cd)pyrene	73	360
Dibenz(a,h)anthracene	ND	360
Benzo(g,h,i)perylene	76	360

QC Batch: S0922-B3

Surrogate Recovery:	
2-Fluorophenol	78%
Phenol-d5	81%
2-Chlorophenol-d4	81%
2,4,6-Tribromophenol	81%
1,2-Dichlorobenzene-d4	72%
Nitrobenzene-d5	78%
2-Fluorobiphenyl	83%
p-Terphenyl-d14	100%

ND = Not detected

023

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP2
Lab ID: D1468-02
Analysis: Method 8270

Analysis Date: 9/24/97
Matrix: Soil, 93% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Phenol	ND	350
bis(2-Chloroethyl)ether	ND	350
2-Chlorophenol	ND	350
1,3-Dichlorobenzene	ND	350
1,4-Dichlorobenzene	ND	350
1,2-Dichlorobenzene	ND	350
2-Methylphenol	ND	350
2,2'-oxybis(1-Chloropropane)	ND	350
4-Methylphenol	ND	350
n-Nitroso-di-n-propylamine	ND	350
Hexachloroethane	ND	350
Nitrobenzene	ND	350
Isophorone	ND	350
2-Nitrophenol	ND	350
2,4-Dimethylphenol	ND	350
bis(2-Chloroethoxy)methane	ND	350
2,4-Dichlorophenol	ND	350
1,2,4-Trichlorobenzene	ND	350
Naphthalene	46 J	350
4-Chloroaniline	ND	350
Hexachlorobutadiene	ND	350
4-Chloro-3-methylphenol	ND	350
2-Methylnaphthalene	56 J	350
Hexachlorocyclopentadiene	ND	350
2,4,6-Trichlorophenol	ND	350
2,4,5-Trichlorophenol	ND	890
2-Chloronaphthalene	ND	350
2-Nitroaniline	ND	890
Dimethylphthalate	ND	350
Acenaphthylene	ND	350
2,6-Dinitrotoluene	ND	350
3-Nitroaniline	ND	890
Acenaphthene	49 J	350
2,4-Dinitrophenol	ND	890
4-Nitrophenol	ND	890
Dibenzofuran	ND	350
2,4-Dinitrotoluene	ND	350

MITKEM CORPORATION

Client ID: DSY-SP2 Lab ID: D1468-02

Analyte	Results	Reporting Limits
Diethylphthalate	ND	350
Fluorene	43 J	350
4-Chlorophenyl-phenylether	ND	350
4-Nitroaniline	ND	890
4,6-Dinitro-2-methylphenol	ND	890
n-Nitrosodiphenylamine	ND	350
4-Bromophenyl-phenylether	ND	350
Hexachlorobenzene	ND	350
Pentachlorophenol	ND	890
Phenanthrene	360	350
Anthracene	ND	350
Di-n-butylphthalate	ND	350
Carbazole	45 J	350
Fluoranthene	450	350
Pyrene	380	350
Butylbenzylphthalate	ND	350
Benzo(a)anthracene	180 J	350
Chrysene	200 J	350
3,3'-Dichlorobenzidine	ND	350
bis(2-Ethylhexyl)phthalate	ND	350
Di-n-octylphthalate	ND	350
Benzo(b)fluoranthene	240 J	350
Benzo(k)fluoranthene	97 J	350
Benzo(a)pyrene	180 J	350
Indeno(1,2,3-cd)pyrene	65	350
Dibenz(a,h)anthracene	ND	350
Benzo(g,h,i)perylene	66	350

QC Batch: S0922-B3

Surrogate Recovery:	
2-Fluorophenol	74%
Phenol-d5	74%
2-Chlorophenol-d4	74%
2,4,6-Tribromophenol	96%
1,2-Dichlorobenzene-d4	67%
Nitrobenzene-d5	72%
2-Fluorobiphenyl	78%
p-Terphenyl-d14	100%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-DRG-1
Lab ID: D1468-03
Analysis: Method 8270

Analysis Date: 9/24/97
Matrix: Soil, 96% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Phenol	ND	340
bis(2-Chloroethyl)ether	ND	340
2-Chlorophenol	ND	340
1,3-Dichlorobenzene	ND	340
1,4-Dichlorobenzene	ND	340
1,2-Dichlorobenzene	ND	340
2-Methylphenol	ND	340
2,2'-oxybis(1-Chloropropane)	ND	340
4-Methylphenol	ND	340
n-Nitroso-di-n-propylamine	ND	340
Hexachloroethane	ND	340
Nitrobenzene	ND	340
Isophorone	ND	340
2-Nitrophenol	ND	340
2,4-Dimethylphenol	ND	340
bis(2-Chloroethoxy)methane	ND	340
2,4-Dichlorophenol	ND	340
1,2,4-Trichlorobenzene	ND	340
Naphthalene	ND	340
4-Chloroaniline	ND	340
Hexachlorobutadiene	ND	340
4-Chloro-3-methylphenol	ND	340
2-Methylnaphthalene	39 J	340
Hexachlorocyclopentadiene	ND	340
2,4,6-Trichlorophenol	ND	340
2,4,5-Trichlorophenol	ND	860
2-Chloronaphthalene	ND	340
2-Nitroaniline	ND	860
Dimethylphthalate	ND	340
Acenaphthylene	ND	340
2,6-Dinitrotoluene	ND	340
3-Nitroaniline	ND	860
Acenaphthene	ND	340
2,4-Dinitrophenol	ND	860
4-Nitrophenol	ND	860
Dibenzofuran	ND	340
2,4-Dinitrotoluene	ND	340

026

MITKEM CORPORATION

Client ID: DSY-DRG-1 Lab ID: D1468-03

Analyte	Results	Reporting Limits
Diethylphthalate	ND	340
Fluorene	ND	340
4-Chlorophenyl-phenylether	ND	340
4-Nitroaniline	ND	860
4,6-Dinitro-2-methylphenol	ND	860
n-Nitrosodiphenylamine	ND	340
4-Bromophenyl-phenylether	ND	340
Hexachlorobenzene	ND	340
Pentachlorophenol	ND	860
Phenanthrene	90 J	340
Anthracene	ND	340
Di-n-butylphthalate	ND	340
Carbazole	ND	340
Fluoranthene	180 J	340
Pyrene	140 J	340
Butylbenzylphthalate	ND	340
Benzo(a)anthracene	81 J	340
Chrysene	84 J	340
3,3'-Dichlorobenzidine	ND	340
bis(2-Ethylhexyl)phthalate	ND	340
Di-n-octylphthalate	ND	340
Benzo(b)fluoranthene	120 J	340
Benzo(k)fluoranthene	42 J	340
Benzo(a)pyrene	82 J	340
Indeno(1,2,3-cd)pyrene	ND	340
Dibenz(a,h)anthracene	ND	340
Benzo(g,h,i)perylene	ND	340

QC Batch: S0922-B3

Surrogate Recovery:	
2-Fluorophenol	69%
Phenol-d5	69%
2-Chlorophenol-d4	69%
2,4,6-Tribromophenol	88%
1,2-Dichlorobenzene-d4	71%
Nitrobenzene-d5	71%
2-Fluorobiphenyl	76%
p-Terphenyl-d14	94%

ND = Not detected

027

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, S0922-B3
Analysis: Method 8270

Analysis Date: 9/23/97
Matrix: Solid
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Phenol	ND	330
bis(2-Chloroethyl)ether	ND	330
2-Chlorophenol	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
1,2-Dichlorobenzene	ND	330
2-Methylphenol	ND	330
2,2'-oxybis(1-Chloropropane)	ND	330
4-Methylphenol	ND	330
n-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
2-Nitrophenol	ND	330
2,4-Dimethylphenol	ND	330
bis(2-Chloroethoxy)methane	ND	330
2,4-Dichlorophenol	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	330
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
4-Chloro-3-methylphenol	ND	330
2-Methylnaphthalene	ND	330
Hexachlorocyclopentadiene	ND	330
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	830
2-Chloronaphthalene	ND	330
2-Nitroaniline	ND	830
Dimethylphthalate	ND	330
Acenaphthylene	ND	330
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	830
Acenaphthene	ND	330
2,4-Dinitrophenol	ND	830
4-Nitrophenol	ND	830
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330

028

D1468-MB

MITKEM CORPORATION

Client ID:

Lab ID: Method Blank, S0922-B3

Analyte	Results	Reporting Limits
Diethylphthalate	ND	330
Fluorene	ND	330
4-Chlorophenyl-phenylether	ND	330
4-Nitroaniline	ND	830
4,6-Dinitro-2-methylphenol	ND	830
n-Nitrosodiphenylamine	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Pentachlorophenol	ND	830
Phenanthrene	ND	330
Anthracene	ND	330
Di-n-butylphthalate	ND	330
Carbazole	ND	330
Fluoranthene	ND	330
Pyrene	ND	330
Butylbenzylphthalate	ND	330
Benzo(a)anthracene	ND	330
Chrysene	ND	330
3,3'-Dichlorobenzidine	ND	330
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	330
Benzo(k)fluoranthene	ND	330
Benzo(a)pyrene	ND	330
Indeno(1,2,3-cd)pyrene	ND	330
Dibenz(a,h)anthracene	ND	330
Benzo(g,h,i)perylene	ND	330

QC Batch: S0922-B3

Surrogate Recovery:	
2-Fluorophenol	72%
Phenol-d5	76%
2-Chlorophenol-d4	76%
2,4,6-Tribromophenol	92%
1,2-Dichlorobenzene-d4	56%
Nitrobenzene-d5	71%
2-Fluorobiphenyl	76%
p-Terphenyl-d14	94%

ND = Not detected

029

D1468-MB

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Lab Control Summary

Client: Foster Wheeler Environmental Corp.
Lab ID for Blank Spike: S0922-LCS3
Analysis: Method 8270

Matrix: Solid

Analysis Date for Blank Spike: 9/23/97

Analyte	% Recovery
Phenol	48
2-Chlorophenol	48
1,4-Dichlorobenzene	54
n-Nitroso-di-n-propylamine	65
1,2,4-Trichlorobenzene	59
4-Chloro-3-methylphenol	56
Acenaphthene	76
4-Nitrophenol	76
2,4-Dinitrotoluene	94
Pentachlorophenol	64
Pyrene	71

QC Batch: S0922-B3

030

D1468-LCS

MITKEM CORPORATION

D1468

Lab Project #: D1468
Client Name: Foster Wheeler
Client Proj #: NA
Client PO #: 003195+supp.01
Project Name: Dereckton Shipyard
Date Due: 9/24/97
Total Price: $ - x 100% surcharge for 48 hr. TAT
Project Mgr: EAL
Salesman: NET
Del Req'd: NA
Completed?: YES

Logged In By: [signature]
Reviewed By: [signature]
Date: 9-23-97 Time: 9:33

Lab ID	Client ID	Matrix	Analysis	Price	Sampled	Received	TPH	IR	BNA	Herb	P/P	Wet	Met	V-GC	V-MS	Sub
-01	DSY-SP1	SL	PCBs		9/22/97	9/22/97					1					
			RCRA 8 Metals										1		1	
			VOC/8260						1							
			SVOC/8270					1								
			TPH				1									
-02	DSY-SP2	SL	PCBs		9/22/97	9/22/97					1					
			RCRA 8 Metals										1			
			VOC/8260												1	
			SVOC/8270						1							
			TPH				1									
-03	DSY-DRG-1	SL	PCBs		9/22/97	9/22/97					1					
			RCRA 8 Metals										1			
			VOC/8260												1	
			SVOC/8270						1							
			TPH				1									

NOTES:

TPH	IR	BNA	Herb	P/P	Wet	Met	V-GC	V-MS	Sub
0	3	3	0	3	0	3	0	3	0

INVOICE GOES TO:
Same

ORIGINAL REPORT GOES TO:
Foster Wheeler Environmental Corp.
PO Box 4749
Middletown, RI 02842

Attn: Mark Gouveia
Phone: 401-842-6940
Fax: 401-842-6970

Lab Project #: D1468

9/23/97 9:33 AM

MITKEM CORPORATION
175 Metro Center Boulevard • Warwick, Rhode Island 02886-1755
(401) 732-3400 • Fax (401) 732-3499
1232 East Broadway Road, Suite 210 • Tempe, Arizona 85282
(602 303-9535 • Fax (602) 921-2883

CHAIN-OF-CUSTODY RECORD

Page ___ of ___

REPORT TO		INVOICE TO	
COMPANY: FOSTER WHEELER	PHONE: 842-6940	COMPANY: SAME	PHONE:
NAME: MARK GONVEIA	FAX: 842-6970	NAME:	FAX:
ADDRESS: 4000T DEFENSE HWY.		ADDRESS:	
CITY/ST/ZIP: PORTSMOUTH RI		CITY/ST/ZIP:	

LAB REFERENCE #: D1468

TURNAROUND TIME: 48 HRS

CLIENT PROJECT NAME: DECECTOR SHIPYARD

CLIENT PROJECT #:

CLIENT P.O.#:

REQUESTED ANALYSES: PCB's; RCRA 8 METALS; VOC 8260; SVOC 8270; TPH

SAMPLE IDENTIFICATION	DATE/TIME SAMPLED	COMPOSITE	GRAB	WATER	SOIL	OTHER	LAB ID	# OF CONTAINERS	PCB's	RCRA 8 METALS	VOC 8260	SVOC 8270	TPH	COMMENTS
DSY-SP1	9-22-97 1510	✓	✓		✓		-01	2	✓	✓	✓	✓	✓	
DSY-SP2	9-22-97 1525	✓	✓		✓		-02	2	✓	✓	✓	✓	✓	
DSY-DRG1	9-22-97 1541	✓	✓		✓		-03	2	✓	✓	✓	✓	✓	

TSF#	RELINQUISHED BY	DATE/TIME	ACCEPTED BY	DATE/TIME
1st	[signature]	9-22-97	[signature]	9/22/97 1:00
2nd		/		/
3rd		/		/

ADDITIONAL REMARKS:

COOLER TEMP:

WHITE: LABORATORY COPY YELLOW: REPORT COPY PINK: CLIENT'S COPY

MITKEM CORPORATION
Sample Condition Form

Received By: AS Date: 9/22/97

Client Project Description/Number: Decector Shipyard

MITKEM Project #: D1468

Client: Foster Wheeler

Condition:

		Lab ID	Client ID	Remarks
1) Custody Seal(s)	Present/Absent (Absent) Intact/Broken	-01		
		-02		
		-03		
2) Custody Seal Number(s)	N/A			
3) Chain-of-Custody Record(s)	Present/Absent (Present)			
4) Cooler Temperature	10°C			
Coolant Condition	Blue Ice			
5) Airbill(s)	Present/Absent (Present)			
Airbill Number(s)				
6) Sample Bottles	Intact (Intact) Broken Leaking			
7) Date Received	9/22/97			
8) Time Received	8:00 am			
9) Project Due Date				

Last Page of Data Report

MITKEM CORPORATION

September 29, 1997

Foster Wheeler Environmental Corp.
P.O. Box 4749
Portsmouth, RI 02842
Attn: Mr. Mark Gouveia

RECEIVED
OCT 16 1997

RE: Client Project #: D013, Derektor Shipyard
Lab Project #: D1496

Dear Mr. Gouveia:

Enclosed please find the data report of the required analyses for the samples associated with the above referenced project. If you have any questions regarding this report, please call me.

We appreciate your business.

Sincerely,

Edward A. Lawler
Laboratory Operations Manager

175 Metro Center Boulevard • Warwick, Rhode Island 02886-1755 • (401) 732-3400 • Fax (401) 732-3499
1232 East Broadway, Suite 210 • Tempe, Arizona 85282 • (602) 303-9535 • Fax (602) 921-2883
email: mitkem19@mail.idt.net

MITKEM CORPORATION

Client: Foster Wheeler Environmental Corp.

Client Project: D013, Derektor Shipyard

Lab Project: D1496

Date samples received: 9/25/97

Project Narrative

This data report includes the analysis results for three (3) soil samples that were received from Foster Wheeler Environmental Corp. on September 25, 1997. Analyses were performed per specification in the Chain of Custody form. For reference, a copy of the Mitkem Sample Log-In form is included for cross-referencing the client sample ID and laboratory sample ID.

All of the analyses were performed according to method specifications. The surrogate standard recovery for the original extraction/analysis for the PCBs were 0%. The samples were reextracted and reanalyzed with acceptable recovery. There were no PCBs detected in either analysis. The original data were provided via fax, and the reextraction and reanalysis data provided via fax and are included in the hardcopy report.

The recovery of silver in the laboratory control sample (LCS) was below the acceptance limit for the original analysis data reported via fax. The samples were reprepared and reanalyzed for silver. The data sheets in this hardcopy report include the reprep/reanalysis data for silver. No other unusual occurrences were noted during sample analysis.

This data report has been reviewed and is authorized for release as evidenced by the signature below.

Edward A. Lawler
Laboratory Operations Manager

Data Qualifiers:

J This flag indicates an estimated value due to either
- the compound was detected at below the Reporting Limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the analyte was also detected in the associated Method Blank

D This flag indicates the analyte concentration was obtained from a diluted analysis

E This flag indicates the analyte concentration exceeded the Calibration Range

P This flag is used for Pesticides/PCB/Herbicide analyte when there is a greater than 50% difference for detected concentration between the two GC columns used for Primary and Confirmation analyses. The lower of the two values is reported in the Analysis Report.

MITKEM CORPORATION

Analysis Report: Total Petroleum Hydrocarbons

Client: Foster Wheeler Environmental Corp.
Analysis: Method 418.1
Matrix: Soil
Concentration in: mg/kg, dry weight basis

Lab ID	Client ID	Result	% Solid	Reporting Limit	Analysis Date
D1496-01	DSY-SP1-SECII	100	86	23	9/26/97
D1496-02	DSY-SP2-SECII	150	84	24	9/26/97

QA/QC

Method Blank			
I0925-B1	ND	20	9/26/97
Lab Control Sample (% Recovery)			
I0925-LCS1	86		9/26/97

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP1-SECII
Lab ID: D1496-01
Analysis Method: 7471A (Mercury)
6010A (Others)

Matrix: Soil, 86% Solids
Concentration in: mg/kg, dry weight basis
Analysis Date: 9/26/97

Analyte	Results	Reporting Limit
Arsenic	12	1
Barium	21	1
Cadmium	ND	0.5
Chromium	13	1
Lead	17	0.5
Mercury	ND	0.3
Selenium	ND	2
Silver *	ND	1

QC Batch: 0925PBS

ND = Not detected

* Re-prepped and re-analyzed on 10/1/97.

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP2-SECII
Lab ID: D1496-02
Analysis Method: 7471A (Mercury)
6010A (Others)

Matrix: Soil, 84% Solids
Concentration in: mg/kg, dry weight basis
Analysis Date: 9/26/97

Analyte	Results	Reporting Limit
Arsenic	11	1
Barium	22	1
Cadmium	ND	0.5
Chromium	12	1
Lead	25	0.5
Mercury	ND	0.3
Selenium	ND	2
Silver *	ND	1

QC Batch: 0925PBS

ND = Not detected

* Re-prepped and re-analyzed on 10/1/97.

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID: TP234SE
Lab ID: D1496-03
Analysis Method: 7471A (Mercury)
6010A (Others)

Matrix: Soil, 94% Solids
Concentration in: mg/kg, dry weight basis
Analysis Date: 9/26/97

Analyte	Results	Reporting Limit
Arsenic	12	1
Barium	33	1
Cadmium	0.8	0.5
Chromium	25	1
Lead	22	0.5
Mercury	ND	0.3
Selenium	ND	2
Silver *	ND	1

QC Batch: 0925PBS

ND = Not detected

* Re-prepped and re-analyzed on 10/1/97.

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Prep Blank, 0925PBS
Analysis Method: 7471A (Mercury)
6010A (Others)

Concentration in: mg/kg
Analysis Date: 9/26/97

Analyte	Results	Reporting Limit
Arsenic	ND	1
Barium	ND	1
Cadmium	ND	0.5
Chromium	ND	1
Lead	ND	0.5
Mercury	ND	0.3
Selenium	ND	2
Silver *	ND	1

QC Batch: 0925PBS

ND = Not detected

* Re-prepped and re-analyzed on 10/1/97.

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Lab Control Sample, 0925LCSS
Analysis Method: 7471A (Mercury)
6010A (Others)

Matrix: Soil
Analysis Date: 9/26/97

Analyte	% Recovery
Arsenic	100
Barium	103
Cadmium	106
Chromium	108
Lead	99
Mercury	96
Selenium	95
Silver *	97

QC Batch: 0925PBS

* Re-prepped and re-analyzed on 10/1/97.

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP1-SECII
Lab ID: D1496-01
Analysis: Method 8080

Analysis Date: 9/29/97
Matrix: Soil, 86% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	38
Aroclor-1221	ND	78
Aroclor-1232	ND	38
Aroclor-1242	ND	38
Aroclor-1248	ND	38
Aroclor-1254	ND	38
Aroclor-1260	ND	38

QC Batch: P0929-B1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	104%
Decachlorobiphenyl	69%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP2-SECII
Lab ID: D1496-02
Analysis: Method 8080

Analysis Date: 9/30/97
Matrix: Soil, 84% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	39
Aroclor-1221	ND	80
Aroclor-1232	ND	39
Aroclor-1242	ND	39
Aroclor-1248	ND	39
Aroclor-1254	ND	39
Aroclor-1260	ND	39

QC Batch: P0929-B1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	94%
Decachlorobiphenyl	65%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, P0929-B1
Analysis: Method 8080

Analysis Date: 9/30/97
Matrix: Soil
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	33
Aroclor-1221	ND	66
Aroclor-1232	ND	33
Aroclor-1242	ND	33
Aroclor-1248	ND	33
Aroclor-1254	ND	33
Aroclor-1260	ND	33

QC Batch: P0929-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	106%
Decachlorobiphenyl	72%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCBs)

Lab Control Summary

Client: Foster Wheeler Environmental Corp.
Lab ID for Blank Spike: P0929-LCS1
Analysis: Method 8080

Matrix: Solid
Analysis Date for Blank Spike: 9/30/97

Analyte	% Recovery
Aroclor 1260	115

QC Batch: P0929-B1

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, V1B0929A
Analysis: Method 8260

Analysis Date: 9/29/97
Matrix: Soil
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Carbon disulfide	ND	5
Iodomethane	ND	5
Acetone	ND	5
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Vinyl acetate	ND	5
2,2-Dichloropropane	ND	5
cis-1,2-Dichloroethene	ND	5
Methyl ethyl ketone	ND	5
Bromochloromethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
1,1-Dichloropropene	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Dibromomethane	ND	5
Bromodichloromethane	ND	5
2-Chloroethyl vinyl ether	ND	5
cis-1,3-Dichloropropene	ND	5
4-Methyl-2-pentanone	ND	5
Toluene	ND	5

MITKEM CORPORATION

Client ID:

Lab ID: Method Blank, V1B0929A

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,3-Dichloropropane	ND	5
2-Hexanone	ND	5
Dibromochloromethane	ND	5
1,2-Dibromoethane (EDB)	ND	5
Chlorobenzene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Ethylbenzene	ND	5
Xylenes, total	ND	5
Styrene	ND	5
Bromoform	ND	5
Isopropylbenzene	ND	5
Bromobenzene	ND	5
1,1,2,2-Tetrachloroethane	ND	5
1,2,3-Trichloropropane	ND	5
n-Propylbenzene	ND	5
2-Chlorotoluene	ND	5
4-Chlorotoluene	ND	5
1,3,5-Trimethylbenzene	ND	5
tert-Butylbenzene	ND	5
1,2,4-Trimethylbenzene	ND	5
sec-Butylbenzene	ND	5
1,3-Dichlorobenzene	ND	5
4-Isopropyltoluene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5
n-Butylbenzene	ND	5
1,2-Dibromo-3-chloropropane	ND	5
1,2,4-Trichlorobenzene	ND	5
Hexachlorobutadiene	ND	5
1,2,3-Trichlorobenzene	ND	5
MTBE	ND	5
Naphthalene	ND	5

Surrogate Recovery:		QC Batch: V1B0929A
1,2-Dichloroethane-d4	97%	
Toluene-d8	100%	
Bromofluorobenzene	93%	

ND = Not detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP1-SECII
Lab ID: D1496-01
Analysis: Method 8260

Analysis Date: 9/29/97
Matrix: Soil, 86% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	6
Chloromethane	ND	6
Vinyl chloride	ND	6
Bromomethane	ND	6
Chloroethane	ND	6
Trichlorofluoromethane	ND	6
1,1-Dichloroethene	ND	6
Carbon disulfide	ND	6
Iodomethane	ND	6
Acetone	ND	6
Methylene chloride	ND	6
trans-1,2-Dichloroethene	ND	6
1,1-Dichloroethane	ND	6
Vinyl acetate	ND	6
2,2-Dichloropropane	ND	6
cis-1,2-Dichloroethene	ND	6
Methyl ethyl ketone	ND	6
Bromochloromethane	ND	6
Chloroform	ND	6
1,1,1-Trichloroethane	ND	6
Carbon tetrachloride	ND	6
1,1-Dichloropropene	ND	6
Benzene	ND	6
1,2-Dichloroethane	ND	6
Trichloroethene	ND	6
1,2-Dichloropropane	ND	6
Dibromomethane	ND	6
Bromodichloromethane	ND	6
2-Chloroethyl vinyl ether	ND	6
cis-1,3-Dichloropropene	ND	6
4-Methyl-2-pentanone	ND	6
Toluene	ND	6

MITKEM CORPORATION

Client ID: DSY-SP1-SECII Lab ID: D1496-01

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	6
1,1,2-Trichloroethane	ND	6
Tetrachloroethene	ND	6
1,3-Dichloropropane	ND	6
2-Hexanone	ND	6
Dibromochloromethane	ND	6
1,2-Dibromoethane (EDB)	ND	6
Chlorobenzene	ND	6
1,1,1,2-Tetrachloroethane	ND	6
Ethylbenzene	ND	6
Xylenes, total	ND	6
Styrene	ND	6
Bromoform	ND	6
Isopropylbenzene	ND	6
Bromobenzene	ND	6
1,1,2,2-Tetrachloroethane	ND	6
1,2,3-Trichloropropane	ND	6
n-Propylbenzene	ND	6
2-Chlorotoluene	ND	6
4-Chlorotoluene	ND	6
1,3,5-Trimethylbenzene	ND	6
tert-Butylbenzene	ND	6
1,2,4-Trimethylbenzene	ND	6
sec-Butylbenzene	ND	6
1,3-Dichlorobenzene	ND	6
4-Isopropyltoluene	ND	6
1,4-Dichlorobenzene	ND	6
1,2-Dichlorobenzene	ND	6
n-Butylbenzene	ND	6
1,2-Dibromo-3-chloropropane	ND	6
1,2,4-Trichlorobenzene	ND	6
Hexachlorobutadiene	ND	6
1,2,3-Trichlorobenzene	ND	6
MTBE	ND	6
Naphthalene	ND	6

Surrogate Recovery:		QC Batch: V1B0929A
1,2-Dichloroethane-d4	95%	
Toluene-d8	96%	
Bromofluorobenzene	88%	

ND = Not detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP2-SECII
Lab ID: D1496-02
Analysis: Method 8260

Analysis Date: 9/29/97
Matrix: Soil, 84% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	6
Chloromethane	ND	6
Vinyl chloride	ND	6
Bromomethane	ND	6
Chloroethane	ND	6
Trichlorofluoromethane	ND	6
1,1-Dichloroethene	ND	6
Carbon disulfide	ND	6
Iodomethane	ND	6
Acetone	ND	6
Methylene chloride	ND	6
trans-1,2-Dichloroethene	ND	6
1,1-Dichloroethane	ND	6
Vinyl acetate	ND	6
2,2-Dichloropropane	ND	6
cis-1,2-Dichloroethene	ND	6
Methyl ethyl ketone	ND	6
Bromochloromethane	ND	6
Chloroform	ND	6
1,1,1-Trichloroethane	ND	6
Carbon tetrachloride	ND	6
1,1-Dichloropropene	ND	6
Benzene	ND	6
1,2-Dichloroethane	ND	6
Trichloroethene	ND	6
1,2-Dichloropropane	ND	6
Dibromomethane	ND	6
Bromodichloromethane	ND	6
2-Chloroethyl vinyl ether	ND	6
cis-1,3-Dichloropropene	ND	6
4-Methyl-2-pentanone	ND	6
Toluene	ND	6

MITKEM CORPORATION

Client ID: DSY-SP2-SECII Lab ID: D1496-02

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	6
1,1,2-Trichloroethane	ND	6
Tetrachloroethene	ND	6
1,3-Dichloropropane	ND	6
2-Hexanone	ND	6
Dibromochloromethane	ND	6
1,2-Dibromoethane (EDB)	ND	6
Chlorobenzene	ND	6
1,1,1,2-Tetrachloroethane	ND	6
Ethylbenzene	ND	6
Xylenes, total	ND	6
Styrene	ND	6
Bromoform	ND	6
Isopropylbenzene	ND	6
Bromobenzene	ND	6
1,1,2,2-Tetrachloroethane	ND	6
1,2,3-Trichloropropane	ND	6
n-Propylbenzene	ND	6
2-Chlorotoluene	ND	6
4-Chlorotoluene	ND	6
1,3,5-Trimethylbenzene	ND	6
tert-Butylbenzene	ND	6
1,2,4-Trimethylbenzene	ND	6
sec-Butylbenzene	ND	6
1,3-Dichlorobenzene	ND	6
4-Isopropyltoluene	ND	6
1,4-Dichlorobenzene	ND	6
1,2-Dichlorobenzene	ND	6
n-Butylbenzene	ND	6
1,2-Dibromo-3-chloropropane	ND	6
1,2,4-Trichlorobenzene	ND	6
Hexachlorobutadiene	ND	6
1,2,3-Trichlorobenzene	ND	6
MTBE	ND	6
Naphthalene	ND	6

Surrogate Recovery: QC Batch: V1B0929A

1,2-Dichloroethane-d4	97%
Toluene-d8	98%
Bromofluorobenzene	90%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP1-SECII
Lab ID: D1496-01
Analysis: Method 8270

Analysis Date: 9/26/97
Matrix: Soil, 86% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Phenol	ND	380
bis(2-Chloroethyl)ether	ND	380
2-Chlorophenol	ND	380
1,3-Dichlorobenzene	ND	380
1,4-Dichlorobenzene	ND	380
1,2-Dichlorobenzene	ND	380
2-Methylphenol	ND	380
2,2'-oxybis(1-Chloropropane)	ND	380
4-Methylphenol	ND	380
n-Nitroso-di-n-propylamine	ND	380
Hexachloroethane	ND	380
Nitrobenzene	ND	380
Isophorone	ND	380
2-Nitrophenol	ND	380
2,4-Dimethylphenol	ND	380
bis(2-Chloroethoxy)methane	ND	380
2,4-Dichlorophenol	ND	380
1,2,4-Trichlorobenzene	ND	380
Naphthalene	ND	380
4-Chloroaniline	ND	380
Hexachlorobutadiene	ND	380
4-Chloro-3-methylphenol	ND	380
2-Methylnaphthalene	ND	380
Hexachlorocyclopentadiene	ND	380
2,4,6-Trichlorophenol	ND	380
2,4,5-Trichlorophenol	ND	960
2-Chloronaphthalene	ND	380
2-Nitroaniline	ND	960
Dimethylphthalate	ND	380
Acenaphthylene	ND	380
2,6-Dinitrotoluene	ND	380
3-Nitroaniline	ND	960
Acenaphthene	ND	380
2,4-Dinitrophenol	ND	960
4-Nitrophenol	ND	960
Dibenzofuran	ND	380
2,4-Dinitrotoluene	ND	380

MITKEM CORPORATION

Client ID: DSY-SP1-SECII
Lab ID: D1496-01

Analyte	Results	Reporting Limits
Diethylphthalate	ND	380
Fluorene	ND	380
4-Chlorophenyl-phenylether	ND	380
4-Nitroaniline	ND	960
4,6-Dinitro-2-methylphenol	ND	960
n-Nitrosodiphenylamine	ND	380
4-Bromophenyl-phenylether	ND	380
Hexachlorobenzene	ND	380
Pentachlorophenol	ND	960
Phenanthrene	170 J	380
Anthracene	47 J	380
Di-n-butylphthalate	ND	380
Carbazole	ND	380
Fluoranthene	300 J	380
Pyrene	370	380
Butylbenzylphthalate	ND	380
Benzo(a)anthracene	180 J	380
Chrysene	180 J	380
3,3'-Dichlorobenzidine	ND	380
bis(2-Ethylhexyl)phthalate	ND	380
Di-n-octylphthalate	ND	380
Benzo(b)fluoranthene	220 J	380
Benzo(k)fluoranthene	100 J	380
Benzo(a)pyrene	170 J	380
Indeno(1,2,3-cd)pyrene	53 J	380
Dibenz(a,h)anthracene	ND	380
Benzo(g,h,i)perylene	ND	380

QC Batch: S0926-B3

Surrogate Recovery:	
2-Fluorophenol	76%
Phenol-d5	76%
2-Chlorophenol-d4	76%
2,4,6-Tribromophenol	79%
1,2-Dichlorobenzene-d4	63%
Nitrobenzene-d5	74%
2-Fluorobiphenyl	79%
p-Terphenyl-d14	132%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP2-SECII
Lab ID: D1496-02
Analysis: Method 8270

Analysis Date: 9/26/97
Matrix: Soil, 84% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Phenol	ND	390
bis(2-Chloroethyl)ether	ND	390
2-Chlorophenol	ND	390
1,3-Dichlorobenzene	ND	390
1,4-Dichlorobenzene	ND	390
1,2-Dichlorobenzene	ND	390
2-Methylphenol	ND	390
2,2'-oxybis(1-Chloropropane)	ND	390
4-Methylphenol	ND	390
n-Nitroso-di-n-propylamine	ND	390
Hexachloroethane	ND	390
Nitrobenzene	ND	390
Isophorone	ND	390
2-Nitrophenol	ND	390
2,4-Dimethylphenol	ND	390
bis(2-Chloroethoxy)methane	ND	390
2,4-Dichlorophenol	ND	390
1,2,4-Trichlorobenzene	ND	390
Naphthalene	ND	390
4-Chloroaniline	ND	390
Hexachlorobutadiene	ND	390
4-Chloro-3-methylphenol	ND	390
2-Methylnaphthalene	ND	390
Hexachlorocyclopentadiene	ND	390
2,4,6-Trichlorophenol	ND	390
2,4,5-Trichlorophenol	ND	980
2-Chloronaphthalene	ND	390
2-Nitroaniline	ND	980
Dimethylphthalate	ND	390
Acenaphthylene	ND	390
2,6-Dinitrotoluene	ND	390
3-Nitroaniline	ND	980
Acenaphthene	ND	390
2,4-Dinitrophenol	ND	980
4-Nitrophenol	ND	980
Dibenzofuran	ND	390
2,4-Dinitrotoluene	ND	390

021

MITKEM CORPORATION

Client ID: DSY-SP2-SECII Lab ID: D1496-02

Analyte	Results	Reporting Limits
Diethylphthalate	ND	390
Fluorene	ND	390
4-Chlorophenyl-phenylether	ND	390
4-Nitroaniline	ND	980
4,6-Dinitro-2-methylphenol	ND	980
n-Nitrosodiphenylamine	ND	390
4-Bromophenyl-phenylether	ND	390
Hexachlorobenzene	ND	390
Pentachlorophenol	ND	980
Phenanthrene	61 J	390
Anthracene	ND	390
Di-n-butylphthalate	ND	390
Carbazole	ND	390
Fluoranthene	100 J	390
Pyrene	140 J	390
Butylbenzylphthalate	ND	390
Benzo(a)anthracene	63 J	390
Chrysene	ND	390
3,3'-Dichlorobenzidine	ND	390
bis(2-Ethylhexyl)phthalate	ND	390
Di-n-octylphthalate	ND	390
Benzo(b)fluoranthene	93 J	390
Benzo(k)fluoranthene	50 J	390
Benzo(a)pyrene	67 J	390
Indeno(1,2,3-cd)pyrene	ND	390
Dibenz(a,h)anthracene	ND	390
Benzo(g,h,i)perylene	ND	390

QC Batch: S0926-B3

Surrogate Recovery:	
2-Fluorophenol	70%
Phenol-d5	73%
2-Chlorophenol-d4	73%
2,4,6-Tribromophenol	80%
1,2-Dichlorobenzene-d4	60%
Nitrobenzene-d5	70%
2-Fluorobiphenyl	80%
p-Terphenyl-d14	135%

ND = Not detected

022

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, S0926-B3
Analysis: Method 8270

Analysis Date: 9/29/97
Matrix: Solid
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Phenol	ND	330
bis(2-Chloroethyl)ether	ND	330
2-Chlorophenol	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
1,2-Dichlorobenzene	ND	330
2-Methylphenol	ND	330
2,2'-oxybis(1-Chloropropane)	ND	330
4-Methylphenol	ND	330
n-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
2-Nitrophenol	ND	330
2,4-Dimethylphenol	ND	330
bis(2-Chloroethoxy)methane	ND	330
2,4-Dichlorophenol	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	330
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
4-Chloro-3-methylphenol	ND	330
2-Methylnaphthalene	ND	330
Hexachlorocyclopentadiene	ND	330
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	830
2-Chloronaphthalene	ND	330
2-Nitroaniline	ND	830
Dimethylphthalate	ND	330
Acenaphthylene	ND	330
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	830
Acenaphthene	ND	330
2,4-Dinitrophenol	ND	830
4-Nitrophenol	ND	830
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330

023

MITKEM CORPORATION

Client ID:
Lab ID: Method Blank, S0926-B3

Analyte	Results	Reporting Limits
Diethylphthalate	ND	330
Fluorene	ND	330
4-Chlorophenyl-phenylether	ND	330
4-Nitroaniline	ND	830
4,6-Dinitro-2-methylphenol	ND	830
n-Nitrosodiphenylamine	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Pentachlorophenol	ND	830
Phenanthrene	ND	330
Anthracene	ND	330
Di-n-butylphthalate	ND	330
Carbazole	ND	330
Fluoranthene	ND	330
Pyrene	ND	330
Butylbenzylphthalate	ND	330
Benzo(a)anthracene	ND	330
Chrysene	ND	330
3,3'-Dichlorobenzidine	ND	330
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	330
Benzo(k)fluoranthene	ND	330
Benzo(a)pyrene	ND	330
Indeno(1,2,3-cd)pyrene	ND	330
Dibenz(a,h)anthracene	ND	330
Benzo(g,h,i)perylene	ND	330

QC Batch: S0926-B3

Surrogate Recovery:	
2-Fluorophenol	72%
Phenol-d5	80%
2-Chlorophenol-d4	76%
2,4,6-Tribromophenol	76%
1,2-Dichlorobenzene-d4	65%
Nitrobenzene-d5	71%
2-Fluorobiphenyl	76%
p-Terphenyl-d14	135%

ND = Not detected

024

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Lab Control Summary

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID for Blank Spike: S0926-LCS3
Analysis: Method 8270

Matrix: Solid

Analysis Date for Blank Spike: 9/26/97

Analyte	% Recovery
Phenol	52
2-Chlorophenol	52
1,4-Dichlorobenzene	65
n-Nitroso-di-n-propylamine	94
1,2,4-Trichlorobenzene	65
4-Chloro-3-methylphenol	56
Acenaphthene	82
4-Nitrophenol	44
2,4-Dinitrotoluene	82
Pentachlorophenol	56
Pyrene	106

QC Batch: S0926-B3

MITKEM CORPORATION

D1496

Lab Project #: **D1496**
Client Name: **Foster Wheeler Environmental Corp.**
Client Proj #: **D013**
Client PO #: **003195 + Supp. 01**
Project Name: **Defektor Shipyard**
Date Due: **9/29/97**
Total Price: **$** - + 100% Surcharge for 48 hr. TAT
Project Mgr: EL
Salesman: NET
Del Req'd: **NEESA Level C**
Completed?: **YES**

Logged In By: [illegible]
Reviewed By: [illegible]
Date: 9-26-97 Time: 9:25

Lab ID	Client ID	Matrix	Analysis	Price	Sampled	Received	TPH	IR	BNA	Herb	P/P	Wet	Met	V-GC	V-MS	Sub
-01	DSY-SP1-SECII	SL	PCBs		9/24/97	9/25/97					1					
			RCRA 8 Metals										1			
			VOC/8260						1					1		
			SVOC/8270					1								
			TPH				1									
-02	DSY-SP2-SECII	SL	PCBs		9/24/97	9/25/97					1					
			RCRA 8 Metals										1			
			VOC/8260											1		
			SVOC/8270						1							
			TPH				1									
-03	TP234SE	SL	RCRA 8 Metals		9/24/97	9/25/97							1			

NOTES:

TPH	IR	BNA	Herb	P/P	Wet	Met	V-GC	V-MS	Sub
0	2	2	0	2	0	3	0	2	0

ORIGINAL REPORT GOES TO:
Foster Wheeler Environmental Corp.
PO Box 4749
Middletown, RI 02842

Attn: Mark Gouveia
Phone: 401-842-6940
Fax: 401-842-6970

INVOICE GOES TO:
Same

9/26/97 9:25 AM

D1496

MITKEM CORPORATION
175 Metro Center Boulevard • Warwick, Rhode Island 02886-1755
(401) 732-3400 • Fax (401) 732-3499
1232 East Broadway Road, Suite 210 • Tempe, Arizona 85282
(602 303-9535 • Fax (602) 921-2883

CHAIN-OF-CUSTODY RECORD

REPORT TO:		INVOICE TO:		LAB REFERENCE #:
COMPANY: Foster Wheeler	PHONE: 842-6940	COMPANY: SAME	PHONE: SAME	
NAME: Mark Gouveia	FAX: 842-6970	NAME:	FAX:	
ADDRESS: 4000 T Defoe Hwy		ADDRESS:		TURNAROUND TIME: 48 HRS
CITY/ST/ZIP: Portsmouth RI		CITY/ST/ZIP:		

CLIENT PROJECT NAME: DSY
CLIENT PROJECT #: D013
CLIENT P.O.#:

REQUESTED ANALYSES

SAMPLE IDENTIFICATION	DATE/TIME SAMPLED	COMPOSITE	GRAB	WATER	SOIL	OTHER	LAB ID	# OF CONTAINERS	PCB	BCLP 8 METALS	VOC	SVOC	TPH	TOTAL METALS							COMMENTS
DSY-SP1-SECII	9-24-97/1053	✓	✓		✓		-01	2	-	-	-	-	-								
DSY-SP2-SECII	9-24-97/1124	✓	✓		✓		-02	2	-	-	-	-	-								
TP234SE	9-24-97/1400		✓				-03	1						✓							
	/																				
	/																				
	/																				
	/																				
	/																				
	/																				
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	/																				
	/																				

TSF#	RELINQUISHED BY	DATE/TIME	ACCEPTED BY	DATE/TIME
1st	[signature]	/	D H Healey	25 Sep 97 / 1:00
2nd		/		/
3rd		/		/

ADDITIONAL REMARKS:

COOLER TEMP:

WHITE: LABORATORY COPY YELLOW: REPORT COPY PINK: CLIENT'S COPY

MITKEM CORPORATION
Sample Condition Form

Received By: AS Date: 9/25/97
Client Project Description/Number: DSY
MITKEM Project: D1496
Client: Foster Wheeler

Condition:

		Lab ID:	Client ID:	Remarks:
1) Custody Seal(s)	Present/Absent (Absent) Intact/Broken	-01	DSY-SP1-SECII	
		-02	DSY-SP2-SECII	
		-03	TP234SE	
2) Custody Seal Number(s)	N/A			
3) Chain-of-Custody Record(s)	Present/Absent (Present)			
4) Cooler Temperature	N/A			
Coolant Condition				
5) Airbill(s)	Present/Absent (Absent)			
Airbill Number(s)				
6) Sample Bottles	Intact (Intact) Broken Leaking			
7) Date Received	9/25/97			
8) Time Received	1:00			
9) Project Due Date				

Last Page of Data Report

MITKEM CORPORATION

October 1, 1997

Foster Wheeler Environmental Corp.
P.O. Box 4749
Middletown, RI 02848
Attn: Mr. Mark Gouveia

RE: Client Project #: Tank Farm #4
Lab Project #: D1521

Dear Mr. Gouveia:

Enclosed please find the data report of the required analyses for the samples associated with the above referenced project. If you have any questions regarding this report, please call me.

We appreciate your business.

Sincerely,

Edward A. Lawler
Laboratory Operations Manager

175 Metro Center Boulevard • Warwick, Rhode Island 02886-1755 • (401) 732-3400 • Fax (401) 732-3499
1232 East Broadway, Suite 210 • Tempe, Arizona 85282 • (602) 303-9535 • Fax (602) 921-2883
email: mitkem19@mail.idt.net

MITKEM CORPORATION

Client: Foster Wheeler Environmental Corp.

Client Project: Tank Farm #4

Lab Project: D1521

Date samples received: 9/29/97

Project Narrative

This data report includes the analysis results for two (2) soil samples that were received from the Tank Farm #4 site from Foster Wheeler Environmental Corp. on September 29, 1997. Analyses were performed per specification in the Chain of Custody form. For reference, a copy of the Mitkem Sample Log-In form is included for cross-referencing the client sample ID and laboratory sample ID.

All of the analyses were performed according to method specifications. No unusual occurrences were noted during sample analysis.

This data report has been reviewed and is authorized for release as evidenced by the signature below.

Edward A. Lawler
Laboratory Operations Manager

Data Qualifiers:

J This flag indicates an estimated value due to either
- the compound was detected at below the Reporting Limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the analyte was also detected in the associated Method Blank

D This flag indicates the analyte concentration was obtained from a diluted analysis

E This flag indicates the analyte concentration exceeded the Calibration Range

P This flag is used for Pesticides/PCB/Herbicide analyte when there is a greater than 50% difference for detected concentration between the two GC columns used for Primary and Confirmation analyses. The lower of the two values is reported in the Analysis Report.

MITKEM CORPORATION

Analysis Report: Total Petroleum Hydrocarbons

Client: Foster Wheeler Environmental Corp.
Analysis: Method 418.1
Matrix: Soil
Concentration in: mg/kg, dry weight basis

Lab ID	Client ID	Result	% Solid	Reporting Limit	Analysis Date
D1521-01	DSY-SP1-SECIII	36	85	24	10/1/97
D1521-02	DSY-SP11-SECIII	230	85	47	10/1/97

QA/QC

Method Blank			
IO930-B1	ND	20	10/1/97
Lab Control Sample (% Recovery)			
IO930-LCS1	86		10/1/97

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP1-SECIII
Lab ID: D1521-01
Analysis Method: 7471A (Mercury)
6010A (Others)

Matrix: Soil, 85% Solids
Concentration in: mg/kg, dry weight basis
Analysis Date: 10/1/97

Analyte	Results	Reporting Limit
Arsenic	10	1
Barium	16	1
Cadmium	ND	0.5
Chromium	12	1
Lead	13	0.5
Mercury	ND	0.3
Selenium	ND	2
Silver	ND	1

QC Batch: 0930PBS

ND = Not detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP2-SECIII
Lab ID: D1521-02
Analysis Method: 7471A (Mercury)
6010A (Others)

Matrix: Soil, 85% Solids
Concentration in: mg/kg, dry weight basis
Analysis Date: 10/1/97

Analyte	Results	Reporting Limit
Arsenic	8	1
Barium	23	1
Cadmium	ND	0.5
Chromium	19	1
Lead	62	0.5
Mercury	ND	0.3
Selenium	ND	2
Silver	ND	1

QC Batch: 0930PBS

ND = Not detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Prep Blank, 0930PBS
Analysis Method: 7471A (Mercury)
6010A (Others)

Concentration in: mg/kg
Analysis Date: 10/1/97

Analyte	Results	Reporting Limit
Arsenic	ND	1
Barium	ND	1
Cadmium	ND	0.5
Chromium	ND	1
Lead	ND	0.5
Mercury	ND	0.3
Selenium	ND	2
Silver	ND	1

QC Batch: 0930PBS

ND = Not detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Lab Control Sample, 0930LCSS
Analysis Method: 7471A (Mercury)
6010A (Others)

Matrix: Soil
Analysis Date: 10/1/97

Analyte	% Recovery
Arsenic	90
Barium	121
Cadmium	130
Chromium	99
Lead	102
Mercury	87
Selenium	103
Silver	97

QC Batch: 0930PBS

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP1-SECIII
Lab ID: D1521-01
Analysis: Method 8260

Analysis Date: 9/30/97
Matrix: Soil, 91% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Carbon disulfide	ND	5
Iodomethane	ND	5
Acetone	ND	5
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Vinyl acetate	ND	5
2,2-Dichloropropane	ND	5
cis-1,2-Dichloroethene	ND	5
Methyl ethyl ketone	ND	5
Bromochloromethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
1,1-Dichloropropene	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Dibromomethane	ND	5
Bromodichloromethane	ND	5
2-Chloroethyl vinyl ether	ND	5
cis-1,3-Dichloropropene	ND	5
4-Methyl-2-pentanone	ND	5
Toluene	ND	5

MITKEM CORPORATION

Client ID: DSY-SP1-SECIII

Lab ID: D1521-01

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,3-Dichloropropane	ND	5
2-Hexanone	ND	5
Dibromochloromethane	ND	5
1,2-Dibromoethane (EDB)	ND	5
Chlorobenzene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Ethylbenzene	ND	5
Xylenes, total	ND	5
Styrene	ND	5
Bromoform	ND	5
Isopropylbenzene	ND	5
Bromobenzene	ND	5
1,1,2,2-Tetrachloroethane	ND	5
1,2,3-Trichloropropane	ND	5
n-Propylbenzene	ND	5
2-Chlorotoluene	ND	5
4-Chlorotoluene	ND	5
1,3,5-Trimethylbenzene	ND	5
tert-Butylbenzene	ND	5
1,2,4-Trimethylbenzene	ND	5
sec-Butylbenzene	ND	5
1,3-Dichlorobenzene	ND	5
4-Isopropyltoluene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5
n-Butylbenzene	ND	5
1,2-Dibromo-3-chloropropane	ND	5
1,2,4-Trichlorobenzene	ND	5
Hexachlorobutadiene	ND	5
1,2,3-Trichlorobenzene	ND	5
MTBE	ND	5
Naphthalene	ND	5

Surrogate Recovery:

QC Batch: V1B0930A

1,2-Dichloroethane-d4	95%
Toluene-d8	95%
Bromofluorobenzene	86%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP2-SECIII
Lab ID: D1521-02
Analysis: Method 8260

Analysis Date: 9/30/97
Matrix: Soil, 92% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Carbon disulfide	ND	5
Iodomethane	ND	5
Acetone	ND	5
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Vinyl acetate	ND	5
2,2-Dichloropropane	ND	5
cis-1,2-Dichloroethene	ND	5
Methyl ethyl ketone	ND	5
Bromochloromethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
1,1-Dichloropropene	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Dibromomethane	ND	5
Bromodichloromethane	ND	5
2-Chloroethyl vinyl ether	ND	5
cis-1,3-Dichloropropene	ND	5
4-Methyl-2-pentanone	ND	5
Toluene	ND	5

MITKEM CORPORATION

Client ID: DSY-SP2-SECIII

Lab ID: D1521-02

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,3-Dichloropropane	ND	5
2-Hexanone	ND	5
Dibromochloromethane	ND	5
1,2-Dibromoethane (EDB)	ND	5
Chlorobenzene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Ethylbenzene	ND	5
Xylenes, total	ND	5
Styrene	ND	5
Bromoform	ND	5
Isopropylbenzene	ND	5
Bromobenzene	ND	5
1,1,2,2-Tetrachloroethane	ND	5
1,2,3-Trichloropropane	ND	5
n-Propylbenzene	ND	5
2-Chlorotoluene	ND	5
4-Chlorotoluene	ND	5
1,3,5-Trimethylbenzene	ND	5
tert-Butylbenzene	ND	5
1,2,4-Trimethylbenzene	ND	5
sec-Butylbenzene	ND	5
1,3-Dichlorobenzene	ND	5
4-Isopropyltoluene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5
n-Butylbenzene	ND	5
1,2-Dibromo-3-chloropropane	ND	5
1,2,4-Trichlorobenzene	ND	5
Hexachlorobutadiene	ND	5
1,2,3-Trichlorobenzene	ND	5
MTBE	ND	5
Naphthalene	ND	5

Surrogate Recovery:

QC Batch: V1B0930A

1,2-Dichloroethane-d4	101%
Toluene-d8	96%
Bromofluorobenzene	87%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, V1B0930A
Analysis: Method 8260

Analysis Date: 9/30/97
Matrix: Solid
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Carbon disulfide	ND	5
Iodomethane	ND	5
Acetone	ND	5
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Vinyl acetate	ND	5
2,2-Dichloropropane	ND	5
cis-1,2-Dichloroethene	ND	5
Methyl ethyl ketone	ND	5
Bromochloromethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
1,1-Dichloropropene	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Dibromomethane	ND	5
Bromodichloromethane	ND	5
2-Chloroethyl vinyl ether	ND	5
cis-1,3-Dichloropropene	ND	5
4-Methyl-2-pentanone	ND	5
Toluene	ND	5

MITKEM CORPORATION

Client ID:

Lab ID: Method Blank, V1B0930A

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,3-Dichloropropane	ND	5
2-Hexanone	ND	5
Dibromochloromethane	ND	5
1,2-Dibromoethane (EDB)	ND	5
Chlorobenzene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Ethylbenzene	ND	5
Xylenes, total	ND	5
Styrene	ND	5
Bromoform	ND	5
Isopropylbenzene	ND	5
Bromobenzene	ND	5
1,1,2,2-Tetrachloroethane	ND	5
1,2,3-Trichloropropane	ND	5
n-Propylbenzene	ND	5
2-Chlorotoluene	ND	5
4-Chlorotoluene	ND	5
1,3,5-Trimethylbenzene	ND	5
tert-Butylbenzene	ND	5
1,2,4-Trimethylbenzene	ND	5
sec-Butylbenzene	ND	5
1,3-Dichlorobenzene	ND	5
4-Isopropyltoluene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5
n-Butylbenzene	ND	5
1,2-Dibromo-3-chloropropane	ND	5
1,2,4-Trichlorobenzene	ND	5
Hexachlorobutadiene	ND	5
1,2,3-Trichlorobenzene	ND	5
MTBE	ND	5
Naphthalene	ND	5

Surrogate Recovery:

QC Batch: V1B0930A

1,2-Dichloroethane-d4	97%
Toluene-d8	99%
Bromofluorobenzene	93%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP1-SECIII
Lab ID: D1521-01
Analysis: Method 8080

Analysis Date: 9/30/97
Matrix: Soil, 85% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	39
Aroclor-1221	ND	79
Aroclor-1232	ND	39
Aroclor-1242	ND	39
Aroclor-1248	ND	39
Aroclor-1254	ND	39
Aroclor-1260	ND	39

QC Batch: P0930-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	92%
Decachlorobiphenyl	68%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP2-SECIII
Lab ID: D1521-02
Analysis: Method 8080

Analysis Date: 9/30/97
Matrix: Soil, 85% solids
Concentration In: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	39
Aroclor-1221	ND	79
Aroclor-1232	ND	39
Aroclor-1242	ND	39
Aroclor-1248	ND	39
Aroclor-1254	ND	39
Aroclor-1260	ND	39

QC Batch: P0930-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	99%
Decachlorobiphenyl	71%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, P0930-B1
Analysis: Method 8080

Analysis Date: 9/30/97
Matrix: Solid
Concentration In: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	33
Aroclor-1221	ND	66
Aroclor-1232	ND	33
Aroclor-1242	ND	33
Aroclor-1248	ND	33
Aroclor-1254	ND	33
Aroclor-1260	ND	33

QC Batch: P0930-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	95%
Decachlorobiphenyl	71%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCBs)

Lab Control Summary

Client: Foster Wheeler Environmental Corp.
Lab ID for Blank Spike: P0930-LCS1
Analysis: Method 8080

Matrix: Solid
Analysis Date for Blank Spike: 9/30/97

Analyte	% Recovery
Aroclor 1260	115

QC Batch: P0930-B1

017

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP1-SECIII
Lab ID: D1521-01
Analysis: Method 8270

Analysis Date: 9/30/97
Matrix: Soil, 85% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Phenol	ND	390
bis(2-Chloroethyl)ether	ND	390
2-Chlorophenol	ND	390
1,3-Dichlorobenzene	ND	390
1,4-Dichlorobenzene	ND	390
1,2-Dichlorobenzene	ND	390
2-Methylphenol	ND	390
2,2'-oxybis(1-Chloropropane)	ND	390
4-Methylphenol	ND	390
n-Nitroso-di-n-propylamine	ND	390
Hexachloroethane	ND	390
Nitrobenzene	ND	390
Isophorone	ND	390
2-Nitrophenol	ND	390
2,4-Dimethylphenol	ND	390
bis(2-Chloroethoxy)methane	ND	390
2,4-Dichlorophenol	ND	390
1,2,4-Trichlorobenzene	ND	390
Naphthalene	ND	390
4-Chloroaniline	ND	390
Hexachlorobutadiene	ND	390
4-Chloro-3-methylphenol	ND	390
2-Methylnaphthalene	ND	390
Hexachlorocyclopentadiene	ND	390
2,4,6-Trichlorophenol	ND	390
2,4,5-Trichlorophenol	ND	970
2-Chloronaphthalene	ND	390
2-Nitroaniline	ND	970
Dimethylphthalate	ND	390
Acenaphthylene	ND	390
2,6-Dinitrotoluene	ND	390
3-Nitroaniline	ND	970
Acenaphthene	ND	390
2,4-Dinitrophenol	ND	970
4-Nitrophenol	ND	970
Dibenzofuran	ND	390
2,4-Dinitrotoluene	ND	390

018

MITKEM CORPORATION

Client ID: DSY-SP1-SECIII

Lab ID: D1521-01

Analyte	Results	Reporting Limits
Diethylphthalate	ND	390
Fluorene	ND	390
4-Chlorophenyl-phenylether	ND	390
4-Nitroaniline	ND	970
4,6-Dinitro-2-methylphenol	ND	970
n-Nitrosodiphenylamine	ND	390
4-Bromophenyl-phenylether	ND	390
Hexachlorobenzene	ND	390
Pentachlorophenol	ND	970
Phenanthrene	53 J	390
Anthracene	ND	390
Di-n-butylphthalate	ND	390
Carbazole	ND	390
Fluoranthene	160 J	390
Pyrene	140 J	390
Butylbenzylphthalate	ND	390
Benzo(a)anthracene	75 J	390
Chrysene	79 J	390
3,3'-Dichlorobenzidine	ND	390
bis(2-Ethylhexyl)phthalate	ND	390
Di-n-octylphthalate	ND	390
Benzo(b)fluoranthene	98 J	390
Benzo(k)fluoranthene	ND	390
Benzo(a)pyrene	56 J	390
Indeno(1,2,3-cd)pyrene	ND	390
Dibenz(a,h)anthracene	ND	390
Benzo(g,h,i)perylene	ND	390

QC Batch: S0930-B3

Surrogate Recovery:	
2-Fluorophenol	69%
Phenol-d5	69%
2-Chlorophenol-d4	69%
2,4,6-Tribromophenol	76%
1,2-Dichlorobenzene-d4	55%
Nitrobenzene-d5	60%
2-Fluorobiphenyl	70%
p-Terphenyl-d14	95%

ND = Not detected

019

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP2-SECIII
Lab ID: D1521-02
Analysis: Method 8270

Analysis Date: 9/30/97
Matrix: Soil, 85% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Phenol	ND	390
bis(2-Chloroethyl)ether	ND	390
2-Chlorophenol	ND	390
1,3-Dichlorobenzene	ND	390
1,4-Dichlorobenzene	ND	390
1,2-Dichlorobenzene	ND	390
2-Methylphenol	ND	390
2,2'-oxybis(1-Chloropropane)	ND	390
4-Methylphenol	ND	390
n-Nitroso-di-n-propylamine	ND	390
Hexachloroethane	ND	390
Nitrobenzene	ND	390
Isophorone	ND	390
2-Nitrophenol	ND	390
2,4-Dimethylphenol	ND	390
bis(2-Chloroethoxy)methane	ND	390
2,4-Dichlorophenol	ND	390
1,2,4-Trichlorobenzene	ND	390
Naphthalene	ND	390
4-Chloroaniline	ND	390
Hexachlorobutadiene	ND	390
4-Chloro-3-methylphenol	ND	390
2-Methylnaphthalene	ND	390
Hexachlorocyclopentadiene	ND	390
2,4,6-Trichlorophenol	ND	390
2,4,5-Trichlorophenol	ND	970
2-Chloronaphthalene	ND	390
2-Nitroaniline	ND	970
Dimethylphthalate	ND	390
Acenaphthylene	ND	390
2,6-Dinitrotoluene	ND	390
3-Nitroaniline	ND	970
Acenaphthene	ND	390
2,4-Dinitrophenol	ND	970
4-Nitrophenol	ND	970
Dibenzofuran	ND	390
2,4-Dinitrotoluene	ND	390

020

MITKEM CORPORATION

Client ID: DSY-SP2-SECIII

Lab ID: D1521-02

Analyte	Results	Reporting Limits
Diethylphthalate	ND	390
Fluorene	ND	390
4-Chlorophenyl-phenylether	ND	390
4-Nitroaniline	ND	970
4,6-Dinitro-2-methylphenol	ND	970
n-Nitrosodiphenylamine	ND	390
4-Bromophenyl-phenylether	ND	390
Hexachlorobenzene	ND	390
Pentachlorophenol	ND	970
Phenanthrene	410	390
Anthracene	99 J	390
Di-n-butylphthalate	ND	390
Carbazole	48 J	390
Fluoranthene	670	390
Pyrene	640	390
Butylbenzylphthalate	ND	390
Benzo(a)anthracene	350 J	390
Chrysene	370 J	390
3,3'-Dichlorobenzidine	ND	390
bis(2-Ethylhexyl)phthalate	ND	390
Di-n-octylphthalate	ND	390
Benzo(b)fluoranthene	440	390
Benzo(k)fluoranthene	220 J	390
Benzo(a)pyrene	330 J	390
Indeno(1,2,3-cd)pyrene	110 J	390
Dibenz(a,h)anthracene	ND	390
Benzo(g,h,i)perylene	110 J	390

QC Batch: S0930-B3

Surrogate Recovery:	
2-Fluorophenol	83%
Phenol-d5	90%
2-Chlorophenol-d4	90%
2,4,6-Tribromophenol	90%
1,2-Dichlorobenzene-d4	65%
Nitrobenzene-d5	70%
2-Fluorobiphenyl	85%
p-Terphenyl-d14	115%

ND = Not detected

021

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, S0930-B3
Analysis: Method 8270

Analysis Date: 9/30/97
Matrix: Solid
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Phenol	ND	330
bis(2-Chloroethyl)ether	ND	330
2-Chlorophenol	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
1,2-Dichlorobenzene	ND	330
2-Methylphenol	ND	330
2,2'-oxybis(1-Chloropropane)	ND	330
4-Methylphenol	ND	330
n-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
2-Nitrophenol	ND	330
2,4-Dimethylphenol	ND	330
bis(2-Chloroethoxy)methane	ND	330
2,4-Dichlorophenol	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	330
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
4-Chloro-3-methylphenol	ND	330
2-Methylnaphthalene	ND	330
Hexachlorocyclopentadiene	ND	330
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	830
2-Chloronaphthalene	ND	330
2-Nitroaniline	ND	830
Dimethylphthalate	ND	330
Acenaphthylene	ND	330
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	830
Acenaphthene	ND	330
2,4-Dinitrophenol	ND	830
4-Nitrophenol	ND	830
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330

022

MITKEM CORPORATION

Client ID:

Lab ID: Method Blank, S0930-B3

Analyte	Results	Reporting Limits
Diethylphthalate	ND	330
Fluorene	ND	330
4-Chlorophenyl-phenylether	ND	330
4-Nitroaniline	ND	830
4,6-Dinitro-2-methylphenol	ND	830
n-Nitrosodiphenylamine	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Pentachlorophenol	ND	830
Phenanthrene	ND	330
Anthracene	ND	330
Di-n-butylphthalate	ND	330
Carbazole	ND	330
Fluoranthene	ND	330
Pyrene	ND	330
Butylbenzylphthalate	ND	330
Benzo(a)anthracene	ND	330
Chrysene	ND	330
3,3'-Dichlorobenzidine	ND	330
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	330
Benzo(k)fluoranthene	ND	330
Benzo(a)pyrene	ND	330
Indeno(1,2,3-cd)pyrene	ND	330
Dibenz(a,h)anthracene	ND	330
Benzo(g,h,i)perylene	ND	330

QC Batch: S0930-B3

Surrogate Recovery:	
2-Fluorophenol	68%
Phenol-d5	68%
2-Chlorophenol-d4	68%
2,4,6-Tribromophenol	64%
1,2-Dichlorobenzene-d4	58%
Nitrobenzene-d5	58%
2-Fluorobiphenyl	65%
p-Terphenyl-d14	94%

ND = Not detected

023

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Lab Control Summary

Client: Foster Wheeler Environmental Corp. Matrix: Solid
Lab ID for Blank Spike: S0930-LCS4
Analysis: Method 8270 Analysis Date for Blank Spike: 9/30/97

Analyte	% Recovery
Phenol	40
2-Chlorophenol	40
1,4-Dichlorobenzene	55
n-Nitroso-di-n-propylamine	54
1,2,4-Trichlorobenzene	55
4-Chloro-3-methylphenol	44
Acenaphthene	65
4-Nitrophenol	44
2,4-Dinitrotoluene	65
Pentachlorophenol	38
Pyrene	71

QC Batch: S0930-B3

024

MITKEM CORPORATION

Lab Project #: D1521 R2
Client Name: Foster Wheeler
Client Proj #: D013
Client PO #: NA
Project Name: Tank Farm #4
Date Due: 10/1/1997 (48 hr turn)
Total Price: $ - x 100% for 48 hr. TAT
Project Mgr: EAL
Salesman: NET
Del Req'd: NA
Completed?: YES

Logged In By: MAM
Reviewed By:
Date: 10-1-97 Time: 3:58

Lab ID	Client ID	Matrix	Analysis	Price	Sampled	Received	TPH	IR	BNA	Herb	P/P	Wet	Met	V-GC	V-MS	Sub
-01	DSY-SP1-SECIII	SL	8080 PCB		9/29/97	9/29/97					1					
			RCRA 8 Metals										1			
			VOC 8260												1	
			SVOC 8270						1							
			TPH-IR					1								
-01	DSY-SP2-SECIII	SL	8080 PCB		9/29/97	9/29/97					1					
			RCRA 8 Metals										1			
			VOC 8260												1	
			SVOC 8270						1							
			TPH-IR					1								

NOTES: R1: No deliverable package, regular commercial report
R2: Report to address change

TPH	IR	BNA	Herb	P/P	Wet	Met	V-GC	V-MS	Sub
0	2	2	0	2	0	2	0	2	0

ORIGINAL REPORT GOES TO:
Foster Wheeler Environmental Corp.
PO Box 4749
Middletown, RI 02842

Attn: Mark Gouveia
Phone: 401-842-6940
Fax: 401-842-6970

INVOICE GOES TO:
Same

MITKEM CORPORATION
175 Metro Center Boulevard • Warwick, Rhode Island 02886-1755
(401) 732-3400 • Fax (401) 732-3499
1232 East Broadway Road, Suite 210 • Tempe, Arizona 85282
(602 303-9535 • Fax (602) 921-2883

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

REPORT TO		INVOICE TO		
COMPANY Foster Wheeler	PHONE 842-6940	COMPANY Same	PHONE Same	LAB REFERENCE #: D1521
NAME Mark Gouveia	FAX 842-6970	NAME	FAX	
ADDRESS 4000T Defense Hwy.		ADDRESS		TURNAROUND TIME: 48 hr
CITY/ST/ZIP Portsmouth RI		CITY/ST/ZIP		

CLIENT PROJECT NAME: Tank Farm # 4
CLIENT PROJECT #: D013
CLIENT P.O.#:

REQUESTED ANALYSES

SAMPLE IDENTIFICATION	DATE/TIME SAMPLED	COMPOSITE	GRAB	WATER	SOIL	OTHER	LAB ID	# OF CONTAINERS	PCB	RCRA 8 METALS	VOC	SVOC	TPH	REPORT TYPE/TURNAROUND							COMMENTS
DSY-SP1-SECIII	9/29/97 1140	/	/		/		-01	2	X	X	X	X	X								
DSY-SP2-SECIII	9/29/97 1145	/	/		/		-02	2	X	X	X	X	X								
	/																				
	/																				
	/																				
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	/																				

TSF#	RELINQUISHED BY	DATE/TIME	ACCEPTED BY	DATE/TIME	ADDITIONAL REMARKS:	COOLER TEMP:
1st	[signature]	9-29-97 1645	[signature]	9/29 1645		
2nd		/		/		
3rd		/		/		

WHITE: LABORATORY COPY YELLOW: REPORT COPY PINK: CLIENT'S COPY

MITKEM CORPORATION
Sample Condition Form

Received By: AS/KC	Reviewed By:	Date: 9/29/97	MITKEM Project: D1521
Client Project: Dawbuffe Tank Farm 4		Client: Foster/Wheeler	

Condition:		Sample ID Lab	Sample ID Client	Preservation (pH) HNO_3	H_2SO_4	HCl	NaOH	Comments/Remarks/ Corrective Action
		-01	DSY	SP1	S2	CIII		
1) Custody Seal(s)	Present/Absent	-02	DSY	SP2	S2	CIII		
	Coolers/Bottles Intact/Broken							
2) Custody Seal Number(s)	N/A							
3) Chain-of-Custody	Present/Absent							
4) Cooler Temperature	15°C							
Coolant Condition	Ice							
5) Airbill(s)	Present/Absent							
Airbill Number(s)								
6) Sample Bottles	Intact							
	Broken							
	Leaking							
7) Date Received	9/29/97							
8) Time Received	600							
9) Project Due Date								

Last Page of Data Report

MITKEM CORPORATION

October 2, 1997

Foster Wheeler Environmental Corp.
P.O. Box 4749
Middletown, RI 02842
Attn: Mr. Mark Gouveia

RE: Client Project #: D013, Derecktor Shipyard
Lab Project #: D1527

Dear Mr. Gouveia:

Enclosed please find the data report of the required analyses for the samples associated with the above referenced project. If you have any questions regarding this report, please call me.

We appreciate your business.

Sincerely,

Edward A. Lawler
Laboratory Operations Manager

175 Metro Center Boulevard • Warwick, Rhode Island 02886-1755 • (401) 732-3400 • Fax (401) 732-3499
1232 East Broadway, Suite 210 • Tempe, Arizona 85282 • (602) 303-9535 • Fax (602) 921-2883
email: mitkem19@mail.idt.net

MITKEM CORPORATION

Client: Foster Wheeler Environmental Corp.

Client Project: D013, Derecktor Shipyard

Lab Project: D1527

Date samples received: 9/30/97

Project Narrative

This data report includes the analysis results for four (4) soil samples that were received from the Derecktor Shipyard site from Foster Wheeler Environmental Corp. on September 30, 1997. Analyses were performed per specification in the Chain of Custody form. For reference, a copy of the Mitkem Sample Log-In form is included for cross-referencing the client sample ID and laboratory sample ID.

All of the analyses were performed according to method specifications. No unusual occurrences were noted during sample analysis.

This data report has been reviewed and is authorized for release as evidenced by the signature below.

Edward A. Lawler
Laboratory Operations Manager

Data Qualifiers:

J This flag indicates an estimated value due to either
- the compound was detected at below the Reporting Limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the analyte was also detected in the associated Method Blank

D This flag indicates the analyte concentration was obtained from a diluted analysis

E This flag indicates the analyte concentration exceeded the Calibration Range

P This flag is used for Pesticides/PCB/Herbicide analyte when there is a greater than 50% difference for detected concentration between the two GC columns used for Primary and Confirmation analyses. The lower of the two values is reported in the Analysis Report.

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP2-SECIV
Lab ID: D1527-01
Analysis: Method 8080

Analysis Date: 10/1/97
Matrix: Soil, 85% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	39
Aroclor-1221	ND	78
Aroclor-1232	ND	39
Aroclor-1242	ND	39
Aroclor-1248	ND	39
Aroclor-1254	ND	39
Aroclor-1260	ND	39

QC Batch: P0930-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	84%
Decachlorobiphenyl	58%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP1-SECIV
Lab ID: D1527-02
Analysis: Method 8080

Analysis Date: 10/1/97
Matrix: Soil, 87% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	38
Aroclor-1221	ND	76
Aroclor-1232	ND	38
Aroclor-1242	ND	38
Aroclor-1248	ND	38
Aroclor-1254	ND	38
Aroclor-1260	ND	38

QC Batch: P0930-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	104%
Decachlorobiphenyl	71%

ND=Not Detected

004

D1527-02

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP1-SECV
Lab ID: D1527-03
Analysis: Method 8080

Analysis Date: 10/1/97
Matrix: Soil, 87% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	38
Aroclor-1221	ND	76
Aroclor-1232	ND	38
Aroclor-1242	ND	38
Aroclor-1248	ND	38
Aroclor-1254	ND	38
Aroclor-1260	ND	38

QC Batch: P0930-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	109%
Decachlorobiphenyl	72%

ND=Not Detected

005

D1527-03

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP2-SECV
Lab ID: D1527-04
Analysis: Method 8080

Analysis Date: 10/1/97
Matrix: Soil, 85% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	39
Aroclor-1221	ND	78
Aroclor-1232	ND	39
Aroclor-1242	ND	39
Aroclor-1248	ND	39
Aroclor-1254	ND	39
Aroclor-1260	ND	39

QC Batch: P0930-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	108%
Decachlorobiphenyl	73%

ND=Not Detected

006

D1527-04

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, P0930-B1
Analysis: Method 8080

Analysis Date: 9/30/97
Matrix: Solid
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	33
Aroclor-1221	ND	66
Aroclor-1232	ND	33
Aroclor-1242	ND	33
Aroclor-1248	ND	33
Aroclor-1254	ND	33
Aroclor-1260	ND	33

QC Batch: P0930-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	95%
Decachlorobiphenyl	71%

ND=Not Detected

007

D1527-MB

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, P1001-B1
Analysis: Method 8080

Analysis Date: 10/1/97
Matrix: Solid
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	33
Aroclor-1221	ND	66
Aroclor-1232	ND	33
Aroclor-1242	ND	33
Aroclor-1248	ND	33
Aroclor-1254	ND	33
Aroclor-1260	ND	33

QC Batch: P1001-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	93%
Decachlorobiphenyl	63%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCBs)

Lab Control Summary

Client: Foster Wheeler Environmental Corp.
Lab ID for Blank Spike: P0930-B1
Analysis: Method 8080

Matrix: Solid
Analysis Date for Blank Spike: 9/30/97

Analyte	% Recovery
Aroclor 1260	115

QC Batch: P0930-B1

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCBs)

Lab Control Summary

Client: Foster Wheeler Environmental Corp.
Lab ID for Blank Spike: P1001-LCS1
Analysis: Method 8080

Matrix: Solid
Analysis Date for Blank Spike: 10/2/97

Analyte	% Recovery
Aroclor 1260	88

QC Batch: P1001-B1

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP2-SECIV
Lab ID: D1527-01
Analysis Method: 7471A (Mercury)
6010A (Others)

Matrix: Soil, 85% Solids
Concentration in: mg/kg, dry weight basis
Analysis Date: 10/2/97

Analyte	Results	Reporting Limit
Arsenic	13	1
Barium	15	1
Cadmium	ND	0.5
Chromium	13	1
Lead	14	0.5
Mercury	ND	0.3
Selenium	ND	2
Silver	ND	1

QC Batch: 1001PBS1

ND = Not detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP1-SECIV
Lab ID: D1527-02
Analysis Method: 7471A (Mercury)
6010A (Others)

Matrix: Soil, 87% Solids
Concentration in: mg/kg, dry weight basis
Analysis Date: 10/2/97

Analyte	Results	Reporting Limit
Arsenic	11	1
Barium	25	1
Cadmium	ND	0.5
Chromium	18	1
Lead	22	0.5
Mercury	ND	0.3
Selenium	ND	2
Silver	ND	1

QC Batch: 1001PBS1

ND = Not detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP1-SECV
Lab ID: D1527-03
Analysis Method: 7471A (Mercury)
6010A (Others)

Matrix: Soil, 87% Solids
Concentration in: mg/kg, dry weight basis
Analysis Date: 10/2/97

Analyte	Results	Reporting Limit
Arsenic	11	1
Barium	25	1
Cadmium	ND	0.5
Chromium	18	1
Lead	71	0.5
Mercury	ND	0.3
Selenium	ND	2
Silver	ND	1

QC Batch: 1001PBS1

ND = Not detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP2-SECV
Lab ID: D1527-04
Analysis Method: 7471A (Mercury)
6010A (Others)

Matrix: Soil, 85% Solids
Concentration in: mg/kg, dry weight basis
Analysis Date: 10/2/97

Analyte	Results	Reporting Limit
Arsenic	10	1
Barium	30	1
Cadmium	ND	0.5
Chromium	29	1
Lead	94	0.5
Mercury	ND	0.3
Selenium	ND	2
Silver	ND	1

QC Batch: 1001PBS1

ND = Not detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, 1001PBS1
Analysis Method: 7471A (Mercury)
6010A (Others)

Concentration in: mg/kg
Analysis Date: 10/2/97

Analyte	Results	Reporting Limit
Arsenic	ND	1
Barium	ND	1
Cadmium	ND	0.5
Chromium	ND	1
Lead	ND	0.5
Mercury	ND	0.3
Selenium	ND	2
Silver	ND	1

QC Batch: 1001PBS1

ND = Not detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Lab Control Sample, 1001LCSS1
Analysis Method: 7471A (Mercury)
6010A (Others)

Matrix: Soil
Analysis Date: 10/2/97

Analyte	% Recovery
Arsenic	94
Barium	103
Cadmium	104
Chromium	96
Lead	91
Mercury	89
Selenium	90
Silver	94

QC Batch: 1001PBS1

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP2-SECIV
Lab ID: D1527-01
Analysis: Method 8260

Analysis Date: 10/1/97
Matrix: Soil, 94% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Carbon disulfide	ND	5
Iodomethane	ND	5
Acetone	ND	5
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Vinyl acetate	ND	5
2,2-Dichloropropane	ND	5
cis-1,2-Dichloroethene	ND	5
Methyl ethyl ketone	ND	5
Bromochloromethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
1,1-Dichloropropene	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Dibromomethane	ND	5
Bromodichloromethane	ND	5
2-Chloroethyl vinyl ether	ND	5
cis-1,3-Dichloropropene	ND	5
4-Methyl-2-pentanone	ND	5
Toluene	ND	5

MITKEM CORPORATION

Client ID: DSY-SP2-SECIV

Lab ID: D1527-01

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,3-Dichloropropane	ND	5
2-Hexanone	ND	5
Dibromochloromethane	ND	5
1,2-Dibromoethane (EDB)	ND	5
Chlorobenzene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Ethylbenzene	ND	5
Xylenes, total	ND	5
Styrene	ND	5
Bromoform	ND	5
Isopropylbenzene	ND	5
Bromobenzene	ND	5
1,1,2,2-Tetrachloroethane	ND	5
1,2,3-Trichloropropane	ND	5
n-Propylbenzene	ND	5
2-Chlorotoluene	ND	5
4-Chlorotoluene	ND	5
1,3,5-Trimethylbenzene	ND	5
tert-Butylbenzene	ND	5
1,2,4-Trimethylbenzene	ND	5
sec-Butylbenzene	ND	5
1,3-Dichlorobenzene	ND	5
4-Isopropyltoluene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5
n-Butylbenzene	ND	5
1,2-Dibromo-3-chloropropane	ND	5
1,2,4-Trichlorobenzene	ND	5
Hexachlorobutadiene	ND	5
1,2,3-Trichlorobenzene	ND	5
MTBE	ND	5
Naphthalene	ND	5

Surrogate Recovery:

QC Batch: V1B1001A

1,2-Dichloroethane-d4	94%
Toluene-d8	98%
Bromofluorobenzene	91%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP1-SECIV
Lab ID: D1527-02
Analysis: Method 8260

Analysis Date: 10/1/97
Matrix: Soil, 95% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Carbon disulfide	ND	5
Iodomethane	ND	5
Acetone	ND	5
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Vinyl acetate	ND	5
2,2-Dichloropropane	ND	5
cis-1,2-Dichloroethene	ND	5
Methyl ethyl ketone	ND	5
Bromochloromethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
1,1-Dichloropropene	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Dibromomethane	ND	5
Bromodichloromethane	ND	5
2-Chloroethyl vinyl ether	ND	5
cis-1,3-Dichloropropene	ND	5
4-Methyl-2-pentanone	ND	5
Toluene	ND	5

MITKEM CORPORATION

Client ID: DSY-SP1-SECIV

Lab ID: D1527-02

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,3-Dichloropropane	ND	5
2-Hexanone	ND	5
Dibromochloromethane	ND	5
1,2-Dibromoethane (EDB)	ND	5
Chlorobenzene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Ethylbenzene	ND	5
Xylenes, total	ND	5
Styrene	ND	5
Bromoform	ND	5
Isopropylbenzene	ND	5
Bromobenzene	ND	5
1,1,2,2-Tetrachloroethane	ND	5
1,2,3-Trichloropropane	ND	5
n-Propylbenzene	ND	5
2-Chlorotoluene	ND	5
4-Chlorotoluene	ND	5
1,3,5-Trimethylbenzene	ND	5
tert-Butylbenzene	ND	5
1,2,4-Trimethylbenzene	ND	5
sec-Butylbenzene	ND	5
1,3-Dichlorobenzene	ND	5
4-Isopropyltoluene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5
n-Butylbenzene	ND	5
1,2-Dibromo-3-chloropropane	ND	5
1,2,4-Trichlorobenzene	ND	5
Hexachlorobutadiene	ND	5
1,2,3-Trichlorobenzene	ND	5
MTBE	ND	5
Naphthalene	ND	5

Surrogate Recovery:

QC Batch: V1B1001A

1,2-Dichloroethane-d4	97%
Toluene-d8	99%
Bromofluorobenzene	91%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP1-SECV
Lab ID: D1527-03
Analysis: Method 8260

Analysis Date: 10/1/97
Matrix: Soil, 94% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Carbon disulfide	ND	5
Iodomethane	ND	5
Acetone	ND	5
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Vinyl acetate	ND	5
2,2-Dichloropropane	ND	5
cis-1,2-Dichloroethene	ND	5
Methyl ethyl ketone	ND	5
Bromochloromethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
1,1-Dichloropropene	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Dibromomethane	ND	5
Bromodichloromethane	ND	5
2-Chloroethyl vinyl ether	ND	5
cis-1,3-Dichloropropene	ND	5
4-Methyl-2-pentanone	ND	5
Toluene	ND	5

MITKEM CORPORATION

Client ID: DSY-SP1-SECV

Lab ID: D1527-03

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,3-Dichloropropane	ND	5
2-Hexanone	ND	5
Dibromochloromethane	ND	5
1,2-Dibromoethane (EDB)	ND	5
Chlorobenzene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Ethylbenzene	ND	5
Xylenes, total	ND	5
Styrene	ND	5
Bromoform	ND	5
Isopropylbenzene	ND	5
Bromobenzene	ND	5
1,1,2,2-Tetrachloroethane	ND	5
1,2,3-Trichloropropane	ND	5
n-Propylbenzene	ND	5
2-Chlorotoluene	ND	5
4-Chlorotoluene	ND	5
1,3,5-Trimethylbenzene	ND	5
tert-Butylbenzene	ND	5
1,2,4-Trimethylbenzene	ND	5
sec-Butylbenzene	ND	5
1,3-Dichlorobenzene	ND	5
4-Isopropyltoluene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5
n-Butylbenzene	ND	5
1,2-Dibromo-3-chloropropane	ND	5
1,2,4-Trichlorobenzene	ND	5
Hexachlorobutadiene	ND	5
1,2,3-Trichlorobenzene	ND	5
MTBE	ND	5
Naphthalene	ND	5

Surrogate Recovery:

QC Batch: V1B1001A

1,2-Dichloroethane-d4	94%
Toluene-d8	98%
Bromofluorobenzene	90%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP2-SECV
Lab ID: D1527-04
Analysis: Method 8260

Analysis Date: 10/1/97
Matrix: Soil, 94% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Carbon disulfide	ND	5
Iodomethane	ND	5
Acetone	ND	5
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Vinyl acetate	ND	5
2,2-Dichloropropane	ND	5
cis-1,2-Dichloroethene	ND	5
Methyl ethyl ketone	ND	5
Bromochloromethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
1,1-Dichloropropene	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Dibromomethane	ND	5
Bromodichloromethane	ND	5
2-Chloroethyl vinyl ether	ND	5
cis-1,3-Dichloropropene	ND	5
4-Methyl-2-pentanone	ND	5
Toluene	ND	5

MITKEM CORPORATION

Client ID: DSY-SP2-SECV

Lab ID: D1527-04

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,3-Dichloropropane	ND	5
2-Hexanone	ND	5
Dibromochloromethane	ND	5
1,2-Dibromoethane (EDB)	ND	5
Chlorobenzene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Ethylbenzene	ND	5
Xylenes, total	ND	5
Styrene	ND	5
Bromoform	ND	5
Isopropylbenzene	ND	5
Bromobenzene	ND	5
1,1,2,2-Tetrachloroethane	ND	5
1,2,3-Trichloropropane	ND	5
n-Propylbenzene	ND	5
2-Chlorotoluene	ND	5
4-Chlorotoluene	ND	5
1,3,5-Trimethylbenzene	ND	5
tert-Butylbenzene	ND	5
1,2,4-Trimethylbenzene	ND	5
sec-Butylbenzene	ND	5
1,3-Dichlorobenzene	ND	5
4-Isopropyltoluene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5
n-Butylbenzene	ND	5
1,2-Dibromo-3-chloropropane	ND	5
1,2,4-Trichlorobenzene	ND	5
Hexachlorobutadiene	ND	5
1,2,3-Trichlorobenzene	ND	5
MTBE	ND	5
Naphthalene	ND	5

Surrogate Recovery:

QC Batch: V1B1001A

1,2-Dichloroethane-d4	93%
Toluene-d8	98%
Bromofluorobenzene	91%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, V1B1001A
Analysis: Method 8260

Analysis Date: 10/1/97
Matrix: Solid
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Carbon disulfide	ND	5
Iodomethane	ND	5
Acetone	ND	5
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Vinyl acetate	ND	5
2,2-Dichloropropane	ND	5
cis-1,2-Dichloroethene	ND	5
Methyl ethyl ketone	ND	5
Bromochloromethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
1,1-Dichloropropene	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Dibromomethane	ND	5
Bromodichloromethane	ND	5
2-Chloroethyl vinyl ether	ND	5
cis-1,3-Dichloropropene	ND	5
4-Methyl-2-pentanone	ND	5
Toluene	ND	5

MITKEM CORPORATION

Client ID:

Lab ID: Method Blank, V1B1001A

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,3-Dichloropropane	ND	5
2-Hexanone	ND	5
Dibromochloromethane	ND	5
1,2-Dibromoethane (EDB)	ND	5
Chlorobenzene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Ethylbenzene	ND	5
Xylenes, total	ND	5
Styrene	ND	5
Bromoform	ND	5
Isopropylbenzene	ND	5
Bromobenzene	ND	5
1,1,2,2-Tetrachloroethane	ND	5
1,2,3-Trichloropropane	ND	5
n-Propylbenzene	ND	5
2-Chlorotoluene	ND	5
4-Chlorotoluene	ND	5
1,3,5-Trimethylbenzene	ND	5
tert-Butylbenzene	ND	5
1,2,4-Trimethylbenzene	ND	5
sec-Butylbenzene	ND	5
1,3-Dichlorobenzene	ND	5
4-Isopropyltoluene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5
n-Butylbenzene	ND	5
1,2-Dibromo-3-chloropropane	ND	5
1,2,4-Trichlorobenzene	ND	5
Hexachlorobutadiene	ND	5
1,2,3-Trichlorobenzene	ND	5
MTBE	ND	5
Naphthalene	ND	5

Surrogate Recovery:

QC Batch: V1B1001A

1,2-Dichloroethane-d4	93%
Toluene-d8	99%
Bromofluorobenzene	93%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP2-SECIV
Lab ID: D1527-01
Analysis: Method 8270

Analysis Date: 10/1/97
Matrix: Soil, 85% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Phenol	ND	390
bis(2-Chloroethyl)ether	ND	390
2-Chlorophenol	ND	390
1,3-Dichlorobenzene	ND	390
1,4-Dichlorobenzene	ND	390
1,2-Dichlorobenzene	ND	390
2-Methylphenol	ND	390
2,2'-oxybis(1-Chloropropane)	ND	390
4-Methylphenol	ND	390
n-Nitroso-di-n-propylamine	ND	390
Hexachloroethane	ND	390
Nitrobenzene	ND	390
Isophorone	ND	390
2-Nitrophenol	ND	390
2,4-Dimethylphenol	ND	390
bis(2-Chloroethoxy)methane	ND	390
2,4-Dichlorophenol	ND	390
1,2,4-Trichlorobenzene	ND	390
Naphthalene	ND	390
4-Chloroaniline	ND	390
Hexachlorobutadiene	ND	390
4-Chloro-3-methylphenol	ND	390
2-Methylnaphthalene	ND	390
Hexachlorocyclopentadiene	ND	390
2,4,6-Trichlorophenol	ND	390
2,4,5-Trichlorophenol	ND	970
2-Chloronaphthalene	ND	390
2-Nitroaniline	ND	970
Dimethylphthalate	ND	390
Acenaphthylene	ND	390
2,6-Dinitrotoluene	ND	390
3-Nitroaniline	ND	970
Acenaphthene	ND	390
2,4-Dinitrophenol	ND	970
4-Nitrophenol	ND	970
Dibenzofuran	ND	390
2,4-Dinitrotoluene	ND	390

MITKEM CORPORATION

Client ID: DSY-SP2-SECIV

Lab ID: D1527-01

Analyte	Results	Reporting Limits
Diethylphthalate	ND	390
Fluorene	ND	390
4-Chlorophenyl-phenylether	ND	390
4-Nitroaniline	ND	970
4,6-Dinitro-2-methylphenol	ND	970
n-Nitrosodiphenylamine	ND	390
4-Bromophenyl-phenylether	ND	390
Hexachlorobenzene	ND	390
Pentachlorophenol	ND	970
Phenanthrene	47 J	390
Anthracene	ND	390
Di-n-butylphthalate	ND	390
Carbazole	ND	390
Fluoranthene	86 J	390
Pyrene	84 J	390
Butylbenzylphthalate	ND	390
Benzo(a)anthracene	50 J	390
Chrysene	56 J	390
3,3'-Dichlorobenzidine	ND	390
bis(2-Ethylhexyl)phthalate	ND	390
Di-n-octylphthalate	ND	390
Benzo(b)fluoranthene	67 J	390
Benzo(k)fluoranthene	ND	390
Benzo(a)pyrene	49 J	390
Indeno(1,2,3-cd)pyrene	ND	390
Dibenz(a,h)anthracene	ND	390
Benzo(g,h,i)perylene	ND	390

QC Batch: S0930-B3

Surrogate Recovery:	
2-Fluorophenol	83%
Phenol-d5	86%
2-Chlorophenol-d4	86%
2,4,6-Tribromophenol	88%
1,2-Dichlorobenzene-d4	70%
Nitrobenzene-d5	70%
2-Fluorobiphenyl	80%
p-Terphenyl-d14	105%

ND = Not detected

028

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP1-SECIV
Lab ID: D1527-02
Analysis: Method 8270

Analysis Date: 10/1/97
Matrix: Soil, 87% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Phenol	ND	380
bis(2-Chloroethyl)ether	ND	380
2-Chlorophenol	ND	380
1,3-Dichlorobenzene	ND	380
1,4-Dichlorobenzene	ND	380
1,2-Dichlorobenzene	ND	380
2-Methylphenol	ND	380
2,2'-oxybis(1-Chloropropane)	ND	380
4-Methylphenol	ND	380
n-Nitroso-di-n-propylamine	ND	380
Hexachloroethane	ND	380
Nitrobenzene	ND	380
Isophorone	ND	380
2-Nitrophenol	ND	380
2,4-Dimethylphenol	ND	380
bis(2-Chloroethoxy)methane	ND	380
2,4-Dichlorophenol	ND	380
1,2,4-Trichlorobenzene	ND	380
Naphthalene	ND	380
4-Chloroaniline	ND	380
Hexachlorobutadiene	ND	380
4-Chloro-3-methylphenol	ND	380
2-Methylnaphthalene	ND	380
Hexachlorocyclopentadiene	ND	380
2,4,6-Trichlorophenol	ND	380
2,4,5-Trichlorophenol	ND	950
2-Chloronaphthalene	ND	380
2-Nitroaniline	ND	950
Dimethylphthalate	ND	380
Acenaphthylene	ND	380
2,6-Dinitrotoluene	ND	380
3-Nitroaniline	ND	950
Acenaphthene	ND	380
2,4-Dinitrophenol	ND	950
4-Nitrophenol	ND	950
Dibenzofuran	ND	380
2,4-Dinitrotoluene	ND	380

029

MITKEM CORPORATION

Client ID: DSY-SP1-SECIV

Lab ID: D1527-02

Analyte	Results	Reporting Limits
Diethylphthalate	ND	380
Fluorene	ND	380
4-Chlorophenyl-phenylether	ND	380
4-Nitroaniline	ND	950
4,6-Dinitro-2-methylphenol	ND	950
n-Nitrosodiphenylamine	ND	380
4-Bromophenyl-phenylether	ND	380
Hexachlorobenzene	ND	380
Pentachlorophenol	ND	950
Phenanthrene	43 J	380
Anthracene	ND	380
Di-n-butylphthalate	ND	380
Carbazole	ND	380
Fluoranthene	100 J	380
Pyrene	100 J	380
Butylbenzylphthalate	ND	380
Benzo(a)anthracene	68 J	380
Chrysene	70 J	380
3,3'-Dichlorobenzidine	ND	380
bis(2-Ethylhexyl)phthalate	ND	380
Di-n-octylphthalate	ND	380
Benzo(b)fluoranthene	78 J	380
Benzo(k)fluoranthene	ND	380
Benzo(a)pyrene	58 J	380
Indeno(1,2,3-cd)pyrene	ND	380
Dibenz(a,h)anthracene	ND	380
Benzo(g,h,i)perylene	ND	380

QC Batch: S0930-B3

Surrogate Recovery:	
2-Fluorophenol	79%
Phenol-d5	79%
2-Chlorophenol-d4	83%
2,4,6-Tribromophenol	83%
1,2-Dichlorobenzene-d4	74%
Nitrobenzene-d5	74%
2-Fluorobiphenyl	84%
p-Terphenyl-d14	100%

ND = Not detected

030

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP1-SECV
Lab ID: D1527-03
Analysis: Method 8270

Analysis Date: 10/1/97
Matrix: Soil, 87% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Phenol	ND	380
bis(2-Chloroethyl)ether	ND	380
2-Chlorophenol	ND	380
1,3-Dichlorobenzene	ND	380
1,4-Dichlorobenzene	ND	380
1,2-Dichlorobenzene	ND	380
2-Methylphenol	ND	380
2,2'-oxybis(1-Chloropropane)	ND	380
4-Methylphenol	ND	380
n-Nitroso-di-n-propylamine	ND	380
Hexachloroethane	ND	380
Nitrobenzene	ND	380
Isophorone	ND	380
2-Nitrophenol	ND	380
2,4-Dimethylphenol	ND	380
bis(2-Chloroethoxy)methane	ND	380
2,4-Dichlorophenol	ND	380
1,2,4-Trichlorobenzene	ND	380
Naphthalene	ND	380
4-Chloroaniline	ND	380
Hexachlorobutadiene	ND	380
4-Chloro-3-methylphenol	ND	380
2-Methylnaphthalene	ND	380
Hexachlorocyclopentadiene	ND	380
2,4,6-Trichlorophenol	ND	380
2,4,5-Trichlorophenol	ND	950
2-Chloronaphthalene	ND	380
2-Nitroaniline	ND	950
Dimethylphthalate	ND	380
Acenaphthylene	ND	380
2,6-Dinitrotoluene	ND	380
3-Nitroaniline	ND	950
Acenaphthene	98 J	380
2,4-Dinitrophenol	ND	950
4-Nitrophenol	ND	950
Dibenzofuran	44 J	380
2,4-Dinitrotoluene	ND	380

031

MITKEM CORPORATION

Client ID: DSY-SP1-SECV

Lab ID: D1527-03

Analyte	Results	Reporting Limits
Diethylphthalate	ND	380
Fluorene	86 J	380
4-Chlorophenyl-phenylether	ND	380
4-Nitroaniline	ND	950
4,6-Dinitro-2-methylphenol	ND	950
n-Nitrosodiphenylamine	ND	380
4-Bromophenyl-phenylether	ND	380
Hexachlorobenzene	ND	380
Pentachlorophenol	ND	950
Phenanthrene	760	380
Anthracene	200 J	380
Di-n-butylphthalate	ND	380
Carbazole	85 J	380
Fluoranthene	940	380
Pyrene	940	380
Butylbenzylphthalate	ND	380
Benzo(a)anthracene	460	380
Chrysene	460	380
3,3'-Dichlorobenzidine	ND	380
bis(2-Ethylhexyl)phthalate	300 J	380
Di-n-octylphthalate	ND	380
Benzo(b)fluoranthene	560	380
Benzo(k)fluoranthene	230 J	380
Benzo(a)pyrene	380	380
Indeno(1,2,3-cd)pyrene	120 J	380
Dibenz(a,h)anthracene	ND	380
Benzo(g,h,i)perylene	100 J	380

QC Batch: S0930-B3

Surrogate Recovery:	
2-Fluorophenol	69%
Phenol-d5	72%
2-Chlorophenol-d4	72%
2,4,6-Tribromophenol	79%
1,2-Dichlorobenzene-d4	63%
Nitrobenzene-d5	68%
2-Fluorobiphenyl	79%
p-Terphenyl-d14	105%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP1-SECV
Lab ID: D1527-04
Analysis: Method 8270

Analysis Date: 10/1/97
Matrix: Soil, 85% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Phenol	ND	390
bis(2-Chloroethyl)ether	ND	390
2-Chlorophenol	ND	390
1,3-Dichlorobenzene	ND	390
1,4-Dichlorobenzene	ND	390
1,2-Dichlorobenzene	ND	390
2-Methylphenol	ND	390
2,2'-oxybis(1-Chloropropane)	ND	390
4-Methylphenol	ND	390
n-Nitroso-di-n-propylamine	ND	390
Hexachloroethane	ND	390
Nitrobenzene	ND	390
Isophorone	ND	390
2-Nitrophenol	ND	390
2,4-Dimethylphenol	ND	390
bis(2-Chloroethoxy)methane	ND	390
2,4-Dichlorophenol	ND	390
1,2,4-Trichlorobenzene	ND	390
Naphthalene	ND	390
4-Chloroaniline	ND	390
Hexachlorobutadiene	ND	390
4-Chloro-3-methylphenol	ND	390
2-Methylnaphthalene	ND	390
Hexachlorocyclopentadiene	ND	390
2,4,6-Trichlorophenol	ND	390
2,4,5-Trichlorophenol	ND	970
2-Chloronaphthalene	ND	390
2-Nitroaniline	ND	970
Dimethylphthalate	ND	390
Acenaphthylene	ND	390
2,6-Dinitrotoluene	ND	390
3-Nitroaniline	ND	970
Acenaphthene	ND	390
2,4-Dinitrophenol	ND	970
4-Nitrophenol	ND	970
Dibenzofuran	ND	390
2,4-Dinitrotoluene	ND	390

MITKEM CORPORATION

Client ID: DSY-SP1-SECV

Lab ID: D1527-04

Analyte	Results	Reporting Limits
Diethylphthalate	ND	390
Fluorene	ND	390
4-Chlorophenyl-phenylether	ND	390
4-Nitroaniline	ND	970
4,6-Dinitro-2-methylphenol	ND	970
n-Nitrosodiphenylamine	ND	390
4-Bromophenyl-phenylether	ND	390
Hexachlorobenzene	ND	390
Pentachlorophenol	ND	970
Phenanthrene	280 J	390
Anthracene	82 J	390
Di-n-butylphthalate	ND	390
Carbazole	ND	390
Fluoranthene	400	390
Pyrene	440	390
Butylbenzylphthalate	ND	390
Benzo(a)anthracene	230 J	390
Chrysene	220 J	390
3,3'-Dichlorobenzidine	ND	390
bis(2-Ethylhexyl)phthalate	250 J	390
Di-n-octylphthalate	ND	390
Benzo(b)fluoranthene	300 J	390
Benzo(k)fluoranthene	110 J	390
Benzo(a)pyrene	210 J	390
Indeno(1,2,3-cd)pyrene	56 J	390
Dibenz(a,h)anthracene	ND	390
Benzo(g,h,i)perylene	ND	390

QC Batch: S0930-B3

Surrogate Recovery:	
2-Fluorophenol	79%
Phenol-d5	79%
2-Chlorophenol-d4	83%
2,4,6-Tribromophenol	83%
1,2-Dichlorobenzene-d4	70%
Nitrobenzene-d5	75%
2-Fluorobiphenyl	80%
p-Terphenyl-d14	110%

ND = Not detected

034

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, S0930-B3
Analysis: Method 8270

Analysis Date: 9/30/97
Matrix: Solid
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Phenol	ND	330
bis(2-Chloroethyl)ether	ND	330
2-Chlorophenol	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
1,2-Dichlorobenzene	ND	330
2-Methylphenol	ND	330
2,2'-oxybis(1-Chloropropane)	ND	330
4-Methylphenol	ND	330
n-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
2-Nitrophenol	ND	330
2,4-Dimethylphenol	ND	330
bis(2-Chloroethoxy)methane	ND	330
2,4-Dichlorophenol	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	330
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
4-Chloro-3-methylphenol	ND	330
2-Methylnaphthalene	ND	330
Hexachlorocyclopentadiene	ND	330
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	830
2-Chloronaphthalene	ND	330
2-Nitroaniline	ND	830
Dimethylphthalate	ND	330
Acenaphthylene	ND	330
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	830
Acenaphthene	ND	330
2,4-Dinitrophenol	ND	830
4-Nitrophenol	ND	830
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330

035

MITKEM CORPORATION

Client ID:

Lab ID: Method Blank, S0930-B3

Analyte	Results	Reporting Limits
Diethylphthalate	ND	330
Fluorene	ND	330
4-Chlorophenyl-phenylether	ND	330
4-Nitroaniline	ND	830
4,6-Dinitro-2-methylphenol	ND	830
n-Nitrosodiphenylamine	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Pentachlorophenol	ND	830
Phenanthrene	ND	330
Anthracene	ND	330
Di-n-butylphthalate	ND	330
Carbazole	ND	330
Fluoranthene	ND	330
Pyrene	ND	330
Butylbenzylphthalate	ND	330
Benzo(a)anthracene	ND	330
Chrysene	ND	330
3,3'-Dichlorobenzidine	ND	330
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	330
Benzo(k)fluoranthene	ND	330
Benzo(a)pyrene	ND	330
Indeno(1,2,3-cd)pyrene	ND	330
Dibenz(a,h)anthracene	ND	330
Benzo(g,h,i)perylene	ND	330

QC Batch: S0930-B3

Surrogate Recovery:	
2-Fluorophenol	68%
Phenol-d5	68%
2-Chlorophenol-d4	68%
2,4,6-Tribromophenol	64%
1,2-Dichlorobenzene-d4	58%
Nitrobenzene-d5	58%
2-Fluorobiphenyl	65%
p-Terphenyl-d14	94%

ND = Not detected

036

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Lab Control Summary

Client: Foster Wheeler Environmental Corp. Matrix: Solid
Lab ID for Blank Spike: S0930-LCS4
Analysis: Method 8270 Analysis Date for Blank Spike: 9/30/97

Analyte	% Recovery
Phenol	40
2-Chlorophenol	40
1,4-Dichlorobenzene	55
n-Nitroso-di-n-propylamine	54
1,2,4-Trichlorobenzene	55
4-Chloro-3-methylphenol	44
Acenaphthene	65
4-Nitrophenol	44
2,4-Dinitrotoluene	65
Pentachlorophenol	38
Pyrene	71

QC Batch: S0930-B3

037

MITKEM CORPORATION

Analysis Report: Total Petroleum Hydrocarbons

Client: Foster Wheeler Environmental Corp.
Analysis: Method 418.1
Matrix: Soil
Concentration in: mg/kg, dry weight basis

Lab ID	Client ID	Result	% Solid	Reporting Limit	Analysis Date
D1527-01	DSY-SP2-SECIV	220	85	47	10/1/97
D1527-02	DSY-SP1-SECIV	130	87	23	10/1/97
D1527-03	DSY-SP1-SECV	260	87	46	10/1/97
D1527-04	DSY-SP2-SECV	330	85	47	10/1/97

QA/QC

Method Blank			
IO930-B1	ND	20	10/1/97
Lab Control Sample (% Recovery)			
IO930-LCS1	86		10/1/97

ND = Not Detected

MITKEM CORPORATION

D1527

Lab Project #: D1527
Client Name: Foster Wheeler
Client Proj #: D013
Client PO #: 003195 + Supp. 01
Project Name: Derecktor Shipyard
Date Due: 10/2/1997 (48 hr turn)
Total Price: $ -
Project Mgr: EAL
Salesman: NET
Del Req'd: NA
Completed?: YES

+ 100% Surcharge for 48 hr. TAT

Logged In By: EAL
Reviewed By: [signature]
Date: 10-2-97 Time: 5:10

Lab ID	Client ID	Matrix	Analysis	Price	Sampled	Received	TPH	IR	BNA	Herb	P/P	Wet	Met	V-GC	V-MS	Sub
-01	DSY-SP2-SECIV	SL	8080 PCB		9/30/97	9/30/97					1		1			
			RCRA 8 Metals											1		
			VOC 8260						1							
			SVOC 8270					1								
			TPH-IR													
-02	DSY-SP1-SECIV	SL	8080 PCB		9/29/97	9/29/97					1		1			
			RCRA 8 Metals											1		
			VOC 8260						1							
			SVOC 8270					1								
			TPH-IR													
-03	DSY-SP1-SECV	SL	8080 PCB		9/30/97	9/30/97					1		1			
			RCRA 8 Metals											1		
			VOC 8260						1							
			SVOC 8270					1								
			TPH-IR													
-04	DSY-SP2-SECV	SL	8080 PCB		9/30/97	9/30/97					1		1			
			RCRA 8 Metals											1		
			VOC 8260						1							
			SVOC 8270													

MITKEM CORPORATION

Lab ID	Client ID	Matrix	Analysis	Price	Sampled	Received	TPH	IR	BNA	Herb	P/P	Wet	Met	V-GC	V-MS	Sub
			TPH-IR					1								
NOTES:							TPH	IR	BNA	Herb	P/P	Wet	Met	V-GC	V-MS	Sub
							0	4	4	0	4	0	4	0	4	0

ORIGINAL REPORT GOES TO:
Foster Wheeler Environmental Corp.
PO Box 4749
Middletown, RI 02842

Attn: Mark Gouveia
Phone: 401-842-6940
Fax: 401-842-6970

INVOICE GOES TO:
Same

040

MITKEM CORPORATION
175 Metro Center Boulevard • Warwick, Rhode Island 02886-1755
(401) 732-3400 • Fax (401) 732-3499
1232 East Broadway Road, Suite 210 • Tempe, Arizona 85282
(602 303-9535 • Fax (602) 921-2883

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

REPORT TO		INVOICE TO		LAB REFERENCE #:
COMPANY FOSTER WHEELER	PHONE 842-6940	COMPANY SAME	PHONE SAME	D1527
NAME MARK GOUVEIA	FAX 842-6970	NAME ↓	FAX ↓	TURNAROUND TIME:
ADDRESS 4000T DEFENSE HWY.		ADDRESS		48 HRS.
CITY/ST/ZIP PORTSMOUTH RI		CITY/ST/ZIP		

CLIENT PROJECT NAME: TANK FARM #4
CLIENT PROJECT #: DO 13
CLIENT P.O.#:

REQUESTED ANALYSES

SAMPLE IDENTIFICATION	DATE/TIME SAMPLED	COMPOSITE	GRAB	WATER	SOIL	OTHER	LAB ID	# OF CONTAINERS	PCB	RCRA Bimetals	VOC	SVOC	TPH								COMMENTS
DSV-SP1-SEC IV	9-30-97 1600	X	X		X		-02	2	✓	✓	✓	✓	✓								
DSV-SP2-SEC IV	9-30-97 1600	X	X		X		-01	2	✓	✓	✓	✓	✓								
DSV-SP1-SEC II	9-30-97 1600	X	X		X		-03	2	✓	✓	✓	✓	✓								
DSV-SP2-SEC II	9-30-97 1600	X	X		X		-04	2	✓	✓	✓	✓	✓								
	✓																				
	✓																				
	✓																				
	✓																				
	✓																				
	✓																				
	✓																				
	✓																				

TSF#	RELINQUISHED BY	DATE/TIME	ACCEPTED BY	DATE/TIME	ADDITIONAL REMARKS:	COOLER TEMP:
1st	[signature]	9/30 1700	[signature]	9/30 1500		
2nd		/		/		
3rd		/		/		

041

WHITE: LABORATORY COPY YELLOW: REPORT COPY PINK: CLIENT'S COPY

MITKEM CORPORATION
Sample Condition Form

Received By: AJ	Reviewed By:	Date: 9/30/97	MITKEM Project: 21527
Client Project: Tank Farm 4		Client: Foxt/Ku	

Condition:		Sample ID Lab	Sample ID Client	Preservation (pH) HNO_3	H_2SO_4	HCl	NaOH	Comments/Remarks/ Corrective Action
		-01						
1) Custody Seal(s)	Present/Absent	-02						
	Coolers/Bottles							
	Intact/Broken							
2) Custody Seal Number(s)	N/A							
3) Chain-of-Custody	Present/Absent							
4) Cooler Temperature	12°C							
Coolant Condition	Ice							
5) Airbill(s)	Present/Absent							
Airbill Number(s)								
6) Sample Bottles	Intact							
	Broken							
	Leaking							
7) Date Received	9/30							
8) Time Received	600							
9) Project Due Date								

Last Page of Data Report

MITKEM CORPORATION

RECEIVED OCT 1 - 1997

October 14, 1997

Foster Wheeler Environmental Corp.
P.O. Box 4749
Middletown, RI 02842
Attn: Mr. Mark Gouveia

RE: Client Project #: D013, Derecktor Shipyard
Lab Project #: D1586

Dear Mr. Gouveia:

Enclosed please find the data report of the required analyses for the samples associated with the above referenced project. If you have any questions regarding this report, please call me.

We appreciate your business.

Sincerely,

Edward A. Lawler
Laboratory Operations Manager

175 Metro Center Boulevard • Warwick, Rhode Island 02886-1755 • (401) 732-3400 • Fax (401) 732-3499
1232 East Broadway, Suite 210 • Tempe, Arizona 85282 • (602) 303-9535 • Fax (602) 921-2883
email: mitkem19@mail.idt.net

MITKEM CORPORATION

Client: Foster Wheeler Environmental Corp.

Client Project: D013, Derecktor Shipyard

Lab Project: D1586

Date samples received: 10/9/97

Project Narrative

This data report includes the analysis results for two (2) soil samples that were received from the Derecktor Shipyard site from Foster Wheeler Environmental Corp. on October 9, 1997. Analyses were performed per specification in the Chain of Custody form. For reference, a copy of the Mitkem Sample Log-In form is included for cross-referencing the client sample ID and laboratory sample ID.

All of the analyses were performed according to method specifications. No unusual occurrences were noted during sample analysis.

This data report has been reviewed and is authorized for release as evidenced by the signature below.

Edward A. Lawler
Laboratory Operations Manager

Data Qualifiers:

J This flag indicates an estimated value due to either
- the compound was detected at below the Reporting Limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the analyte was also detected in the associated Method Blank

D This flag indicates the analyte concentration was obtained from a diluted analysis

E This flag indicates the analyte concentration exceeded the Calibration Range

P This flag is used for Pesticides/PCB/Herbicide analyte when there is a greater than 50% difference for detected concentration between the two GC columns used for Primary and Confirmation analyses. The lower of the two values is reported in the Analysis Report.

MITKEM CORPORATION

Analysis Report: Total Petroleum Hydrocarbons

Client: Foster Wheeler Environmental Corp.
Analysis: Method 418.1
Matrix: Soil
Concentration in: mg/kg, dry weight basis

Lab ID	Client ID	Result	% Solid	Reporting Limit	Analysis Date
D1586-01	DSY-SP2-SECVI	80	94	21	10/10/97
D1586-02	DSY-SP1-SECVI	120	93	22	10/10/97
QA/QC					
Method Blank					
I1009-B1		ND		20	10/10/97
Lab Control Sample (% Recovery)					
I1009-LCS1		67			10/10/97

ND = Not detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSV-SP2-SECVI
Lab ID: D1586-01
Analysis: Method 8080

Analysis Date: 10/10/97
Matrix: Soil, 94% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	35
Aroclor-1221	ND	70
Aroclor-1232	ND	35
Aroclor-1242	ND	35
Aroclor-1248	ND	35
Aroclor-1254	ND	35
Aroclor-1260	ND	35

QC Batch: P1009-B2

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	81%
Decachlorobiphenyl	58%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP1-SECVI
Lab ID: D1586-02
Analysis: Method 8080

Analysis Date: 10/10/97
Matrix: Soil, 93% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	35
Aroclor-1221	ND	71
Aroclor-1232	ND	35
Aroclor-1242	ND	36
Aroclor-1248	ND	35
Aroclor-1254	ND	36
Aroclor-1260	ND	35

QC Batch: P1009-B2

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	83%
Decachlorobiphenyl	70%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, P1009-B2
Analysis: Method 8080

Analysis Date: 10/10/97
Matrix: Solid
Concentration In: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	33
Aroclor-1221	ND	66
Aroclor-1232	ND	33
Aroclor-1242	ND	33
Aroclor-1248	ND	33
Aroclor-1254	ND	33
Aroclor-1260	ND	33

QC Batch: P1009-B2

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	85%
Decachlorobiphenyl	64%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCBs)

Lab Control Summary

Client: Foster Wheeler Environmental, Corp.
Lab ID for Blank Spike: P1009-LCS2
Analysis: Method 8080

Matrix: Solid
Analysis Date for Blank Spike: 10/10/97

Analyte	% Recovery
Aroclor 1260	89

QC Batch: P1009-B2

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP2-SECVI
Lab ID: D1586-01
Analysis: Method 8260

Analysis Date: 10/10/97
Matrix: Soil, 93% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Carbon disulfide	ND	5
Iodomethane	ND	5
Acetone	ND	5
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Vinyl acetate	ND	5
2,2-Dichloropropane	ND	5
cis-1,2-Dichloroethene	ND	5
Methyl ethyl ketone	ND	5
Bromochloromethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
1,1-Dichloropropene	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Dibromomethane	ND	5
Bromodichloromethane	ND	5
2-Chloroethyl vinyl ether	ND	5
cis-1,3-Dichloropropene	ND	5
4-Methyl-2-pentanone	ND	5
Toluene	ND	5

MITKEM CORPORATION

Client ID: DSY-SP2-SECVI Lab ID: D1586-01

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,3-Dichloropropane	ND	5
2-Hexanone	ND	5
Dibromochloromethane	ND	5
1,2-Dibromoethane (EDB)	ND	5
Chlorobenzene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Ethylbenzene	ND	5
Xylenes, total	ND	5
Styrene	ND	5
Bromoform	ND	5
Isopropylbenzene	ND	5
Bromobenzene	ND	5
1,1,2,2-Tetrachloroethane	ND	5
1,2,3-Trichloropropane	ND	5
n-Propylbenzene	ND	5
2-Chlorotoluene	ND	5
4-Chlorotoluene	ND	5
1,3,5-Trimethylbenzene	ND	5
tert-Butylbenzene	ND	5
1,2,4-Trimethylbenzene	ND	5
sec-Butylbenzene	ND	5
1,3-Dichlorobenzene	ND	5
4-Isopropyltoluene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5
n-Butylbenzene	ND	5
1,2-Dibromo-3-chloropropane	ND	5
1,2,4-Trichlorobenzene	ND	5
Hexachlorobutadiene	ND	5
1,2,3-Trichlorobenzene	ND	5
MTBE	ND	5
Naphthalene	ND	5

Surrogate Recovery: QC Batch: V2B1010B

1,2-Dichloroethane-d4	108%
Toluene-d8	104%
Bromofluorobenzene	100%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP1-SECVI
Lab ID: D1586-02
Analysis: Method 8260

Analysis Date: 10/09/97
Matrix: Soil, 93% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Carbon disulfide	ND	5
Iodomethane	ND	5
Acetone	ND	5
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Vinyl acetate	ND	5
2,2-Dichloropropane	ND	5
cis-1,2-Dichloroethene	ND	5
Methyl ethyl ketone	ND	5
Bromochloromethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
1,1-Dichloropropene	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Dibromomethane	ND	5
Bromodichloromethane	ND	5
2-Chloroethyl vinyl ether	ND	5
cis-1,3-Dichloropropene	ND	5
4-Methyl-2-pentanone	ND	5
Toluene	ND	5

MITKEM CORPORATION

Client ID: DSY-SP1-SECVI Lab ID: D1586-02

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,3-Dichloropropane	ND	5
2-Hexanone	ND	5
Dibromochloromethane	ND	5
1,2-Dibromoethane (EDB)	ND	5
Chlorobenzene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Ethylbenzene	ND	5
Xylenes, total	ND	5
Styrene	ND	5
Bromoform	ND	5
Isopropylbenzene	ND	5
Bromobenzene	ND	5
1,1,2,2-Tetrachloroethane	ND	5
1,2,3-Trichloropropane	ND	5
n-Propylbenzene	ND	5
2-Chlorotoluene	ND	5
4-Chlorotoluene	ND	5
1,3,5-Trimethylbenzene	ND	5
tert-Butylbenzene	ND	5
1,2,4-Trimethylbenzene	ND	5
sec-Butylbenzene	ND	5
1,3-Dichlorobenzene	ND	5
4-Isopropyltoluene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5
n-Butylbenzene	ND	5
1,2-Dibromo-3-chloropropane	ND	5
1,2,4-Trichlorobenzene	ND	5
Hexachlorobutadiene	ND	5
1,2,3-Trichlorobenzene	ND	5
MTBE	ND	5
Naphthalene	ND	5

Surrogate Recovery: QC Batch: V2B1009A

1,2-Dichloroethane-d4	110%
Toluene-d8	101%
Bromofluorobenzene	94%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank,V2B1010B
Analysis: Method 8260

Analysis Date: 10/12/97
Matrix: Solid
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Carbon disulfide	ND	5
Iodomethane	ND	5
Acetone	ND	5
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Vinyl acetate	ND	5
2,2-Dichloropropane	ND	5
cis-1,2-Dichloroethene	ND	5
Methyl ethyl ketone	ND	5
Bromochloromethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
1,1-Dichloropropene	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Dibromomethane	ND	5
Bromodichloromethane	ND	5
2-Chloroethyl vinyl ether	ND	5
cis-1,3-Dichloropropene	ND	5
4-Methyl-2-pentanone	ND	5
Toluene	ND	5

MITKEM CORPORATION

Client ID:

Lab ID: Method Blank,V2B1010B

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,3-Dichloropropane	ND	5
2-Hexanone	ND	5
Dibromochloromethane	ND	5
1,2-Dibromoethane (EDB)	ND	5
Chlorobenzene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Ethylbenzene	ND	5
Xylenes, total	ND	5
Styrene	ND	5
Bromoform	ND	5
Isopropylbenzene	ND	5
Bromobenzene	ND	5
1,1,2,2-Tetrachloroethane	ND	5
1,2,3-Trichloropropane	ND	5
n-Propylbenzene	ND	5
2-Chlorotoluene	ND	5
4-Chlorotoluene	ND	5
1,3,5-Trimethylbenzene	ND	5
tert-Butylbenzene	ND	5
1,2,4-Trimethylbenzene	ND	5
sec-Butylbenzene	ND	5
1,3-Dichlorobenzene	ND	5
4-Isopropyltoluene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5
n-Butylbenzene	ND	5
1,2-Dibromo-3-chloropropane	ND	5
1,2,4-Trichlorobenzene	ND	5
Hexachlorobutadiene	ND	5
1,2,3-Trichlorobenzene	ND	5
MTBE	ND	5
Naphthalene	ND	5

Surrogate Recovery:

1,2-Dichloroethane-d4	109%
Toluene-d8	105%
Bromofluorobenzene	105%

QC Batch: V2B1010B

ND = Not detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank,V2B1009A
Analysis: Method 8260

Analysis Date: 10/09/97
Matrix: Solid
Concentration In: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Carbon disulfide	ND	5
Iodomethane	ND	5
Acetone	ND	5
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Vinyl acetate	ND	5
2,2-Dichloropropane	ND	5
cis-1,2-Dichloroethene	ND	5
Methyl ethyl ketone	ND	5
Bromochloromethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
1,1-Dichloropropene	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Dibromomethane	ND	5
Bromodichloromethane	ND	5
2-Chloroethyl vinyl ether	ND	5
cis-1,3-Dichloropropene	ND	5
4-Methyl-2-pentanone	ND	5
Toluene	ND	5

MITKEM CORPORATION

Client ID:

Lab ID: Method Blank,V2B1009A

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,3-Dichloropropane	ND	5
2-Hexanone	ND	5
Dibromochloromethane	ND	5
1,2-Dibromoethane (EDB)	ND	5
Chlorobenzene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Ethylbenzene	ND	5
Xylenes, total	ND	5
Styrene	ND	5
Bromoform	ND	5
Isopropylbenzene	ND	5
Bromobenzene	ND	5
1,1,2,2-Tetrachloroethane	ND	5
1,2,3-Trichloropropane	ND	5
n-Propylbenzene	ND	5
2-Chlorotoluene	ND	5
4-Chlorotoluene	ND	5
1,3,5-Trimethylbenzene	ND	5
tert-Butylbenzene	ND	5
1,2,4-Trimethylbenzene	ND	5
sec-Butylbenzene	ND	5
1,3-Dichlorobenzene	ND	5
4-Isopropyltoluene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5
n-Butylbenzene	ND	5
1,2-Dibromo-3-chloropropane	ND	5
1,2,4-Trichlorobenzene	ND	5
Hexachlorobutadiene	ND	5
1,2,3-Trichlorobenzene	ND	5
MTBE	ND	5
Naphthalene	ND	5

Surrogate Recovery: QC Batch: V2B1009A

1,2-Dichloroethane-d4	107%
Toluene-d8	105%
Bromofluorobenzene	105%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP2-SECVI
Lab ID: D1586-01
Dilution: 1

Analysis Date: 10/10/97
Matrix: Soil, 94% solids
Analysis: Method 8270
Concentration in: ug/kg, dry weight basis

Analyte	Results	Reporting Limits
Phenol	ND	350
bis(2-Chloroethyl)ether	ND	350
2-Chlorophenol	ND	350
1,3-Dichlorobenzene	ND	350
1,4-Dichlorobenzene	ND	350
1,2-Dichlorobenzene	ND	350
2-Methylphenol	ND	350
2,2'-oxybis(1-Chloropropane)	ND	350
4-Methylphenol	ND	350
n-Nitroso-di-n-propylamine	ND	350
Hexachloroethane	ND	350
Nitrobenzene	ND	350
Isophorone	ND	350
2-Nitrophenol	ND	350
2,4-Dimethylphenol	ND	350
bis(2-Chloroethoxy)methane	ND	350
2,4-Dichlorophenol	ND	350
1,2,4-Trichlorobenzene	ND	350
Naphthalene	ND	350
4-Chloroaniline	ND	350
Hexachlorobutadiene	ND	350
4-Chloro-3-methylphenol	ND	350
2-Methylnaphthalene	ND	350
Hexachlorocyclopentadiene	ND	350
2,4,6-Trichlorophenol	ND	350
2,4,5-Trichlorophenol	ND	880
2-Chloronaphthalene	ND	350
2-Nitroaniline	ND	880
Dimethylphthalate	ND	350
Acenaphthylene	ND	350
2,6-Dinitrotoluene	ND	350
3-Nitroaniline	ND	880
Acenaphthene	140 J	350
2,4-Dinitrophenol	ND	880
4-Nitrophenol	ND	880
Dibenzofuran	130 J	350
2,4-Dinitrotoluene	ND	350

MITKEM CORPORATION

Client ID: DSY-SP2-SECVI Lab ID: D1586-01

Analyte	Results	Reporting Limits
Diethylphthalate	ND	350
Fluorene	ND	350
4-Chlorophenyl-phenylether	ND	350
4-Nitroaniline	ND	880
4,6-Dinitro-2-methylphenol	ND	880
n-Nitrosodiphenylamine	ND	350
4-Bromophenyl-phenylether	ND	350
Hexachlorobenzene	ND	350
Pentachlorophenol	ND	880
Phenanthrene	1,300	350
Anthracene	250 J	350
Di-n-butylphthalate	ND	350
Carbazole	140 J	350
Fluoranthene	1,600	350
Pyrene	1,600	350
Butylbenzylphthalate	ND	350
Benzo(a)anthracene	780	350
Chrysene	800	350
3,3'-Dichlorobenzidine	ND	350
bis(2-Ethylhexyl)phthalate	ND	350
Di-n-octylphthalate	ND	350
Benzo(b)fluoranthene	1,000	350
Benzo(k)fluoranthene	380	350
Benzo(a)pyrene	700	350
Indeno(1,2,3-cd)pyrene	230 J	350
Dibenz(a,h)anthracene	ND	350
Benzo(g,h,i)perylene	220 J	350

QC Batch: S1009-B1

Surrogate Recovery:	
2-Fluorophenol	65%
Phenol-d5	69%
2-Chlorophenol-d4	73%
2,4,6-Tribromophenol	85%
1,2-Dichlorobenzene-d4	52%
Nitrobenzene-d5	61%
2-Fluorobiphenyl	78%
p-Terphenyl-d14	111%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	10/10/97
Client ID:	DSY-SP1-SECVI	Matrix:	Soil, 93% solids
Lab ID:	D1586-02	Analysis:	Method 8270
Dilution:	1	Concentration in:	ug/kg, dry weight basis

Analyte	Results	Reporting Limits
Phenol	ND	350
bis(2-Chloroethyl)ether	ND	350
2-Chlorophenol	ND	350
1,3-Dichlorobenzene	ND	350
1,4-Dichlorobenzene	ND	350
1,2-Dichlorobenzene	ND	350
2-Methylphenol	ND	350
2,2'-oxybis(1-Chloropropane)	ND	350
4-Methylphenol	ND	350
n-Nitroso-di-n-propylamine	ND	350
Hexachloroethane	ND	350
Nitrobenzene	ND	350
Isophorone	ND	350
2-Nitrophenol	ND	350
2,4-Dimethylphenol	ND	350
bis(2-Chloroethoxy)methane	ND	350
2,4-Dichlorophenol	ND	350
1,2,4-Trichlorobenzene	ND	350
Naphthalene	ND	350
4-Chloroaniline	ND	350
Hexachlorobutadiene	ND	350
4-Chloro-3-methylphenol	ND	350
2-Methylnaphthalene	ND	350
Hexachlorocyclopentadiene	ND	350
2,4,6-Trichlorophenol	ND	350
2,4,5-Trichlorophenol	ND	880
2-Chloronaphthalene	ND	350
2-Nitroaniline	ND	880
Dimethylphthalate	ND	350
Acenaphthylene	ND	350
2,6-Dinitrotoluene	ND	350
3-Nitroaniline	ND	880
Acenaphthene	ND	350
2,4-Dinitrophenol	ND	880
4-Nitrophenol	ND	880
Dibenzofuran	ND	350
2,4-Dinitrotoluene	ND	350

MITKEM CORPORATION

Client ID: DSY-SP1-SECVI Lab ID: D1586-02

Analyte	Results	Reporting Limits
Diethylphthalate	ND	350
Fluorene	ND	350
4-Chlorophenyl-phenylether	ND	350
4-Nitroaniline	ND	880
4,6-Dinitro-2-methylphenol	ND	880
n-Nitrosodiphenylamine	ND	350
4-Bromophenyl-phenylether	ND	350
Hexachlorobenzene	ND	350
Pentachlorophenol	ND	880
Phenanthrene	160 J	350
Anthracene	43 J	350
Di-n-butylphthalate	ND	350
Carbazole	ND	350
Fluoranthene	290 J	350
Pyrene	330 J	350
Butylbenzylphthalate	ND	350
Benzo(a)anthracene	180 J	350
Chrysene	170 J	350
3,3'-Dichlorobenzidine	ND	350
bis(2-Ethylhexyl)phthalate	ND	350
Di-n-octylphthalate	ND	350
Benzo(b)fluoranthene	240 J	350
Benzo(k)fluoranthene	110 J	350
Benzo(a)pyrene	160 J	350
Indeno(1,2,3-cd)pyrene	ND	350
Dibenz(a,h)anthracene	ND	350
Benzo(g,h,i)perylene	ND	350

QC Batch: S1009-B1

Surrogate Recovery:	
2-Fluorophenol	67%
Phenol-d5	70%
2-Chlorophenol-d4	74%
2,4,6-Tribromophenol	77%
1,2-Dichlorobenzene-d4	54%
Nitrobenzene-d5	67%
2-Fluorobiphenyl	83%
p-Terphenyl-d14	117%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, S1009-B1
Dilution: 1

Analysis Date: 10/10/97
Matrix: Solid
Analysis: Method 8270
Concentration in: ug/kg, dry weight basis

Analyte	Results	Reporting Limits
Phenol	ND	330
bis(2-Chloroethyl)ether	ND	330
2-Chlorophenol	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
1,2-Dichlorobenzene	ND	330
2-Methylphenol	ND	330
2,2'-oxybis(1-Chloropropane)	ND	330
4-Methylphenol	ND	330
n-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
2-Nitrophenol	ND	330
2,4-Dimethylphenol	ND	330
bis(2-Chloroethoxy)methane	ND	330
2,4-Dichlorophenol	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	330
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
4-Chloro-3-methylphenol	ND	330
2-Methylnaphthalene	ND	330
Hexachlorocyclopentadiene	ND	330
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	830
2-Chloronaphthalene	ND	330
2-Nitroaniline	ND	830
Dimethylphthalate	ND	330
Acenaphthylene	ND	330
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	830
Acenaphthene	ND	330
2,4-Dinitrophenol	ND	830
4-Nitrophenol	ND	830
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330

MITKEM CORPORATION

Client ID: Lab ID: Method Blank, S1009-B1

Analyte	Results	Reporting Limits
Diethylphthalate	ND	330
Fluorene	ND	330
4-Chlorophenyl-phenylether	ND	330
4-Nitroaniline	ND	830
4,6-Dinitro-2-methylphenol	ND	830
n-Nitrosodiphenylamine	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Pentachlorophenol	ND	830
Phenanthrene	ND	330
Anthracene	ND	330
Di-n-butylphthalate	ND	330
Carbazole	ND	330
Fluoranthene	ND	330
Pyrene	ND	330
Butylbenzylphthalate	ND	330
Benzo(a)anthracene	ND	330
Chrysene	ND	330
3,3'-Dichlorobenzidine	ND	330
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	330
Benzo(k)fluoranthene	ND	330
Benzo(a)pyrene	ND	330
Indeno(1,2,3-cd)pyrene	ND	330
Dibenz(a,h)anthracene	ND	330
Benzo(g,h,i)perylene	ND	330

QC Batch: S1009-B1

Surrogate Recovery:	
2-Fluorophenol	52%
Phenol-d5	56%
2-Chlorophenol-d4	56%
2,4,6-Tribromophenol	48%
1,2-Dichlorobenzene-d4	49%
Nitrobenzene-d5	48%
2-Fluorobiphenyl	59%
p-Terphenyl-d14	94%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Lab Control Summary

Client: Foster Wheeler Environmental Corp.
Matrix: Solid
Lab ID for Blank Spike: S1009-LCS1
Analysis: Method 8270
Analysis Date for Blank Spike: 10/10/97

Analyte	% Recovery
Phenol	60
2-Chlorophenol	56
1,4-Dichlorobenzene	76
n-Nitroso-di-n-propylamine	71
1,2,4-Trichlorobenzene	82
4-Chloro-3-methylphenol	52
Acenaphthene	82
4-Nitrophenol	44
2,4-Dinitrotoluene	76
Pentachlorophenol	34
Pyrene	112

QC Batch: S1009-B1

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP2-SECVI
Lab ID: D1586-01
Analysis Method: 7471A (Mercury)
6010A (Others)
Matrix: Soil, 94% Solids
Concentration in: mg/kg, dry wight basis
Analysis Date: 10/10/97

Analyte	Results	Reporting Limit
Arsenic	14	1
Barium	19	1
Cadmium	ND	0.5
Chromium	14	1
Lead	45	0.5
Mercury	ND	0.3
Selenium	ND	2
Silver	ND	1

ND = Not detected

QC Batch: 1009PBS2

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP1-SECVI
Lab ID: D1586-02
Analysis Method: 7471A (Mercury)
6010A (Others)

Matrix: Soil, 93% Solids
Concentration in: mg/kg, dry wight basis
Analysis Date: 10/10/97

Analyte	Results	Reporting Limit
Arsenic	15	1
Barium	30	1
Cadmium	ND	0.5
Chromium	17	1
Lead	55	0.5
Mercury	ND	0.3
Selenium	ND	2
Silver	ND	1

ND = Not detected

QC Batch: 1009PBS2

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Prep Blank, 1009PBS2
Analysis Method: 7471A (Mercury)
6010A (Others)

Concentration in: mg/kg
Analysis Date: 10/10/97

Analyte	Results	Reporting Limit
Arsenic	ND	1
Barium	ND	1
Cadmium	ND	0.5
Chromium	ND	1
Lead	ND	0.5
Mercury	ND	0.3
Selenium	ND	2
Silver	ND	1

ND = Not detected

QC Batch: 1009PBS2

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Lab Control Sample, 1009LCSS2
Analysis Method: 7471A (Mercury)
6010A (Others)

Matrix: Soil
Analysis Date: 10/10/97

Analyte	% Recovery
Arsenic	100
Barium	101
Cadmium	105
Chromium	105
Lead	95
Mercury	84
Selenium	96
Silver	102

ND = Not detected

QC Batch: 1009PBS2

D1556-LCS

MITKEM CORPORATION

Logged In By: [illegible]
Reviewed By: [illegible]
Date: 10-10-97 Time: 9:16

Lab Project #: D1586 [illegible]
Client Name: Foster Wheeler
Client Proj #: D013
Client PO #: 003195 + Supp. 01
Project Name: Derecktor Shipyard
Date Due: [illegible]
Total Price: $ -
Project Mgr: EAL
Salesman: PAS
Del Req'd: NA
Completed?: YES

100% Surcharge for 48 hr. TAT

Lab ID	Client ID	Matrix	Analysis	Price	Sampled	Received	TPH	IR	BNA	Herb	P/P	Wet	Met	V-GC	V-MS	Sub
-01	DSY-SP2-SECVI	SL	8080 PCB		10/8/97	10/9/97					1					
			RCRA 8 Metals										1			
			VOC 8260											1		
			SVOC 8270						1							
			TPH-IR					1								
-02	DSY-SP1-SECVI	SL	8080 PCB		10/8/97	10/9/97					1					
			RCRA 8 Metals										1			
			VOC 8260											1		
			SVOC 8270						1							
			TPH-IR					1								

NOTES: [illegible]

TPH	IR	BNA	Herb	P/P	Wet	Met	V-GC	V-MS	Sub
0	2	2	0	2	0	2	0	2	0

INVOICE GOES TO:
Same

ORIGINAL REPORT GOES TO:
Foster Wheeler Environmental Corp.
PO Box 4749
Middletown, RI 02842

Attn: Mark Gouveia
Phone: 401-842-6940
Fax: 401-842-6970

MITKEM Corporation

175 Metro Center Boulevard • Warwick, Rhode Island 02886-1755
(401) 732-3400 • Fax (401) 732-3499
1232 East Broadway Road, Suite 210 • Tempe, Arizona 85282
(602 303-9555 • Fax (602) 921-2883

CHAIN-OF-CUSTODY RECORD

Page ___ of ___

RECEIVED BY

COMPANY: Foster Wheeler
PHONE: 842-6940
NAME: Mike Gonzalez
FAX: 842-6970
ADDRESS: 40001 Defense Hwy
CITY/ST/ZIP: Rockville RI

INVOICE TO

COMPANY: Same
PHONE: Same
NAME:
FAX:
ADDRESS:
CITY/ST/ZIP:

LAB REFERENCE #: D1586
TURNAROUND TIME: 48

CLIENT PROJECT NAME: DSY
CLIENT PROJECT #: D013
CLIENT P.O.#:

REQUESTED ANALYSES: RCRA 8 metals, VOC, SVOC, TPH

SAMPLE IDENTIFICATION	DATE/TIME SAMPLED	COMPOSITE	GRAB	WATER	SOIL	OTHER	LAB ID	# OF CONTAINERS	RCRA 8 metals	VOC	SVOC	TPH	COMMENTS
DSY-SP2-SEC VI	10/8 1600	✓	✓		✓		-01	2	✓	✓	✓	✓	
DSY-SP1-SEC VI	10/8 1600	✓	✓		✓		-02	2	✓	✓	✓	✓	

TSF#	RELINQUISHED BY	DATE/TIME	ACCEPTED BY	DATE/TIME
1st	[signature]	/	[signature]	10/9/97 9:10
2nd		/		/
3rd		/		/

ADDITIONAL REMARKS:

COOLER TEMP:

WHITE: LABORATORY COPY
YELLOW: REPORT COPY
PINK: CLIENTS COPY

MITKEM CORPORATION
Sample Condition Form

Received By: AS | Reviewed By: BFD | Date: 10/9/97 | MITKEM Project: D1586
Client Project: DSY | Client: Foster Wheeler

Condition:		Sample ID Lab	Sample ID Client	Preservation (pH) HNO3	H2SO4	HCl	NaOH	Comments/Remarks/ Corrective Action
		-01	SP2					
1) Custody Seal(s)	Present/Absent	-02	SP1					
	Coolers/Bottles Intact/Broken							
2) Custody Seal Number(s)	N/A							
3) Chain-of-Custody	Present/Absent							
4) Cooler Temperature	17°C							
Coolant Condition	blue							
5) Airbill(s)	Present/Absent							
Airbill Number(s)								
6) Sample Bottles	Intact / Broken / Leaking							
7) Date Received	10/9/97							
8) Time Received	900							
9) Project Due Date								

Last Page of Data Report

U.S. NORTHERN DIVISION
REMEDIAL ACTION CONTRACT (RAC)
CONTRACT NO. N62472-94-R-0398
DELIVERY ORDER NO.013E

NORTHDIV RAC
DELIVERY ORDER 13, NEWPORT,RI
DERECKTOR'S SHIPYARD
INITIAL SOIL REMOVAL SUMMARY

Prepared by

Foster Wheeler Environmental Corporation
2300 Lincoln Highway East
One Oxford Valley
Suite 200
Langhorne, PA 19047-1829

April 1998

DERECKTOR SHIPYARDS STOCKPILES

SN- Denotes section soil was removed from

O with a number inside - Denotes stockpile number in that section

Field Sketch
Not to Scale

	Piles to landfill	>12 ppm Arsenic or >150 ppm lead
	Piles to Tank 43	≤ 12 ppm Arsenic or ≤ 150 ppm Lead
	Asphalt Piles	Asphalt piles were all shipped to an approved off-site facility.

Section	Pile #	Arsenic	Lead	Comments
1	1	19	72	Silty loam, shale, no concrete, no asphalt
	2	11	81	Silty loam, shale, no concrete, no asphalt
	3	14	40	Silty loam, shale, no concrete, no asphalt
	4	10	31	Silty loam, shale, no concrete, no asphalt
	5	10	31	Silty loam, shale, no concrete, no asphalt
	6	10	23	Silty loam, shale, no concrete, no asphalt
	7	11	23	Silty loam, shale, no concrete, no asphalt
	8	18	16	Silty loam, shale, no concrete, no asphalt
	9	15	30	Silty loam, shale, no concrete, no asphalt
	10	10	15	Silty loam, shale, no concrete, no asphalt
	11	10	14	Silty loam, shale, no concrete, no asphalt
	12	11	18	Silty loam, shale, no concrete, no asphalt
	13	13	19	Silty loam, shale, no concrete, no asphalt
	14	13	25	Silty loam, shale, no concrete, no asphalt
	15	10	25	Silty loam, shale, no concrete, no asphalt
	16	11	17	Silty loam, shale, no concrete, no asphalt
	17	13	12	Silty loam, shale, no concrete, no asphalt
	18	9	120	Silty loam, shale, no concrete, no asphalt
	19	12	56	Silty loam, shale, no concrete, no asphalt
	20	15	38	Silty loam, shale, no concrete, no asphalt
	21	15	88	Silty loam, shale, no concrete, no asphalt
	22	12	150	Silty loam, shale, no concrete, no asphalt
	23	21	70	Silty loam, shale, no concrete, no asphalt
	24	10	220	Silty loam, shale, no concrete, no asphalt

Section	Pile #	Arsenic	Lead	Comments
2	1	12	17	Silty loam, shale, no concrete, no asphalt
	2	11	25	Silty loam, shale, no concrete, no asphalt
	3	13	16	Silty loam, shale, no concrete, no asphalt
	4	10	20	Silty loam, shale, no concrete, no asphalt
	5	13	8	Silty loam, shale, no concrete, no asphalt
	6	15	15	Silty loam, shale, no concrete, no asphalt
	7	16	17	Silty loam, shale, no concrete, no asphalt
	8	14	15	Silty loam, shale, no concrete, no asphalt
	9	13	12	Silty loam, shale, no concrete, no asphalt
	10	11	9	Silty loam, shale, no concrete, no asphalt
	11	8	9	Silty loam, shale, no concrete, no asphalt
	12	11	10	Silty loam, shale, no concrete, no asphalt
	13	8	7	Silty loam, shale, no concrete, no asphalt
	14	10	11	Silty loam, shale, no concrete, no asphalt
	15	13	12	Silty loam, shale, no concrete, no asphalt
	16	11	15	Silty loam, shale, no concrete, no asphalt
	17	10	20	Silty loam, shale, no concrete, no asphalt
	18	9	12	Silty loam, shale, no concrete, no asphalt
	19	10	11	Silty loam, shale, no concrete, no asphalt
	20	9	9	Silty loam, shale, no concrete, no asphalt
	21	9	16	Silty loam, shale, no concrete, no asphalt
	22	10	14	Silty loam, shale, no concrete, no asphalt
	23	17	17	Silty loam, shale, no concrete, no asphalt
	24	10	13	Silty loam, shale, no concrete, no asphalt
	25	5	11	Silty loam, shale, no concrete, no asphalt
	26	13	14	Silty loam, shale, no concrete, no asphalt
	27	17	20	Silty loam, shale, no concrete, no asphalt
	28	11	14	Silty loam, shale, no concrete, no asphalt
	29	14	16	Silty loam, shale, no concrete, no asphalt
	30	12	47	Silty loam, shale, no concrete, no asphalt
	31	15	56	Silty loam, shale, no concrete, no asphalt
	32	15	71	Silty loam, shale, no concrete, no asphalt
	33	12	140	Silty loam, shale, no concrete, no asphalt
	34	7	42	Silty loam, shale, no concrete, no asphalt
	35	10	250	Silty loam, shale, no concrete, no asphalt
	36	12	41	Silty loam, shale, no concrete, no asphalt
	37	9	20	Silty loam, shale, no concrete, no asphalt
	38	12	34	Silty loam, shale, no concrete, no asphalt
	39	3	8	Silty loam, shale, no concrete, no asphalt
	40	17	23	Silty loam, shale, no concrete, no asphalt
	41	14	30	Silty loam, shale, no concrete, no asphalt
	42	20	35	Silty loam, shale, no concrete, no asphalt
	43	14	76	Silty loam, shale, no concrete, no asphalt
	44	19	17	Silty loam, shale, no concrete, no asphalt
	45	16	33	Silty loam, shale, no concrete, no asphalt
	46	5	16	Silty loam, shale, no concrete, no asphalt
	47	13	19	Silty loam, shale, no concrete, no asphalt
	48	10	51	Silty loam, shale, no concrete, no asphalt
	49	7	27	Silty loam, shale, no concrete, no asphalt
	50	13	80	Silty loam, shale, no concrete, no asphalt

Section	Pile #	Arsenic	Lead	Comments
3	1	10	13	Silty loam, shale, no concrete, no asphalt
	2	8	62	Silty loam, shale, no concrete, no asphalt
	3	11	20	Silty loam, shale, no concrete, no asphalt
	4	13	49	Silty loam, shale, no concrete, no asphalt
	5	12	28	Silty loam, shale, no concrete, no asphalt
	6	15	36	Silty loam, shale, no concrete, no asphalt

Section	Pile #	Arsenic	Lead	Comments
4	1	11	22	Silty loam, shale, no concrete, no asphalt
	2	13	14	Silty loam, shale, no concrete, no asphalt
	3	15	34	Silty loam, shale, no concrete, no asphalt
	4	12	19	Silty loam, shale, no concrete, no asphalt
	5	12	14	Silty loam, shale, no concrete, no asphalt
	6	8	42	Silty loam, shale, no concrete, no asphalt
	7	10	53	Silty loam, shale, no concrete, no asphalt
	8	12	12	Silty loam, shale, no concrete, no asphalt
	9	13	15	Silty loam, shale, no concrete, no asphalt
	10	8	29	Silty loam, shale, no concrete, no asphalt
	11	11	90	Silty loam, shale, no concrete, no asphalt
	12	11	75	Silty loam, shale, no concrete, no asphalt
	13	10	160	Silty loam, shale, no concrete, no asphalt
	14	10	340	Silty loam, shale, no concrete, no asphalt
	15	10	150	Silty loam, shale, no concrete, no asphalt

Section	Pile #	Arsenic	Lead	Comments
5	1	11	71	Silty loam, shale, no concrete, no asphalt
	2	10	94	Silty loam, shale, no concrete, no asphalt
	3	16	71	Silty loam, shale, no concrete, no asphalt
	4	17	47	Silty loam, shale, no concrete, no asphalt
	5	11	21	Silty loam, shale, no concrete, no asphalt
	6	13	63	Silty loam, shale, no concrete, no asphalt
	7	17	37	Silty loam, shale, no concrete, no asphalt
	8	12	28	Silty loam, shale, no concrete, no asphalt
	9	11	27	Silty loam, shale, no concrete, no asphalt
	10	15	26	Silty loam, shale, no concrete, no asphalt
	11	16	36	Silty loam, shale, no concrete, no asphalt
	12	13	33	Silty loam, shale, no concrete, no asphalt
	13	13	33	Silty loam, shale, no concrete, no asphalt
	14	10	32	Silty loam, shale, no concrete, no asphalt
	15	13	98	Silty loam, shale, no concrete, no asphalt
	16	11	96	Silty loam, shale, no concrete, no asphalt
	17	15	66	Silty loam, shale, no concrete, no asphalt
	18	15	15	Silty loam, shale, no concrete, no asphalt
	19	17	68	Silty loam, shale, no concrete, no asphalt
	20	17	50	Silty loam, shale, no concrete, no asphalt
	21	13	43	Silty loam, shale, no concrete, no asphalt
	22	12	44	Silty loam, shale, no concrete, no asphalt
	23	13	54	Silty loam, shale, no concrete, no asphalt
	24	10	58	Silty loam, shale, no concrete, no asphalt
	25	16	34	Silty loam, shale, no concrete, no asphalt
	26	12	50	Silty loam, shale, no concrete, no asphalt
	27	10	100	Silty loam, shale, no concrete, no asphalt
	28	15	47	Silty loam, shale, no concrete, no asphalt
	29	9	48	Silty loam, shale, no concrete, no asphalt

Section	Pile #	Arsenic	Lead	Comments
6	1	15	55	Silty loam, shale, no concrete, no asphalt
	2	14	45	Silty loam, shale, no concrete, no asphalt
	3	15	52	Silty loam, shale, no concrete, no asphalt
	4	14	36	Silty loam, shale, no concrete, no asphalt
	5	19	36	Silty loam, shale, no concrete, no asphalt
	6	15	40	Silty loam, shale, no concrete, no asphalt
	7	16	26	Silty loam, shale, no concrete, no asphalt
	8	28	28	Silty loam, shale, no concrete, no asphalt
	9	15	39	Silty loam, shale, no concrete, no asphalt
	10	13	68	Silty loam, shale, no concrete, no asphalt
	11	15	36	Silty loam, shale, no concrete, no asphalt
	12	14	27	Silty loam, shale, no concrete, no asphalt
	13	14	38	Silty loam, shale, no concrete, no asphalt
	14	14	76	Silty loam, shale, no concrete, no asphalt
	15	16	62	Silty loam, shale, no concrete, no asphalt
	16	15	82	Silty loam, shale, no concrete, no asphalt
	17	19	30	Silty loam, shale, no concrete, no asphalt
	18	17	28	Silty loam, shale, no concrete, no asphalt
	19	16	28	Silty loam, shale, no concrete, no asphalt
	20	18	46	Silty loam, shale, no concrete, no asphalt
	21	14	43	Silty loam, shale, no concrete, no asphalt
	22	16	36	Silty loam, shale, no concrete, no asphalt
	23	12	920	Silty loam, shale, no concrete, no asphalt
	24	16	66	Silty loam, shale, no concrete, no asphalt
	25	18	33	Silty loam, shale, no concrete, no asphalt
	26	19	89	Silty loam, shale, no concrete, no asphalt
	27	19	37	Silty loam, shale, no concrete, no asphalt
	28	19	240	Silty loam, shale, no concrete, no asphalt
	29	11	250	Silty loam, shale, no concrete, no asphalt
	30	20	530	Silty loam, shale, no concrete, no asphalt
	31	17	40	Silty loam, shale, no concrete, no asphalt
	32	23	370	Silty loam, shale, no concrete, no asphalt
	33	21	70	Silty loam, shale, no concrete, no asphalt
	34	21	92	Silty loam, shale, no concrete, no asphalt
	35	17	230	Silty loam, shale, no concrete, no asphalt
	36	16	82	Silty loam, shale, no concrete, no asphalt
	37	15	61	Silty loam, shale, no concrete, no asphalt
	38	17	410	Silty loam, shale, no concrete, no asphalt
	39	16	370	Silty loam, shale, no concrete, no asphalt
	40	18	110	Silty loam, shale, no concrete, no asphalt
	41	12	200	Silty loam, shale, no concrete, no asphalt
	42	15	140	Silty loam, shale, no concrete, no asphalt
	43	22	330	Silty loam, shale, no concrete, no asphalt
	44	17	230	Silty loam, shale, no concrete, no asphalt

Toxicity Characteristic Leaching Procedure (TCLP) Analyses

* TCLP 1 - Volatile organic compounds were not detected

* TCLP 2 - Volatile organic compounds were not detected

* TCLP 1 Metals - The following compounds were detected:

Barium	.49 mg/L
Cadmium	.003 mg/L
Chromium	.03 mg/L
Lead	.12 mg/L

* TCLP 2 Metals - The following compounds were detected:

Barium	.48 mg/L
Lead	.02 mg/L

* TCLP 1 - Semivolatile organic compounds were not detected

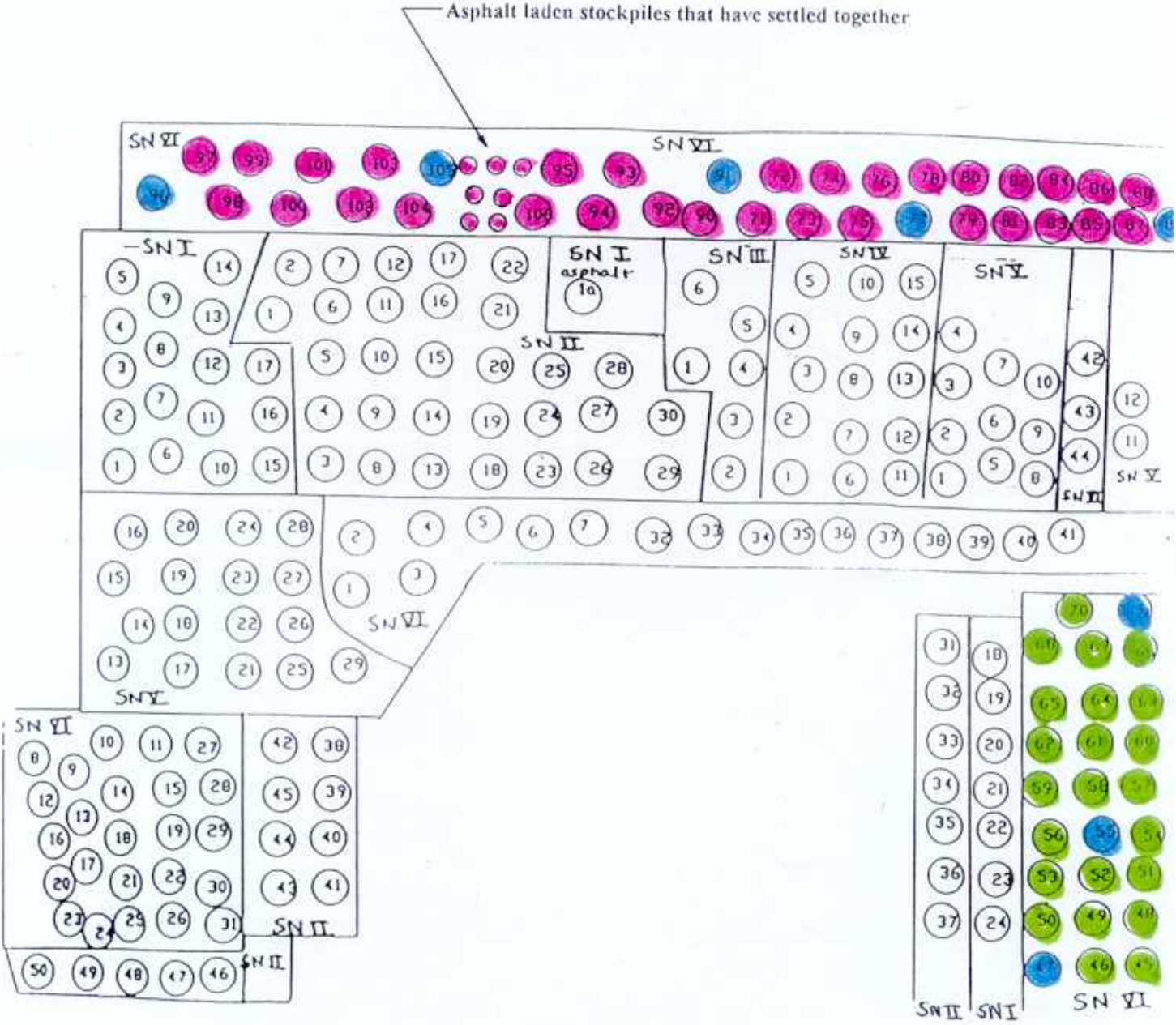
* TCLP 2 - Semivolatile organic compounds were not detected

* Based on the above laboratory analytical results this material is non-hazardous

DERECKTOR SHIPYARDS STOCKPILES

SN- Denotes section soil was removed from

O with a number inside - Denotes stockpile number in that section



TCLP1 - Composite of piles 47, 55 and 69 in Section 6

TCLP2 - Composite of piles 96, 105, 91, 77 and 89 of Section 6

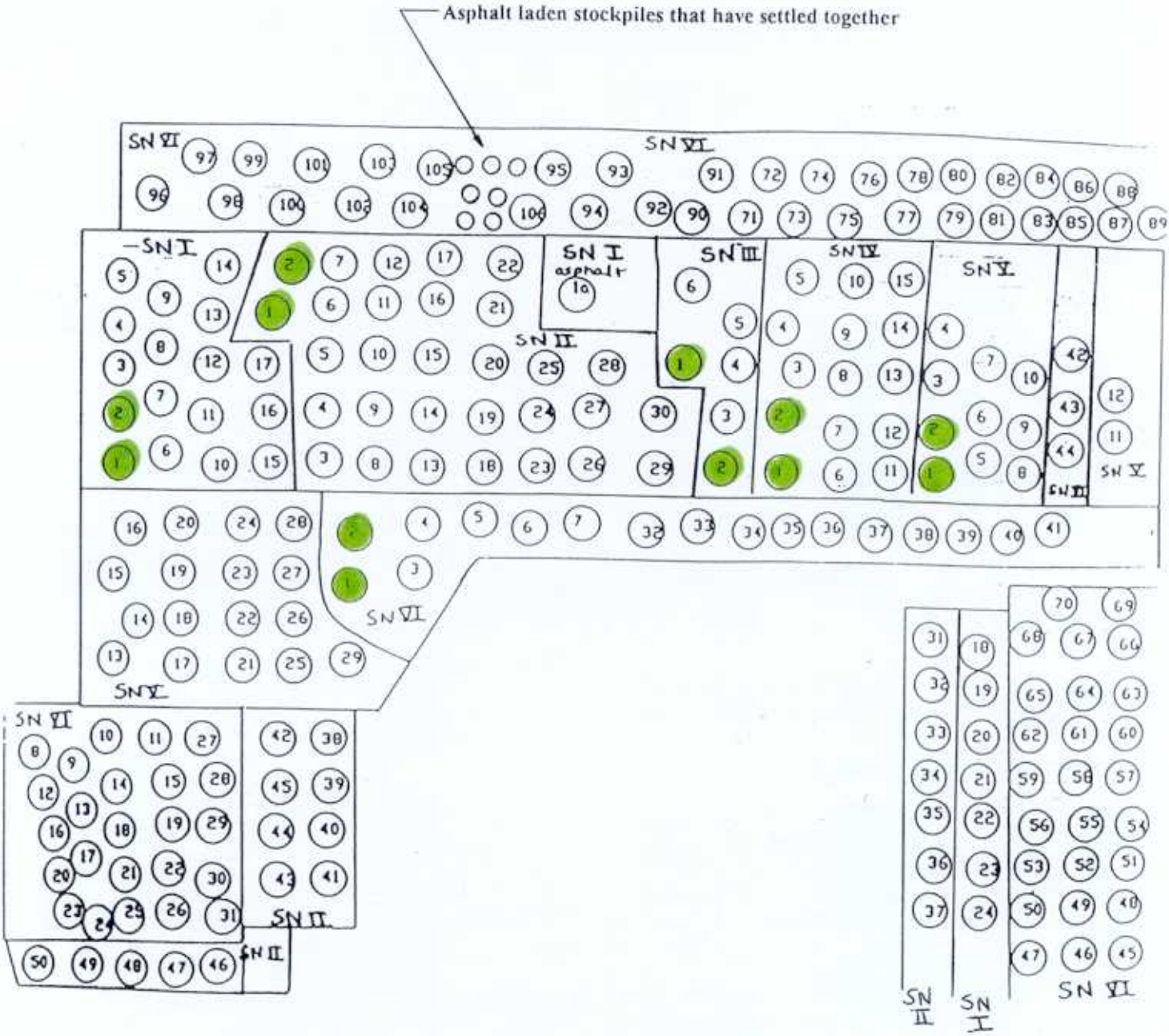
SEC 1

DSY SP 1			
SUBSTANCE			FIELD ANALYTICAL DETECTIONS (mg/kg except as otherwise noted)
VOLATILE ORGANICS			
SEMIVOLATILES			
Acenaphthene			39 PPB
Anthracene			74 PPB
Benzo(a)anthracene			190 PPB

DERECKTOR SHIPYARDS STOCKPILES

SN- Denotes section soil was removed from

O with a number inside - Denotes stockpile number in that section



Total's for volatile and semi-volatile compounds for the first 200 yard of each selection.

Benzo(a)pyrene			190 PPB
Benzo(b)fluoranthene			270 PPB
Benzo(g,h,i)perylene			76 PPB
Benzo(k)fluoranthene			110 PPB
Bis(2-ethylhexyl)phthalate			81 PPB
Carbazole			45PPB
Chrysene			200 PPB
Diethlhexyl phthalate			46 PPB
Fluoranthene			430 PPB
Ideno(1,2,3-cd)pyrene			73 PPB
Naphthalene			60 PPB
Phenanthrene			300 PPB
Pyrene			360 PPB
PESTCIDES/PCBs			
AROCLOR-1260			100 PPB
INORGANICS			
Arsenic			19
Barium			36
Cadmium			1.2

Chromium			17
Lead			72
Selenium			0.04
TPH			93

SEC 1

DSY-SP2			
SUBSTANCE			**FIELD ANALYTICAL DETECTIONS (mg/kg except as otherwise noted)**
VOLATILE ORGANICS			
SEMIVOLATILES			
Acenaphthene			49PPB
Benzo(a)anthracene			180PPB

Benzo(a)pyrene			180PPB
Benzo(b)fluoranthene			240PPB
Benzo(g,h,i)perylene			66PPB
Benzo(k)fluoranthene			97PPB
Carbazole			45PPB
Chrysene			200PPB
Fluoranthene			450PPB
Fluorene			43PPB
Ideno(1,2,3-cd)pyrene			65PPB
Methyl naphthalene, 2-			56PPb
Naphthalene			46PPB
Phenanthrene			360PPB
Pyrene			380PPB
PESTCIDES/PCBs			
AROCLOR-1260			44PPB
INORGANICS			
Arsenic			11
Barium			25
Cadmium			0.9

Chromium			16
Lead			81
TPH			37

DSY-SP-1-SEC2			
SUBSTANCE			FIELD ANALYTICAL DETECTIONS (mg/kg except as otherwise noted)
VOLATILE ORGANICS			
SEMIVOLATILES			
Benzo(a)anthracene			180PPB

Benzo(a)pyrene			170PPB
Benzo(b)fluoranthene			100PPB
Benzo(g,h,i)perylene			66PPB
Benzo(k)fluoranthene			100PPB
Chrysene			180PPB
Fluoranthene			300PPB
Ideno(1,2,3-cd)pyrene			53PPB
Phenanthrene			170PPB
Pyrene			370PBB
PESTCIDES/PCBs			
AROCLOR-1260			44PPB
INORGANICS			
Arsenic			12
Barium			21

Chromium			13
Lead			17
TPH			100

DSY-SP-2-SEC2	
SUBSTANCE	FIELD ANALYTICAL DETECTIONS (mg/kg except as otherwise noted)
VOLATILE ORGANICS	
SEMIVOLATILES	
Benzo(a)anthracene	63PPB

Benzo(a)pyrene			67PPB
Benzo(b)fluoranthene			93PPB
Benzo(k)fluoranthene			50PPB
Fluoranthene			100PPB
Phenanthrene			61PPB
Pyrene			140PPB
PESTCIDES/PCBs			
INORGANICS			
Arsenic			11
Barium			22

Chromium			12
Lead			25
TPH			150

DSY-SP1-SEC3			
SUBSTANCE			FIELD ANALYTICAL DETECTIONS (mg/kg except as otherwise noted)
VOLATILE ORGANICS			
SEMIVOLATILES			
Benzo(a)anthracene			75PPB

Benzo(a)pyrene	56PPB
Benzo(b)fluoranthene	98PPB
Chrysene	79PPB
Fluoranthene	160PPB
Phenanthrene	53PPB
Pyrene	140PPB
PESTCIDES/PCBs	
INORGANICS	
Arsenic	10
Barium	16

Chromium			12
Lead			13
TPH			85

DSY-SP2-SEC3			
SUBSTANCE			**FIELD ANALYTICAL**
			DETECTIONS
			(mg/kg except as
			otherwise noted)
VOLATILE ORGANICS			
SEMIVOLATILES			
Anthracene			99PPB
Benzo(a)anthracene			350PPB

Benzo(a)pyrene			330PPB
Benzo(b)fluoranthene			440PPB
Benzo(k)fluoranthene			220PPB
Chrysene			370PPB
Carbazole			48PPB
Indeno(1,2,3-cd)pyrene			110PPB
Fluoranthene			670PPB
Phenanthrene			410PPB
Pyrene			640PPB
PESTCIDES/PCBs			
INORGANICS			
Arsenic			8
Barium			23

Chromium		19
Lead		62
TPH		230

DSY-SP1-SEC4			
SUBSTANCE			FIELD ANALYTICAL DETECTIONS (mg/kg except as otherwise noted)
VOLATILE ORGANICS			
SEMIVOLATILES			
Benzo(a)anthracene			68PPB

Benzo(a)pyrene			58PPB
Benzo(b)fluoranthene			78PPB
Chrysene			70PPB
Fluoranthene			100PPB
Phenanthrene			43PPB
Pyrene			100PPB
PESTCIDES/PCBs			
INORGANICS			
Arsenic			11
Barium			25

Chromium			16
Lead			22
TPH			130

DSY-SP2-SEC4	
SUBSTANCE	FIELD ANALYTICAL DETECTIONS (mg/kg except as otherwise noted)
VOLATILE ORGANICS	
SEMIVOLATILES	
Benzo(a)anthracene	50PPB

Benzo(a)pyrene	49PPB
Benzo(b)fluoranthene	67PPB
Chrysene	56PPB
Fluoranthene	86PPB
Phenanthrene	47PPB
Pyrene	84PPB
PESTCIDES/PCBs	
INORGANICS	
Arsenic	13
Barium	15

Chromium			13
Lead			14
TPH			220

DSY-SP1-SEC5			
SUBSTANCE			FIELD ANALYTICAL DETECTIONS (mg/kg except as otherwise noted)
VOLATILE ORGANICS			
SEMIVOLATILES			
Anthracene			200PPB
Acenaphthene			98PPB
Benzo(a)anthracene			460PPB

Benzo(a)pyrene			380PPB
Benzo(b)fluoranthene			560PPB
Benzo(k)fluoranthene			230PPB
Dibenzofuran			44PPB
Carbazole			85PPB
Bis(2-Ethylhexyl)phthalate			300PPB
Fluorine			86PPB
Indeno(1,2,3-cd)pyrene			120PPB
Chrysene			460PPB
Fluoranthene			940PPB
Phenanthrene			760PPB
Pyrene			940PPB
PESTCIDES/PCBs			
INORGANICS			
Arsenic			11
Barium			25

DSY-SP2-SEC5			
SUBSTANCE			FIELD ANALYTICAL DETECTIONS (mg/kg except as otherwise noted)
VOLATILE ORGANICS			
SEMIVOLATILES			
Anthracene			82PPB
Benzo(a)anthracene			230PPB

Benzo(a)pyrene	49PPB
Benzo(b)fluoranthene	67PPB
Chrysene	56PPB
Fluoranthene	86PPB
Phenanthrene	47PPB
Pyrene	84PPB
PESTCIDES/PCBs	
INORGANICS	
Arsenic	13
Barium	15

Chromium			13
Lead			14
TPH			220

DSY-SP1-SEC5			
SUBSTANCE			FIELD ANALYTICAL DETECTIONS (mg/kg except as otherwise noted)
VOLATILE ORGANICS			
SEMIVOLATILES			
Anthracene			200PPB
Acenaphthene			98PPB
Benzo(a)anthracene			460PPB

Benzo(a)pyrene			380PPB
Benzo(b)fluoranthene			560PPB
Benzo(k)fluoranthene			230PPB
Dibenzofuran			44PPB
Carbazole			85PPB
Bis(2-Ethylhexyl)phthalate			300PPB
Fluorine			86PPB
Indeno(1,2,3-cd)pyrene			120PPB
Chrysene			460PPB
Fluoranthene			940PPB
Phenanthrene			760PPB
Pyrene			940PPB
PESTCIDES/PCBs			
INORGANICS			
Arsenic			11
Barium			25

Chromium			18
Lead			71
TPH			260

DSY-SP2-SEC5			
SUBSTANCE			FIELD ANALYTICAL DETECTIONS (mg/kg except as otherwise noted)
VOLATILE ORGANICS			
SEMIVOLATILES			
Anthracene			82PPB
Benzo(a)anthracene			230PPB

Benzo(a)pyrene			210PPB
Benzo(b)fluoranthene			300PPB
Benzo(k)fluoranthene			110PPB
Bis(2-Ethylhexyl)phthalate			250PPB
Indeno(1,2,3-cd)pyrene			56PPB
Chrysene			220PPB
Fluoranthene			400PPB
Phenanthrene			280PPB
Pyrene			440PPB
PESTCIDES/PCBs			
INORGANICS			
Arsenic			10
Barium			30

Chromium			29
Lead			94
TPH			330

DSY-SP1-SEC6		
SUBSTANCE		FIELD ANALYTICAL DETECTIONS (mg/kg except as otherwise noted)
VOLATILE ORGANICS		
SEMIVOLATILES		
Anthracene		43PPB
Benzo(a)anthracene		180PPB

Benzo(a)pyrene			160PPB
Benzo(b)fluoranthene			240PPB
Benzo(k)fluoranthene			110PPB
Chrysene			170PPB
Fluoranthene			290PPB
Phenanthrene			160PPB
Pyrene			330PPB
PESTCIDES/PCBs			
INORGANICS			
Arsenic			15
Barium			30

Chromium			17
Lead			55
TPH			120

DSY-SP2-SEC6			
SUBSTANCE			FIELD ANALYTICAL DETECTIONS (mg/kg except as otherwise noted)
VOLATILE ORGANICS			
SEMIVOLATILES			
Acenaphthene			140PPB
Anthracene			250PPB
Benzo(a)anthracene			780PPB

Benzo(a)pyrene			700PPB
Benzo(b)fluoranthene			1000PPB
Benzo(k)fluoranthene			380PPB
Carbazole			140PPB
Dibenzofuran			130PPB
Benzo(ghi)perylene			220PPB
Indeno(1,2,3-cd)pyrene			230PPB
Chrysene			800PPB
Fluoranthene			1600PPB
Phenanthrene			1300PPB
Pyrene			1600PPB
PESTCIDES/PCBs			
INORGANICS			
Arsenic			14
Barium			19

Chromium			14
Lead			45
TPH			80

Derecktor Shipyard
BERM – REMOVAL

Additional Soil Piles
Laboratory Reports
Lead/Arsenic /PCBs

Missing Laboratory Data Reports

SECTION	Missing Laboratory Reports	Number of Missing Sample Reports
Section I	Stockpiles 18 - 24	7 samples
Section II	Stockpiles 31 - 50	19 samples
Section VI	Stockpiles 17 - 44	27 samples

Note:
As discussed in Section III.A.5, while compiling Appendix A for this report, it was discovered that hardcopy of 1997 laboratory data reports for the lead/arsenic/PCB stockpile samples identified above were missing. The laboratory, MITKEM, spent several weeks attempting to recover the missing reports from their archives, but was unsuccessful.

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Analysis Method: 6010A

Matrix: Soil
Concentration in: mg/kg, dry weight basis
Analysis Date: 10/2/97

Lab ID	Client ID	% Solid	Result Arsenic	Result Lead
D1528-01	DSY-SP15-SECI	86	10	15
D1528-01D	DSY-SP15-SEC1 Dup	86	10	24
D1528-02	DSY-SP16-SECI	88	11	17
D1528-03	DSY-SP17-SECI	87	13	12
D1528-13	DSY-SP3-SECI	85	14	40
D1528-14	DSY-SP4-SECI	85	10	31
D1528-15	DSY-SP5-SECI	84	10	31
D1528-16	DSY-SP6-SECI	84	10	23
Reporting Limits			1	1
QA/QC				
Method Blank				
1001PBS1			ND	ND
Lab Control Sample (% Recovery)				
1001LCSS1			94	91
Sample Duplicate (% RPD)				
D1528-01 Dup			0	46
Sample Spike (% Recovery)				
D1528-01 Spike			95	98

ND = Not detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Analysis Method: 6010A

Matrix: Soil
Concentration in: mg/kg, dry weight basis
Analysis Date: 10/2/97

Lab ID	Client ID	% Solid	Result Arsenic	Result Lead
D1528-17	DSY-SP7-SECI	85	11	23
D1528-18	DSY-SP8-SECI	87	18	16
D1528-19	DSY-SP9-SECI	85	15	30
D1528-20	DSY-SP10-SECI	86	10	15
D1528-20D	DSY-SP10-SECI-Dup	86	12	14
D1528-21	DSY-SP11-SECI	87	10	14
D1528-22	DSY-SP12-SECI	86	11	18
D1528-23	DSY-SP13-SECI	87	13	19
D1528-24	DSY-SP14-SECI	87	13	25
Reporting Limits			1	1
QA/QC				
Method Blank				
1001PBS2			ND	ND
Lab Control Sample (% Recovery)				
1001LCSS2			98	94
Sample Duplicate (% RPD)				
D1528-20 Dup			18	7
Sample Spike (% Recovery)				
D1528-20 Spike			100	98

ND = Not detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Analysis Method: 6010A

Matrix: Soil
Concentration in: mg/kg, dry weight basis
Analysis Date: 10/2/97

Lab ID	Client ID	% Solid	Result Arsenic	Result Lead
D1529-01	DSY-SP15-SECII	84	13	12
D1529-02	DSY-SP16-SECII	84	11	15
D1529-03	DSY-SP17-SECII	85	10	20
D1529-04	DSY-SP18-SECII	87	9	12
D1529-05	DSY-SP19-SECII	84	10	11
D1529-06	DSY-SP20-SECII	86	9	9
D1529-07	DSY-SP21-SECII	85	9	16
D1529-08	DSY-SP22-SECII	85	10	14
D1529-09	DSY-SP23-SECII	86	17	17
D1529-10	DSY-SP24-SECII	86	10	13
D1529-11	DSY-SP25-SECII	87	5	11
D1529-12	DSY-SP26-SECII	87	13	14
Reporting Limits			1	1
QA/QC				
Method Blank				
1001PBS2			ND	ND
Lab Control Sample (% Recovery)				
1001LCSS2			98	94

ND = Not detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Analysis Method: 6010A

Matrix: Soil
Concentration in: mg/kg, dry weight basis
Analysis Date: 10/2/97

Lab ID	Client ID	% Solid	Result Arsenic	Result Lead
D1529-13	DSY-SP27-SECII	85	17	20
D1529-13D	DSY-SP27-SECII Dup	85	19	22
D1529-14	DSY-SP28-SECII	86	11	14
D1529-15	DSY-SP29-SECII	86	14	16
D1529-16	DSY-SP30-SECII	85	12	47
D1529-25	DSY-SP3-SECII	85	13	16
D1529-26	DSY-SP4-SECII	85	10	20
D1529-27	DSY-SP5-SECII	96	13	8
D1529-28	DSY-SP6-SECII	83	15	15
D1529-29	DSY-SP7-SECII	85	16	17
D1529-30	DSY-SP8-SECII	85	14	15
D1529-31	DSY-SP9-SECII	85	13	12
D1529-32	DSY-SP10-SECII	87	11	9
Reporting Limits			1	1

QA/QC

Method Blank		
1001PBS3	ND	ND
Lab Control Sample (% Recovery)		
1001LCSS3	97	93
Sample Duplicate (% RPD)		
D1529-13 Dup	11	10
Sample Spike (% Recovery)		
D1529-13 Spike	113	110

ND = Not detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Analysis Method: 6010A

Matrix: Soil
Concentration in: mg/kg, dry weight basis
Analysis Date: 10/2/97

Lab ID	Client ID	% Solid	Result Arsenic	Result Lead
D1529-33	DSY-SP11-SECII	86	8	9
D1529-34	DSY-SP12-SECII	86	11	10
D1529-35	DSY-SP13-SECII	86	8	7
D1529-36	DSY-SP14-SECII	84	10	11
Reporting Limits			1	1
QA/QC				
Method Blank				
1002PBS1			ND	ND
Lab Control Sample (% Recovery)				
1002LCSS1			103	98

ND = Not detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Analysis Method: 6010A

Matrix: Soil
Concentration in: mg/kg, dry weight basis
Analysis Date: 10/2/97

Lab ID	Client ID	% Solid	Result Arsenic	Result Lead
D1528-04	DSY-SP1-SECIII	87	8	28
D1528-05	DSY-SP2-SECIII	88	10	26
D1528-06	DSY-SP3-SECIII	87	11	20
D1528-07	DSY-SP4-SECIII	85	13	49
D1528-08	DSY-SP5-SECIII	85	12	28
D1528-09	DSY-SP6-SECIII	86	15	36
Reporting Limits			1	1
QA/QC				
Method Blank				
1001PBS1			ND	ND
Lab Control Sample (% Recovery)				
1001LCSS1			94	91
Sample Duplicate (% RPD)				
D1528-01 Dup			0	46
Sample Spike (% Recovery)				
D1528-01 Spike			95	98

ND = Not detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Analysis Method: 6010A

Matrix: Soil
Concentration in: mg/kg, dry weight basis
Analysis Date: 10/2/97

Lab ID	Client ID	% Solid	Result Arsenic	Result Lead
D1528-10	DSY-SP3-SECIV	86	15	34
D1528-11	DSY-SP4-SECIV	87	12	19
D1528-12	DSY-SP5-SECIV	89	12	14
Reporting Limits			1	1
QA/QC				
Method Blank				
1001PBS1			ND	ND
Lab Control Sample (% Recovery)				
1001LCSS1			94	91
Sample Duplicate (% RPD)				
D1528-01 Dup			0	46
Sample Spike (% Recovery)				
D1528-01 Spike			95	98

ND = Not detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Analysis Method: 6010A

Matrix: Soil
Concentration in: mg/kg, dry weight basis
Analysis Date: 10/2/97

Lab ID	Client ID	% Solid	Result Arsenic	Result Lead
D1529-17	DSY-SP7-SECIV	88	10	53
D1529-18	DSY-SP8-SECIV	89	12	12
D1529-19	DSY-SP9-SECIV	87	13	15
D1529-20	DSY-SP10-SECIV	88	8	29
D1529-21	DSY-SP11-SECIV	86	11	90
D1529-22	DSY-SP12-SECIV	85	11	75
D1529-23	DSY-SP13-SECIV	86	10	160
D1529-24	DSY-SP14-SECIV	86	10	340
D1529-37	DSY-SP15-SECIV	88	10	150
Reporting Limits			1	1
QA/QC				
Method Blank				
1001PBS3			ND	ND
Lab Control Sample (% Recovery)				
1001LCSS3			97	93
Sample Duplicate (% RPD)				
D1529-13 Dup			11	10
Sample Spike (% Recovery)				
D1529-13 Spike			113	110

ND = Not detected

MITKEM CORPORATION

"Environmental Testing Into The Next Century"

175 Metro Center Boulevard
Warwick, Rhode Island 02886-1755
Phone: (401)-732-3400 Fax: (401)-732-3499

FACSIMILE COVER SHEET

TO: Mark Gouveia **FROM:** Ed Lauber

COMPANY: FW/T.F.-4 **DATE:** 10/31/97

FAX NUMBER: 842-6970 **NUMBER OF PAGES:** 63 *(Including cover sheet)*

REFERENCE: PCB/Lead/Arsenic Results from last FRI...

COMMENTS:

One PCB Sample, ~~PCB-9~~C and the metal will follow shortly

(PCB Sample missing is DSY-SP32-SEC6

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP3-SEC6
Lab ID: D1690-01
Analysis: Method 8080

Analysis Date: 10/28/97
Matrix: Soil, 94% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	35
Aroclor-1221	ND	70
Aroclor-1232	ND	35
Aroclor-1242	ND	35
Aroclor-1248	ND	35
Aroclor-1254	ND	35
Aroclor-1260	ND	35

QC Batch: P1024-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	71%
Decachlorobiphenyl	71%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP4-SEC6
Lab ID: D1690-02
Analysis: Method 8080

Analysis Date: 10/28/97
Matrix: Soil, 94% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	35
Aroclor-1221	ND	70
Aroclor-1232	ND	35
Aroclor-1242	ND	35
Aroclor-1248	ND	35
Aroclor-1254	ND	35
Aroclor-1260	ND	35

QC Batch: P1024-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	93%
Decachlorobiphenyl	86%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP5-SEC6
Lab ID: D1690-03
Analysis: Method 8080

Analysis Date: 10/28/97
Matrix: Soil, 94% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	35
Aroclor-1221	ND	70
Aroclor-1232	ND	35
Aroclor-1242	ND	35
Aroclor-1248	ND	35
Aroclor-1254	ND	35
Aroclor-1260	ND	35

QC Batch: P1024-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	78%
Decachlorobiphenyl	78%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP6-SEC6
Lab ID: D1690-04
Analysis: Method 8080

Analysis Date: 10/28/97
Matrix: Soil, 97% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	34
Aroclor-1221	ND	68
Aroclor-1232	ND	34
Aroclor-1242	ND	34
Aroclor-1248	ND	34
Aroclor-1254	ND	34
Aroclor-1260	ND	34

QC Batch: P1024-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	71%
Decachlorobiphenyl	69%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP7-SEC6
Lab ID: D1690-05
Analysis: Method 8080

Analysis Date: 10/28/97
Matrix: Soil, 96% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	34
Aroclor-1221	ND	69
Aroclor-1232	ND	34
Aroclor-1242	ND	34
Aroclor-1248	ND	34
Aroclor-1254	ND	34
Aroclor-1260	ND	34

QC Batch: P1024-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	78%
Decachlorobiphenyl	71%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP8-SEC6
Lab ID: D1690-06
Analysis: Method 8080

Analysis Date: 10/28/97
Matrix: Soil, 95% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	35
Aroclor-1221	ND	69
Aroclor-1232	ND	35
Aroclor-1242	ND	35
Aroclor-1248	ND	35
Aroclor-1254	ND	35
Aroclor-1260	ND	35

QC Batch: P1024-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	78%
Decachlorobiphenyl	78%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP9-SEC6
Lab ID: D1690-07
Analysis: Method 8080

Analysis Date: 10/28/97
Matrix: Soil, 97% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	34
Aroclor-1221	ND	68
Aroclor-1232	ND	34
Aroclor-1242	ND	34
Aroclor-1248	ND	34
Aroclor-1254	ND	34
Aroclor-1260	ND	34

QC Batch: P1024-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	86%
Decachlorobiphenyl	86%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP10-SEC6
Lab ID: D1690-08
Analysis: Method 8080

Analysis Date: 10/28/97
Matrix: Soil, 97% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	34
Aroclor-1221	ND	68
Aroclor-1232	ND	34
Aroclor-1242	ND	34
Aroclor-1248	ND	34
Aroclor-1254	ND	34
Aroclor-1260	ND	34

QC Batch: P1024-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	78%
Decachlorobiphenyl	71%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP11-SEC6
Lab ID: D1690-09
Analysis: Method 8080

Analysis Date: 10/28/97
Matrix: Soil, 99% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	33
Aroclor-1221	ND	67
Aroclor-1232	ND	33
Aroclor-1242	ND	33
Aroclor-1248	ND	33
Aroclor-1254	ND	33
Aroclor-1260	ND	33

QC Batch: P1024-B1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	77%
Decachlorobiphenyl	85%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP12-SEC6
Lab ID: D1690-10
Analysis: Method 8080

Analysis Date: 10/29/97
Matrix: Soil, 96% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	34
Aroclor-1221	ND	69
Aroclor-1232	ND	34
Aroclor-1242	ND	34
Aroclor-1248	ND	34
Aroclor-1254	ND	34
Aroclor-1260	ND	34

QC Batch: P1024-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	91%
Decachlorobiphenyl	91%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP13-SEC6
Lab ID: D1690-11
Analysis: Method 8080

Analysis Date: 10/29/97
Matrix: Soil, 96% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	34
Aroclor-1221	ND	69
Aroclor-1232	ND	34
Aroclor-1242	ND	34
Aroclor-1248	ND	34
Aroclor-1254	ND	34
Aroclor-1260	ND	34

QC Batch: P1024-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	83%
Decachlorobiphenyl	82%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP14-SEC6
Lab ID: D1690-12
Analysis: Method 8080

Analysis Date: 10/29/97
Matrix: Soil, 97% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	34
Aroclor-1221	ND	68
Aroclor-1232	ND	34
Aroclor-1242	ND	34
Aroclor-1248	ND	34
Aroclor-1254	ND	34
Aroclor-1260	ND	34

QC Batch: P1024-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	85%
Decachlorobiphenyl	86%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP15-SEC6
Lab ID: D1690-13
Analysis: Method 8080

Analysis Date: 10/30/97
Matrix: Soil, 96% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	34
Aroclor-1221	ND	69
Aroclor-1232	ND	34
Aroclor-1242	ND	34
Aroclor-1248	ND	34
Aroclor-1254	ND	34
Aroclor-1260	ND	34

QC Batch: P1025-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	96%
Decachlorobiphenyl	96%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP16-SEC6
Lab ID: D1690-14
Analysis: Method 8080

Analysis Date: 10/30/97
Matrix: Soil, 92% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	36
Aroclor-1221	ND	72
Aroclor-1232	ND	36
Aroclor-1242	ND	36
Aroclor-1248	ND	36
Aroclor-1254	ND	36
Aroclor-1260	ND	36

QC Batch: P1025-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	96%
Decachlorobiphenyl	98%

ND=Not Detected

MITKEM CORPORATION

"Environmental Testing Into The Next Century"

175 Metro Center Boulevard
Warwick, Rhode Island 02886-1755
Phone: (401)-732-3400 Fax: (401)-732-3499

FACSIMILE COVER SHEET

TO: Mark Gouveia **FROM:** Ed Lawler

COMPANY: FW/ T.F.4 **DATE:** 10/14/97

FAX NUMBER: 842-6970 **NUMBER OF PAGES:** 4/4 *(Including cover sheet)*

REFERENCE: PCB, Lead + Arsenic Data.

COMMENTS:

(1) Is the metals data Sheet OK (Second sheet has most SEC-5 and one SEC-4).

(2) Do you need a pick-up today??

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Matrix: Soil

Analysis Method: 6010A
Concent mg/kg, dry weight basis
Analysis 10/10/97

Lab ID	Client ID	% Solid	Result Arsenic	Result Lead
D1585-01	DSY-SP3-SEC5	94	16	71
D1585-02	DSY-SP4-SEC5	93	17	47
D1585-03	DSY-SP5-SEC5	96	11	21
D1585-04	DSY-SP6-SEC5	96	13	63
D1585-05	DSY-SP7-SEC5	96	17	37
D1585-06	DSY-SP8-SEC5	96	12	28
D1585-07	DSY-SP9-SEC5	99	11	27
D1585-08	DSY-SP10-SEC5	94	15	26
D1585-09	DSY-SP11-SEC5	95	16	36
D1585-10	DSY-SP12-SEC5	97	13	33
D1585-11	DSY-SP13-SEC5	98	13	33
D1585-12	DSY-SP14-SEC5	96	10	32
D1585-14	DSY-SP15-SEC5	99	13	98
D1585-15	DSY-SP16-SEC5	95	11	96
D1585-16	DSY-SP17-SEC5	98	15	66
D1585-17	DSY-SP18-SEC5	99	15	15
D1585-18	DSY-SP19-SEC5	98	17	68
D1585-19	DSY-SP20-SEC5	99	17	50
D1585-19D	DSY-SP20-SEC5 Dup	99	16	42
D1585-20	DSY-SP21-SEC5	99	13	43
D1585-21	DSY-SP22-SEC5	99	12	44
Reporting Limits			3	1
QA/QC				
Method Blank 1009PBS1			ND	ND
Lab Control Sample (% Recovery) 1009LCSS1			100	96
Sample Duplicate (% RPD) D1585-19Dup			6	17
Sample Spike (% Recovery) D1585-19 Spike			97	106*

ND = Not detected

* Post-Digest Spike Recovery

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Matrix: Soil

Analysis Method: 6010A
Concent mg/kg, dry weight basis
Analysis 10/10/97

Lab ID	Client ID	% Solid	Result Arsenic	Result Lead
D1585-22	DSY-SP23-SEC5	98	13	54
D1585-23	DSY-SP24-SEC5	99	10	58
D1585-24	DSY-SP25-SEC5	96	16	34
D1585-25	DSY-SP26-SEC5	94	12	50
D1585-26	DSY-SP27-SEC5	96	10	100
D1585-27	DSY-SP28-SEC5	96	15	47
D1585-28	DSY-SP29-SEC5	94	9	48
D1585-28D	DSY-SP29-SEC5D	94	9	45
D1585-29	DSY-SP6-SEC4	95	8	42
Reporting Limits			3	1

QA/QC		
Method Blank 1009PBS2	ND	ND
Lab Control Sample (% Recovery) 1009LCSS2	100	95
Sample Duplicate (% RPD) D1585-28Dup	0	6
Sample Spike (% Recovery) D1585-28 Spike	95	120

ND = Not detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP3-SEC5
Lab ID: D1585-01
Analysis: Method 8080

Analysis Date: 10/9/97
Matrix: Soil, 94% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	35
Aroclor-1221	ND	70
Aroclor-1232	ND	35
Aroclor-1242	ND	35
Aroclor-1248	ND	35
Aroclor-1254	ND	35
Aroclor-1260	ND	35

QC Batch: P1009-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	96%
Decachlorobiphenyl	73%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP4-SEC5
Lab ID: D1585-02
Analysis: Method 8080

Analysis Date: 10/9/97
Matrix: Soil, 93% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	35
Aroclor-1221	ND	71
Aroclor-1232	ND	35
Aroclor-1242	ND	35
Aroclor-1248	ND	35
Aroclor-1254	ND	35
Aroclor-1260	ND	35

QC Batch: P1009-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	89%
Decachlorobiphenyl	68%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP5-SEC5
Lab ID: D1585-03
Analysis: Method 8080

Analysis Date: 10/9/97
Matrix: Soil, 96% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	34
Aroclor-1221	ND	69
Aroclor-1232	ND	34
Aroclor-1242	ND	34
Aroclor-1248	ND	34
Aroclor-1254	ND	34
Aroclor-1260	ND	34

QC Batch: P1009-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	101%
Decachlorobiphenyl	84%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP6-SEC5
Lab ID: D1585-04
Analysis: Method 8080

Analysis Date: 10/10/97
Matrix: Soil, 96% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	34
Aroclor-1221	ND	69
Aroclor-1232	ND	34
Aroclor-1242	ND	34
Aroclor-1248	ND	34
Aroclor-1254	ND	34
Aroclor-1260	38	34

QC Batch: P1009-B1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	82%
Decachlorobiphenyl	67%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP7-SEC5
Lab ID: D1585-05
Analysis: Method 8080

Analysis Date: 10/10/97
Matrix: Soil, 96% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	34
Aroclor-1221	ND	69
Aroclor-1232	ND	34
Aroclor-1242	ND	34
Aroclor-1248	ND	34
Aroclor-1254	ND	34
Aroclor-1260	ND	34

QC Batch: P1009-B1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	104%
Decachlorobiphenyl	76%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP8-SEC5
Lab ID: D1585-06
Analysis: Method 8080

Analysis Date: 10/10/97
Matrix: Soil, 96% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	34
Aroclor-1221	ND	69
Aroclor-1232	ND	34
Aroclor-1242	ND	34
Aroclor-1248	ND	34
Aroclor-1254	ND	34
Aroclor-1260	ND	34

QC Batch: P1009-B1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	102%
Decachlorobiphenyl	86%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP9-SEC5
Lab ID: D1585-07
Analysis: Method 8080

Analysis Date: 10/10/97
Matrix: Soil, 99% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	33
Aroclor-1221	ND	67
Aroclor-1232	ND	33
Aroclor-1242	ND	33
Aroclor-1248	ND	33
Aroclor-1254	ND	33
Aroclor-1260	ND	33

QC Batch: P1009-B1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	95%
Decachlorobiphenyl	87%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP10-SEC5
Lab ID: D1585-08
Analysis: Method 8080

Analysis Date: 10/10/97
Matrix: Soil, 94% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	35
Aroclor-1221	ND	70
Aroclor-1232	ND	35
Aroclor-1242	ND	35
Aroclor-1248	ND	35
Aroclor-1254	ND	35
Aroclor-1260	ND	35

QC Batch: P1009-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	99%
Decachlorobiphenyl	78%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP11-SEC5
Lab ID: D1585-09
Analysis: Method 8080

Analysis Date: 10/10/97
Matrix: Soil, 95% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	35
Aroclor-1221	ND	69
Aroclor-1232	ND	35
Aroclor-1242	ND	35
Aroclor-1248	ND	35
Aroclor-1254	ND	35
Aroclor-1260	40	35

QC Batch: P1009-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	110%
Decachlorobiphenyl	114%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP12-SEC5
Lab ID: D1585-10
Analysis: Method 8080

Analysis Date: 10/10/97
Matrix: Soil, 97% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	34
Aroclor-1221	ND	68
Aroclor-1232	ND	34
Aroclor-1242	ND	34
Aroclor-1248	ND	34
Aroclor-1254	ND	34
Aroclor-1260	60	34

QC Batch: P1009-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	87%
Decachlorobiphenyl	70%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP13-SEC5
Lab ID: D1585-11
Analysis: Method 8080

Analysis Date: 10/10/97
Matrix: Soil, 98% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	34
Aroclor-1221	ND	67
Aroclor-1232	ND	34
Aroclor-1242	ND	34
Aroclor-1248	ND	34
Aroclor-1254	ND	34
Aroclor-1260	ND	34

QC Batch: P1009-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	100%
Decachlorobiphenyl	186%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP14-SEC5
Lab ID: D1585-12
Analysis: Method 8080

Analysis Date: 10/10/97
Matrix: Soil, 96% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	34
Aroclor-1221	ND	69
Aroclor-1232	ND	34
Aroclor-1242	ND	34
Aroclor-1248	ND	34
Aroclor-1254	ND	34
Aroclor-1260	45	34

QC Batch: P1009-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	104%
Decachlorobiphenyl	92%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP15-SEC5
Lab ID: D1585-14
Analysis: Method 8080

Analysis Date: 10/10/97
Matrix: Soil, 99% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	33
Aroclor-1221	ND	67
Aroclor-1232	ND	33
Aroclor-1242	ND	33
Aroclor-1248	ND	33
Aroclor-1254	ND	33
Aroclor-1260	ND	33

QC Batch: P1009-B1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	89%
Decachlorobiphenyl	75%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP16-SEC5
Lab ID: D1585-15
Analysis: Method 8080

Analysis Date: 10/10/97
Matrix: Soil, 95% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	35
Aroclor-1221	ND	69
Aroclor-1232	ND	35
Aroclor-1242	ND	35
Aroclor-1248	ND	35
Aroclor-1254	ND	35
Aroclor-1260	ND	35

QC Batch: P1009-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	102%
Decachlorobiphenyl	81%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP17-SEC5
Lab ID: D1585-16
Analysis: Method 8080

Analysis Date:10/10/97
Matrix: Soil, 98% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	34
Aroclor-1221	ND	67
Aroclor-1232	ND	34
Aroclor-1242	ND	34
Aroclor-1248	ND	34
Aroclor-1254	ND	34
Aroclor-1260	ND	34

QC Batch: P1009-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	97%
Decachlorobiphenyl	76%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP18-SEC5
Lab ID: D1585-17
Analysis: Method 8080

Analysis Date: 10/10/97
Matrix: Soil, 99% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	33
Aroclor-1221	ND	67
Aroclor-1232	ND	33
Aroclor-1242	ND	33
Aroclor-1248	ND	33
Aroclor-1254	ND	33
Aroclor-1260	ND	33

QC Batch: P1009-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	104%
Decachlorobiphenyl	82%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP19-SEC5
Lab ID: D1585-18
Analysis: Method 8080

Analysis Date: 10/10/97
Matrix: Soil, 98% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	34
Aroclor-1221	ND	67
Aroclor-1232	ND	34
Aroclor-1242	ND	34
Aroclor-1248	ND	34
Aroclor-1254	ND	34
Aroclor-1260	ND	34

QC Batch: P1009-B1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	112%
Decachlorobiphenyl	87%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP20-SEC5
Lab ID: D1585-19
Analysis: Method 8080

Analysis Date: 10/10/97
Matrix: Soil, 99% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	33
Aroclor-1221	ND	67
Aroclor-1232	ND	33
Aroclor-1242	ND	33
Aroclor-1248	ND	33
Aroclor-1254	ND	33
Aroclor-1260	ND	33

QC Batch: P1009-B1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	99%
Decachlorobiphenyl	75%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP21-SEC5
Lab ID: D1585-20
Analysis: Method 8080

Analysis Date: 10/10/97
Matrix: Soil, 99% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	33
Aroclor-1221	ND	67
Aroclor-1232	ND	33
Aroclor-1242	ND	33
Aroclor-1248	ND	33
Aroclor-1254	ND	33
Aroclor-1260	ND	33

QC Batch: P1009-B1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	107%
Decachlorobiphenyl	86%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP22-SEC5
Lab ID: D1585-21
Analysis: Method 8080

Analysis Date: 10/10/97
Matrix: Soil, 99% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	33
Aroclor-1221	ND	67
Aroclor-1232	ND	33
Aroclor-1242	ND	33
Aroclor-1248	ND	33
Aroclor-1254	ND	33
Aroclor-1260	ND	33

QC Batch: P1009-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	85%
Decachlorobiphenyl	73%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP23-SEC5
Lab ID: D1585-22
Analysis: Method 8080

Analysis Date: 10/10/97
Matrix: Soil, 98% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	34
Aroclor-1221	ND	67
Aroclor-1232	ND	34
Aroclor-1242	ND	34
Aroclor-1248	ND	34
Aroclor-1254	ND	34
Aroclor-1260	ND	34

QC Batch: P1009-B1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	88%
Decachlorobiphenyl	79%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP24-SEC5
Lab ID: D1585-23
Analysis: Method 8080

Analysis Date: 10/10/97
Matrix: Soil, 99% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	33
Aroclor-1221	ND	67
Aroclor-1232	ND	33
Aroclor-1242	ND	33
Aroclor-1248	ND	33
Aroclor-1254	ND	33
Aroclor-1260	ND	33

QC Batch: P1009-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	85%
Decachlorobiphenyl	77%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP25-SEC5
Lab ID: D1585-24
Analysis: Method 8080

Analysis Date: 10/10/97
Matrix: Soil, 96% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	34
Aroclor-1221	ND	69
Aroclor-1232	ND	34
Aroclor-1242	ND	34
Aroclor-1248	ND	34
Aroclor-1254	ND	34
Aroclor-1260	ND	34

QC Batch: P1009-B1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	83%
Decachlorobiphenyl	63%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP26-SEC5
Lab ID: D1585-25
Analysis: Method 8080

Analysis Date: 10/11/97
Matrix: Soil, 94% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	35
Aroclor-1221	ND	70
Aroclor-1232	ND	35
Aroclor-1242	ND	35
Aroclor-1248	ND	35
Aroclor-1254	ND	35
Aroclor-1260	ND	35

QC Batch: P1009-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	101%
Decachlorobiphenyl	79%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP27-SEC5
Lab ID: D1585-26
Analysis: Method 8080

Analysis Date: 10/11/97
Matrix: Soil, 96% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	34
Aroclor-1221	ND	69
Aroclor-1232	ND	34
Aroclor-1242	ND	34
Aroclor-1248	ND	34
Aroclor-1254	ND	34
Aroclor-1260	ND	34

QC Batch: P1009-B1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	94%
Decachlorobiphenyl	98%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP28-SEC5
Lab ID: D1585-27
Analysis: Method 8080

Analysis Date: 10/11/97
Matrix: Soil, 96% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	34
Aroclor-1221	ND	69
Aroclor-1232	ND	34
Aroclor-1242	ND	34
Aroclor-1248	ND	34
Aroclor-1254	ND	34
Aroclor-1260	ND	34

QC Batch: P1009-B1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	96%
Decachlorobiphenyl	68%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP29-SEC5
Lab ID: D1585-28
Analysis: Method 8080

Analysis Date: 10/11/97
Matrix: Soil, 94% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	35
Aroclor-1221	ND	70
Aroclor-1232	ND	35
Aroclor-1242	ND	35
Aroclor-1248	ND	35
Aroclor-1254	ND	35
Aroclor-1260	ND	35

QC Batch: P1009-B1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	88%
Decachlorobiphenyl	75%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID: DSY-SP6-SEC4
Lab ID: D1585-29
Analysis: Method 8080

Analysis Date: 10/11/97
Matrix: Soil, 95% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	35
Aroclor-1221	ND	69
Aroclor-1232	ND	35
Aroclor-1242	ND	35
Aroclor-1248	ND	35
Aroclor-1254	ND	35
Aroclor-1260	ND	35

QC Batch: P1009-B1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	81%
Decachlorobiphenyl	60%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID:
Lab ID: Method Blank, P1009-B1
Analysis: Method 8080

Analysis Date: 10/9/97
Matrix: Solids
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	33
Aroclor-1221	ND	66
Aroclor-1232	ND	33
Aroclor-1242	ND	33
Aroclor-1248	ND	33
Aroclor-1254	ND	33
Aroclor-1260	ND	33

QC Batch: P1009-B1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	98%
Decachlorobiphenyl	79%

ND=Not Detected

D1585-MB

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental, Inc.
Client ID:
Lab ID: Method Blank, P1009-B2
Analysis: Method 8080

Analysis Date: 10/10/97
Matrix: Solids
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	33
Aroclor-1221	ND	66
Aroclor-1232	ND	33
Aroclor-1242	ND	33
Aroclor-1248	ND	33
Aroclor-1254	ND	33
Aroclor-1260	ND	33

QC Batch: P1009-B2

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	85%
Decachlorobiphenyl	64%

ND=Not Detected

D1585-MB

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCBs)

Lab Control Summary

Client: Foster Wheeler Environmental Corp.
Lab ID for Blank Spike: P1009-LCS1
Analysis: Method 8080

Matrix: Solid
Analysis Date for Blank Spike: 10/9/97

Analyte	% Recovery
Aroclor 1260	153

QC Batch: P1009-B1

D1585-LCS

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCBs)

Lab Control Summary

Client: Foster Wheeler Environmental Corp.
Lab ID for Blank Spike: P1009-LCS2
Analysis: Method 8080

Matrix: Solid
Analysis Date for Blank Spike: 10/10/97

Analyte	% Recovery
Aroclor 1260	89

QC Batch: P1009-B2

D1585-LCS2

MITKEM CORPORATION

Analysis Report: Chlorinated Pesticides

Matrix Spike Summary

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP3-SEC5
Lab ID for Matrix Spike: D1585-01MS
Lab ID for Matrix Spike Duplicate: D1585-01MSD
Analysis: Method 8080

Matrix: Soil

Analysis Date for Matrix Spike: 10/9/97
Analysis Date for Matrix Spike Duplicate: 10/9/97

	% Recovery		
Analyte	Matrix Spike	Matrix Spike Dup.	% RPD
Aroclor 1260	114	111	3

QC Batch: P1009-B1

MITKEM CORPORATION

Analysis Report: Chlorinated Pesticides

Matrix Spike Summary

Client: Foster Wheeler Environmental Corp.
Client ID: DSY-SP22-SEC5
Lab ID for Matrix Spike: D1585-21MS
Lab ID for Matrix Spike Duplicate: D1585-21MSD
Analysis: Method 8080

Matrix: Soil

Analysis Date for Matrix Spike: 10/10/97
Analysis Date for Matrix Spike Duplicate: 10/10/97

% Recovery

Analyte	Matrix Spike	Matrix Spike Dup.	% RPD
Aroclor 1260	101	104	2

QC Batch: P1009-B2

MITKEM CORPORATION

Lab Project #: D1585 R1
Client Name: Foster Wheeler
Client Proj #: D013
Client PO #: 003195 + Supp. 01
Project Name: Derektor Shipyard
Date Due: 10/14/97 (48hr turn)
Total Price: $
Project Mgr: EAL
Salesman: PAS
Del Req'd: NA
Completed?: YES

100% Surcharge for 48 hr. TAT

Logged In By: MAM
Reviewed By:
Date: 10-10-97 Time: 9:13

Lab ID	Client ID	Matrix	Analysis	Price	Sampled	Received	TPH	IR	BNA	Herb	P/P	Wet	Met	V-GC	V-MS	Sub
-01	DSY-SP3-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				
-02	DSY-SP4-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				
-03	DSY-SP5-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				
-04	DSY-SP6-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				
-05	DSY-SP7-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				
-06	DSY-SP8-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					

MITKEM CORPORATION

Lab ID	Client ID	Matrix	Analysis	Price	Sampled	Received	TPH	IR	BNA	Herb	P/P	Wet	Met	V-GC	V-MS	Sub
			Total Arsenic									1				
-07	DSY-SP9-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				
-08	DSY-SP10-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				
-09	DSY-SP11-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				
-10	DSY-SP12-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				
-11	DSY-SP13-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				
-12	DSY-SP14-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				
-14	DSY-SP15-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				
-15	DSY-SP16-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				
-16	DSY-SP17-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				

Lab Project #: D1585

MITKEM CORPORATION

Lab ID	Client ID	Matrix	Analysis	Price	Sampled	Received	TPH	IR	BNA	Herb	P/P	Wet	Met	V-GC	V-MS	Sub
-17	DSY-SP18-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				
-18	DSY-SP19-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				
-19	DSY-SP20-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				
-20	DSY-SP21-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				
-21	DSY-SP22-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				
-22	DSY-SP23-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				
-23	DSY-SP24-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				
-24	DSY-SP25-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				
-25	DSY-SP26-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				

MITKEM CORPORATION

Lab ID	Client ID	Matrix	Analysis	Price	Sampled	Received	TPH	IR	BNA	Herb	P/P	Wet	Met	V-GC	V-MS	Sub
-26	DSY-SP27-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				
-27	DSY-SP28-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				
-28	DSY-SP29-SEC5	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				
-29	DSY-SP6-SEC4	SL	Total Pb		10/8/97	10/9/97							1			
			PCB								1					
			Total Arsenic									1				

TPH	IR	BNA	Herb	P/P	Wet	Met	V-GC	V-MS	Sub
0	0	0	0	28	28	28	0	0	0

NOTES: 1. No sample #13

[redacted]

ORIGINAL REPORT GOES TO:
Foster Wheeler Environmental Corp.
PO Box 4749
Middletown, RI 02842

Attn: Mark Gouveia
Phone: 401-842-6940
Fax: 401-842-6970

INVOICE GOES TO:
Same

Lab Project #: D1585

MITKEM CORPORATION
175 Metro Center Boulevard ● Warwick, Rhode Island 02886-1755
(401) 732-3400 ● Fax (401) 732-3499
1232 East Broadway Road, Suite 210 ● Tempe, Arizona 85282
(602 303-9535 ● Fax (602) 921-2883

CHAIN-OF-CUSTODY RECORD

REPORT TO		INVOICE TO		LAB REFERENCE #:
COMPANY Foster Wheeler	PHONE 842-6940	COMPANY SAME	PHONE SAME	D1585
NAME MARK GOUVEIA	FAX 842-6970	NAME ↓	FAX SAME	TURNAROUND TIME:
ADDRESS 4000 T DEFENSE HWY		ADDRESS		48
CITY/ST/ZIP PORTSMOUTH RI		CITY/ST/ZIP		

CLIENT PROJECT NAME: DSY
CLIENT PROJECT #: DO 13
CLIENT P.O.#:

REQUESTED ANALYSES

SAMPLE IDENTIFICATION	DATE/TIME SAMPLED	COMPOSITE	GRAB	WATER	SOIL	OTHER	LAB ID	# OF CONTAINERS	PCB	TOTAL Lead	TOTAL ARSENIC	COMMENTS
DSY-SP3-SEC5	10-8 1400		✓		✓		-01	1	✓	✓	✓	~~No Sample~~
DSY-SP4-SEC5	/						-02		✓	✓	✓	~~No sample~~
DSY-SP5-SEC5	/						-03		✓	✓	✓	
DSY-SP6-SEC5	/						-04		✓	✓	✓	
DSY-SP7-SEC5	/						-05		✓	✓	✓	
DSY-SP8-SEC5	/						-06		✓	✓	✓	
DSY-SP9-SEC5	/						-07		✓	✓	✓	
DSY-SP10-SEC5	/						-08		✓	✓	✓	
DSY-SP11-SEC5	/						-09		✓	✓	✓	
DSY-SP12-SEC5	/						-10		✓	✓	✓	
DSY-SP13-SEC5	/						-11		✓	✓	✓	
DSY-SP14-SEC5	/						-12		✓	✓	✓	

TSF#	RELINQUISHED BY	DATE/TIME	ACCEPTED BY	DATE/TIME
1st	[signature]	/	[signature]	10/9/97 8:10
2nd		/		/
3rd		/		/

ADDITIONAL REMARKS:

COOLER TEMP:

WHITE: LABORATORY COPY YELLOW: REPORT COPY PINK: CLIENT'S COPY

MITKEM CORPORATION
175 Metro Center Boulevard ● Warwick, Rhode Island 02886-1755
(401) 732-3400 ● Fax (401) 732-3499
1232 East Broadway Road, Suite 210 ● Tempe, Arizona 85282
(602 303-9535 ● Fax (602) 921-2883

CHAIN-OF-CUSTODY RECORD

REPORT TO:		INVOICE TO:		LAB REFERENCE #:
COMPANY: FOSTER Wheeler	PHONE: 842-6540	COMPANY:	PHONE:	
NAME: MARK GOWRIA	FAX: 842-6570	NAME: SAME	FAX:	TURNAROUND TIME: 48
ADDRESS: 4000 J DEFENCE Hwy		ADDRESS:		
CITY/ST/ZIP: PORTSMOUTH RI		CITY/ST/ZIP:		

CLIENT PROJECT NAME: DSY

CLIENT PROJECT #: DO 13

CLIENT P.O.#:

REQUESTED ANALYSES

SAMPLE IDENTIFICATION	DATE/TIME SAMPLED	COMPOSITE	GRAB	WATER	SOIL	OTHER	LAB ID	# OF CONTAINERS	PCB	TOTAL LEAD	TOTAL ARSENIC	COMMENTS
~~DSY SP14 SEC5~~	~~10/1 1400~~						~~13~~	1	✓	✓	✓	Eliminate Dup entry
DSY SP15 SEC5	↓	↓					-14	↓	✓	✓	✓	
DSY SP16 SEC5							-15		✓	✓	✓	
DSY SP17 SEC5							-16		✓	✓	✓	
DSY SP18 SEC5							-17		✓	✓	✓	
DSY SP19 SEC5							-18		✓	✓	✓	
DSY SP20 SEC5							-19		✓	✓	✓	
DSY SP21 SEC5							-20		✓	✓	✓	
DSY SP22 SEC5							-21		✓	✓	✓	
DSY SP23 SEC5							-22		✓	✓	✓	
DSY SP24 SEC5							-23		✓	✓	✓	
DSY SP25 SEC5	↓	↓				↓	-24	↓	✓	✓	✓	

TSF#	RELINQUISHED BY	DATE/TIME	ACCEPTED BY	DATE/TIME
1st	[signature]	/	[signature]	10/9/97 910
2nd		/		/
3rd		/		/

ADDITIONAL REMARKS:

COOLER TEMP:

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MITKEM CORPORATION
175 Metro Center Boulevard • Warwick, Rhode Island 02886-1755
(401) 732-3400 • Fax (401) 732-3499
1232 East Broadway Road, Suite 210 • Tempe, Arizona 85282
(602 303-9535 • Fax (602) 921-2883

CHAIN-OF-CUSTODY RECORD

REPORT TO:

COMPANY: Foster Wheeler
PHONE: 842 6940
NAME: Mike Gouveia
FAX: 842 6970
ADDRESS: 4000 T Defence Hwy
CITY/ST/ZIP: Portsmouth RI

INVOICE TO:

COMPANY:
PHONE:
NAME: Same
FAX:
ADDRESS:
CITY/ST/ZIP:

LAB REFERENCE #:

TURNAROUND TIME: 48

CLIENT PROJECT NAME: DSY
CLIENT PROJECT #: DO 13
CLIENT P.O.#:

REQUESTED ANALYSES

SAMPLE IDENTIFICATION	DATE/TIME SAMPLED	COMPOSITE	GRAB	WATER	SOIL	OTHER	LAB ID	# OF CONTAINERS	PCB	TOTAL LEAD	TOTAL ARSENIC	COMMENTS
DSY SP26 SEC5	10-8 1400	↓			↓		-25	1	✓	✓	✓	
DSY SP27 SEC5	↓	↓			↓		-26	↓	✓	✓	✓	
DSY SP28 SEC5	↓	↓			↓		-27	↓	✓	✓	✓	
DSY SP29 SEC5	↓	↓			↓		-28	↓	✓	✓	✓	
DSY SP6 SEC4	↓	↓			↓		-29		✓	✓	✓	added per Mike Gouveia 10/9/97

TSF#	RELINQUISHED BY	DATE/TIME	ACCEPTED BY	DATE/TIME
1st	[signature]	/	[signature]	10/9/97 1910
2nd		/		/
3rd		/		/

ADDITIONAL REMARKS: Sample -29 is DSY SP-6 SEC4, only one sample DY SP14 SEC5

COOLER TEMP:

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Appendix B

Sump 42-1 Confirmatory Sample Results Summary and Laboratory Data

FOSTER WHEELER ENVIRONMENTAL CORPORATION
U.S. NAVY NORTHERN DIVISION REMEDIAL ACTION CONTRACT (RAC)
CONTRACT N62472-94-D-0398 DELIVERY ORDER 13 AND 60
DERECKTOR SHIPYARD SUMP 42-1 SUMMARY OF ANALYTICAL RESULTS

RIDEM Direct Exposure Criteria ---------->	Residential	Commercial/ Industrial	Wall 1	Wall 2	Wall 3	Wall 4	Floor 1
Volatile Organics							
Benzene	2.5	200.0	-	-	-	-	-
Bromodichloromethane	10.0	92.0	-	-	-	-	-
Bromoform	81.0	720.0	-	-	-	-	-
Bromomethane	0.8	2,900.0	+	+	+	+	+
Carbon tetrachloride	1.5	44.0	-	-	-	-	-
Chlorobenzene	210.0	10,000.0	-	-	-	-	-
Chloroform	1.2	940.0	-	-	-	-	-
Dibromochloromethane	7.6	68.0	-	-	-	-	-
1,1-Dichloroethane	920.0	10,000.0	-	-	-	-	-
1,2-Dichloroethane	0.9	63.0	-	-	-	-	-
1,1-Dichloroethene	0.2	9.5	-	-	-	-	-
cis-1,2-Dichloroethene	630.0	10,000.0	-	-	-	-	-
trans-1,2-Dichloroethene	1,100.0	10,000.0	-	-	-	-	-
1,2-Dichloropropane	1.9	84.0	-	-	-	-	-
Ethylbenzene	71.0	10,000.0	-	-	-	-	-
Isopropyl benzene	27.0	10,000.0	-	-	-	-	-
Methyl-tert-butyl-ether	390.0	10,000.0	-	-	-	-	-
Methylene chloride	45.0	760.0	-	-	-	-	-
Styrene	13.0	190.0	-	-	-	-	-
1,1,1,2 Tetrachloroethane	2.2	220.0	-	-	-	-	-
1,1,2,2 Tetrachloroethane	1.3	29.0	-	-	-	-	-
Toluene	190.0	10,000.0	-	-	-	-	-
1,1,1-Trichloroethane	540.0	10,000.0	-	-	-	-	-
1,1,2-Trichloroethane	3.6	100.0	-	-	-	-	-
Vinyl chloride	0.02	3.00	+	+	+	+	+
Total Xylenes	110.0	10,000.0	-	-	-	-	-
Semivolatiles							
Acenaphthene	43.0	10,000.0	-	-	-	-	-
Acenaphthylene	23.0	10,000.0	-	-	-	-	-
Anthracene	35.0	10,000.0	-	-	-	-	-
Benzo(a)anthracene	0.9	7.8	-	-	-	-	-
Benzo(a)pyrene	0.4	0.8	+	+	+	+	+
Benzo(b)fluoranthene	0.9	7.8	-	-	-	-	-
Benzo(g,h,I)perylene	0.8	10,000.0	-	-	-	-	-
Benzo(k)fluoranthene	0.9	78.0	-	-	-	-	-
Bis(2-ethylhexyl)phthalate	46.0	410.0	-	-	-	-	-
Bis(2-chloroethyl)ether	0.6	5.2	+	+	+	+	+
Bis(2-chloroisipropyl)ether	9.1	82.0	-	-	-	-	-
Chrysene	0.4	780.0	+	+	+	+	+
Dibenzo(a,h)anthracene	0.4	0.8	+	+	+	+	+
1,2-Dichlorobenzene	510.0	10,000.0	-	-	-	-	-
1,3-Dichlorobenzene	430.0	10,000.0	-	-	-	-	-
1,4-Dichlorobenzene	27.0	240.0	-	-	-	-	-
3,3-Dichlorobenzidine	1.4	13.0	-	-	-	-	-
Diethyl phthalate	340.0	10,000.0	-	-	-	-	-
2,4-Dimethyl phenol	1,400.0	10,000.0	-	-	-	-	-
Dimethyl phthalate	1,900.0	10,000.0	-	-	-	-	-
2,4-Dinitrophenol	160.0	4,100.0	-	-	-	-	-
2,4-Dinitrotoluene	0.9	8.4	-	-	-	-	-
Fluoranthene	20.0	10,000.0	-	-	-	-	-
Fluorene	28.0	10,000.0	-	-	-	-	-
Hexachlorobenzene	0.4	3.6	+	+	+	+	+
Hexachlorobutadiene	8.2	73.0	-	-	-	-	-
Hexachloroethane	46.0	410.0	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	0.9	7.8	-	-	-	-	-
Naphthalene	54.0	10,000.0	-	-	-	-	-
Pentachlorophenol	5.3	48.0	-	-	-	-	-
Phenanthrene	40.0	10,000.0	-	-	-	-	-
Phenol	6,000.0	10,000.0	-	-	-	-	-
Pyrene	13.0	10,000.0	-	-	-	-	-
1,2,4-Trichlorobenzene	96.0	10,000.0	-	-	-	-	-
2,4,6-Trichlorophenol	58.0	520.0	-	-	-	-	-
Pesticides/PCBs							
Chlordane	0.5	4.4	-	-	-	-	-
Dieldrin	0.04	0.40	-	-	-	-	-
Polychlorinated biphenyls	10.0	10.0	-	-	-	-	-
Inorganics							
Arsenic	1.7	3.8	22.0	20.7	15.4	19.3	17.2
Barium	5,500.0	10,000.0	22.5	21.2	23.6	18.2	14.2
Cadmium	39.0	1,000.0	2.31	2.46	2.15	2.15	2.44
Chromium III	1,400.0	10,000.0	n	n	n	n	n
Chromium VI	390.0	10,000.0	n	n	n	n	n
Chromium (Total)	na	na	15.90	13.4	14.9	13.2	16.8
Lead	150.0	500.0	22.0	19.0	26.7	21.0	27.4
Mercury	23.0	610.0	-	-	-	-	-
Selenium	390.0	10,000.0	-	-	-	-	-
Silver	200.0	10,000.0	-	-	-	-	-
TPH(8015B)	500.0	2,500.0	-	-	-	-	-

	= Exceeds RIDEM Residential Exposure Criteria
-	= Non-Detect Result
+	= Non-Detect Result noting that the Lab Detection Limit was above the Residential DEC but below the Commercial/Industrial DEC
n	= Not Analyzed
na	= Not Applicable

All results in mg/kg unless otherwise noted

Wh. opy Original (Accompanies Samples) | Ye. w Copy — Collector | Pink Copy — Custon.. s Copy

R. I. ANALYTICAL LABORATORIES, INC.

41 Illinois Avenue · Warwick, Rhode Island 02888
(401) 737-8500 Fax (401) 738-1970

Analysis Required

Date Collected	Time Collected	Sample ID	Sample Type	VOC Methanol Preserved 8260	SVOC 8270	RCRA 8 METALS	TPH 8015	TPH 418.1	PCB/PEST. 8080			Remarks	Total # of Cont.
5-21-98	1328	Sump 42 WALL 1	GRAB	✓	✓	✓	✓	✓	✓				3
5-21-98	1323	Sump 42 WALL 2		✓	✓	✓	✓	✓	✓				3
5-21-98	1330	Sump 42 WALL 3		✓	✓	✓	✓	✓	✓				3
5-21-98	1331	Sump 42 WALL 4		✓	✓	✓	✓	✓	✓				3
5-21-98	1308	Sump 42 FLOOR 1		✓	✓	✓	✓	✓	✓				3
												Total Numbers of Cont.	15

Company Name: FOSTER WHEELER
P.O. #
Address: 98 DEFENSE HWY.
City / State / Zip: MIDDLETOWN RI
Phone / Fax: (401) 842-6940 / (401) 842-6970
Contact: MARK GOWEIA.

Relinquished by: Date / Time: 5/21 1314 Received by:
Relinquished by: Date / Time: 5/21/98 1600 Received by:
Relinquished by: Date / Time Received by:

Collected by:

Turn Around Time: ☐ Normal ☒ Rush 48

Comments: SHIPPED ON ICE

RIAL: 3964
☒ – Pick-Up Only
☐ – Sampled _____ Hours
☒ – Shipped on Ice

R.I. Analytical

Specialists in Environmental Services

RECEIVED

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Attn: Mr. Mark Gouveia
P.O. Box 4749
Middletown, RI 02842-0749

Date Received: 5/21/98
Date Reported: 5/28/98
P.O. #: 008810
Work Order #: 9805-03964

DESCRIPTION: FIVE SOIL SAMPLES

Subject sample(s) has/have been analyzed by our laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies. The specific methodologies are listed in the methods column of the Certificate Of Analysis

If you have any questions regarding this work, or if we maybe of further assistance, please contact us.

Approved by:

James E. Mich
Vice President

Michael J. Hobin
Quality Control Coordinator

enc: Chain of Custody

41 Illinois Avenue, Warwick, RI 02888
Tel: (401) 737-8500 Fax: (401) 738-1970

950 Boylston Street, Unit 102, Newton Highlands, MA 02161
Tel: (617) 965-5133 Fax: (617) 965-5624

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: _____
R.I. Analytical

Sample #: 001
SAMPLE DESCRIPTION: SUMP 42 WALL 1 GRAB 05/21/98 @1328

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
TPH GC						
C6-C9	<15	15	mg/kg/dry	SW846 8015B	5/24/98 20:07	BMS
C9-C24	<4.9	4.9	mg/kg dry	SW846 8015B	5/24/98 20:07	BMS
C24-C36	<25	25	mg/kg dry	SW846 8015B	5/24/98 20:07	BMS
PESTICIDES / PCB'S						
Aldrin	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:24	MDL
Alpha-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:24	MDL
Beta-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:24	MDL
Delta-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:24	MDL
Gamma-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:24	MDL
Chlordane	<0.05	0.05	mg/kg dry	SW-846 8080	5/25/98 14:24	MDL
4-4'-DDD	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:24	MDL
4-4'-DDE	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:24	MDL
4-4'-DDT	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:24	MDL
Dieldrin	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:24	MDL
Endosulfan I	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:24	MDL
Endosulfan II	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:24	MDL
Endosulfan Sulfate	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:24	MDL
Endrin	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:24	MDL
Endrin Aldehyde	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:24	MDL
Heptachlor	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:24	MDL
Heptachlor epoxide	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:24	MDL
Methoxychlor	<0.05	0.05	mg/kg dry	SW-846 8080	5/25/98 14:24	MDL
Toxaphene	<0.5	0.5	mg/kg dry	SW-846 8080	5/25/98 14:24	MDL
Arochlor-1016	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 14:24	MDL
Arochlor-1221	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 14:24	MDL
Arochlor-1232	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 14:24	MDL
Arochlor-1242	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 14:24	MDL
Arochlor-1248	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 14:24	MDL
Arochlor-1254	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 14:24	MDL
Arochlor-1260	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 14:24	MDL
Volatile Organic Compounds						
Benzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
Bromobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
Bromochloromethane	<0.4	0.4	MG/KG	SW-846 8260	5/22/98 20:08	LGF
Bromodichloromethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
Bromoform	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
Bromomethane	<1.0	1.0	MG/KG	SW-846 8260	5/22/98 20:08	LGF
n-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: _____
R.I. Analytical

Sample #: 001

SUMP 42 WALL 1 GRAB 05/21/98 @1328

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
sec-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
tert-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
Carbon Tetrachloride	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
Chlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
Chloroethane	<0.5	0.5	MG/KG	SW-846 8260	5/22/98 20:08	LGF
Chloroform	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
Chloromethane	<0.5	0.5	MG/KG	SW-846 8260	5/22/98 20:08	LGF
2-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
4-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
Dibromochloromethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
1,2-Dibromo-3-Chloropropane	<0.4	0.4	MG/KG	SW-846 8260	5/22/98 20:08	LGF
1,2-Dibromoethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
Dibromomethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
1,2-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
1,3-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
1,4-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
Dichlorodifluoromethane	<0.5	0.5	MG/KG	SW-846 8260	5/22/98 20:08	LGF
1,1-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
1,2-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
1,1-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
cis-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
trans-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
1,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
1,3-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
2,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
1,1-Dichloropropene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
Ethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
Hexachlorobutadiene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
Isopropylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
p-Isopropyltoluene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
Methylene Chloride	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
Naphthalene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
n-Propylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
Styrene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
1,1,1,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
1,1,2,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
Tetrachloroethene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
Toluene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
1,2,3-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
1,2,4-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
1,1,1-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
1,1,2-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: R.I. Analytical

Sample #: 001

SUMP 42 WALL 1 GRAB 05/21/98 @1328

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Trichloroethene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
Trichlorofluoromethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
1,2,3-Trichloropropane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
1,2,4-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
1,3,5-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
Vinyl Chloride	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
o-Xylene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
m&p-Xylene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 20:08	LGF
MTBE	<0.4	0.4	MG/KG	SW-846 8260	5/22/98 20:08	LGF
SURROGATES				SW-846 8260	5/22/98 20:08	LGF
Dibromofluoromethane	118		80-120%	SW-846 8260	5/22/98 20:08	LGF
Toluene-d8	106		81-117%	SW-846 8260	5/22/98 20:08	LGF
4-Bromofluorobenzene	98		74-121%	SW-846 8260	5/22/98 20:08	LGF
SEMI-VOLATILE ORGANIC COMPOUNDS						
Acenaphthene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Acenaphthylene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Anthracene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Benzidine	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Benzo(a)anthracene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Benzo(b)fluoranthene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Benzo(k)fluoranthene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Benzo(g,h,i)perylene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Benzo(a)pyrene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Bis(2-chloroethyl)ether	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Bis(2-Chloroethoxy)methane	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
bis(2-chloroisopropyl)ether	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Bis(2-ethylhexyl)phthalate	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
4-Bromophenyl phenyl ether	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Butylbenzyl phthalate	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
2-Chloronaphthalene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
4-Chlorophenyl phenyl ether	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Chrysene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Dibenzo(a,h)anthracene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
1,2-Dichlorobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
1,3-Dichlorobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
1,4-Dichlorobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
3,3'-Dichlorobenzidine	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Diethyl phthalate	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Dimethyl phthalate	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
2,4-Dinitrotoluene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
2,6-Dinitrotoluene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: _____
R.I. Analytical

Sample #: 001

SUMP 42 WALL 1 GRAB 05/21/98 @1328

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Di-n-octyl phthalate	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
1,2-Diphenylhydrazine	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Fluoranthene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Fluorene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Hexachlorobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Hexachlorobutadiene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Hexachlorocyclopentadiene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Hexachloroethane	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Indeno(1,2,3-cd)pyrene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Isophorone	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Naphthalene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Nitrobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
N-nitrosodimethylamine	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
N-nitrosodiphenylamine	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
N-nitrosodi-n-propylamine	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Phenanthrene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Pyrene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
1,2,4-Trichlorobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
4-Chloro-3-methylphenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
2-Chlorophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
2,4-Dichlorophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
2,4-Dimethylphenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
2-Methyl-4,6-dinitrophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
2,4-Dinitrophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
2-Nitrophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
4-Nitrophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Pentachlorophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
Phenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
2,4,6-Trichlorophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/25/98 11:46	LGF
SURROGATES			%	SW-846 8270	5/25/98 11:46	LGF
Phenol-d5	62		24-113%	SW-846 8270	5/25/98 11:46	LGF
2-Fluorophenol	53		25-121%	SW-846 8270	5/25/98 11:46	LGF
2,4,6-Tribromophenol	65		19-122%	SW-846 8270	5/25/98 11:46	LGF
Nitrobenzene-d5	73		23-120%	SW-846 8270	5/25/98 11:46	LGF
2-Fluorobiphenyl	80		30-115%	SW-846 8270	5/25/98 11:46	LGF
P-Terphenyl-d14	89		18-137%	SW-846 8270	5/25/98 11:46	LGF
TOTAL METALS						
ARSENIC	22.0	5.49	MG/KG DRY	SW-846 6010	5/22/98 14:31	RGM
BARIUM	22.5	0.27	MG/KG DRY	SW-846 6010	5/22/98 14:31	RGM
CADMIUM	2.31	0.27	MG/KG DRY	SW-846 6010	5/22/98 14:31	RGM
CHROMIUM	15.9	1.65	MG/KG DRY	SW-846 6010	5/22/98 14:31	RGM

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: _____
R.I. Analytical

Sample #: 001

SUMP 42 WALL 1 GRAB 05/21/98 @1328

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
LEAD	22.0	2.20	MG/KG DRY	SW-846 6010	5/22/98 14:31	RGM
MERCURY	<0.25	0.25	MG/KG DRY	SW-846 7471A	5/22/98 16:58	KAB
SELENIUM	<11.0	11.0	MG/KG DRY	SW-846 6010	5/22/98 14:31	RGM
SILVER	<1.10	1.10	MG/KG DRY	SW-846 6010	5/22/98 14:31	RGM

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: R.I. Analytical

Sample #: 002
SAMPLE DESCRIPTION: SUMP 42 WALL 2 GRAB 05/21/98 @1323

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
TPH GC						
C6-C9	<14	14	mg/kg/dry	SW846 8015B	5/24/98 21:30	BMS
C9-C24	<4.6	4.6	mg/kg dry	SW846 8015B	5/24/98 21:30	BMS
C24-C36	<23	23	mg/kg dry	SW846 8015B	5/24/98 21:30	BMS
PESTICIDES / PCB'S						
Aldrin	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:57	MDL
Alpha-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:57	MDL
Beta-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:57	MDL
Delta-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:57	MDL
Gamma-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:57	MDL
Chlordane	<0.05	0.05	mg/kg dry	SW-846 8080	5/25/98 14:57	MDL
4-4'-DDD	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:57	MDL
4-4'-DDE	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:57	MDL
4-4'-DDT	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:57	MDL
Dieldrin	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:57	MDL
Endosulfan I	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:57	MDL
Endosulfan II	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:57	MDL
Endosulfan Sulfate	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:57	MDL
Endrin	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:57	MDL
Endrin Aldehyde	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:57	MDL
Heptachlor	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:57	MDL
Heptachlor epoxide	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 14:57	MDL
Methoxychlor	<0.05	0.05	mg/kg dry	SW-846 8080	5/25/98 14:57	MDL
Toxaphene	<0.5	0.5	mg/kg dry	SW-846 8080	5/25/98 14:57	MDL
Arochlor-1016	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 14:57	MDL
Arochlor-1221	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 14:57	MDL
Arochlor-1232	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 14:57	MDL
Arochlor-1242	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 14:57	MDL
Arochlor-1248	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 14:57	MDL
Arochlor-1254	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 14:57	MDL
Arochlor-1260	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 14:57	MDL
Volatile Organic Compounds						
Benzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
Bromobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
Bromochloromethane	<0.4	0.4	MG/KG	SW-846 8260	5/22/98 21:14	LGF
Bromodichloromethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
Bromoform	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
Bromomethane	<1.0	1.0	MG/KG	SW-846 8260	5/22/98 21:14	LGF
n-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: _____
R.I. Analytical

Sample #: 002

SUMP 42 WALL 2 GRAB 05/21/98 @1323

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
sec-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
tert-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
Carbon Tetrachloride	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
Chlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
Chloroethane	<0.5	0.5	MG/KG	SW-846 8260	5/22/98 21:14	LGF
Chloroform	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
Chloromethane	<0.5	0.5	MG/KG	SW-846 8260	5/22/98 21:14	LGF
2-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
4-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
Dibromochloromethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
1,2-Dibromo-3-Chloropropane	<0.4	0.4	MG/KG	SW-846 8260	5/22/98 21:14	LGF
1,2-Dibromoethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
Dibromomethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
1,2-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
1,3-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
1,4-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
Dichlorodifluoromethane	<0.5	0.5	MG/KG	SW-846 8260	5/22/98 21:14	LGF
1,1-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
1,2-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
1,1-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
cis-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
trans-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
1,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
1,3-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
2,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
1,1-Dichloropropene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
Ethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
Hexachlorobutadiene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
Isopropylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
p-Isopropyltoluene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
Methylene Chloride	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
Naphthalene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
n-Propylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
Styrene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
1,1,1,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
1,1,2,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
Tetrachloroethene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
Toluene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
1,2,3-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
1,2,4-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
1,1,1-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
1,1,2-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: _____
R.I. Analytical

Sample #: 002

SUMP 42 WALL 2 GRAB 05/21/98 @1323

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Trichloroethene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
Trichlorofluoromethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
1,2,3-Trichloropropane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
1,2,4-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
1,3,5-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
Vinyl Chloride	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
o-Xylene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
m&p-Xylene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 21:14	LGF
MTBE	<0.4	0.4	MG/KG	SW-846 8260	5/22/98 21:14	LGF
SURROGATES				SW-846 8260	5/22/98 21:14	LGF
Dibromofluoromethane	110		80-120%	SW-846 8260	5/22/98 21:14	LGF
Toluene-d8	106		81-117%	SW-846 8260	5/22/98 21:14	LGF
4-Bromofluorobenzene	97		74-121%	SW-846 8260	5/22/98 21:14	LGF
SEMI-VOLATILE ORGANIC COMPOUNDS						
Acenaphthene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Acenaphthylene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Anthracene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Benzidine	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Benzo(a)anthracene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Benzo(b)fluoranthene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Benzo(k)fluoranthene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Benzo(g,h,i)perylene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Benzo(a)pyrene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Bis(2-chloroethyl)ether	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Bis(2-Chloroethoxy)methane	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
bis(2-chloroisopropyl)ether	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Bis(2-ethylhexyl)phthalate	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
4-Bromophenyl phenyl ether	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Butylbenzyl phthalate	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
2-Chloronaphthalene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
4-Chlorophenyl phenyl ether	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Chrysene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Dibenzo(a,h)anthracene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
1,2-Dichlorobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
1,3-Dichlorobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
1,4-Dichlorobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
3,3'-Dichlorobenzidine	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Diethyl phthalate	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Dimethyl phthalate	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
2,4-Dinitrotoluene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
2,6-Dinitrotoluene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: _____
R.I. Analytical

Sample #: 002

SUMP 42 WALL 2 GRAB 05/21/98 @1323

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Di-n-octyl phthalate	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
1,2-Diphenylhydrazine	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Fluoranthene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Fluorene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Hexachlorobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Hexachlorobutadiene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Hexachlorocyclopentadiene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Hexachloroethane	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Indeno(1,2,3-cd)pyrene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Isophorone	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Naphthalene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Nitrobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
N-nitrosodimethylamine	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
N-nitrosodiphenylamine	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
N-nitrosodi-n-propylamine	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Phenanthrene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Pyrene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
1,2,4-Trichlorobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
4-Chloro-3-methylphenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
2-Chlorophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
2,4-Dichlorophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
2,4-Dimethylphenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
2-Methyl-4,6-dinitrophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
2,4-Dinitrophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
2-Nitrophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
4-Nitrophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Pentachlorophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
Phenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
2,4,6-Trichlorophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 11:11	LGF
SURROGATES			%	SW-846 8270	5/28/98 11:11	LGF
Phenol-d5	114		24-113%	SW-846 8270	5/28/98 11:11	LGF
2-Fluorophenol	130		25-121%	SW-846 8270	5/28/98 11:11	LGF
2,4,6-Tribromophenol	102		19-122%	SW-846 8270	5/28/98 11:11	LGF
Nitrobenzene-d5	106		23-120%	SW-846 8270	5/28/98 11:11	LGF
2-Fluorobiphenyl	115		30-115%	SW-846 8270	5/28/98 11:11	LGF
P-Terphenyl-d14	91		18-137%	SW-846 8270	5/28/98 11:11	LGF
TOTAL METALS						
ARSENIC	20.7	5.59	MG/KG DRY	SW-846 6010	5/22/98 14:27	RGM
BARIUM	21.2	0.28	MG/KG DRY	SW-846 6010	5/22/98 14:27	RGM
CADMIUM	2.46	0.28	MG/KG DRY	SW-846 6010	5/22/98 14:27	RGM
CHROMIUM	13.4	1.68	MG/KG DRY	SW-846 6010	5/22/98 14:27	RGM

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: _____
R.I. Analytical

Sample #: 002

SUMP 42 WALL 2 GRAB 05/21/98 @1323

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
LEAD	19.0	2.23	MG/KG DRY	SW-846 6010	5/22/98 14:27	RGM
MERCURY	<0.25	0.25	MG/KG DRY	SW-846 7471A	5/22/98 16:58	KAB
SELENIUM	<11.2	11.2	MG/KG DRY	SW-846 6010	5/22/98 14:27	RGM
SILVER	<1.12	1.12	MG/KG DRY	SW-846 6010	5/22/98 14:27	RGM

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: _____
R.I. Analytical

Sample #: 003
SAMPLE DESCRIPTION: SUMP 42 WALL 3 GRAB 05/21/98 @1330

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
TPH GC						
C6-C9	<15	15	mg/kg/dry	SW846 8015B	5/24/98 22:12	BMS
C9-C24	5.1	4.9	mg/kg dry	SW846 8015B	5/24/98 22:12	BMS
C24-C36	<25	25	mg/kg dry	SW846 8015B	5/24/98 22:12	BMS
PESTICIDES / PCB'S						
Aldrin	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 15:30	MDL
Alpha-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 15:30	MDL
Beta-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 15:30	MDL
Delta-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 15:30	MDL
Gamma-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 15:30	MDL
Chlordane	<0.05	0.05	mg/kg dry	SW-846 8080	5/25/98 15:30	MDL
4-4'-DDD	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 15:30	MDL
4-4'-DDE	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 15:30	MDL
4-4'-DDT	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 15:30	MDL
Dieldrin	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 15:30	MDL
Endosulfan I	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 15:30	MDL
Endosulfan II	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 15:30	MDL
Endosulfan Sulfate	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 15:30	MDL
Endrin	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 15:30	MDL
Endrin Aldehyde	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 15:30	MDL
Heptachlor	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 15:30	MDL
Heptachlor epoxide	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 15:30	MDL
Methoxychlor	<0.05	0.05	mg/kg dry	SW-846 8080	5/25/98 15:30	MDL
Toxaphene	<0.5	0.5	mg/kg dry	SW-846 8080	5/25/98 15:30	MDL
Arochlor-1016	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 15:30	MDL
Arochlor-1221	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 15:30	MDL
Arochlor-1232	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 15:30	MDL
Arochlor-1242	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 15:30	MDL
Arochlor-1248	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 15:30	MDL
Arochlor-1254	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 15:30	MDL
Arochlor-1260	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 15:30	MDL
Volatile Organic Compounds						
Benzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
Bromobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
Bromochloromethane	<0.4	0.4	MG/KG	SW-846 8260	5/22/98 22:29	LGF
Bromodichloromethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
Bromoform	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
Bromomethane	<1.0	1.0	MG/KG	SW-846 8260	5/22/98 22:29	LGF
n-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: _____
R.I. Analytical

Sample #: 003

SUMP 42 WALL 3 GRAB 05/21/98 @1330

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
sec-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
tert-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
Carbon Tetrachloride	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
Chlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
Chloroethane	<0.5	0.5	MG/KG	SW-846 8260	5/22/98 22:29	LGF
Chloroform	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
Chloromethane	<0.5	0.5	MG/KG	SW-846 8260	5/22/98 22:29	LGF
2-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
4-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
Dibromochloromethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
1,2-Dibromo-3-Chloropropane	<0.4	0.4	MG/KG	SW-846 8260	5/22/98 22:29	LGF
1,2-Dibromoethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
Dibromomethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
1,2-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
1,3-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
1,4-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
Dichlorodifluoromethane	<0.5	0.5	MG/KG	SW-846 8260	5/22/98 22:29	LGF
1,1-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
1,2-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
1,1-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
cis-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
trans-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
1,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
1,3-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
2,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
1,1-Dichloropropene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
Ethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
Hexachlorobutadiene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
Isopropylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
p-Isopropyltoluene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
Methylene Chloride	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
Naphthalene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
n-Propylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
Styrene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
1,1,1,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
1,1,2,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
Tetrachloroethene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
Toluene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
1,2,3-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
1,2,4-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
1,1,1-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
1,1,2-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: R.I. Analytical

Sample #: 003

SUMP 42 WALL 3 GRAB 05/21/98 @1330

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Trichloroethene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
Trichlorofluoromethane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
1,2,3-Trichloropropane	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
1,2,4-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
1,3,5-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
Vinyl Chloride	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
o-Xylene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
m&p-Xylene	<0.2	0.2	MG/KG	SW-846 8260	5/22/98 22:29	LGF
MTBE	<0.4	0.4	MG/KG	SW-846 8260	5/22/98 22:29	LGF
SURROGATES				SW-846 8260	5/22/98 22:29	LGF
Dibromofluoromethane	116		80-120%	SW-846 8260	5/22/98 22:29	LGF
Toluene-d8	110		81-117%	SW-846 8260	5/22/98 22:29	LGF
4-Bromofluorobenzene	99		74-121%	SW-846 8260	5/22/98 22:29	LGF
SEMI-VOLATILE ORGANIC COMPOUNDS						
Acenaphthene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Acenaphthylene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Anthracene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Benzidine	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Benzo(a)anthracene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Benzo(b)fluoranthene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Benzo(k)fluoranthene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Benzo(g,h,i)perylene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Benzo(a)pyrene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Bis(2-chloroethyl)ether	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Bis(2-Chloroethoxy)methane	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
bis(2-chloroisopropyl)ether	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Bis(2-ethylhexyl)phthalate	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
4-Bromophenyl phenyl ether	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Butylbenzyl phthalate	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
2-Chloronaphthalene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
4-Chlorophenyl phenyl ether	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Chrysene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Dibenzo(a,h)anthracene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
1,2-Dichlorobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
1,3-Dichlorobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
1,4-Dichlorobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
3,3'-Dichlorobenzidine	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Diethyl phthalate	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Dimethyl phthalate	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
2,4-Dinitrotoluene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
2,6-Dinitrotoluene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: R.I. Analytical

Sample #: 003

SUMP 42 WALL 3 GRAB 05/21/98 @1330

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Di-n-octyl phthalate	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
1,2-Diphenylhydrazine	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Fluoranthene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Fluorene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Hexachlorobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Hexachlorobutadiene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Hexachlorocyclopentadiene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Hexachloroethane	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Indeno(1,2,3-cd)pyrene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Isophorone	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Naphthalene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Nitrobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
N-nitrosodimethylamine	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
N-nitrosodiphenylamine	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
N-nitrosodi-n-propylamine	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Phenanthrene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Pyrene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
1,2,4-Trichlorobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
4-Chloro-3-methylphenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
2-Chlorophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
2,4-Dichlorophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
2,4-Dimethylphenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
2-Methyl-4,6-dinitrophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
2,4-Dinitrophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
2-Nitrophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
4-Nitrophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Pentachlorophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
Phenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
2,4,6-Trichlorophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 12:19	LGF
SURROGATES			%	SW-846 8270	5/28/98 12:19	LGF
Phenol-d5	102		24-113%	SW-846 8270	5/28/98 12:19	LGF
2-Fluorophenol	94		25-121%	SW-846 8270	5/28/98 12:19	LGF
2,4,6-Tribromophenol	87		19-122%	SW-846 8270	5/28/98 12:19	LGF
Nitrobenzene-d5	99		23-120%	SW-846 8270	5/28/98 12:19	LGF
2-Fluorobiphenyl	98		30-115%	SW-846 8270	5/28/98 12:19	LGF
P-Terphenyl-d14	89		18-137%	SW-846 8270	5/28/98 12:19	LGF
TOTAL METALS						
ARSENIC	15.4	5.12	MG/KG DRY	SW-846 6010	5/22/98 14:34	RGM
BARIUM	23.6	0.26	MG/KG DRY	SW-846 6010	5/22/98 14:34	RGM
CADMIUM	2.15	0.26	MG/KG DRY	SW-846 6010	5/22/98 14:34	RGM
CHROMIUM	14.9	1.54	MG/KG DRY	SW-846 6010	5/22/98 14:34	RGM

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: _____
R.I. Analytical

Sample #: 003

SUMP 42 WALL 3 GRAB 05/21/98 @1330

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
LEAD	26.7	2.05	MG/KG DRY	SW-846 6010	5/22/98 14:34	RGM
MERCURY	<0.25	0.25	MG/KG DRY	SW-846 7471A	5/22/98 16:58	KAB
SELENIUM	<10.2	10.2	MG/KG DRY	SW-846 6010	5/22/98 14:34	RGM
SILVER	<1.02	1.02	MG/KG DRY	SW-846 6010	5/22/98 14:34	RGM

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: _____
R.I. Analytical

Sample #: 004
SAMPLE DESCRIPTION: SUMP 42 WALL 4 GRAB 05/21/98 @1331

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
TPH GC						
C6-C9	<16	16	mg/kg/dry	SW846 8015B	5/24/98 22:53	BMS
C9-C24	32	5.2	mg/kg dry	SW846 8015B	5/24/98 22:53	BMS
C24-C36	41	26	mg/kg dry	SW846 8015B	5/24/98 22:53	BMS
PESTICIDES / PCB'S						
Aldrin	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:03	MDL
Alpha-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:03	MDL
Beta-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:03	MDL
Delta-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:03	MDL
Gamma-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:03	MDL
Chlordane	<0.05	0.05	mg/kg dry	SW-846 8080	5/25/98 16:03	MDL
4-4'-DDD	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:03	MDL
4-4'-DDE	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:03	MDL
4-4'-DDT	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:03	MDL
Dieldrin	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:03	MDL
Endosulfan I	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:03	MDL
Endosulfan II	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:03	MDL
Endosulfan Sulfate	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:03	MDL
Endrin	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:03	MDL
Endrin Aldehyde	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:03	MDL
Heptachlor	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:03	MDL
Heptachlor epoxide	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:03	MDL
Methoxychlor	<0.05	0.05	mg/kg dry	SW-846 8080	5/25/98 16:03	MDL
Toxaphene	<0.5	0.5	mg/kg dry	SW-846 8080	5/25/98 16:03	MDL
Arochlor-1016	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 16:03	MDL
Arochlor-1221	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 16:03	MDL
Arochlor-1232	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 16:03	MDL
Arochlor-1242	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 16:03	MDL
Arochlor-1248	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 16:03	MDL
Arochlor-1254	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 16:03	MDL
Arochlor-1260	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 16:03	MDL
Volatile Organic Compounds						
Benzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
Bromobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
Bromochloromethane	<0.4	0.4	MG/KG	SW-846 8260	5/23/98 4:29	LGF
Bromodichloromethane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
Bromoform	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
Bromomethane	<1.0	1.0	MG/KG	SW-846 8260	5/23/98 4:29	LGF
n-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: _____
R.I. Analytical

Sample #: 004

SUMP 42 WALL 4 GRAB 05/21/98 @1331

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
sec-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
tert-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
Carbon Tetrachloride	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
Chlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
Chloroethane	<0.5	0.5	MG/KG	SW-846 8260	5/23/98 4:29	LGF
Chloroform	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
Chloromethane	<0.5	0.5	MG/KG	SW-846 8260	5/23/98 4:29	LGF
2-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
4-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
Dibromochloromethane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
1,2-Dibromo-3-Chloropropane	<0.4	0.4	MG/KG	SW-846 8260	5/23/98 4:29	LGF
1,2-Dibromoethane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
Dibromomethane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
1,2-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
1,3-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
1,4-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
Dichlorodifluoromethane	<0.5	0.5	MG/KG	SW-846 8260	5/23/98 4:29	LGF
1,1-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
1,2-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
1,1-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
cis-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
trans-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
1,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
1,3-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
2,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
1,1-Dichloropropene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
Ethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
Hexachlorobutadiene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
Isopropylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
p-Isopropyltoluene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
Methylene Chloride	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
Naphthalene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
n-Propylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
Styrene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
1,1,1,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
1,1,2,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
Tetrachloroethene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
Toluene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
1,2,3-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
1,2,4-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
1,1,1-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF
1,1,2-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 4:29	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: _____
R.I. Analytical

Sample #: 004

SUMP 42 WALL 4 GRAB 05/21/98 @1331

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME		ANALYST
Trichloroethene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	4:29	LGF
Trichlorofluoromethane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	4:29	LGF
1,2,3-Trichloropropane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	4:29	LGF
1,2,4-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	4:29	LGF
1,3,5-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	4:29	LGF
Vinyl Chloride	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	4:29	LGF
o-Xylene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	4:29	LGF
m&p-Xylene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	4:29	LGF
MTBE	<0.4	0.4	MG/KG	SW-846 8260	5/23/98	4:29	LGF
SURROGATES				SW-846 8260	5/23/98	4:29	LGF
Dibromofluoromethane	118		80-120%	SW-846 8260	5/23/98	4:29	LGF
Toluene-d8	111		81-117%	SW-846 8260	5/23/98	4:29	LGF
4-Bromofluorobenzene	95		74-121%	SW-846 8260	5/23/98	4:29	LGF
SEMI-VOLATILE ORGANIC COMPOUNDS							
Acenaphthene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF
Acenaphthylene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF
Anthracene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF
Benzidine	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF
Benzo(a)anthracene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF
Benzo(b)fluoranthene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF
Benzo(k)fluoranthene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF
Benzo(g,h,i)perylene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF
Benzo(a)pyrene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF
Bis(2-chloroethyl)ether	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF
Bis(2-Chloroethoxy)methane	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF
bis(2-chloroisopropyl)ether	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF
Bis(2-ethylhexyl)phthalate	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF
4-Bromophenyl phenyl ether	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF
Butylbenzyl phthalate	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF
2-Chloronaphthalene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF
4-Chlorophenyl phenyl ether	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF
Chrysene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF
Dibenzo(a,h)anthracene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF
1,2-Dichlorobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF
1,3-Dichlorobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF
1,4-Dichlorobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF
3,3'-Dichlorobenzidine	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF
Diethyl phthalate	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF
Dimethyl phthalate	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF
2,4-Dinitrotoluene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF
2,6-Dinitrotoluene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	13:18	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: _____
R.I. Analytical

Sample #: 004

SUMP 42 WALL 4 GRAB 05/21/98 @1331

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Di-n-octyl phthalate	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
1,2-Diphenylhydrazine	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
Fluoranthene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
Fluorene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
Hexachlorobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
Hexachlorobutadiene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
Hexachlorocyclopentadiene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
Hexachloroethane	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
Indeno(1,2,3-cd)pyrene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
Isophorone	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
Naphthalene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
Nitrobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
N-nitrosodimethylamine	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
N-nitrosodiphenylamine	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
N-nitrosodi-n-propylamine	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
Phenanthrene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
Pyrene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
1,2,4-Trichlorobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
4-Chloro-3-methylphenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
2-Chlorophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
2,4-Dichlorophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
2,4-Dimethylphenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
2-Methyl-4,6-dinitrophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
2,4-Dinitrophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
2-Nitrophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
4-Nitrophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
Pentachlorophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
Phenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
2,4,6-Trichlorophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 13:18	LGF
SURROGATES			%	SW-846 8270	5/28/98 13:18	LGF
Phenol-d5	102		24-113%	SW-846 8270	5/28/98 13:18	LGF
2-Fluorophenol	91		25-121%	SW-846 8270	5/28/98 13:18	LGF
2,4,6-Tribromophenol	87		19-122%	SW-846 8270	5/28/98 13:18	LGF
Nitrobenzene-d5	95		23-120%	SW-846 8270	5/28/98 13:18	LGF
2-Fluorobiphenyl	93		30-115%	SW-846 8270	5/28/98 13:18	LGF
P-Terphenyl-d14	83		18-137%	SW-846 8270	5/28/98 13:18	LGF
TOTAL METALS						
ARSENIC	19.3	1.81	MG/KG DRY	SW-846 6010	5/22/98 14:45	RGM
BARIUM	18.2	0.28	MG/KG DRY	SW-846 6010	5/22/98 14:45	RGM
CADMIUM	2.15	0.28	MG/KG DRY	SW-846 6010	5/22/98 14:45	RGM
CHROMIUM	13.2	1.66	MG/KG DRY	SW-846 6010	5/22/98 14:45	RGM

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: _____
R.I. Analytical

Sample #: 004

SUMP 42 WALL 4 GRAB 05/21/98 @1331

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
LEAD	21.0	2.20	MG/KG DRY	SW-846 6010	5/22/98 14:45	RGM
MERCURY	<0.25	0.25	MG/KG DRY	SW-846 7471A	5/22/98 16:58	KAB
SELENIUM	<11.0	11.0	MG/KG DRY	SW-846 6010	5/22/98 14:45	RGM
SILVER	<1.10	1.10	MG/KG DRY	SW-846 6010	5/22/98 14:45	RGM

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: _____
R.I. Analytical

Sample #: 005
SAMPLE DESCRIPTION: SUMP 42 FLOOR 1 GRAB 05/21/98 @1308

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
TPH GC						
C6-C9	<14	14	mg/kg/dry	SW846 8015B	5/24/98 22:12	BMS
C9-C24	<4.6	4.6	mg/kg dry	SW846 8015B	5/24/98 22:12	BMS
C24-C36	<23	23	mg/kg dry	SW846 8015B	5/24/98 22:12	BMS
PESTICIDES / PCB'S						
Aldrin	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:36	MDL
Alpha-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:36	MDL
Beta-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:36	MDL
Delta-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:36	MDL
Gamma-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:36	MDL
Chlordane	<0.05	0.05	mg/kg dry	SW-846 8080	5/25/98 16:36	MDL
4-4'-DDD	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:36	MDL
4-4'-DDE	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:36	MDL
4-4'-DDT	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:36	MDL
Dieldrin	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:36	MDL
Endosulfan I	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:36	MDL
Endosulfan II	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:36	MDL
Endosulfan Sulfate	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:36	MDL
Endrin	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:36	MDL
Endrin Aldehyde	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:36	MDL
Heptachlor	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:36	MDL
Heptachlor epoxide	<0.01	0.01	mg/kg dry	SW-846 8080	5/25/98 16:36	MDL
Methoxychlor	<0.05	0.05	mg/kg dry	SW-846 8080	5/25/98 16:36	MDL
Toxaphene	<0.5	0.5	mg/kg dry	SW-846 8080	5/25/98 16:36	MDL
Arochlor-1016	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 16:36	MDL
Arochlor-1221	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 16:36	MDL
Arochlor-1232	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 16:36	MDL
Arochlor-1242	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 16:36	MDL
Arochlor-1248	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 16:36	MDL
Arochlor-1254	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 16:36	MDL
Arochlor-1260	<0.1	0.1	mg/kg dry	SW-846 8080	5/25/98 16:36	MDL
Volatile Organic Compounds						
Benzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 6:08	LGF
Bromobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 6:08	LGF
Bromochloromethane	<0.4	0.4	MG/KG	SW-846 8260	5/23/98 6:08	LGF
Bromodichloromethane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 6:08	LGF
Bromoform	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 6:08	LGF
Bromomethane	<1.0	1.0	MG/KG	SW-846 8260	5/23/98 6:08	LGF
n-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98 6:08	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: _____
R.I. Analytical

Sample #: 005

SUMP 42 FLOOR 1 GRAB 05/21/98 @1308

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME		ANALYST
sec-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
tert-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
Carbon Tetrachloride	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
Chlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
Chloroethane	<0.5	0.5	MG/KG	SW-846 8260	5/23/98	6:08	LGF
Chloroform	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
Chloromethane	<0.5	0.5	MG/KG	SW-846 8260	5/23/98	6:08	LGF
2-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
4-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
Dibromochloromethane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
1,2-Dibromo-3-Chloropropane	<0.4	0.4	MG/KG	SW-846 8260	5/23/98	6:08	LGF
1,2-Dibromoethane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
Dibromomethane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
1,2-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
1,3-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
1,4-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
Dichlorodifluoromethane	<0.5	0.5	MG/KG	SW-846 8260	5/23/98	6:08	LGF
1,1-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
1,2-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
1,1-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
cis-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
trans-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
1,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
1,3-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
2,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
1,1-Dichloropropene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
Ethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
Hexachlorobutadiene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
Isopropylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
p-Isopropyltoluene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
Methylene Chloride	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
Naphthalene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
n-Propylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
Styrene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
1,1,1,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
1,1,2,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
Tetrachloroethene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
Toluene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
1,2,3-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
1,2,4-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
1,1,1-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
1,1,2-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: _____
R.I. Analytical

Sample #: 005

SUMP 42 FLOOR 1 GRAB 05/21/98 @1308

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME		ANALYST
Trichloroethene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
Trichlorofluoromethane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
1,2,3-Trichloropropane	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
1,2,4-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
1,3,5-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
Vinyl Chloride	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
o-Xylene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
m&p-Xylene	<0.2	0.2	MG/KG	SW-846 8260	5/23/98	6:08	LGF
MTBE	<0.4	0.4	MG/KG	SW-846 8260	5/23/98	6:08	LGF
SURROGATES				SW-846 8260	5/23/98	6:08	LGF
Dibromofluoromethane	118		80-120%	SW-846 8260	5/23/98	6:08	LGF
Toluene-d8	104		81-117%	SW-846 8260	5/23/98	6:08	LGF
4-Bromofluorobenzene	103		74-121%	SW-846 8260	5/23/98	6:08	LGF
SEMI-VOLATILE ORGANIC COMPOUNDS							
Acenaphthene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF
Acenaphthylene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF
Anthracene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF
Benzidine	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF
Benzo(a)anthracene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF
Benzo(b)fluoranthene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF
Benzo(k)fluoranthene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF
Benzo(g,h,i)perylene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF
Benzo(a)pyrene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF
Bis(2-chloroethyl)ether	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF
Bis(2-Chloroethoxy)methane	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF
bis(2-chloroisopropyl)ether	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF
Bis(2-ethylhexyl)phthalate	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF
4-Bromophenyl phenyl ether	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF
Butylbenzyl phthalate	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF
2-Chloronaphthalene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF
4-Chlorophenyl phenyl ether	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF
Chrysene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF
Dibenzo(a,h)anthracene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF
1,2-Dichlorobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF
1,3-Dichlorobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF
1,4-Dichlorobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF
3,3'-Dichlorobenzidine	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF
Diethyl phthalate	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF
Dimethyl phthalate	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF
2,4-Dinitrotoluene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF
2,6-Dinitrotoluene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98	14:18	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: _____
R.I. Analytical

Sample #: 005

SUMP 42 FLOOR 1 GRAB 05/21/98 @1308

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Di-n-octyl phthalate	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
1,2-Diphenylhydrazine	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
Fluoranthene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
Fluorene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
Hexachlorobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
Hexachlorobutadiene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
Hexachlorocyclopentadiene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
Hexachloroethane	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
Indeno(1,2,3-cd)pyrene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
Isophorone	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
Naphthalene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
Nitrobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
N-nitrosodimethylamine	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
N-nitrosodiphenylamine	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
N-nitrosodi-n-propylamine	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
Phenanthrene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
Pyrene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
1,2,4-Trichlorobenzene	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
4-Chloro-3-methylphenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
2-Chlorophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
2,4-Dichlorophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
2,4-Dimethylphenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
2-Methyl-4,6-dinitrophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
2,4-Dinitrophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
2-Nitrophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
4-Nitrophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
Pentachlorophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
Phenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
2,4,6-Trichlorophenol	<0.7	0.7	mg/kg dry	SW-846 8270	5/28/98 14:18	LGF
SURROGATES			%	SW-846 8270	5/28/98 14:18	LGF
Phenol-d5	197		24-113%	SW-846 8270	5/28/98 14:18	LGF
2-Fluorophenol	88		25-121%	SW-846 8270	5/28/98 14:18	LGF
2,4,6-Tribromophenol	91		19-122%	SW-846 8270	5/28/98 14:18	LGF
Nitrobenzene-d5	101		23-120%	SW-846 8270	5/28/98 14:18	LGF
2-Fluorobiphenyl	100		30-115%	SW-846 8270	5/28/98 14:18	LGF
P-Terphenyl-d14	94		18-137%	SW-846 8270	5/28/98 14:18	LGF
TOTAL METALS						
ARSENIC	17.2	5.08	MG/KG DRY	SW-846 6010	5/22/98 14:20	RGM
BARIUM	14.2	0.25	MG/KG DRY	SW-846 6010	5/22/98 14:20	RGM
CADMIUM	2.44	0.25	MG/KG DRY	SW-846 6010	5/22/98 14:20	RGM
CHROMIUM	16.8	1.52	MG/KG DRY	SW-846 6010	5/22/98 14:20	RGM

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: _____
R.I. Analytical

Sample #: 005

SUMP 42 FLOOR 1 GRAB 05/21/98 @1308

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
LEAD	27.4	2.03	MG/KG DRY	SW-846 6010	5/22/98 14:20	RGM
MERCURY	<0.25	0.25	MG/KG DRY	SW-846 7471A	5/22/98 16:58	KAB
SELENIUM	<10.1	10.1	MG/KG DRY	SW-846 6010	5/22/98 14:20	RGM
SILVER	<1.02	1.02	MG/KG DRY	SW-846 6010	5/22/98 14:20	RGM

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: _____
R.I. Analytical

Sample #: 001
SAMPLE DESCRIPTION: SUMP 42 WALL 1 GRAB 05/21/98 @1328

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
TPH IR	<30	30	MG/KG DRY	EPA 418.1	5/22/98 16:32	JMG

Sample #: 002
SAMPLE DESCRIPTION: SUMP 42 WALL 2 GRAB 05/21/98 @1323

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
TPH IR	<28	28	MG/KG DRY	EPA 418.1	5/22/98 16:32	JMG

Sample #: 003
SAMPLE DESCRIPTION: SUMP 42 WALL 3 GRAB 05/21/98 @1330

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
TPH IR	<28	28	MG/KG DRY	EPA 418.1	5/22/98 16:32	JMG

Sample #: 004
SAMPLE DESCRIPTION: SUMP 42 WALL 4 GRAB 05/21/98 @1331

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
TPH IR	<30	30	MG/KG DRY	EPA 418.1	5/22/98 16:32	JMG

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 5/21/98
Work Order # 9805-03964

Approved by: _____
R.I. Analytical

Sample #: 005
SAMPLE DESCRIPTION: SUMP 42 FLOOR 1 GRAB 05/21/98 @1308

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
TPH IR	<28	28	MG/KG DRY	EPA 418.1	5/22/98 16:32	JMG

Appendix C

Sump 42-1 Liquid/Sludge Waste Profile and Disposal Documentation

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIALS
One Winter Street
Boston, Massachusetts 02108

GCC FILE # 10306

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator US EPA ID No. R I 1 1 7 0 0 2 4 2 4 3 — Manifest Document No. 50620

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
NETC NEWPORT PUBLIC WORK DEPT
X ~~NETC NEWPORT ENV DIV~~ ENV PROTECTION, DIV CODE 40E
1 SIMON PETRI DRIVE NEWPORT RI. 02841-1711

4. Generator's Phone ( ) 401-841-3735

A. State Manifest Document Number: MA K047704

B. State Gen. ID: SAME

5. Transporter 1 Company Name: GENERAL CHEMICAL CORPORATION

6. US EPA ID Number: M A D 0 1 9 3 7 1 0 7 9

C. State Trans. ID: 41617MA

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone: 508-872-5000

E. State Trans. ID

9. Designated Facility Name and Site Address
GENERAL CHEMICAL CORPORATION
133 LELAND STREET
FRAMINGHAM MA 01702

10. US EPA ID Number: M A D 0 1 9 3 7 1 0 7 9

F. Transporter's Phone ( )

G. State Facility's ID: Not Required

H. Facility's Phone: 508-872-5000

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
STATE REGULATED OIL WASTE	007	DM	00385	G	MA01 RD1D
b.					
c.					
d.					

I. Additional Descriptions for Materials Listed Above (Include physical state and hazard code.)
Auth. # VT0076909
a. b. c. d.

K. Handling Codes for Wastes Listed Above
a. S 1 0 1 b. c. d.

15. Special Handling Instructions and Additional Information
FOSTER WHEELER 401-842-6940

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

GENERATOR — Printed/Typed Name: JOB PALAYA — Signature: Job Palaya — Date: Month Day Year

TRANSPORTER — 17. Transporter 1 Acknowledgement of Receipt of Materials — Printed/Typed Name: DANA CALLAHAN — Signature: Dana Callahan — Date: Month Day Year 07 01 98

18. Transporter 2 Acknowledgement of Receipt of Materials — Printed/Typed Name — Signature — Date: Month Day Year

FACILITY — 19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name — Signature — Date: Month Day Year

In case of emergency or spill, immediately call the National Response Center (800) 424-8802.

MA K047704 COPY>1: FACILITY MAILS TO DESTINATION STATE

Form Approved OMB No. 2050-0039
EPA Form 8700-22 (Rev. 9-94) Previous editions are obsolete

COPY>1: FACILITY MAILS TO DESTINATION STATE

502/3

WASTE MATERIAL PROFILE SHEET

133-138 Leland St
Framingham, MA 01702
(508) 872-5000
(508) 875-5271 (Fax)

EMERG. RESP. # _____

APPROVAL CODE: VT _____

SALESMAN: Barbara

PLEASE ATTACH: All Material Safety Data Sheets (MSDS), Analysis Reports, Handling Precautions, Additional Hazard Information, Support Data & Comments.

Generator Name NETC

Facility Address Bldg 42

City, State, Zip Newport RI

Technical Contact Mark Rizzly (Name) (Title)

Area Code (401) Telephone # _____

Facility EPA ID # _____

Billing Address Foster Wheeler

PO Box 4749

City, State, Zip Middletown, RI 02842

Business Contact Jon Cory (Name) (Title)

Area Code (401) Telephone # 842-6940

Common Name of Waste water Petro distillate

EPA Haz. Waste Nos. MA01

Container Type: ☒ Drum ☐ Bulk ☐ Other _____

Rate of Generation: _____ (Quan) (Units) per (Time Interval)

Proper DOT Shipping Name: include RQ information

Add'l Desc. (_____)

Haz Class _____ UN/NA No. _____ PG _____

PROCESS GENERATING WASTE

Pump out Rain water from at Bldg 42 and Removing Rust Scale.

CHEMICAL COMPOSITION (Totals to 100 %)

water / Rust scale	98	%
oil	<2	%
		%
		%
		%
		%
		%
		%
		%
		%
		%

PHYSICAL DESCRIPTION

Physical State	☒ Liquid	☐ Semi Solid	☐ Solid
Viscosity	☐ Low	☐ Medium	☐ High
Liquid Layering	☐ None	☐ Bilayered	☐ Multilayered

Solids: Suspended 52 Sulfides(ppm) N/D

Free Liquid: 95 Flash (°F) >200

Odor mild Color ~~Brn~~ BROWN

Specific Gravity N/D pH 7

Cyanides (ppm) N/D PCB (ppm) N/D

ORGANICS (Mg/l or ppm) TCLP

Endrin	BRL	2,4-Dinitrotoluene	BRL
Lindane		Heptachlor	
Methoxychlor		Hexachlorobenzene	
Toxaphene		Hexachloro-1,3-butadiene	
2,4-D		Hexachloroethane	
2,4,5-TP (Silvex)		Methyl Ethyl Ketone	
Benzene		Nitrobenzene	
Carbon tetrachloride		Pentachlorophenol	
Chlordane		Pyridine	
Chlorobenzene		Tetrachloroethylene	
Chloroform		Trichloroethylene	
o-Cresol		2,4,5-Trichlorophenol	
m-Cresol		2,4,6-Trichlorophenol	
p-Cresol		Vinyl chloride	
Cresol		Mercaptans	
1,4-Dichlorobenzene		Phenol (ics)	
1,2-Dichloroethane		Other _____	
1,1-Dichloroethylene		Other _____	

Other Comments/Info _____

METALS (Mg/l or ppm)

(Check One) ☒ TCLP ☐ TOTAL

Arsenic (D004)	BRL	Selenium (D010)	BRL
Barium (D005)		Silver (D011)	
Cadmium (D006)		Copper	
Chromium (D007)		Nickel	
Lead (D008)		Zinc	
Mercury (D009)		Thallium	
Other _____		Other _____	

GCC USE ONLY

Approved for Acceptance Yes No

Description _____

GC Analysis _____

Flash _____ Halogens _____

CLASS IN _____

Lab Approval _____ ESM Approval _____

I hereby certify that I have personally examined and am familiar with the information submitted in this and all attached documents. I believe that the submitted information is true, accurate, and complete to the best of my knowledge.

Appendix D

Sump 42-1 Soil/Concrete Waste Profile and Disposal Documentation

CRAPO HILL LANDFILL
WASTE SHIPMENT PROFILE

300 Samuel Barnet Blvd. New Bedford, MA 02745
TEL. (508) 998-5674 FAX (508) 998-5676

Division of Solid Waste Management Permit #: 93637

INVOICE # _____

A. Waste Generator Information

Generator Name: Naval Education Training Center
Facility Address (site of waste generation): Bldg 42 Derecktors Shipyard
Generator City, State/Province Newport RI
Generator USEPA/Federal ID#: _____ Zip/Postal Code: 02841
Licensed Site Professional Contact (LSP): N/A State/Province ID#: _____
Regulatory Agency Approval Received: Yes ____ No ____ Permit Number _____ Phone: 401-842-6940 FAX: _____
Material Safety Data Sheet Provided: Yes ____ No X Declassified ____ Deregulated ____ Not Applicable ____ Designated MA99 X

Generator Certification

To the best of my knowledge, the information provided is accurate and the material is not classified as a hazardous waste in accordance with current regulations.

Authorized Representative
Signature: [signature]
Name: _____
Title: _____
Date: _____

B. Response Action Company:

Name: General Chemical Corp
Contact: Tim Burbank
Address: _____
Telephone: 508-872-5000
FAX: 508-875-5271

CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transportation by highway according to applicable international and government regulations.

Signature: [signature] Month/Day/Year: 8/31/98

DEP BILL OF LADING (pursuant to 310 CMR 40.0030) release tracking number: _____

C. Transporting Company

Name: GENERAL CHEMICAL CORP Telephone: 508 872-5000
Contact: Tim Burbank FAX: 508 875 5271
Address: _____

D. Material Information:

Waste Quantities: 15 Units: Cubic Yards
Frequency of Receipt: Daily ____ Weekly ____ Monthly ____ One Time X Other ____
Special handling instructions and additional information: None

Source: Demo of Bldg 42
Description: SOIL

E. Sampling Information

Sample Collector: Foster Wheeler ENV. Mark Gouveia
Sampling Method: 5 Grab Samples
Date of Collection: 5/21/98
Date of Analysis: 5/28/98

F: Comments: _____

Laboratory:

ug/L=ppb=ug/kg
mg/L=ppm=mg/kg

Metals	Analytical Result	Reuse Levels
Total Arsenic	22	40 ppm
Total Cadmium	2.31	80 ppm
Total Chromium	15.1	1000 ppm
Total Lead	22	2000 ppm
Total Mercury	ND	10 pppm

TPH	Analytical Result	Reuse Levels
Total		5000 ppm

Total PAHs (EPA=8100)	Analytical Result	Reuse Levels
Acenaphthene	ND	
Acenaphthylene		
Anthracene		
Benzo (a) Anthraesne		
Benzo (b) Fluoranthene		
Benzo (k) Fluoranthene		
Benzp (g,h,I)Perylene		
Benzo (a) Pyrene		
Chrysene		
Dibenzo (a,h) Anthracene		
Fluoranthene		
Fluorene		
indevb (1,2,3-CD) Pyrene		
Naphthalene		
Phenathrene		
Pyrene		
Total		100 ppm

Conductivity	Analytical Result	Reuse Levels
Conductivity		4000 umhos/cm

TCLP	Analytical Result	Reuse Levels
TCLP		None

Total PCBs (EPA=8080)	Analytical Result	Reuse Levels
Aroclor 1016	ND	
Aroclor 1221		
Aroclor 1232		
Aroclor 1242		
Aroclor 1248		
Aroclor 1254		
Aroclor 1260		
Total		0 ppm

Total VOCs (EPA=8240)	Analytical Result	Reuse Levels
Acetone	ND	
Acrolein		
Acrylonitrile		
Benzene		
Bromodichloramethane		
Bromaform		
Bromomethane		
2-Butanone (MEK)		
Carbon Disulfide		
Carbon tetrachloride		
Chlorebenzene		
Chlorcethane		
2-Chleroethyl vinyl ether		
Chloroform		
Chloromethane		
Dibromochloromethane		
Dibromomethane		
1,4-Dichloro-2-butene		
Dichlorodifluoromethane		
I,1-Dichloroethane		
I,2-Dichloroethane		
I,1-Dichloroethene		
trans-1,2-Dichloroethene		
1,2-Dichloropropane		
Total 1,3-Dichloropropene		
Ethanol		
Ethylbenzene		
Ethyl methacrylate		
2-Hexanone		
Iodomethane		
Methylene Chloride		
4-Methyl-2-pentanone		
Styrene		
1,1,2,2-Tetrachloroehtane		
Tetrachloroethene		
Toluene		
1,1,1-Trichloroethane		
1,1,2-Triehloroehtane		
Trichloroethene		
Trichlorofluoromethane		
1,2,3-Trichloroproppane		
Vinyl acetate		
Vinyl ehleride		
Total Xylenes		
Total:		10 ppm

Note: The parameters listed under Total VOCs may vary depending on test method.

Approval of Director of Operations:

Hank Van Laarhoven

DATE PROMISED: 9/28/98

DATE 9/24/98 SALESMAN 58

ORDER 11627 MANIFEST

GCC # GCC LANDBANS

CREDIT LANDBANS

LABELS

GENERAL CHEMICAL CORPORATION
WASTE PICKUP SHEET

PCBs 108

ORDER TAKEN BY TB

P.O. #

ACCOUNT # 9047-502

GENERATOR/SITE: Naval Education Training Center
Bldg 40 Dereckors Shipyard

CUSTOMER: Foster Wheeler

ADDRESS: Newport RI 02841

ADDRESS

EPA ID NUMBER

EPA ID NUMBER

CONTACT NAME: Mark Riellz PHONE: 401-841-3735

CONTACT NAME PHONE

ATTACHED PROFILES FOR SIGNATURE? NO ☒ YES ☐ HOW MANY?

Comments: Pick up Roll-off Bill of Lading on-site!
7:30 - 3:30 Landfill time

MANIFEST #	FACILITY	DRUM #	QTY	ITEM #/PRODUCT	WASTE CODES	APP CODE	INT CODE
B.O.L. GCC File number				NON-HAZ SOIL (soil)	MA99	365/	
				Crapo Hill Landfill 300 Samuel Barnet Blvd New Bedford MA 02745			
GCC File number							
GCC File number							
GCC File number							

ATTENTION: DRIVER	DATE
Start Time from Base	Site/Arrival Time
Site Departure Time	Time/Return to Base:
Actual Quantity:	Driver Initials

Damian Associates, L.L.C.

Sand - Gravel - Stone - Loam
Site Excavation
Heavy Equipment Rentals
Environmental Remediation
General Contractor

65 Norman Drive
Tiverton, RI 02878

Office: 401-624-3433 Cell: 401-924-4603/Pager: 401-969-1566/Fax: 401-624-4682

FWENC P.O.-5907 TASK 8

STRAIGHT BILL OF LADING — SHORT FORM — Original — Not Negotiable

Shipper's No.

NAME OF CARRIER: General Chemical Corp.

Carrier's No.

RECEIVED, subject to classifications and tariffs in effect on the date of the issue of this Bill of Lading,

at September 19 98 from Bldg. 42 Derecktor Shipyard

Consigned to Crapo Hill Landfill Greater New Bedford Regional Refuse Mngmnt District

(Mail or street address of consignee—For purposes of notification only.)

Destination 300 Samuel Barnet Blvd. State New Bedford, MA County

Route Delivery Address*

(*To be filled in only when shipper desires and governing tariffs provide for delivery thereat.)

Delivering Carrier Car or Vehicle Initials No.

No. Packages	KIND OF PACKAGES, DESCRIPTION OF ARTICLES SPECIAL MARKS AND EXCEPTIONS	*WEIGHT (Sub. to Correction)	CLASS OR RATE	CHECK COLUMN
1	30 yd. ROLLOFF # NVRU 200546			
	NON-HAZ SOIL DISPOSAL			

Subject to Section 7 of conditions, of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor.)

If charges are to be prepaid, write or stamp here, "To be prepaid."

Received $ to apply in prepayment of the charges on the property described hereon.

Agent or Cashier

Per

(The signature here acknowledges only the amount prepaid.)

Charges Advanced:

$

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is "carrier's or shipper's weight."

NOTE—Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding. per

† "The fibre containers used for this shipment conform to the specifications set forth in the box maker's certificate thereon, and all other requirements of Rule 41 of the Uniform Freight Classification and Rule 5 of the National Motor Freight Classification."

† Shipper's imprint in lieu of stamp, not a part of bill of lading approved by the Interstate Commerce Commission.

Shipper Per Paul Jamieson

Agent Per

Plate # 2097-MA Truck # 532061

Permanent post-office address of shipper

1

GREATER NEW BEDFORD REGIONAL REFUSE MANAGEMENT DISTRICT

300 SAMUEL BARNET BLVD., NEW BEDFORD, MA 02745 TEL: (508) 763-5924 FAX: (508) 763-8624

CRAPO HILL LANDFILL 78130

DATE: 09/29/98
TIME IN: 10:13
TIME OUT: 10:49
SCALE: 1

CARRIER: 259 DAMIAN ASSOCIATES,L.L.C.

CUSTOMER: 259 DAMIAN ASSOCIATES,L.L.C.

TRUCK: GENCHM TRAILER:

PRODUCT: 52 C.H.L.SPECIAL WASTE JOB: NETC NEWPORT

WGT IN GROSS: 61680 LBS

TARE: 43900 LBS PB

NET: 17780 LBS = 8.89 TONS @ PER TON

AMOUNT: $ DRIVER SIGNATURE

OFFICE COPY

Appendix E

Test Pit 14 Initial Post Excavation Sample Results Summary and Laboratory Data

FOSTER WHEELER ENVIRONMENTAL CORPORATION
U.S. NAVY NORTHERN DIVISION REMEDIAL ACTION CONTRACT (RAC)
CONTRACT N62472-94-D-0398 DELIVERY ORDER 13 AND 60

DERECKTOR SHIPYARD TEST PIT 14 PCB CONTAMINATED SOIL REMOVAL - INITIAL POST EXCAVATION SAMPLE RESULTS

RIDEM Direct Exposure Criteria --->	Residential	Commercial/ Industrial	TP14W-1	TP14W-2	TP14W-3	TP14W-4	TP14F-1	TP14MP-1	TP14MP-2	TP14MP-3	TP14MP-4
Volatile Organics											
Benzene	2.5	200.0	-	-	-	-	-	-	-	-	-
Bromodichloromethane	10.0	92.0	-	-	-	-	-	-	-	-	-
Bromoform	81.0	720.0	-	-	-	-	-	-	-	-	-
Bromomethane	0.8	2,900.0	+	+	+	+	+	+	+	+	+
Carbon tetrachloride	1.5	44.0	-	-	-	-	-	-	-	-	-
Chlorobenzene	210.0	10,000.0	-	-	-	-	-	-	-	-	-
Chloroform	1.2	940.0	-	-	-	-	-	-	-	-	-
Dibromochloromethane	7.6	68.0	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	920.0	10,000.0	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	0.9	63.0	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	0.2	9.5	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	630.0	10,000.0	-	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	1,100.0	10,000.0	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	1.9	84.0	-	-	-	-	-	-	-	-	-
Ethylbenzene	71.0	10,000.0	-	-	-	-	-	-	-	-	-
Isopropyl benzene	27.0	10,000.0	-	-	-	-	-	-	-	-	-
Methyl-tert-butyl-ether	390.0	10,000.0	-	-	-	-	-	-	-	-	-
Methylene chloride	45.0	760.0	-	-	-	-	-	-	-	-	-
Styrene	13.0	190.0	-	-	-	-	-	-	-	-	-
1,1,1,2 Tetrachloroethane	2.2	220.0	-	-	-	-	-	-	-	-	-
1,1,2,2 Tetrachloroethane	1.3	29.0	-	-	-	-	-	-	-	-	-
Toluene	190.0	10,000.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
1,1,1-Trichloroethane	540.0	10,000.0	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	3.6	100.0	-	-	-	-	-	-	-	-	-
Vinyl chloride	0.02	3.00	+	+	+	+	+	+	+	+	+
Total Xylenes	110.0	10,000.0	-	-	-	-	-	-	-	-	-
Semivolatiles											
Acenaphthene	43.0	10,000.0	-	-	-	-	-	-	-	-	-
Acenaphthylene	23.0	10,000.0	-	-	-	-	-	-	-	-	-
Anthracene	35.0	10,000.0	-	-	-	-	-	-	-	-	-
Benzo(a)anthracene	0.9	7.8	+	12.0	7.3	+	+	+	+	16.0	+
Benzo(a)pyrene	0.4	0.8	x	10.0	x	x	x	x	x	13.0	x
Benzo(b)fluoranthene	0.9	7.8	9.9	15.0	10.0	+	+	+	10.0	20.0	7.2
Benzo(g,h,I)perylene	0.8	10,000.0	+	+	+	+	+	+	+	+	+
Benzo(k)fluoranthene	0.9	78.0	+	8.2	+	+	+	+	+	8.8	+
Bis(2-ethylhexyl)phthalate	46.0	410.0	-	-	-	-	-	-	-	-	-
Bis(2-chloroethyl)ether	0.6	5.2	x	x	x	x	x	x	x	x	x
Bis(2-chloroisipropyl)ether	9.1	82.0	-	-	-	-	-	-	-	-	-
Chrysene	0.4	780.0	+	12.0	7.1	+	+	+	7.0	15.0	+
Dibenzo(a,h)anthracene	0.4	0.8	x	x	x	x	x	x	x	x	x
1,2-Dichlorobenzene	510.0	10,000.0	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	430.0	10,000.0	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	27.0	240.0	-	-	-	-	-	-	-	-	-
3,3-Dichlorobenzidine	1.4	13.0	+	+	+	+	+	+	+	+	+
Diethyl phthalate	340.0	10,000.0	-	-	-	-	-	-	-	-	-
2,4-Dimethyl phenol	1,400.0	10,000.0	-	-	-	-	-	-	-	-	-
Dimethyl phthalate	1,900.0	10,000.0	-	-	-	-	-	-	-	-	-
2,4-Dinitrophenol	160.0	4,100.0	-	-	-	-	-	-	-	-	-
2,4-Dinitrotoluene	0.9	8.4	+	+	+	+	+	+	+	+	+
Fluoranthene	20.0	10,000.0	12.0	26.0	17.0	-	-	7.1	14.0	34.0	12.0
Fluorene	28.0	10,000.0	-	-	-	-	-	-	-	-	-
Hexachlorobenzene	0.4	3.6	x	x	x	x	x	x	x	x	x
Hexachlorobutadiene	8.2	73.0	-	-	-	-	-	-	-	-	-
Hexachloroethane	46.0	410.0	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	0.9	7.8	+	+	+	+	+	+	+	+	+
Naphthalene	54.0	10,000.0	-	-	-	-	-	-	-	-	-
Pentachlorophenol	5.3	48.0	+	+	+	+	+	+	+	+	+
Phenanthrene	40.0	10,000.0	-	20.0	8.6	-	-	-	-	31.0	8.9
Phenol	6,000.0	10,000.0	-	-	-	-	-	-	-	-	-
Pyrene	13.0	10,000.0	10.0	22.0	14.0	-	-	-	13.0	28.0	9.3
1,2,4-Trichlorobenzene	96.0	10,000.0	-	-	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	58.0	520.0	-	-	-	-	-	-	-	-	-
Pesticides/PCBs											
Chlordane	0.5	4.4	x	-	-	-	-	-	-	-	-
Dieldrin	0.04	0.40	x	-	-	-	-	-	-	-	-
Polychlorinated biphenyls	10.0	10.0	1900.0	0.9	2000.0	12.0	37.0	23.0	27.0	20.0	2.8
Inorganics											
Arsenic	1.7	3.8	29.6	18.9	19.0	6.2	16.8	21.7	73.3	15.9	8.6
Barium	5,500.0	10,000.0	158.0	71.7	73.8	15.4	29.6	243.0	248.0	220.0	148.0
Cadmium	39.0	1,000.0	5.8	4.0	3.6	0.5	3.4	5.3	7.0	6.7	1.8
Chromium III	1,400.0	10,000.0	n	n	n	n	n	n	n	n	n
Chromium VI	390.0	10,000.0	n	n	n	n	n	n	n	n	n
Chromium (Total)	na	na	46.7	37.1	30.4	7.9	36.3	44.1	48.6	97.7	20.2
Lead	150.0	500.0	305.0	334.0	136.0	19.7	74.3	264.0	254.0	699.0	87.8
Mercury	23.0	610.0	-	-	-	-	-	-	-	-	-
Selenium	390.0	10,000.0	-	-	-	-	-	-	-	-	-
Silver	200.0	10,000.0	2.6	1.9	-	-	-	-	-	2.3	-
TPH (8015)	500.0	2,500.0	390	260	64	560	-	600	-	790	1100

= Exceeds RIDEM Residential Exposure Criteria

- = Non-Detect Result

+ = Non-Detect Result noting that the Lab Detection Limit was above the Residential DEC but below the Commercial/Industrial DEC

x = Non-Detect Result noting that the Lab Detection Limit was above the Residential DEC and the Commercial/Industrial DEC

n = Not Analyzed

na =Not Applicable

All results in mg/kg unless otherwise noted

Wh[illegible] Copy Original (Accompanies Samples) | Y[illegible]w Copy – Collector | Pink Copy – Custo[illegible]'s Copy

R. I. ANALYTICAL LABORATORIES, INC.

41 Illinois Avenue · Warwick, Rhode Island 02888
(401) 737-8500 Fax (401) 738-1970

Analysis Required

Date Collected	Time Collected	Sample ID	Sample Type	VOCs 8260	SVOCs 8270	TPH 8015	TPH 418.1	RCRA 8 Metals	PCB	Pesticides 8080	Remarks	Total # of Cont.
6/3/98	3:30pm	TP14W-1	Soil	X	X	X	X	X	X	X		4
	3:35pm	TP14W-2		X	X	X	X	X	X	X		4
	3:40pm	TP14W-3		X	X	X	X	X	X	X		4
	3:45pm	TP14W-4		X	X	X	X	X	X	X		4
	3:25pm	TP14E-1		X	X	X	X	X	X	X		4
	3:55pm	TP14MP-1		X	X	X	X	X	X	X		4
	4:00pm	TP14MP-2		X	X	X	X	X	X	X		4
	4:05pm	TP14MP-3		X	X	X	X	X	X	X		4
	4:12pm	TP14MP-4		X	X	X	X	X	X	X		4
											Total Numbers of Cont.	36

Company Name: FOSTER WHEELER TFS/BLDG #6 PCB
P.O. #
Address: 98 DEFENSE HWY
City / State / Zip: MIDDLETOWN RI 02842
Phone / Fax: 401-842-6940 / 401-842-6970
Contact: JON CARY

Collected by: Jon Cary

Turn Around Time: ☐ Normal ☑ Rush 48 HR TAT

Comments:

RIAL: 4290

☒ – Pick-Up Only
☐ – Sampled _____ Hours
☒ – Shipped on Ice

Relinquished by:	Date / Time	Received by:
JON CARY	6/3/96 4:20 PM	Bruce Cannel
Bruce Cannel	6/3/96 1745	J. [illegible]
Relinquished by:	Date / Time	Received by:

R.I. Analytical

Specialists in Environmental Services

RECEIVED JUN 1 6 1998

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Attn: Mr. Jon Carey
P.O. Box 4749
Middletown, RI 02842-0749

Date Received: 6/03/98
Date Reported: 6/11/98
P.O. #: 008810
Work Order #: 9806-04290

DESCRIPTION: BLDG #6 PCB (NINE SOIL SAMPLES)

Subject sample(s) has/have been analyzed by our laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies. The specific methodologies are listed in the methods column of the Certificate Of Analysis

If you have any questions regarding this work, or if we maybe of further assistance, please contact us.

Approved by:

James E. Mich
Vice President

Michael J. Hobin
Quality Control Coordinator

enc: Chain of Custody

41 Illinois Avenue, Warwick, RI 02888
Tel: (401) 737-8500 Fax: (401) 738-1970

950 Boylston Street, Unit 102, Newton Highlands, MA 02161
Tel: (617) 965-5133 Fax: (617) 965-5624

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 001
SAMPLE DESCRIPTION: TP14W-1 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
PCB						
Arochlor-1016	<5.0	5.0	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Arochlor-1221	<5.0	5.0	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Arochlor-1232	<5.0	5.0	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Arochlor-1242	<5.0	5.0	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Arochlor-1248	<5.0	5.0	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Arochlor-1254	<5.0	5.0	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Arochlor-1260	1900	5.0	mg/kg dry	SW-846 8080	6/06/98 5:05	BMS
OTAL METALS						
ARSENIC	29.6	6.58	MG/KG DRY	SW-846 6010	6/05/98 16:41	RGM
BARIUM	158	0.33	MG/KG DRY	SW-846 6010	6/05/98 16:41	RGM
CADMIUM	5.79	0.33	MG/KG DRY	SW-846 6010	6/05/98 16:41	RGM
CHROMIUM	46.7	1.97	MG/KG DRY	SW-846 6010	6/05/98 16:41	RGM
LEAD	305	2.63	MG/KG DRY	SW-846 6010	6/05/98 16:41	RGM
MERCURY	<0.25	0.25	MG/KG DRY	SW-846 7471A	6/05/98 15:00	CDM
SELENIUM	<13.2	13.2	MG/KG DRY	SW-846 6010	6/05/98 16:41	RGM
SILVER	2.63	1.32	MG/KG DRY	SW-846 6010	6/05/98 16:41	RGM
TPH GC						
C6-C9	<140	140	mg/kg/dry	SW846 8015B	6/06/98 21:44	JRN
C9-C24	560	47	mg/kg dry	SW846 8015B	6/06/98 21:44	JRN
C24-C36	260	230	mg/kg dry	SW846 8015B	6/06/98 21:44	JRN
Volatile Organic Compounds						
Benzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
Bromobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
Bromochloromethane	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 17:52	LGF
Bromodichloromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
Bromoform	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
Bromomethane	<1.0	1.0	MG/KG	SW-846 8260	6/05/98 17:52	LGF
n-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
sec-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
tert-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
Carbon Tetrachloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
Chlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
Chloroethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 17:52	LGF
Chloroform	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
Chloromethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 17:52	LGF

R.I. Analytical Laboratories, Inc.

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Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 001

TP14W-1 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
2-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
4-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
Dibromochloromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
1,2-Dibromo-3-Chloropropane	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 17:52	LGF
1,2-Dibromoethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
Dibromomethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
1,2-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
1,3-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
1,4-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
Dichlorodifluoromethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 17:52	LGF
1-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
1,2-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
1,1-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
cis-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
trans-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
1,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
1,3-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
2,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
1,1-Dichloropropene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
Ethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
Hexachlorobutadiene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
Isopropylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
p-Isopropyltoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
Methylene Chloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
Naphthalene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
n-Propylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
Styrene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
1,1,1,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
1,1,2,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
Tetrachloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
Toluene	0.3	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
1,2,3-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
1,2,4-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
1,1,1-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
1,1,2-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
Trichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
Trichlorofluoromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
1,2,3-Trichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
1,2,4-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
1,3,5-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: Michael J. Wu
R.I. Analytical

Sample #: 001

TP14W-1 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Vinyl Chloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
o-Xylene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
m&p-Xylene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 17:52	LGF
MTBE	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 17:52	LGF
SURROGATES				SW-846 8260	6/05/98 17:52	LGF
Dibromofluoromethane	105		80-120%	SW-846 8260	6/05/98 17:52	LGF
Toluene-d8	98		81-117%	SW-846 8260	6/05/98 17:52	LGF
4-Bromofluorobenzene	85		74-121%	SW-846 8260	6/05/98 17:52	LGF
SEMI-VOLATILE ORGANIC COMPOUNDS						
Acenaphthene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Acenaphthylene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Anthracene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzidine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzo(a)anthracene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzo(b)fluoranthene	9.9	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzo(k)fluoranthene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzo(g,h,i)perylene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzo(a)pyrene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Bis(2-chloroethyl)ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Bis(2-Chloroethoxy)methane	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
bis(2-chloroisopropyl)ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Bis(2-ethylhexyl)phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
4-Bromophenyl phenyl ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Butylbenzyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2-Chloronaphthalene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
4-Chlorophenyl phenyl ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Chrysene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Dibenzo(a,h)anthracene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
1,2-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
1,3-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
1,4-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
3,3'-Dichlorobenzidine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Diethyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Dimethyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,4-Dinitrotoluene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,6-Dinitrotoluene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Di-n-octyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
1,2-Diphenylhydrazine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Fluoranthene	12	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 001

TP14W-1 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Fluorene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Hexachlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Hexachlorobutadiene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Hexachlorocyclopentadiene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Hexachloroethane	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Indeno(1,2,3-cd)pyrene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Isophorone	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Naphthalene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Nitrobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
N-nitrosodimethylamine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
-nitrosodiphenylamine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
N-nitrosodi-n-propylamine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Phenanthrene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Pyrene	10	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
1,2,4-Trichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
4-Chloro-3-methylphenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2-Chlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,4-Dichlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,4-Dimethylphenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2-Methyl-4,6-dinitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,4-Dinitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2-Nitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
4-Nitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Pentachlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Phenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,4,6-Trichlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
SURROGATES			%	SW-846 8270	6/10/98 15:49	LGF
Phenol-d5	NA		24-113%	SW-846 8270	6/10/98 15:49	LGF
2-Fluorophenol	NA		25-121%	SW-846 8270	6/10/98 15:49	LGF
2,4,6-Tribromophenol	NA		19-122%	SW-846 8270	6/10/98 15:49	LGF
Nitrobenzene-d5	NA		23-120%	SW-846 8270	6/10/98 15:49	LGF
2-Fluorobiphenyl	NA		30-115%	SW-846 8270	6/10/98 15:49	LGF
P-Terphenyl-d14	NA		18-137%	SW-846 8270	6/10/98 15:49	LGF
PESTICIDES						
ldrin	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:09	BMS
lpha-BHC	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:09	BMS
Beta-BHC	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:09	BMS
Delta-BHC	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:09	BMS
Gamma-BHC	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:09	BMS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 001

TP14W-1 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Chlordane	<25	25	mg/kg dry	SW-846 8080	6/06/05 19:57	BMS
4-4'-DDD	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:09	BMS
4-4'-DDE	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:09	BMS
4-4'-DDT	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:09	BMS
Dieldrin	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:09	BMS
Endosulfan I	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:09	BMS
Endosulfan II	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:09	BMS
Endosulfan Sulfate	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:09	BMS
Endrin	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:09	BMS
Endrin Aldehyde	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:09	BMS
eptachlor	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:09	BMS
Heptachlor epoxide	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:09	BMS
Methoxychlor	<25	25	mg/kg dry	SW-846 8080	6/07/98 20:09	BMS
Toxaphene	<250	250	mg/kg dry	SW-846 8080	6/07/98 20:09	BMS

Increased detection limit due to sample matrix.

NA = Surrogate diluted outside calibration range.

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CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 002
SAMPLE DESCRIPTION: TP14W-2 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
PCB						
Arochlor-1016	<0.1	0.1	mg/kg dry	SW-846 8080	6/06/98 1:28	BMS
Arochlor-1221	<0.1	0.1	mg/kg dry	SW-846 8080	6/06/98 1:28	BMS
Arochlor-1232	<0.1	0.1	mg/kg dry	SW-846 8080	6/06/98 1:28	BMS
Arochlor-1242	<0.1	0.1	mg/kg dry	SW-846 8080	6/06/98 1:28	BMS
Arochlor-1248	<0.1	0.1	mg/kg dry	SW-846 8080	6/06/98 1:28	BMS
Arochlor-1254	<0.1	0.1	mg/kg dry	SW-846 8080	6/06/98 1:28	BMS
Arochlor-1260	0.9	0.1	mg/kg dry	SW-846 8080	6/06/98 1:28	BMS
OTAL METALS						
ARSENIC	18.9	6.29	MG/KG DRY	SW-846 6010	6/05/98 16:48	RGM
BARIUM	71.7	0.31	MG/KG DRY	SW-846 6010	6/05/98 16:48	RGM
CADMIUM	3.96	0.31	MG/KG DRY	SW-846 6010	6/05/98 16:48	RGM
CHROMIUM	37.1	1.89	MG/KG DRY	SW-846 6010	6/05/98 16:48	RGM
LEAD	334	2.52	MG/KG DRY	SW-846 6010	6/05/98 16:48	RGM
MERCURY	<0.25	0.25	MG/KG DRY	SW-846 7471A	6/05/98 15:00	CDM
SELENIUM	<12.6	12.6	MG/KG DRY	SW-846 6010	6/05/98 16:48	RGM
SILVER	1.89	1.26	MG/KG DRY	SW-846 6010	6/05/98 16:48	RGM
TPH GC						
C6-C9	<150	150	mg/kg/dry	SW846 8015B	6/06/98 22:25	JRN
C9-C24	170	51	mg/kg dry	SW846 8015B	6/06/98 22:25	JRN
C24-C36	300	200	mg/kg dry	SW846 8015B	6/06/98 22:25	JRN
Volatile Organic Compounds						
Benzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
Bromobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
Bromochloromethane	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 18:29	LGF
Bromodichloromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
Bromoform	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
Bromomethane	<1.0	1.0	MG/KG	SW-846 8260	6/05/98 18:29	LGF
n-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
sec-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
tert-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
arbon Tetrachloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
Chlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
Chloroethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 18:29	LGF
Chloroform	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
Chloromethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 18:29	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 002

TP14W-2 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
2-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
4-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
Dibromochloromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
1,2-Dibromo-3-Chloropropane	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 18:29	LGF
1,2-Dibromoethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
Dibromomethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
1,2-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
1,3-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
1,4-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
Dichlorodifluoromethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 18:29	LGF
1-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
1,2-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
1,1-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
cis-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
trans-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
1,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
1,3-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
2,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
1,1-Dichloropropene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
Ethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
Hexachlorobutadiene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
Isopropylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
p-Isopropyltoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
Methylene Chloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
Naphthalene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
n-Propylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
Styrene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
1,1,1,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
1,1,2,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
Tetrachloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
Toluene	0.3	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
1,2,3-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
1,2,4-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
1,1,1-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
1,1,2-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
Trichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
Trichlorofluoromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
1,2,3-Trichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
1,2,4-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
1,3,5-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 002

TP14W-2 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Vinyl Chloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
o-Xylene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
m&p-Xylene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 18:29	LGF
MTBE	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 18:29	LGF
SURROGATES				SW-846 8260	6/05/98 18:29	LGF
Dibromofluoromethane	104		80-120%	SW-846 8260	6/05/98 18:29	LGF
Toluene-d8	108		81-117%	SW-846 8260	6/05/98 18:29	LGF
4-Bromofluorobenzene	103		74-121%	SW-846 8260	6/05/98 18:29	LGF
SEMI-VOLATILE ORGANIC COMPOUNDS						
cenaphthene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Acenaphthylene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Anthracene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzidine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzo(a)anthracene	12	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzo(b)fluoranthene	15	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzo(k)fluoranthene	8.2	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzo(g,h,i)perylene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzo(a)pyrene	10	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Bis(2-chloroethyl)ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Bis(2-Chloroethoxy)methane	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
bis(2-chloroisopropyl)ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Bis(2-ethylhexyl)phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
4-Bromophenyl phenyl ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Butylbenzyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2-Chloronaphthalene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
4-Chlorophenyl phenyl ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Chrysene	12	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Dibenzo(a,h)anthracene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
1,2-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
1,3-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
1,4-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
3,3'-Dichlorobenzidine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Diethyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Dimethyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
\,4-Dinitrotoluene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,6-Dinitrotoluene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Di-n-octyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
1,2-Diphenylhydrazine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Fluoranthene	26	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: Michael J. [illegible]
R.I. Analytical

Sample #: 002

TP14W-2 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Fluorene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Hexachlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Hexachlorobutadiene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Hexachlorocyclopentadiene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Hexachloroethane	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Indeno(1,2,3-cd)pyrene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Isophorone	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Naphthalene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Nitrobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
N-nitrosodimethylamine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
-nitrosodiphenylamine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
N-nitrosodi-n-propylamine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Phenanthrene	20	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Pyrene	22	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
1,2,4-Trichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
4-Chloro-3-methylphenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2-Chlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,4-Dichlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,4-Dimethylphenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2-Methyl-4,6-dinitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,4-Dinitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2-Nitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
4-Nitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Pentachlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Phenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,4,6-Trichlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
SURROGATES			%	SW-846 8270	6/10/98 15:49	LGF
Phenol-d5	NA		24-113%	SW-846 8270	6/10/98 15:49	LGF
2-Fluorophenol	NA		25-121%	SW-846 8270	6/10/98 15:49	LGF
2,4,6-Tribromophenol	NA		19-122%	SW-846 8270	6/10/98 15:49	LGF
Nitrobenzene-d5	NA		23-120%	SW-846 8270	6/10/98 15:49	LGF
2-Fluorobiphenyl	NA		30-115%	SW-846 8270	6/10/98 15:49	LGF
P-Terphenyl-d14	NA		18-137%	SW-846 8270	6/10/98 15:49	LGF
PESTICIDES						
Aldrin	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/98 1:28	BMS
Alpha-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/98 1:28	BMS
Beta-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/98 1:28	BMS
Delta-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/98 1:28	BMS
Gamma-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/98 1:28	BMS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 002

TP14W-2 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME		ANALYST
Chlordane	<0.05	0.05	mg/kg dry	SW-846 8080	6/06/98	1:28	BMS
4-4'-DDD	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/98	1:28	BMS
4-4'-DDE	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/98	1:28	BMS
4-4'-DDT	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/98	1:28	BMS
Dieldrin	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/98	1:28	BMS
Endosulfan I	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/98	1:28	BMS
Endosulfan II	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/98	1:28	BMS
Endosulfan Sulfate	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/98	1:28	BMS
Endrin	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/98	1:28	BMS
Endrin Aldehyde	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/98	1:28	BMS
eptachlor	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/98	1:28	BMS
Heptachlor epoxide	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/98	1:28	BMS
Methoxychlor	<0.05	0.05	mg/kg dry	SW-846 8080	6/06/98	1:28	BMS
Toxaphene	<0.5	0.5	mg/kg dry	SW-846 8080	6/06/98	1:28	BMS

NA = Surrogate diluted outside calibration range

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: Michael J. Kelley
R.I. Analytical

Sample #: 003
SAMPLE DESCRIPTION: TP14W-3 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
PCB						
Arochlor-1016	<5.0	5.0	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Arochlor-1221	<5.0	5.0	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Arochlor-1232	<5.0	5.0	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Arochlor-1242	<5.0	5.0	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Arochlor-1248	<5.0	5.0	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Arochlor-1254	<5.0	5.0	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Arochlor-1260	2000	0.1	mg/kg dry	SW-846 8080	6/07/98 20:45	BMS
TOTAL METALS						
ARSENIC	19.0	5.95	MG/KG DRY	SW-846 6010	6/05/98 16:51	RGM
BARIUM	73.8	0.29	MG/KG DRY	SW-846 6010	6/05/98 16:51	RGM
CADMIUM	3.57	0.29	MG/KG DRY	SW-846 6010	6/05/98 16:51	RGM
CHROMIUM	30.4	1.78	MG/KG DRY	SW-846 6010	6/05/98 16:51	RGM
LEAD	136	2.38	MG/KG DRY	SW-846 6010	6/05/98 16:51	RGM
MERCURY	<0.25	0.25	MG/KG DRY	SW-846 7471A	6/05/98 15:00	CDM
SELENIUM	<11.9	11.9	MG/KG DRY	SW-846 6010	6/05/98 16:51	RGM
SILVER	<1.19	1.19	MG/KG DRY	SW-846 6010	6/05/98 16:51	RGM
TPH GC						
C6-C9	<150	150	mg/kg/dry	SW846 8015B	6/06/98 21:02	JRN
C9-C24	250	50	mg/kg dry	SW846 8015B	6/06/98 21:02	JRN
C24-C36	<250	250	mg/kg dry	SW846 8015B	6/06/98 21:02	JRN
Volatile Organic Compounds						
Benzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
Bromobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
Bromochloromethane	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 19:07	LGF
Bromodichloromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
Bromoform	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
Bromomethane	<1.0	1.0	MG/KG	SW-846 8260	6/05/98 19:07	LGF
n-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
sec-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
tert-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
Carbon Tetrachloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
Chlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
Chloroethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 19:07	LGF
Chloroform	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
Chloromethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 19:07	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 003

TP14W-3 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
2-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
4-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
Dibromochloromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
1,2-Dibromo-3-Chloropropane	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 19:07	LGF
1,2-Dibromoethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
Dibromomethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
1,2-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
1,3-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
1,4-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
Dichlorodifluoromethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 19:07	LGF
1-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
1,2-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
1,1-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
cis-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
trans-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
1,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
1,3-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
2,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
1,1-Dichloropropene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
Ethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
Hexachlorobutadiene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
Isopropylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
p-Isopropyltoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
Methylene Chloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
Naphthalene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
n-Propylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
Styrene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
1,1,1,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
1,1,2,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
Tetrachloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
Toluene	0.3	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
1,2,3-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
1,2,4-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
1,1,1-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
1,1,2-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
Trichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
Trichlorofluoromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
1,2,3-Trichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
1,2,4-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
1,3,5-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 003

TP14W-3 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Vinyl Chloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
o-Xylene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
m&p-Xylene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:07	LGF
MTBE	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 19:07	LGF
SURROGATES				SW-846 8260	6/05/98 19:07	LGF
Dibromofluoromethane	104		80-120%	SW-846 8260	6/05/98 19:07	LGF
Toluene-d8	105		81-117%	SW-846 8260	6/05/98 19:07	LGF
4-Bromofluorobenzene	93		74-121%	SW-846 8260	6/05/98 19:07	LGF
SEMI-VOLATILE ORGANIC COMPOUNDS						
Acenaphthene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Acenaphthylene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Anthracene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzidine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzo(a)anthracene	7.3	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzo(b)fluoranthene	10	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzo(k)fluoranthene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzo(g,h,i)perylene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzo(a)pyrene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Bis(2-chloroethyl)ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Bis(2-Chloroethoxy)methane	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
bis(2-chloroisopropyl)ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Bis(2-ethylhexyl)phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
4-Bromophenyl phenyl ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Butylbenzyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2-Chloronaphthalene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
4-Chlorophenyl phenyl ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Chrysene	7.1	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Dibenzo(a,h)anthracene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
1,2-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
1,3-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
1,4-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
3,3'-Dichlorobenzidine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Diethyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Dimethyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,4-Dinitrotoluene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,6-Dinitrotoluene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Di-n-octyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
1,2-Diphenylhydrazine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Fluoranthene	17	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 003

TP14W-3 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Fluorene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Hexachlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Hexachlorobutadiene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Hexachlorocyclopentadiene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Hexachloroethane	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Indeno(1,2,3-cd)pyrene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Isophorone	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Naphthalene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Nitrobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
N-nitrosodimethylamine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
.-nitrosodiphenylamine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
N-nitrosodi-n-propylamine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Phenanthrene	8.6	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Pyrene	14	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
1,2,4-Trichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
4-Chloro-3-methylphenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2-Chlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,4-Dichlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,4-Dimethylphenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2-Methyl-4,6-dinitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,4-Dinitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2-Nitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
4-Nitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Pentachlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Phenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,4,6-Trichlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
SURROGATES			%	SW-846 8270	6/10/98 15:49	LGF
Phenol-d5	NA		24-113%	SW-846 8270	6/10/98 15:49	LGF
2-Fluorophenol	NA		25-121%	SW-846 8270	6/10/98 15:49	LGF
2,4,6-Tribromophenol	NA		19-122%	SW-846 8270	6/10/98 15:49	LGF
Nitrobenzene-d5	NA		23-120%	SW-846 8270	6/10/98 15:49	LGF
2-Fluorobiphenyl	NA		30-115%	SW-846 8270	6/10/98 15:49	LGF
P-Terphenyl-d14	NA		18-137%	SW-846 8270	6/10/98 15:49	LGF
PESTICIDES						
\ldrin	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:45	BMS
Alpha-BHC	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:45	BMS
Beta-BHC	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:45	BMS
Delta-BHC	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:45	BMS
Gamma-BHC	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:45	BMS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 003

TP14W-3 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Chlordane	<25	25	mg/kg dry	SW-846 8080	6/06/05 19:57	BMS
4-4'-DDD	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:45	BMS
4-4'-DDE	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:45	BMS
4-4'-DDT	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:45	BMS
Dieldrin	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:45	BMS
Endosulfan I	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:45	BMS
Endosulfan II	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:45	BMS
Endosulfan Sulfate	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:45	BMS
Endrin	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:45	BMS
Endrin Aldehyde	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:45	BMS
Heptachlor	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:45	BMS
Heptachlor epoxide	<5.0	5.0	mg/kg dry	SW-846 8080	6/07/98 20:45	BMS
Methoxychlor	<25	25	mg/kg dry	SW-846 8080	6/07/98 20:45	BMS
Toxaphene	<250	250	mg/kg dry	SW-846 8080	6/07/98 20:45	BMS

Increased detection limit due to sample matrix.

NA = Surrogate diluted outside calibration range.

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 004
SAMPLE DESCRIPTION: TP14W-4 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
PCB						
Arochlor-1016	<0.1	0.1	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Arochlor-1221	<0.1	0.1	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Arochlor-1232	<0.1	0.1	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Arochlor-1242	<0.1	0.1	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Arochlor-1248	<0.1	0.1	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Arochlor-1254	<0.1	0.1	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Arochlor-1260	12	0.1	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
OTAL METALS						
ARSENIC	6.18	5.62	MG/KG DRY	SW-846 6010	6/05/98 16:54	RGM
BARIUM	15.4	0.28	MG/KG DRY	SW-846 6010	6/05/98 16:54	RGM
CADMIUM	0.50	0.28	MG/KG DRY	SW-846 6010	6/05/98 16:54	RGM
CHROMIUM	7.86	1.68	MG/KG DRY	SW-846 6010	6/05/98 16:54	RGM
LEAD	19.7	2.25	MG/KG DRY	SW-846 6010	6/05/98 16:54	RGM
MERCURY	<0.25	0.25	MG/KG DRY	SW-846 7471A	6/05/98 15:00	CDM
SELENIUM	<11.2	11.2	MG/KG DRY	SW-846 6010	6/05/98 16:54	RGM
SILVER	<1.12	1.12	MG/KG DRY	SW-846 6010	6/05/98 16:54	RGM
TPH GC						
C6-C9	<130	130	mg/kg/dry	SW846 8015B	6/06/98 18:16	JRN
C9-C24	5300	45	mg/kg dry	SW846 8015B	6/06/98 18:16	JRN
C24-C36	<220	220	mg/kg dry	SW846 8015B	6/06/98 18:16	JRN
Volatile Organic Compounds						
Benzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
Bromobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
Bromochloromethane	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 19:45	LGF
Bromodichloromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
Bromoform	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
Bromomethane	<1.0	1.0	MG/KG	SW-846 8260	6/05/98 19:45	LGF
n-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
sec-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
tert-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
Carbon Tetrachloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
Chlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
Chloroethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 19:45	LGF
Chloroform	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
Chloromethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 19:45	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 004

TP14W-4 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
2-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
4-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
Dibromochloromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
1,2-Dibromo-3-Chloropropane	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 19:45	LGF
1,2-Dibromoethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
Dibromomethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
1,2-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
1,3-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
1,4-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
Dichlorodifluoromethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 19:45	LGF
1-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
1,2-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
1,1-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
cis-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
trans-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
1,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
1,3-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
2,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
1,1-Dichloropropene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
Ethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
Hexachlorobutadiene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
Isopropylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
p-Isopropyltoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
Methylene Chloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
Naphthalene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
n-Propylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
Styrene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
1,1,1,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
1,1,2,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
Tetrachloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
Toluene	0.3	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
1,2,3-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
1,2,4-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
1,1,1-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
1,1,2-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
Trichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
Trichlorofluoromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
1,2,3-Trichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
1,2,4-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
1,3,5-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: Michael J. Pelini
R.I. Analytical

Sample #: 004

TP14W-4 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Vinyl Chloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
o-Xylene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
m&p-Xylene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 19:45	LGF
MTBE	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 19:45	LGF
SURROGATES				SW-846 8260	6/05/98 19:45	LGF
Dibromofluoromethane	108		80-120%	SW-846 8260	6/05/98 19:45	LGF
Toluene-d8	89		81-117%	SW-846 8260	6/05/98 19:45	LGF
4-Bromofluorobenzene	112		74-121%	SW-846 8260	6/05/98 19:45	LGF
SEMI-VOLATILE ORGANIC COMPOUNDS						
cenaphthene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Acenaphthylene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Anthracene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzidine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzo(a)anthracene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzo(b)fluoranthene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzo(k)fluoranthene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzo(g,h,i)perylene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzo(a)pyrene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Bis(2-chloroethyl)ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Bis(2-Chloroethoxy)methane	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
bis(2-chloroisopropyl)ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Bis(2-ethylhexyl)phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
4-Bromophenyl phenyl ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Butylbenzyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2-Chloronaphthalene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
4-Chlorophenyl phenyl ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Chrysene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Dibenzo(a,h)anthracene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
1,2-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
1,3-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
1,4-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
3,3'-Dichlorobenzidine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Diethyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Dimethyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
,4-Dinitrotoluene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,6-Dinitrotoluene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Di-n-octyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
1,2-Diphenylhydrazine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Fluoranthene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 004

TP14W-4 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Fluorene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Hexachlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Hexachlorobutadiene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Hexachlorocyclopentadiene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Hexachloroethane	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Indeno(1,2,3-cd)pyrene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Isophorone	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Naphthalene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Nitrobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
N-nitrosodimethylamine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
N-nitrosodiphenylamine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
N-nitrosodi-n-propylamine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Phenanthrene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Pyrene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
1,2,4-Trichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
4-Chloro-3-methylphenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2-Chlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,4-Dichlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,4-Dimethylphenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2-Methyl-4,6-dinitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,4-Dinitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2-Nitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
4-Nitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Pentachlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Phenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,4,6-Trichlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
SURROGATES			%	SW-846 8270	6/10/98 15:49	LGF
Phenol-d5	NA		24-113%	SW-846 8270	6/10/98 15:49	LGF
2-Fluorophenol	NA		25-121%	SW-846 8270	6/10/98 15:49	LGF
2,4,6-Tribromophenol	NA		19-122%	SW-846 8270	6/10/98 15:49	LGF
Nitrobenzene-d5	NA		23-120%	SW-846 8270	6/10/98 15:49	LGF
2-Fluorobiphenyl	NA		30-115%	SW-846 8270	6/10/98 15:49	LGF
P-Terphenyl-d14	NA		18-137%	SW-846 8270	6/10/98 15:49	LGF
PESTICIDES						
Aldrin	<0.01	0.01	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Alpha-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Beta-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Delta-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Gamma-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 004

TP14W-4 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Chlordane	<0.05	0.05	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
4-4'-DDD	<0.01	0.01	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
4-4'-DDE	<0.01	0.01	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
4-4'-DDT	<0.01	0.01	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Dieldrin	<0.01	0.01	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Endosulfan I	<0.01	0.01	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Endosulfan II	<0.01	0.01	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Endosulfan Sulfate	<0.01	0.01	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Endrin	<0.01	0.01	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Endrin Aldehyde	<0.01	0.01	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Heptachlor	<0.01	0.01	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Heptachlor epoxide	<0.01	0.01	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Methoxychlor	<0.05	0.05	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Toxaphene	<0.5	0.5	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS

NA = Surrogate diluted outside calibration range.

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 005
SAMPLE DESCRIPTION: TP14F-1 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
PCB						
Arochlor-1016	<0.1	0.1	mg/kg dry	SW-846 8080	6/07/98 18:57	BMS
Arochlor-1221	<0.1	0.1	mg/kg dry	SW-846 8080	6/07/98 18:57	BMS
Arochlor-1232	<0.1	0.1	mg/kg dry	SW-846 8080	6/07/98 18:57	BMS
Arochlor-1242	<0.1	0.1	mg/kg dry	SW-846 8080	6/07/98 18:57	BMS
Arochlor-1248	<0.1	0.1	mg/kg dry	SW-846 8080	6/07/98 18:57	BMS
Arochlor-1254	<0.1	0.1	mg/kg dry	SW-846 8080	6/07/98 18:57	BMS
Arochlor-1260	37	0.1	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
TOTAL METALS						
ARSENIC	16.8	5.58	MG/KG DRY	SW-846 6010	6/05/98 16:58	RGM
BARIUM	29.6	0.28	MG/KG DRY	SW-846 6010	6/05/98 16:58	RGM
CADMIUM	3.35	0.28	MG/KG DRY	SW-846 6010	6/05/98 16:58	RGM
CHROMIUM	36.3	1.68	MG/KG DRY	SW-846 6010	6/05/98 16:58	RGM
LEAD	74.3	2.23	MG/KG DRY	SW-846 6010	6/05/98 16:58	RGM
MERCURY	<0.25	0.25	MG/KG DRY	SW-846 7471A	6/05/98 15:00	CDM
SELENIUM	<11.2	11.2	MG/KG DRY	SW-846 6010	6/05/98 16:58	RGM
SILVER	<1.12	1.12	MG/KG DRY	SW-846 6010	6/05/98 16:58	RGM
TPH GC						
C6-C9	<140	140	mg/kg/dry	SW846 8015B	6/06/98 18:51	JRN
C9-C24	240	45	mg/kg dry	SW846 8015B	6/06/98 18:51	JRN
C24-C36	<230	230	mg/kg dry	SW846 8015B	6/06/98 18:51	JRN
Volatile Organic Compounds						
Benzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
Bromobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
Bromochloromethane	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 20:23	LGF
Bromodichloromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
Bromoform	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
Bromomethane	<1.0	1.0	MG/KG	SW-846 8260	6/05/98 20:23	LGF
n-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
sec-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
tert-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
Carbon Tetrachloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
Chlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
Chloroethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 20:23	LGF
Chloroform	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
Chloromethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 20:23	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 005

TP14F-1 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
2-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
4-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
Dibromochloromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
1,2-Dibromo-3-Chloropropane	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 20:23	LGF
1,2-Dibromoethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
Dibromomethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
1,2-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
1,3-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
1,4-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
Dichlorodifluoromethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 20:23	LGF
1,1-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
1,2-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
1,1-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
cis-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
trans-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
1,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
1,3-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
2,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
1,1-Dichloropropene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
Ethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
Hexachlorobutadiene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
Isopropylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
p-Isopropyltoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
Methylene Chloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
Naphthalene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
n-Propylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
Styrene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
1,1,1,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
1,1,2,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
Tetrachloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
Toluene	0.3	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
1,2,3-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
1,2,4-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
1,1,1-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
1,1,2-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
Trichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
Trichlorofluoromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
1,2,3-Trichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
1,2,4-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
1,3,5-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 005

TP14F-1 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Vinyl Chloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
o-Xylene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
m&p-Xylene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 20:23	LGF
MTBE	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 20:23	LGF
SURROGATES				SW-846 8260	6/05/98 20:23	LGF
Dibromofluoromethane	97		80-120%	SW-846 8260	6/05/98 20:23	LGF
Toluene-d8	96		81-117%	SW-846 8260	6/05/98 20:23	LGF
4-Bromofluorobenzene	97		74-121%	SW-846 8260	6/05/98 20:23	LGF
SEMI-VOLATILE ORGANIC COMPOUNDS						
Acenaphthene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Acenaphthylene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Anthracene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzidine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzo(a)anthracene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzo(b)fluoranthene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzo(k)fluoranthene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzo(g,h,i)perylene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Benzo(a)pyrene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Bis(2-chloroethyl)ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Bis(2-Chloroethoxy)methane	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
bis(2-chloroisopropyl)ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Bis(2-ethylhexyl)phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
4-Bromophenyl phenyl ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Butylbenzyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2-Chloronaphthalene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
4-Chlorophenyl phenyl ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Chrysene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Dibenzo(a,h)anthracene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
1,2-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
1,3-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
1,4-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
3,3'-Dichlorobenzidine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Diethyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Dimethyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,4-Dinitrotoluene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,6-Dinitrotoluene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Di-n-octyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
1,2-Diphenylhydrazine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Fluoranthene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 005

TP14F-1 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Fluorene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Hexachlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Hexachlorobutadiene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Hexachlorocyclopentadiene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Hexachloroethane	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Indeno(1,2,3-cd)pyrene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Isophorone	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Naphthalene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Nitrobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
N-nitrosodimethylamine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
N-nitrosodiphenylamine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
N-nitrosodi-n-propylamine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Phenanthrene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Pyrene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
1,2,4-Trichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
4-Chloro-3-methylphenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2-Chlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,4-Dichlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,4-Dimethylphenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2-Methyl-4,6-dinitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,4-Dinitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2-Nitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
4-Nitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Pentachlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
Phenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
2,4,6-Trichlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:49	LGF
SURROGATES			%	SW-846 8270	6/10/98 15:49	LGF
Phenol-d5	NA		24-113%	SW-846 8270	6/10/98 15:49	LGF
2-Fluorophenol	NA		25-121%	SW-846 8270	6/10/98 15:49	LGF
2,4,6-Tribromophenol	NA		19-122%	SW-846 8270	6/10/98 15:49	LGF
Nitrobenzene-d5	NA		23-120%	SW-846 8270	6/10/98 15:49	LGF
2-Fluorobiphenyl	NA		30-115%	SW-846 8270	6/10/98 15:49	LGF
P-Terphenyl-d14	NA		18-137%	SW-846 8270	6/10/98 15:49	LGF
PESTICIDES						
Aldrin	<0.01	0.01	mg/kg dry	SW-846 8080	6/08/98 9:04	BMS
Alpha-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 18:57	BMS
Beta-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 18:57	BMS
Delta-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 18:57	BMS
Gamma-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 18:57	BMS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 005

TP14F-1 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Chlordane	<0.05	0.05	mg/kg dry	SW-846 8080	6/07/98 18:57	BMS
4-4'-DDD	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 18:57	BMS
4-4'-DDE	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 18:57	BMS
4-4'-DDT	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 18:57	BMS
Dieldrin	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 18:57	BMS
Endosulfan I	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 18:57	BMS
Endosulfan II	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 18:57	BMS
Endosulfan Sulfate	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 18:57	BMS
Endrin	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 18:57	BMS
Endrin Aldehyde	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 18:57	BMS
Heptachlor	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 18:57	BMS
Heptachlor epoxide	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 18:57	BMS
Methoxychlor	<0.05	0.05	mg/kg dry	SW-846 8080	6/07/98 18:57	BMS
Toxaphene	<0.5	0.5	mg/kg dry	SW-846 8080	6/07/98 18:57	BMS

NA= Surrogate diluted outside calibration range

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 006
SAMPLE DESCRIPTION: TP14MP-1 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
PCB						
Arochlor-1016	<0.1	0.1	mg/kg dry	SW-846 8080	6/07/98 21:21	BMS
Arochlor-1221	<0.1	0.1	mg/kg dry	SW-846 8080	6/07/98 21:21	BMS
Arochlor-1232	<0.1	0.1	mg/kg dry	SW-846 8080	6/07/98 21:21	BMS
Arochlor-1242	<0.1	0.1	mg/kg dry	SW-846 8080	6/07/98 21:21	BMS
Arochlor-1248	<0.1	0.1	mg/kg dry	SW-846 8080	6/07/98 21:21	BMS
Arochlor-1254	<0.1	0.1	mg/kg dry	SW-846 8080	6/07/98 21:21	BMS
Arochlor-1260	23	0.1	mg/kg dry	SW-846 8080	6/07/98 21:21	BMS
TOTAL METALS						
ARSENIC	21.7	6.21	MG/KG DRY	SW-846 6010	6/05/98 17:01	RGM
BARIUM	243	0.31	MG/KG DRY	SW-846 6010	6/05/98 17:01	RGM
CADMIUM	5.34	0.31	MG/KG DRY	SW-846 6010	6/05/98 17:01	RGM
CHROMIUM	44.1	1.86	MG/KG DRY	SW-846 6010	6/05/98 17:01	RGM
LEAD	264	2.48	MG/KG DRY	SW-846 6010	6/05/98 17:01	RGM
MERCURY	<0.25	0.25	MG/KG DRY	SW-846 7471A	6/05/98 15:00	CDM
SELENIUM	<12.4	12.4	MG/KG DRY	SW-846 6010	6/05/98 17:01	RGM
SILVER	<1.24	1.24	MG/KG DRY	SW-846 6010	6/05/98 17:01	RGM
TPH GC						
C6-C9	<150	150	mg/kg/dry	SW846 8015B	6/06/98 19:39	JRN
C9-C24	70	49	mg/kg dry	SW846 8015B	6/06/98 19:39	JRN
C24-C36	<250	250	mg/kg dry	SW846 8015B	6/06/98 19:39	JRN
Volatile Organic Compounds						
Benzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
Bromobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
Bromochloromethane	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 21:00	LGF
Bromodichloromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
Bromoform	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
Bromomethane	<1.0	1.0	MG/KG	SW-846 8260	6/05/98 21:00	LGF
n-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
sec-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
tert-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
Carbon Tetrachloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
Chlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
Chloroethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 21:00	LGF
Chloroform	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
Chloromethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 21:00	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 006

TP14MP-1 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
2-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
4-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
Dibromochloromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
1,2-Dibromo-3-Chloropropane	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 21:00	LGF
1,2-Dibromoethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
Dibromomethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
1,2-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
1,3-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
1,4-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
Dichlorodifluoromethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 21:00	LGF
1,1-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
1,2-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
1,1-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
cis-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
trans-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
1,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
1,3-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
2,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
1,1-Dichloropropene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
Ethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
Hexachlorobutadiene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
Isopropylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
p-Isopropyltoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
Methylene Chloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
Naphthalene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
n-Propylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
Styrene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
1,1,1,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
1,1,2,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
Tetrachloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
Toluene	0.3	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
1,2,3-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
1,2,4-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
1,1,1-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
1,1,2-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
Trichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
Trichlorofluoromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
1,2,3-Trichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
1,2,4-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
1,3,5-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 006

TP14MP-1 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Vinyl Chloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
o-Xylene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
m&p-Xylene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:00	LGF
MTBE	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 21:00	LGF
SURROGATES				SW-846 8260	6/05/98 21:00	LGF
Dibromofluoromethane	104		80-120%	SW-846 8260	6/05/98 21:00	LGF
Toluene-d8	88		81-117%	SW-846 8260	6/05/98 21:00	LGF
4-Bromofluorobenzene	107		74-121%	SW-846 8260	6/05/98 21:00	LGF
SEMI-VOLATILE ORGANIC COMPOUNDS						
Acenaphthene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Acenaphthylene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Anthracene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Benzidine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Benzo(a)anthracene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Benzo(b)fluoranthene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Benzo(k)fluoranthene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Benzo(g,h,i)perylene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Benzo(a)pyrene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Bis(2-chloroethyl)ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Bis(2-Chloroethoxy)methane	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
bis(2-chloroisopropyl)ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Bis(2-ethylhexyl)phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
4-Bromophenyl phenyl ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Butylbenzyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2-Chloronaphthalene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
4-Chlorophenyl phenyl ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Chrysene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Dibenzo(a,h)anthracene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
1,2-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
1,3-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
1,4-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
3,3'-Dichlorobenzidine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Diethyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Dimethyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2,4-Dinitrotoluene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2,6-Dinitrotoluene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Di-n-octyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
1,2-Diphenylhydrazine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Fluoranthene	7.1	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 006

TP14MP-1 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Fluorene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Hexachlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Hexachlorobutadiene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Hexachlorocyclopentadiene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Hexachloroethane	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Indeno(1,2,3-cd)pyrene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Isophorone	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Naphthalene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Nitrobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
N-nitrosodimethylamine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
N-nitrosodiphenylamine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
N-nitrosodi-n-propylamine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Phenanthrene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Pyrene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
1,2,4-Trichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
4-Chloro-3-methylphenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2-Chlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2,4-Dichlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2,4-Dimethylphenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2-Methyl-4,6-dinitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2,4-Dinitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2-Nitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
4-Nitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Pentachlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Phenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2,4,6-Trichlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
SURROGATES			%	SW-846 8270	6/10/98 15:56	LGF
Phenol-d5	NA		24-113%	SW-846 8270	6/10/98 15:56	LGF
2-Fluorophenol	NA		25-121%	SW-846 8270	6/10/98 15:56	LGF
2,4,6-Tribromophenol	NA		19-122%	SW-846 8270	6/10/98 15:56	LGF
Nitrobenzene-d5	NA		23-120%	SW-846 8270	6/10/98 15:56	LGF
2-Fluorobiphenyl	NA		30-115%	SW-846 8270	6/10/98 15:56	LGF
P-Terphenyl-d14	NA		18-137%	SW-846 8270	6/10/98 15:56	LGF
PESTICIDES						
Aldrin	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 21:21	BMS
Alpha-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 21:21	BMS
Beta-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 21:21	BMS
Delta-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 21:21	BMS
Gamma-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 21:21	BMS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 006

TP14MP-1 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Chlordane	<0.05	0.05	mg/kg dry	SW-846 8080	6/07/98 21:21	BMS
4-4'-DDD	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 21:21	BMS
4-4'-DDE	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 21:21	BMS
4-4'-DDT	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 21:21	BMS
Dieldrin	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 21:21	BMS
Endosulfan I	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 21:21	BMS
Endosulfan II	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 21:21	BMS
Endosulfan Sulfate	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 21:21	BMS
Endrin	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 21:21	BMS
Endrin Aldehyde	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 21:21	BMS
Heptachlor	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 21:21	BMS
Heptachlor epoxide	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 21:21	BMS
Methoxychlor	<0.05	0.05	mg/kg dry	SW-846 8080	6/07/98 21:21	BMS
Toxaphene	<0.5	0.5	mg/kg dry	SW-846 8080	6/07/98 21:21	BMS

NA= Surrogate diluted outside calibration range.

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: Michael J. Pellerin
R.I. Analytical

Sample #: 007
SAMPLE DESCRIPTION: TP14MP-2 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
PCB						
Arochlor-1016	<0.1	0.1	mg/kg dry	SW-846 8080	6/07/98 19:33	BMS
Arochlor-1221	<0.1	0.1	mg/kg dry	SW-846 8080	6/07/98 19:33	BMS
Arochlor-1232	<0.1	0.1	mg/kg dry	SW-846 8080	6/07/98 19:33	BMS
Arochlor-1242	<0.1	0.1	mg/kg dry	SW-846 8080	6/07/98 19:33	BMS
Arochlor-1248	<0.1	0.1	mg/kg dry	SW-846 8080	6/07/98 19:33	BMS
Arochlor-1254	<0.1	0.1	mg/kg dry	SW-846 8080	6/07/98 19:33	BMS
Arochlor-1260	27	0.1	mg/kg dry	SW-846 8080	6/07/98 19:33	BMS
TOTAL METALS						
ARSENIC	73.3	9.52	MG/KG DRY	SW-846 6010	6/05/98 17:05	RGM
BARIUM	248	0.48	MG/KG DRY	SW-846 6010	6/05/98 17:05	RGM
CADMIUM	6.95	0.48	MG/KG DRY	SW-846 6010	6/05/98 17:05	RGM
CHROMIUM	48.6	2.86	MG/KG DRY	SW-846 6010	6/05/98 17:05	RGM
LEAD	254	3.81	MG/KG DRY	SW-846 6010	6/05/98 17:05	RGM
MERCURY	<0.25	0.25	MG/KG DRY	SW-846 7471A	6/05/98 15:00	CDM
SELENIUM	<19.0	19.0	MG/KG DRY	SW-846 6010	6/05/98 17:05	RGM
SILVER	<1.90	1.90	MG/KG DRY	SW-846 6010	6/05/98 17:05	RGM
TPH GC						
C6-C9	<80	80	mg/kg/dry	SW846 8015B	6/06/98 23:07	JRN
C9-C24	280	240	mg/kg dry	SW846 8015B	6/06/98 23:07	JRN
C24-C36	580	400	mg/kg dry	SW846 8015B	6/06/98 23:07	JRN
Volatile Organic Compounds						
Benzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
Bromobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
Bromochloromethane	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 21:38	LGF
Bromodichloromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
Bromoform	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
Bromomethane	<1.0	1.0	MG/KG	SW-846 8260	6/05/98 21:38	LGF
n-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
sec-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
tert-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
Carbon Tetrachloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
Chlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
Chloroethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 21:38	LGF
Chloroform	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
Chloromethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 21:38	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 007

TP14MP-2 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
2-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
4-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
Dibromochloromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
1,2-Dibromo-3-Chloropropane	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 21:38	LGF
1,2-Dibromoethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
Dibromomethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
1,2-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
1,3-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
1,4-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
Dichlorodifluoromethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 21:38	LGF
1,1-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
1,2-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
1,1-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
cis-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
trans-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
1,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
1,3-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
2,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
1,1-Dichloropropene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
Ethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
Hexachlorobutadiene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
Isopropylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
p-Isopropyltoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
Methylene Chloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
Naphthalene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
n-Propylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
Styrene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
1,1,1,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
1,1,2,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
Tetrachloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
Toluene	0.3	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
1,2,3-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
1,2,4-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
1,1,1-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
1,1,2-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
Trichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
Trichlorofluoromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
1,2,3-Trichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
1,2,4-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
1,3,5-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 007

TP14MP-2 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Vinyl Chloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
o-Xylene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
m&p-Xylene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 21:38	LGF
MTBE	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 21:38	LGF
SURROGATES				SW-846 8260	6/05/98 21:38	LGF
Dibromofluoromethane	107		80-120%	SW-846 8260	6/05/98 21:38	LGF
Toluene-d8	109		81-117%	SW-846 8260	6/05/98 21:38	LGF
4-Bromofluorobenzene	97		74-121%	SW-846 8260	6/05/98 21:38	LGF
SEMI-VOLATILE ORGANIC COMPOUNDS						
Acenaphthene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Acenaphthylene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Anthracene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Benzidine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Benzo(a)anthracene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Benzo(b)fluoranthene	10	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Benzo(k)fluoranthene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Benzo(g,h,i)perylene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Benzo(a)pyrene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Bis(2-chloroethyl)ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Bis(2-Chloroethoxy)methane	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
bis(2-chloroisopropyl)ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Bis(2-ethylhexyl)phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
4-Bromophenyl phenyl ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Butylbenzyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2-Chloronaphthalene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
4-Chlorophenyl phenyl ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Chrysene	7.0	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Dibenzo(a,h)anthracene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
1,2-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
1,3-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
1,4-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
3,3'-Dichlorobenzidine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Diethyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Dimethyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2,4-Dinitrotoluene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2,6-Dinitrotoluene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Di-n-octyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
1,2-Diphenylhydrazine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Fluoranthene	14	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 007

TP14MP-2 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Fluorene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Hexachlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Hexachlorobutadiene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Hexachlorocyclopentadiene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Hexachloroethane	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Indeno(1,2,3-cd)pyrene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Isophorone	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Naphthalene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Nitrobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
N-nitrosodimethylamine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
N-nitrosodiphenylamine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
N-nitrosodi-n-propylamine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Phenanthrene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Pyrene	13	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
1,2,4-Trichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
4-Chloro-3-methylphenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2-Chlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2,4-Dichlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2,4-Dimethylphenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2-Methyl-4,6-dinitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2,4-Dinitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2-Nitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
4-Nitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Pentachlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Phenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2,4,6-Trichlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
SURROGATES			%	SW-846 8270	6/10/98 15:56	LGF
Phenol-d5	NA		24-113%	SW-846 8270	6/10/98 15:56	LGF
2-Fluorophenol	NA		25-121%	SW-846 8270	6/10/98 15:56	LGF
2,4,6-Tribromophenol	NA		19-122%	SW-846 8270	6/10/98 15:56	LGF
Nitrobenzene-d5	NA		23-120%	SW-846 8270	6/10/98 15:56	LGF
2-Fluorobiphenyl	NA		30-115%	SW-846 8270	6/10/98 15:56	LGF
P-Terphenyl-d14	NA		18-137%	SW-846 8270	6/10/98 15:56	LGF
PESTICIDES						
Aldrin	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:33	BMS
Alpha-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:33	BMS
Beta-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:33	BMS
Delta-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:33	BMS
Gamma-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:33	BMS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 007

TP14MP-2 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Chlordane	<0.05	0.05	mg/kg dry	SW-846 8080	6/07/98 19:33	BMS
4-4'-DDD	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:33	BMS
4-4'-DDE	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:33	BMS
4-4'-DDT	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:33	BMS
Dieldrin	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:33	BMS
Endosulfan I	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:33	BMS
Endosulfan II	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:33	BMS
Endosulfan Sulfate	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:33	BMS
Endrin	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:33	BMS
Endrin Aldehyde	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:33	BMS
Heptachlor	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:33	BMS
Heptachlor epoxide	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:33	BMS
Methoxychlor	<0.05	0.05	mg/kg dry	SW-846 8080	6/07/98 19:33	BMS
Toxaphene	<0.5	0.5	mg/kg dry	SW-846 8080	6/07/98 19:33	BMS

NA=Surrogate diluted outside calibration range

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 008
SAMPLE DESCRIPTION: TP14MP-3 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
PCB						
Arochlor-1016	<0.1	0.1	mg/kg dry	SW-846 8080	6/07/98 21:57	BMS
Arochlor-1221	<0.1	0.1	mg/kg dry	SW-846 8080	6/07/98 21:57	BMS
Arochlor-1232	<0.1	0.1	mg/kg dry	SW-846 8080	6/07/98 21:57	BMS
Arochlor-1242	<0.1	0.1	mg/kg dry	SW-846 8080	6/07/98 21:57	BMS
Arochlor-1248	<0.1	0.1	mg/kg dry	SW-846 8080	6/07/98 21:57	BMS
Arochlor-1254	<0.1	0.1	mg/kg dry	SW-846 8080	6/07/98 21:57	BMS
Arochlor-1260	20	0.1	mg/kg dry	SW-846 8080	6/07/98 21:57	BMS
TOTAL METALS						
ARSENIC	15.9	5.68	MG/KG DRY	SW-846 6010	6/05/98 17:15	RGM
BARIUM	220	0.28	MG/KG DRY	SW-846 6010	6/05/98 17:15	RGM
CADMIUM	6.65	0.28	MG/KG DRY	SW-846 6010	6/05/98 17:15	RGM
CHROMIUM	97.7	1.70	MG/KG DRY	SW-846 6010	6/05/98 17:15	RGM
LEAD	699	2.27	MG/KG DRY	SW-846 6010	6/05/98 17:15	RGM
MERCURY	<0.25	0.25	MG/KG DRY	SW-846 7471A	6/05/98 15:00	CDM
SELENIUM	<11.4	11.4	MG/KG DRY	SW-846 6010	6/05/98 17:15	RGM
SILVER	2.27	1.14	MG/KG DRY	SW-846 6010	6/05/98 17:15	RGM
TPH GC						
C6-C9	<540	540	mg/kg/dry	SW846 8015B	6/07/98 0:30	JRN
C9-C24	3200	180	mg/kg dry	SW846 8015B	6/07/98 0:30	JRN
C24-C36	1800	900	mg/kg dry	SW846 8015B	6/07/98 0:30	JRN
Volatile Organic Compounds						
Benzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
Bromobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
Bromochloromethane	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 22:18	LGF
Bromodichloromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
Bromoform	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
Bromomethane	<1.0	1.0	MG/KG	SW-846 8260	6/05/98 22:18	LGF
n-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
sec-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
tert-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
Carbon Tetrachloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
Chlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
Chloroethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 22:18	LGF
Chloroform	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
Chloromethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 22:18	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 008

TP14MP-3 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
2-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
4-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
Dibromochloromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
1,2-Dibromo-3-Chloropropane	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 22:18	LGF
1,2-Dibromoethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
Dibromomethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
1,2-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
1,3-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
1,4-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
Dichlorodifluoromethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 22:18	LGF
1,1-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
1,2-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
1,1-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
cis-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
trans-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
1,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
1,3-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
2,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
1,1-Dichloropropene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
Ethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
Hexachlorobutadiene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
Isopropylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
p-Isopropyltoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
Methylene Chloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
Naphthalene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
n-Propylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
Styrene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
1,1,1,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
1,1,2,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
Tetrachloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
Toluene	0.3	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
1,2,3-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
1,2,4-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
1,1,1-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
1,1,2-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
Trichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
Trichlorofluoromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
1,2,3-Trichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
1,2,4-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
1,3,5-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 008

TP14MP-3 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Vinyl Chloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
o-Xylene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
m&p-Xylene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:18	LGF
MTBE	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 22:18	LGF
SURROGATES				SW-846 8260	6/05/98 22:18	LGF
Dibromofluoromethane	88		80-120%	SW-846 8260	6/05/98 22:18	LGF
Toluene-d8	94		81-117%	SW-846 8260	6/05/98 22:18	LGF
4-Bromofluorobenzene	94		74-121%	SW-846 8260	6/05/98 22:18	LGF
SEMI-VOLATILE ORGANIC COMPOUNDS						
Acenaphthene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Acenaphthylene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Anthracene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Benzidine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Benzo(a)anthracene	16	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Benzo(b)fluoranthene	20	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Benzo(k)fluoranthene	8.8	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Benzo(g,h,i)perylene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Benzo(a)pyrene	13	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Bis(2-chloroethyl)ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Bis(2-Chloroethoxy)methane	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
bis(2-chloroisopropyl)ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Bis(2-ethylhexyl)phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
4-Bromophenyl phenyl ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Butylbenzyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2-Chloronaphthalene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
4-Chlorophenyl phenyl ether	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Chrysene	15	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Dibenzo(a,h)anthracene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
1,2-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
1,3-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
1,4-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
3,3'-Dichlorobenzidine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Diethyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Dimethyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2,4-Dinitrotoluene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2,6-Dinitrotoluene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Di-n-octyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
1,2-Diphenylhydrazine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Fluoranthene	34	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 008

TP14MP-3 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Fluorene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Hexachlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Hexachlorobutadiene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Hexachlorocyclopentadiene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Hexachloroethane	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Indeno(1,2,3-cd)pyrene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Isophorone	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Naphthalene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Nitrobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
N-nitrosodimethylamine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
N-nitrosodiphenylamine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
N-nitrosodi-n-propylamine	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Phenanthrene	31	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Pyrene	28	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
1,2,4-Trichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
4-Chloro-3-methylphenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2-Chlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2,4-Dichlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2,4-Dimethylphenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2-Methyl-4,6-dinitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2,4-Dinitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2-Nitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
4-Nitrophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Pentachlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
Phenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
2,4,6-Trichlorophenol	<7	7	mg/kg dry	SW-846 8270	6/10/98 15:56	LGF
SURROGATES			%	SW-846 8270	6/10/98 15:56	LGF
Phenol-d5	NA		24-113%	SW-846 8270	6/10/98 15:56	LGF
2-Fluorophenol	NA		25-121%	SW-846 8270	6/10/98 15:56	LGF
2,4,6-Tribromophenol	NA		19-122%	SW-846 8270	6/10/98 15:56	LGF
Nitrobenzene-d5	NA		23-120%	SW-846 8270	6/10/98 15:56	LGF
2-Fluorobiphenyl	NA		30-115%	SW-846 8270	6/10/98 15:56	LGF
P-Terphenyl-d14	NA		18-137%	SW-846 8270	6/10/98 15:56	LGF
PESTICIDES						
Aldrin	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:57	BMS
Alpha-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:57	BMS
Beta-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:57	BMS
Delta-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:57	BMS
Gamma-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:57	BMS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 008

TP14MP-3 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Chlordane	<0.05	0.05	mg/kg dry	SW-846 8080	6/07/98 19:57	BMS
4-4'-DDD	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:57	BMS
4-4'-DDE	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:57	BMS
4-4'-DDT	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:57	BMS
Dieldrin	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:57	BMS
Endosulfan I	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:57	BMS
Endosulfan II	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:57	BMS
Endosulfan Sulfate	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:57	BMS
Endrin	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:57	BMS
Endrin Aldehyde	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:57	BMS
Heptachlor	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:57	BMS
Heptachlor epoxide	<0.01	0.01	mg/kg dry	SW-846 8080	6/07/98 19:57	BMS
Methoxychlor	<0.05	0.05	mg/kg dry	SW-846 8080	6/07/98 19:57	BMS
Toxaphene	<0.5	0.5	mg/kg dry	SW-846 8080	6/07/98 19:57	BMS

NA = Surrogate diluted outside calibration range

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 009
SAMPLE DESCRIPTION: TP14MP-4 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
PCB						
Arochlor-1016	<0.1	0.1	mg/kg dry	SW-846 8080	6/06/98 5:05	BMS
Arochlor-1221	<0.1	0.1	mg/kg dry	SW-846 8080	6/06/98 5:05	BMS
Arochlor-1232	<0.1	0.1	mg/kg dry	SW-846 8080	6/06/98 5:05	BMS
Arochlor-1242	<0.1	0.1	mg/kg dry	SW-846 8080	6/06/98 5:05	BMS
Arochlor-1248	<0.1	0.1	mg/kg dry	SW-846 8080	6/06/98 5:05	BMS
Arochlor-1254	<0.1	0.1	mg/kg dry	SW-846 8080	6/06/98 5:05	BMS
Arochlor-1260	2.8	0.1	mg/kg dry	SW-846 8080	6/06/98 5:05	BMS
TOTAL METALS						
ARSENIC	8.61	6.62	MG/KG DRY	SW-846 6010	6/05/98 17:19	RGM
BARIUM	148	0.33	MG/KG DRY	SW-846 6010	6/05/98 17:19	RGM
CADMIUM	1.75	0.33	MG/KG DRY	SW-846 6010	6/05/98 17:19	RGM
CHROMIUM	20.2	1.99	MG/KG DRY	SW-846 6010	6/05/98 17:19	RGM
LEAD	87.8	2.65	MG/KG DRY	SW-846 6010	6/05/98 17:19	RGM
MERCURY	<0.25	0.25	MG/KG DRY	SW-846 7471A	6/05/98 15:00	CDM
SELENIUM	<13.2	13.2	MG/KG DRY	SW-846 6010	6/05/98 17:19	RGM
SILVER	<1.32	1.32	MG/KG DRY	SW-846 6010	6/05/98 17:19	RGM
TPH GC						
C6-C9	<150	150	mg/kg/dry	SW846 8015B	6/06/98 23:48	JRN
C9-C24	150	50	mg/kg dry	SW846 8015B	6/06/98 23:48	JRN
C24-C36	420	250	mg/kg dry	SW846 8015B	6/06/98 23:48	JRN
Volatile Organic Compounds						
Benzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
Bromobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
Bromochloromethane	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 22:57	LGF
Bromodichloromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
Bromoform	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
Bromomethane	<1.0	1.0	MG/KG	SW-846 8260	6/05/98 22:57	LGF
n-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
sec-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
tert-Butylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
Carbon Tetrachloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
Chlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
Chloroethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 22:57	LGF
Chloroform	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
Chloromethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 22:57	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 009

TP14MP-4 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
2-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
4-Chlorotoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
Dibromochloromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
1,2-Dibromo-3-Chloropropane	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 22:57	LGF
1,2-Dibromoethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
Dibromomethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
1,2-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
1,3-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
1,4-Dichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
Dichlorodifluoromethane	<0.5	0.5	MG/KG	SW-846 8260	6/05/98 22:57	LGF
1,1-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
1,2-Dichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
1,1-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
cis-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
trans-1,2-Dichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
1,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
1,3-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
2,2-Dichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
1,1-Dichloropropene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
Ethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
Hexachlorobutadiene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
Isopropylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
p-Isopropyltoluene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
Methylene Chloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
Naphthalene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
n-Propylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
Styrene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
1,1,1,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
1,1,2,2-Tetrachloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
Tetrachloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
Toluene	0.3	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
1,2,3-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
1,2,4-Trichlorobenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
1,1,1-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
1,1,2-Trichloroethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
Trichloroethene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
Trichlorofluoromethane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
1,2,3-Trichloropropane	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
1,2,4-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
1,3,5-Trimethylbenzene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 009

TP14MP-4 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Vinyl Chloride	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
o-Xylene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
m&p-Xylene	<0.2	0.2	MG/KG	SW-846 8260	6/05/98 22:57	LGF
MTBE	<0.4	0.4	MG/KG	SW-846 8260	6/05/98 22:57	LGF
SURROGATES				SW-846 8260	6/05/98 22:57	LGF
Dibromofluoromethane	116		80-120%	SW-846 8260	6/05/98 22:57	LGF
Toluene-d8	99		81-117%	SW-846 8260	6/05/98 22:57	LGF
4-Bromofluorobenzene	94		74-121%	SW-846 8260	6/05/98 22:57	LGF
SEMI-VOLATILE ORGANIC COMPOUNDS						
Acenaphthene	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Acenaphthylene	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Anthracene	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Benzidine	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Benzo(a)anthracene	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Benzo(b)fluoranthene	7.2	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Benzo(k)fluoranthene	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Benzo(g,h,i)perylene	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Benzo(a)pyrene	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Bis(2-chloroethyl)ether	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Bis(2-Chloroethoxy)methane	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
bis(2-chloroisopropyl)ether	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Bis(2-ethylhexyl)phthalate	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
4-Bromophenyl phenyl ether	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Butylbenzyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
2-Chloronaphthalene	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
4-Chlorophenyl phenyl ether	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Chrysene	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Dibenzo(a,h)anthracene	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
1,2-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
1,3-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
1,4-Dichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
3,3'-Dichlorobenzidine	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Diethyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Dimethyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
2,4-Dinitrotoluene	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
2,6-Dinitrotoluene	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Di-n-octyl phthalate	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
1,2-Diphenylhydrazine	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Fluoranthene	12	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 009

TP14MP-4 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Fluorene	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Hexachlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Hexachlorobutadiene	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Hexachlorocyclopentadiene	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Hexachloroethane	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Indeno(1,2,3-cd)pyrene	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Isophorone	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Naphthalene	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Nitrobenzene	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
N-nitrosodimethylamine	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
N-nitrosodiphenylamine	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
N-nitrosodi-n-propylamine	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Phenanthrene	8.9	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Pyrene	9.3	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
1,2,4-Trichlorobenzene	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
4-Chloro-3-methylphenol	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
2-Chlorophenol	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
2,4-Dichlorophenol	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
2,4-Dimethylphenol	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
2-Methyl-4,6-dinitrophenol	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
2,4-Dinitrophenol	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
2-Nitrophenol	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
4-Nitrophenol	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Pentachlorophenol	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
Phenol	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
2,4,6-Trichlorophenol	<7	7	mg/kg dry	SW-846 8270	6/11/98 15:56	LGF
SURROGATES			%	SW-846 8270	6/11/98 15:56	LGF
Phenol-d5	NA		24-113%	SW-846 8270	6/11/98 15:56	LGF
2-Fluorophenol	NA		25-121%	SW-846 8270	6/11/98 15:56	LGF
2,4,6-Tribromophenol	NA		19-122%	SW-846 8270	6/11/98 15:56	LGF
Nitrobenzene-d5	NA		23-120%	SW-846 8270	6/11/98 15:56	LGF
2-Fluorobiphenyl	NA		30-115%	SW-846 8270	6/11/98 15:56	LGF
P-Terphenyl-d14	NA		18-137%	SW-846 8270	6/11/98 15:56	LGF
PESTICIDES						
Aldrin	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/05 19:57	BMS
Alpha-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/05 19:57	BMS
Beta-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/05 19:57	BMS
Delta-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/05 19:57	BMS
Gamma-BHC	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/05 19:57	BMS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 009

TP14MP-4 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
Chlordane	<0.05	0.05	mg/kg dry	SW-846 8080	6/06/05 19:57	BMS
4-4'-DDD	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/05 19:57	BMS
4-4'-DDE	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/05 19:57	BMS
4-4'-DDT	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/05 19:57	BMS
Dieldrin	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/05 19:57	BMS
Endosulfan I	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/05 19:57	BMS
Endosulfan II	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/05 19:57	BMS
Endosulfan Sulfate	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/05 19:57	BMS
Endrin	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/05 19:57	BMS
Endrin Aldehyde	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/05 19:57	BMS
Heptachlor	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/05 19:57	BMS
Heptachlor epoxide	<0.01	0.01	mg/kg dry	SW-846 8080	6/06/05 19:57	BMS
Methoxychlor	<0.05	0.05	mg/kg dry	SW-846 8080	6/06/05 19:57	BMS
Toxaphene	<0.5	0.5	mg/kg dry	SW-846 8080	6/06/05 19:57	BMS

NA = Surrogate diluted outside calibration range.

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 001
SAMPLE DESCRIPTION: TP14W-1 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
TPH IR	390	25	MG/KG DRY	EPA 418.1	6/04/98 20:52	JMG

Sample #: 002
SAMPLE DESCRIPTION: TP14W-2 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
TPH IR	260	25	MG/KG DRY	EPA 418.1	6/04/98 20:52	JMG

Sample #: 003
SAMPLE DESCRIPTION: TP14W-3 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
TPH IR	64	25	MG/KG DRY	EPA 418.1	6/04/98 20:52	JMG

Sample #: 004
SAMPLE DESCRIPTION: TP14W-4 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
TPH IR	560	25	MG/KG DRY	EPA 418.1	6/04/98 20:52	JMG

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: R.I. Analytical

Sample #: 005
SAMPLE DESCRIPTION: TP14F-1 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
TPH IR	<26	26	MG/KG DRY	EPA 418.1	6/04/98 20:52	JMG

Sample #: 006
SAMPLE DESCRIPTION: TP14MP-1 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
TPH IR	600	25	MG/KG DRY	EPA 418.1	6/04/98 20:52	JMG

Sample #: 007
SAMPLE DESCRIPTION: TP14MP-2 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
TPH IR	<49	49	MG/KG DRY	EPA 418.1	6/04/98 20:52	JMG

Sample #: 008
SAMPLE DESCRIPTION: TP14MP-3 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
TPH IR	790	25	MG/KG DRY	EPA 418.1	6/04/98 20:52	JMG

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler - TK5
Date Received: 6/03/98
Work Order # 9806-04290

Approved by: _____
R.I. Analytical

Sample #: 009
SAMPLE DESCRIPTION: TP14MP-4 COLLECTED 06/03/98

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
TPH IR	1100	25	MG/KG DRY	EPA 418.1	6/04/98 20:52	JMG

Appendix F

Test Pit 14 Exploratory Sample Results Summary and Laboratory Data

FOSTER WHEELER ENVIRONMENTAL CORPORATION
U.S. NAVY NORTHERN DIVISION REMEDIAL ACTION CONTRACT (RAC)
CONTRACT N62472-94-D-0398 DELIVERY ORDER 13 AND 60

DERECKTOR SHIPYARD TEST PIT 14 PCB - Post Initial Soils Removal Investigation Results

RIDEM Direct Exposure Criteria (Residential) = 10.0 ppm	**PCB Result (ppm)**
Sample ID	
01-98 (0-1)	0.084
01-98 (1-2)	-
02-98 (0-1)	0.160
02-98 (1-2)	0.066
03-98 (0-1)	0.360
03-98 (1-2)	0.140
04-98 (0-1)	0.046
04-98 (1-2)	-
05-98 (0-1)	0.064
05-98 (1-2)	-
06-98 (0-1)	-
06-98 (1-2)	-
CF01-98	-
STONE01-98	-
STONE02-98	0.130 P
STONE03-98	0.150 P
RB01-98	-
SED01-98	1.200
SED02-98	1.000
SOIL-07-98	0.053
SOIL-08-98	0.150
SOIL-09-98	0.290
SOIL-10-98	5.600 E
SOIL-10-09DL	5.600 D

Exceeds RIDEM Residential Exposure Criteria =

Non-Detect Result = -

Concentration obtained from a diluted analysis = D

Exceeded calibration range = E

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01-98 (0-1)

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5333F

% Moisture: 7 decanted: (Y/N) N Date Received: 09/02/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/09/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 09/10/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	72	U
1114-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	35	U
11096-82-5	Aroclor-1260	84	

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01-98 (1-2)

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-02

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5334F

% Moisture: 7 decanted: (Y/N) N Date Received: 09/02/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/09/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 09/10/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	72	U
1114-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	35	U
11096-82-5	Aroclor-1260	35	U

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

02-98 (0-1)

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-03

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5335F

% Moisture: 9 decanted: (Y/N) N Date Received: 09/02/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/09/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 09/10/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	74	U
1114-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	160	

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

02-98 (1-2)

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-04

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5336F

% Moisture: 7 decanted: (Y/N) N Date Received: 09/02/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/09/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 09/11/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	72	U
1114-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	35	U
11096-82-5	Aroclor-1260	66	

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

03-98 (0-1)

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-05

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5337F

% Moisture: 14 decanted: (Y/N) N Date Received: 09/02/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/09/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 09/11/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	78	U
1114-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	360	

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

03-98 (1-2)

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-06

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5338F

% Moisture: 12 decanted: (Y/N) N Date Received: 09/02/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/09/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 09/11/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	76	U
1114-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	140	

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

04-98 (0-1)

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-07

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5339F

% Moisture: 10 decanted: (Y/N) N Date Received: 09/02/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/09/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 09/11/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	74	U
1114-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	46	

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

04-98 (1-2)

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-08

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5340F

% Moisture: 7 decanted: (Y/N) N Date Received: 09/02/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/09/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/11/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	72	U
1114-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	35	U
11096-82-5	Aroclor-1260	35	U

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

05-98 (0-1)

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-09

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5346F

% Moisture: 9 decanted: (Y/N) N Date Received: 09/02/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/09/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 09/11/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	74	U
1114-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	64	

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

05-98 (1-2)

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-10

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5347F

% Moisture: 10 decanted: (Y/N) N Date Received: 09/02/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/09/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 09/11/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	74	U
1114-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	37	U

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

06-98 (0-1)

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-11

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5348F

% Moisture: 4 decanted: (Y/N) N Date Received: 09/02/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/09/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 09/11/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	70	U
1114-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	U

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

06-98 (1-2)

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-12

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5349F

% Moisture: 2 decanted: (Y/N) N Date Received: 09/02/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/09/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 09/11/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	68	U
1114-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	U

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CF01-98

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-13

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5350F

% Moisture: 0 decanted: (Y/N) N Date Received: 09/03/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/09/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/11/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	67	U
1114-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

STONE01-98

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-14

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5351F

% Moisture: 2 decanted: (Y/N) N Date Received: 09/03/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/09/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/11/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	68	U
1114-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	U

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

STONE02-98

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-15

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5352F

% Moisture: 5 decanted: (Y/N) N Date Received: 09/03/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/10/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 09/11/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	70	U
1114-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	35	U
11096-82-5	Aroclor-1260	130	P

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PBLK03

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: P0909-BS1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5331F

% Moisture: 0 decanted: (Y/N) N Date Received: _____

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/09/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/10/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	67	U
1114-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PBLK03LCS

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: P0909-LS1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5332F

% Moisture: 0 decanted: (Y/N) N Date Received: _____

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/09/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/10/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	380	
11104-28-2	Aroclor-1221	67	U
1114-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	330	

FORM 2
SOIL OTHER SURROGATE RECOVERY

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

GC Column(1): DB-1701 ID: 0.53 (mm) GC Column(2): DB-608 ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PBLK03	82	83	82	69			0
02	PBLK03LCS	104	104	107	90			0
03	01-98 (0-1)	84	92	89	75			0
04	01-98 (1-2)	82	91	88	73			0
05	02-98 (0-1)	91	89	90	78			0
06	02-98 (1-2)	100	101	100	84			0
07	03-98 (0-1)	97	101	99	101			0
08	03-98 (1-2)	91	90	90	81			0
09	04-98 (0-1)	79	80	80	80			0
10	04-98 (1-2)	96	97	94	85			0
11	05-98 (0-1)	89	91	88	89			0
12	05-98 (1-2)	74	74	75	68			0
13	06-98 (0-1)	93	92	95	79			0
14	06-98 (1-2)	88	87	88	74			0
15	CF01-98	99	99	101	85			0
16	STONE01-98	115	117	117	121			0
17	STONE02-98	124	124	122	112			0
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

ADVISORY
QC LIMITS

S1 (TCX) = Tetrachloro-m-xylene (30-150)
S2 (DCB) = Decachlorobiphenyl (30-150)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

FORM 3
SOIL OTHER LAB CONTROL SAMPLE

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix Spike - Sample No.: PBLK03

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Aroclor-1016	333	0.000	383	115	62-155
Aroclor-1260	333	0.000	335	101	56-173

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 2 outside limits

COMMENTS:

MITKEM CORPORATION
175 Metro Center Boulevard
Warwick, Rhode Island 02886-1755
(401) 732-3400 • Fax (401) 732-3499
email: mitkem@wildnet.ali.net

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

REPORT TO		INVOICE TO		
Foster Wheeler	PHONE 617-457-8[illegible]	COMPANY Per Purchase Order	PHONE	LAB PROJECT #: 21423
Stephen Lawlor	FAX 617-457-8497	NAME	FAX	
40 Atlantic Ave		ADDRESS		TURNAROUND TIME: 1 Week
Boston MA		CITY/ST/ZIP		

PROJECT NAME:	CLIENT PROJECT #:	CLIENT P.O.#:
C Bldg 6	1284	

REQUESTED ANALYSES: PCB 8082

SAMPLE IDENTIFICATION	DATE/TIME SAMPLED	COMPOSITE	GRAB	WATER	SOIL	OTHER	LAB ID	# OF CONTAINERS	PCB 8082	COMMENTS
L01-98(0-1')	9/2/98 13:00		X		X		01		X	
L01-98(1-2')	9/2/98 13:05		X		X		02		X	
02-98(0-1')	9/2/98 13:20		X		X		03		X	
02-98(1-2')	9/2/98 13:25		X		X		04		X	
03-98(0-1')	9/2/98 13:45		X		X		05		X	
03-98(1-2')	9/2/98 13:50		X		X		06		X	
04-98(0-1')	9/2/98 14:[illegible]		X		X		07		X	
04-98(1-2')	9/2/98 1435		X		X		08		X	
L05-98(0-1')	9/2/98 1450		X		X		09		X	
L05-98(1-2')	9/2/98 1500		X		X		10		X	
06-98(0-1')	9/2/98 1520		X		X		11		X	
06-98(1-2')	9/2/98 1525		X		X		12		X	

RELINQUISHED BY	DATE/TIME	ACCEPTED BY	DATE/TIME	ADDITIONAL REMARKS:	COOLER TEMP:
Stephen Lawlor	9-2-98/1710	[signature]	9/2/98 1710		<4°C
	/		/		
	/		/		

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MITKEM CORPORATION
175 Metro Center Boulevard
Warwick, Rhode Island 02886-1755
(401) 732-3400 • Fax (401) 732-3499
email: mitkem@worldnet.att.net

CHAIN-OF-CUSTODY RECORD

Page 1 of 2

REPORT TO		INVOICE TO		
Foster Wheeler	PHONE 617-451-8206	COMPANY Per purchase order	PHONE	LAB PROJECT #: 8/4/23
Stephen Lawler	FAX 617-457-8499	NAME	FAX	
470 Atlantic Ave		ADDRESS		TURNAROUND TIME:
Boston, MA		CITY/ST/ZIP		

PROJECT NAME:	CLIENT PROJECT #:	CLIENT P.O.#:
TC Bldg 16	1284	

REQUESTED ANALYSES: PCBs 8082

SAMPLE IDENTIFICATION	DATE/TIME SAMPLED	COMPOSITE	GRAB	WATER	SOIL	OTHER	LAB ID	# OF CONTAINERS	PCBs 8082	COMMENTS
-98	9-3-98 / 0900				SL	✓	13	1	✓	
e01-98	/ 0910				✓		14		✓	
e02-98	/ 0920				✓		15		✓	Includes MS/MSD
e02-98-D	/ 0920				✓		16		✓	
e03-98	/ 0930				✓		17		✓	
01-98	/ 1010				✓		18		✓	
02-98	/ 1050				✓		19		✓	
01-98	/ 1100			✓			20		✓	
SL	/				✓		21		✓	
IL-07-98	/ 1120				✓		21		✓	
IL-08-98	/ 1130						22		✓	
IL-09-98	/ 1140				✓		23		✓	Includes MS/MSD

RELINQUISHED BY	DATE/TIME	ACCEPTED BY	DATE/TIME	ADDITIONAL REMARKS:	COOLER TEMP:
Steph Lawler	9-3 / 1400	[signature]	9/3/98 / 1440		
	/		/		
	/		/		

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MITKEM CORPORATION
175 Metro Center Boulevard
Warwick, Rhode Island 02886-1755
(401) 732-3400 • Fax (401) 732-3499
email: mitkem@worldnet.att.net

CHAIN-OF-CUSTODY RECORD

Page 2 of 2

REPORT TO:		INVOICE TO:		LAB PROJECT #:
Foster Wheeler	PHONE 617-457-9206	COMPANY Per purchase order	PHONE	
tephen Lawlor	FAX 617-457-8499	NAME	FAX	TURNAROUND TIME:
470 Atlantic Ave		ADDRESS		
IP Boston, MA		CITY/ST/ZIP		

PROJECT NAME:	CLIENT PROJECT #:	CLIENT P.O.#:
y 06, NETC	1284	

REQUESTED ANALYSES: PCBs 8082

SAMPLE IFICATION	DATE/TIME SAMPLED	COMPOSITE	GRAB	WATER	SOIL	OTHER	LAB ID	# OF CONTAINERS	PCBs 8082	COMMENTS
.09-98-D	9-3 / 1140				✓		25	1	✓	
L10-98	↓ / 1150				✓		26	1	✓	
	/									
	/									
	/									
	/									
	/									
	/									
	/									
	/									
	/									
	/									

RELINQUISHED BY	DATE/TIME	ACCEPTED BY	DATE/TIME	ADDITIONAL REMARKS:	COOLER TEMP:
[illegible]	9-3-98 / 1400	[illegible]	9/3/98 / 1400		
	/		/		
	/		/		

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14-15

MITKEM CORPORATION

"Environmental Testing Into The Next Century"

175 Metro Center Boulevard
Warwick, Rhode Island 02886-1755
Phone: (401)-732-3400 Fax: (401)-732-3499

FACSIMILE COVER SHEET

TO: ~~Steve~~ Andrew Lawler

FROM: Ed Lawler

COMPANY: FW / Boston

DATE: 9/14/98

FAX NUMBER: 617-457-8499
842-6970

NUMBER OF PAGES: ~~24~~ 30
(Including cover sheet)

Enclosed are the analytical results for your project Bldg 6 / Do. 13 - NETC

Hard copies of the report will follow upon completion of final QA/QC review.

Please do not hesitate to call me if you should have any questions.

Second (final) set of PCB Form 1's. Hard copy to follow ~ end of wk

U.S. SBA 1997 MINORITY ENTERPRISE SPECIAL ACHIEVEMENT AWARD

Data Flag/Qualifiers:

J This flag indicates an estimated value due to either
- the compound was detected at below the Reporting Limit, or
- estimated concentration for Tentatively Identified Compound

B For organic analyses, this flag indicates the analyte was also detected in the associated Method Blank. The B flag has an alternative meaning for CLP-type metals analyses, indicating a "trace" concentration below the normal reporting limit and above the detection limit.

D This flag indicates the analyte concentration was obtained from a diluted analysis

E This flag indicates the analyte concentration exceeded the Calibration Range

P This flag is used for Pesticides/PCB/Herbicide analyte when there is a greater than 40% difference for detected concentration between the two GC columns used for Primary and Confirmation analyses. The lower of the two values is reported in the Analysis Report.

U - Not Detected

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

05-98 (0-1)

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-09

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5346F

% Moisture: 9 decanted: (Y/N) N Date Received: 09/02/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/09/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/11/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	74	U
1114-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	64	

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

05-98 (1-2)

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-10

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5347F

% Moisture: 10 decanted: (Y/N) N Date Received: 09/02/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/09/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/11/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	74	U
1114-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	37	U

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

06-98 (0-1)

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-11

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5348F

% Moisture: 4 decanted: (Y/N) N Date Received: 09/02/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/09/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/11/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	70	U
1114-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	U

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

06-98 (1-2)

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-12

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5349F

% Moisture: 2 decanted: (Y/N) N Date Received: 09/02/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/09/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/11/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	68	U
1114-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	U

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

CF01-98

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-13

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5350F

% Moisture: 0 decanted: (Y/N) N Date Received: 09/03/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/09/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/11/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	67	U
1114-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

RB01-98

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) WATER Lab Sample ID: E1423-20

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3A5377F

% Moisture: _____ decanted: (Y/N)___ Date Received: 09/03/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/09/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/12/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
1114-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SED01-98

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-18

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5364F

% Moisture: 3 decanted: (Y/N) N Date Received: 09/03/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/10/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/11/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	69	U
1114-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	1200	

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SED02-98

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-19

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5365F

% Moisture: 0 decanted: (Y/N) N Date Received: 09/03/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/10/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/11/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	67	U
1114-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	1000	

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SOIL-07-98

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-21

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5366F

% Moisture: 33 decanted: (Y/N) N Date Received: 09/03/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/10/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/11/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	49	U
11104-28-2	Aroclor-1221	100	U
1114-16-5	Aroclor-1232	49	U
53469-21-9	Aroclor-1242	49	U
12672-29-6	Aroclor-1248	49	U
11097-69-1	Aroclor-1254	49	U
11096-82-5	Aroclor-1260	53	

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SOIL-08-98

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-22

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5367F

% Moisture: 43 decanted: (Y/N) N Date Received: 09/03/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/10/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/11/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	58	U
11104-28-2	Aroclor-1221	120	U
1114-16-5	Aroclor-1232	58	U
53469-21-9	Aroclor-1242	58	U
12672-29-6	Aroclor-1248	58	U
11097-69-1	Aroclor-1254	58	U
11096-82-5	Aroclor-1260	150	

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SOIL-09-98

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-23

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5368F

% Moisture: 21 decanted: (Y/N) N Date Received: 09/03/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/10/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/11/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	42	U
11104-28-2	Aroclor-1221	85	U
1114-16-5	Aroclor-1232	42	U
53469-21-9	Aroclor-1242	42	U
12672-29-6	Aroclor-1248	42	U
11097-69-1	Aroclor-1254	42	U
11096-82-5	Aroclor-1260	290	

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SOIL-09-98-D

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-24

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5369F

% Moisture: 22 decanted: (Y/N) N Date Received: 09/03/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/10/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/11/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	42	U
11104-28-2------	Aroclor-1221	86	U
1114-16-5-------	Aroclor-1232	42	U
53469-21-9------	Aroclor-1242	42	U
12672-29-6------	Aroclor-1248	42	U
11097-69-1------	Aroclor-1254	42	U
11096-82-5------	Aroclor-1260	180	

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SOIL-10-98

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-25

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5378F

% Moisture: 23 decanted: (Y/N) N Date Received: 09/03/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/10/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/12/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	43	U
11104-28-2	Aroclor-1221	87	U
1114-16-5	Aroclor-1232	43	U
53469-21-9	Aroclor-1242	43	U
12672-29-6	Aroclor-1248	43	U
11097-69-1	Aroclor-1254	43	U
11096-82-5	Aroclor-1260	5600	E

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
SOIL-10-98DL

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-25DL

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5391F

% Moisture: 23 decanted: (Y/N) N Date Received: 09/03/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/10/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/12/98

Injection Volume: 2.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	430	U
11104-28-2	Aroclor-1221	870	U
1114-16-5	Aroclor-1232	430	U
53469-21-9	Aroclor-1242	430	U
12672-29-6	Aroclor-1248	430	U
11097-69-1	Aroclor-1254	430	U
11096-82-5	Aroclor-1260	5600	D

FORM I
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

STONE01-98

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-14

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5351F

% Moisture: 2 decanted: (Y/N) N Date Received: 09/03/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/09/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/11/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	34	U
11104-28-2------	Aroclor-1221	68	U
1114-16-5-------	Aroclor-1232	34	U
53469-21-9------	Aroclor-1242	34	U
12672-29-6------	Aroclor-1248	34	U
11097-69-1------	Aroclor-1254	34	U
11096-82-5------	Aroclor-1260	34	U

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

STONE02-98

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-15

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5352F

% Moisture: 5 decanted: (Y/N) N Date Received: 09/03/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/10/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/11/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	70	U
1114-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	35	U
11096-82-5	Aroclor-1260	130	P

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

STONE02-98-D

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-16

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5362F

% Moisture: 5 decanted: (Y/N) N Date Received: 09/03/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/10/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/11/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	70	U
1114-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	35	U
11096-82-5	Aroclor-1260	130	P

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

STONE03-98

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-17

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5363F

% Moisture: 10 decanted: (Y/N) N Date Received: 09/03/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/10/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/11/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	74	U
1114-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	150	P

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PBLK05

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) WATER Lab Sample ID: P0909-BW1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3A5375F

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/09/98

Concentrated Extract Volume: 10000(uL) Date Analyzed: 09/12/98

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
1114-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PBLK05LCS

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) WATER Lab Sample ID: P0909-LW1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3A5376F

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/09/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/12/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
12674-11-2	Aroclor-1016	11	
11104-28-2	Aroclor-1221	2.0	U
1114-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	8.3	

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

STONE0298MS

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-15MS

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5353F

% Moisture: 5 decanted: (Y/N) N Date Received: 09/03/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/10/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/11/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	560	
11104-28-2	Aroclor-1221	70	U
1114-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	35	U
11096-82-5	Aroclor-1260	550	

FORM 1
OTHER ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

STONE0298MSD

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix: (soil/water) SOIL Lab Sample ID: E1423-15MSD

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3A5354F

% Moisture: 5 decanted: (Y/N) N Date Received: 09/03/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/10/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/11/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	380	
11104-28-2	Aroclor-1221	70	U
1114-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	35	U
11096-82-5	Aroclor-1260	410	

FORM 2
SOIL OTHER SURROGATE RECOVERY

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

GC Column(1): DB-1701 ID: 0.53 (mm) GC Column(2): DB-608 ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PBLK03	82	83	82	69			0
02	PBLK03LCS	104	104	107	90			0
03	01-98 (0-1)	84	92	89	75			0
04	01-98 (1-2)	82	91	88	73			0
05	02-98 (0-1)	91	89	90	78			0
06	02-98 (1-2)	100	101	100	84			0
07	03-98 (0-1)	97	101	99	101			0
08	03-98 (1-2)	91	90	90	81			0
09	04-98 (0-1)	79	80	80	80			0
10	04-98 (1-2)	96	97	94	85			0
11	05-98 (0-1)	89	91	88	89			0
12	05-98 (1-2)	74	74	75	68			0
13	06-98 (0-1)	93	92	96	79			0
14	06-98 (1-2)	88	87	88	74			0
15	CF01-98	99	99	101	85			0
16	STONE01-98	115	117	117	121			0
17	STONE02-98	124	124	122	112			0
18	STONE0298MS	138	136	136	121			0
19	STONE0298MSD	100	100	101	90			0
20	PBLK04	130	130	135	116			0
21	PBLK04LCS	124	122	124	106			0
22	STONE02-98-D	117	116	116	106			0
23	STONE03-98	94	125	96	174*			1
24	SED01-98	94	93	82	72			0
25	SED02-98	49	49	56	29*			1
26	SOIL-07-98	92	92	86	69			0
27	SOIL-08-98	85	87	85	74			0
28	SOIL-09-98	118	103	101	83			0
29	SOIL-09-98-D	90	91	90	80			0
30	SOIL-10-98	65	61	76	76			0

ADVISORY
QC LIMITS

S1 (TCX) = Tetrachloro-m-xylene (30-150)
S2 (DCB) = Decachlorobiphenyl (30-150)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

FORM 2
SOIL OTHER SURROGATE RECOVERY

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

GC Column(1): DB-1701 ID: 0.53 (mm) GC Column(2): DB-608 ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	SOIL-10-98DL	84	75	122	109			0
02								
03								
04								
05								
06								
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

ADVISORY QC LIMITS

S1 (TCX) = Tetrachloro-m-xylene (30-150)
S2 (DCB) = Decachlorobiphenyl (30-150)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

FORM 2
WATER OTHER SURROGATE RECOVERY

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

GC Column(1): DB-1701 ID: 0.53 (mm) GC Column(2): DB-608 ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PBLK05	84	86	87	72			0
02	PBLK05LCS	104	105	84	68			0
03	RB01-98	76	77	48	38			0
04								
05								
06								
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

ADVISORY QC LIMITS

S1 (TCX) = Tetrachloro-m-xylene (30-150)
S2 (DCB) = Decachlorobiphenyl (30-150)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

FORM 3
SOIL OTHER LAB CONTROL SAMPLE

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix Spike - Sample No.: PBLK03

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Aroclor-1016	333	0.000	383	115	62-155
Aroclor-1260	333	0.000	335	101	56-173

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM 3
SOIL OTHER LAB CONTROL SAMPLE

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix Spike - Sample No.: PBLK04

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Aroclor-1016	333	0.000	452	136	62-155
Aroclor-1260	333	0.000	391	117	56-173

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM 3
WATER OTHER LAB CONTROL SAMPLE

Lab Name: MITKEM CORP. Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: E1423

Matrix Spike - Sample No.: PBLK05

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Aroclor-1016	10.0	0.000	11.2	112	45-162
Aroclor-1260	10.0	0.000	8.34	83	54-159

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 2 outside limits

COMMENTS:

Appendix G

Test Pit 14 Expanded Area Excavation Sampling Results Summary and Laboratory Data

FOSTER WHEELER ENVIRONMENTAL CORPORATION
U.S. NAVY NORTHERN DIVISION REMEDIAL ACTION CONTRACT (RAC)
CONTRACT N62472-94-D-0398 DELIVERY ORDER 13 AND 60
DERECKTOR SHIPYARD TEST PIT 14 PCB CONTAMINATED SOIL REMOVAL - EXPANDED AREA OF INVESTIGATION

RIDEM Direct Exposure Criteria --->	Residential	Commercial/ Industrial	EAE TP14 F1	EAE TP14 F2	EAE TP14 F3	EAE TP14 F4	EAE TP14 F5	EAE TP14 W1	EAE TP14 W3	EAE TP14 W4	EAE TP14 W5	EAE TP14 W6	EAE TP14 W7	EAE TP14 W8	EAE TP14 W9	EAE TP14 W10
Volatile Organics																
Benzene	2.5	200.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	10.0	92.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform	81.0	720.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromomethane	0.8	2,900.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	1.5	44.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	210.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	1.2	940.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	7.6	68.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	920.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	0.9	63.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	0.2	9.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	630.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	1,100.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	1.9	84.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	71.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl-tert-butyl-ether	390.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride	45.0	760.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	13.0	190.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1,2 Tetrachloroethane	2.2	220.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2 Tetrachloroethane	1.3	29.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	190.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	540.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	3.6	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	0.02	3.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Xylenes	110.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-
Semivolatiles																
Acenaphthene	43.0	10,000.0	-	n	-	n	33.0	n	n	-	n	n	n	n	-	52.0
Acenaphthylene	23.0	10,000.0	-	n	1.4 J	n	1.8 J	n	n	0.91 J	n	n	n	n	-	1.1 J
Anthracene	35.0	10,000.0	-	n	1.9 J	n	50.0	n	n	1.2 J	n	n	n	n	-	93.0
Benzo(a)anthracene	0.9	7.8	0.92 J	n	4.9 J	n	100.0	n	n	3.8 J	n	n	n	n	0.7 J	200 D
Benzo(a)pyrene	0.4	0.8	0.7 J	n	4.4 J	n	78.0	n	n	3.4 J	n	n	n	n	0.7 J	160 D
Benzo(b)fluoranthene	0.9	7.8	1.0 J	n	6.0 J	n	100.0	n	n	4.9 J	n	n	n	n	0.9 J	190 D
Benzo(g,h,I)perylene	0.8	10,000.0	-	n	3.0 J	n	40.0	n	n	2.2 J	n	n	n	n	-	73.0
Benzo(k)fluoranthene	0.9	78.0	-	n	1.9 J	n	27.0	n	n	1.7 J	n	n	n	n	-	50.0
Bis(2-ethylhexyl)phthalate	46.0	410.0	-	n	-	n	0.77 J	n	n	-	n	n	n	n	-	-
Bis(2-chloroethyl)ether	0.6	5.2	-	n	-	n	-	n	n	-	n	n	n	n	-	-
Bis(2-chloroisipropyl)ether	9.1	82.0	-	n	-	n	-	n	n	-	n	n	n	n	-	-
Chrysene	0.4	780.0	0.87 J	n	5.4 J	n	90.0	n	n	4.4 J	n	n	n	n	0.69 J	180 D
Dibenzo(a,h)anthracene	0.4	0.8	-	n	0.9 J	n	12.0	n	n	-	n	n	n	n	-	20.0
1,2-Dichlorobenzene	510.0	10,000.0	-	n	-	n	-	n	n	-	n	n	n	n	-	-
1,3-Dichlorobenzene	430.0	10,000.0	-	n	-	n	-	n	n	-	n	n	n	n	-	-
1,4-Dichlorobenzene	27.0	240.0	0.14 J	n	-	n	-	n	n	-	n	n	n	n	-	-
3,3-Dichlorobenzidine	1.4	13.0	-	n	-	n	-	n	n	-	n	n	n	n	-	-
Diethyl phthalate	340.0	10,000.0	-	n	-	n	-	n	n	-	n	n	n	n	-	-
2,4-Dimethyl phenol	1,400.0	10,000.0	-	n	-	n	-	n	n	-	n	n	n	n	-	-
Dimethyl phthalate	1,900.0	10,000.0	-	n	-	n	-	n	n	-	n	n	n	n	-	-
2,4-Dinitrophenol	160.0	4,100.0	-	n	-	n	-	n	n	-	n	n	n	n	-	-
2,4-Dinitrotoluene	0.9	8.4	-	n	-	n	-	n	n	-	n	n	n	n	-	-
Fluoranthene	20.0	10,000.0	1.4 J	n	8.9	n	260 D	n	n	8.3	n	n	n	n	1.5 J	480 D
Fluorene	28.0	10,000.0	-	n	6.0 J	n	26.0	n	n	-	n	n	n	n	-	53.0
Hexachlorobenzene	0.4	3.6	-	n	-	n	-	n	n	-	n	n	n	n	-	-
Hexachlorobutadiene	8.2	73.0	-	n	-	n	-	n	n	-	n	n	n	n	-	-
Hexachloroethane	46.0	410.0	-	n	-	n	-	n	n	-	n	n	n	n	-	-
Indeno(1,2,3-cd)pyrene	0.9	7.8	-	n	2.8 J	n	40.0	n	n	2.1 J	n	n	n	n	-	70.0
Naphthalene	54.0	10,000.0	-	n	-	n	16.0	n	n	-	n	n	n	n	-	44.0
Pentachlorophenol	5.3	48.0	-	n	-	n	-	n	n	1.0 J	n	n	n	n	-	-
Phenanthrene	40.0	10,000.0	0.71 J	n	4.1 J	n	240 D	n	n	4.5 J	n	n	n	n	1.0 J	470 D
Phenol	6,000.0	10,000.0	-	n	-	n	-	n	n	-	n	n	n	n	-	0.93 J
Pyrene	13.0	10,000.0	1.0 J	n	-	n	190 D	n	n	6.2 J	n	n	n	n	1.0 J	350 D
1,2,4-Trichlorobenzene	96.0	10,000.0	0.5	n	-	n	-	n	n	-	n	n	n	n	-	-
2,4,6-Trichlorophenol	58.0	520.0	-	n	-	n	-	n	n	-	n	n	n	n	-	-
Pesticides/PCBs																
Chlordane	0.5	4.4	2.1 P	n	.07 P	n	-	n	n	-	n	n	n	n	-	-
Dieldrin	0.04	0.40	9.5	n	0.29	n	-	n	n	-	n	n	n	n	-	-
Polychlorinated biphenyls	10.0	10.0	950 D	n	50 D	n	43 D	n	n	5 D	n	n	n	n	1.4	7.1 D
Inorganics																
Arsenic	1.7	3.8	7.0	-	15.0	-	8.0	-	-	11.0	-	-	-	-	7.0	16.0
Barium	5,500.0	10,000.0	10.0	-	40.0	-	22.0	-	-	44.0	-	-	-	-	12.0	28.0
Cadmium	39.0	1,000.0	0.6	-	1.0	-	0.7	-	-	0.6	-	-	-	-	0.5	1.2
Chromium III	1,400.0	10,000.0	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Chromium VI	390.0	10,000.0	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Chromium (Total)	na	na	21.0	-	16.0	-	18.0	-	-	13.0	-	-	-	-	12.0	20.0
Lead	150.0	500.0	4.0	-	73.0	-	24.0	-	-	79.0	-	-	-	-	27.0	130.0
Mercury	23.0	610.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	390.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	200.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPH (8015M)	500.0	2,500.0	830	n	7,600	n	8,700	n	n	660	n	n	n	n	2,400	5,400
TPH (418.1)	500.0	2,500.0	95	n	5,800	n	930	n	n	71	n	n	n	n	430	53

= Exceeds RIDEM Residential Exposure Criteria

All results in mg/kg unless otherwise noted

- = Non-Detect Result

n = Not Analyzed

na = Not Applicable

J = Estimated value detected below the reporting limit.
D = Concentration obtained from a diluted analysis
P = > than 40% difference between both GC columns

MITKEM CORPORATION
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Warwick, Rhode Island 02886-1755
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email: mitkem@worldnet.att.net

Cooler #1

CHAIN-OF-CUSTODY RECORD

REPORT TO		INVOICE TO		
COMPANY Foster Wheeler	PHONE 401-842-6940	COMPANY	PHONE	LAB PROJECT #: E1949
NAME Andrew Prophete	FAX 842-6970	NAME	FAX	
ADDRESS 98 Defense Hwy		ADDRESS		TURNAROUND TIME: 48hr
CITY/ST/ZIP Middletown RI 02842		CITY/ST/ZIP		

CLIENT PROJECT NAME:	CLIENT PROJECT #:	CLIENT P.O.#:
Bldg #6 / TP14		

REQUESTED ANALYSES

SAMPLE IDENTIFICATION	DATE/TIME SAMPLED	COMPOSITE	GRAB	WATER	SOIL	OTHER	LAB ID	# OF CONTAINERS	VOC 8260 w/ MeOH	SVOC 8270	TPH 8015	TPH 418.1	RCRA 8 Metals	PCB	Pesticides 8080						COMMENTS
EAETP14F1	11/24/98 7:45				X				X	X	X	X	X	X	X						
EAETP14F2	11/24/98 8:15				X				X												
EAETP14W3	11/24/98 8:25				X				X												
EAETP14W4	11/24/98 845				X				X	X	X	X	X	X	X						
EAETP14F3	11/24/98 910				X				X	X	X	X	X	X	X						
EAETP14W5	11/24/98 915				X				X												
EAETP14W1	11/24/98 935				X				X												
EAETP14F4	11/24/98 1325				X				X												
EAETP14W6	11/24/98 1330				X				X												
EAETP14W7	11/24/98 1350				X				X												
EAETP14W8	11/24/98 1400				X				X												
EAETP14W9	11/24/98 1435				X				X	X	X	X	X	X	X						

TSF#	RELINQUISHED BY	DATE/TIME	ACCEPTED BY	DATE/TIME
1	Andrew Prophete	11/24/98 1615	[illegible]	11/24/98 16:15
2		/		/
3		/		/

ADDITIONAL REMARKS: 48 hr Turnaround

COOLER TEMP: <4°C

WHITE: LABORATORY COPY YELLOW: REPORT COPY PINK: CLIENT'S COPY

MITKEM CORPORATION
175 Metro Center Boulevard
Warwick, Rhode Island 02886-1755
(401) 732-3400 • Fax (401) 732-3499
email: mitkem@worldnet.att.net

Cooler #1

CHAIN-OF-CUSTODY RECORD

REPORT TO		INVOICE TO		
COMPANY: Foster Wheeler	PHONE: 842-6940	COMPANY:	PHONE:	LAB PROJECT #: E1949
NAME: Andrew Prophete	FAX: 842-6970	NAME:	FAX:	
ADDRESS: 98 Defense Hwy		ADDRESS:		TURNAROUND TIME: 48hr
CITY/ST/ZIP: Middletown RI 02842		CITY/ST/ZIP:		

CLIENT PROJECT NAME: Bldg #6 / TP14
CLIENT PROJECT #:
CLIENT P.O.#:

REQUESTED ANALYSES

SAMPLE IDENTIFICATION	DATE/TIME SAMPLED	COMPOSITE	GRAB	WATER	SOIL	OTHER	LAB ID	# OF CONTAINERS	VOC 8260 w/MeOH	SVOC 8270	TPH 8015	TPH 418.1	RCRA 8 Metals	PCB	Pesticides						COMMENTS
EAETP14WD	11/24/98 1430				X				X	X	X	X	X	X	X						
EAETP14FS	11/24/98 1500				X				X	X	X	X	X	X	X						
TB	/																				not on COC originally
	/																				
	/																				
	/																				
	/																				
	/																				
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	/																				
	/																				

TSF#	RELINQUISHED BY	DATE/TIME	ACCEPTED BY	DATE/TIME
1	Andrew Prophete	11/24/98 1615	James Healey	11/24/98 1615
2		/		/
3		/		/

ADDITIONAL REMARKS: 48hr Turnaround

COOLER TEMP: <4°C

WHITE: LABORATORY COPY YELLOW: REPORT COPY PINK: CLIENT'S COPY

MITKEM CORPORATION

December 9, 1998

Foster Wheeler Environmental Corp.
98 T Defense Highway
Middletown, RI 02842
Attn: Mr. Jon Cary

RE: Client Project #: Bldgs 6 and 179, NUWC
Lab Project #: E1949

Dear Mr. Cary:

Enclosed please find the data report of the required analyses for the samples associated with the above referenced project. If you have any questions regarding this report, please call me.

We appreciate your business.

Sincerely,

Edward A. Lawler
Laboratory Operations Manager

175 Metro Center Boulevard • Warwick, Rhode Island 02886-1755 • (401) 732-3400 • Fax (401) 732-3499
email: mitkem@worldnet.att.net

MITKEM CORPORATION

Client: Foster Wheeler Environmental Corp.

Client Project: Bldg 6/TP-14, NUWC

Lab Project: E1949

Date samples received: 11/24/98

Project Narrative

This data report includes the analysis results for one (1) aqueous and fourteen (14) soil samples that were received from Foster Wheeler Environmental Corp. on November 24, 1998. Analyses were performed per specification in the Chain of Custody form. For reference, a copy of the Mitkem Sample Log-In form is included for cross-referencing the client sample ID and laboratory sample ID.

These samples were analyzed on a rush basis, with data provided via fax. Due to relatively high concentrations of target and non-target compounds present in samples, and due to matrix interferences, several samples required dilution and/or reanalysis. These reanalysis data may differ from the original data provided. This final hard copy report includes the results of all final dilutions and reanalyses.

All of the analyses were performed according to method specifications.

Several samples contain substantial concentrations of PCB material. This caused the surrogate standard decachlorobipheny to have unusually high percent recovery due to co-elution with material from the sample.

The concentration of PCB and semivolatile polynuclear aromatic hydrocarbons have a significant impact on the organochlorine pesticide analyses by method 8081. These compounds will give a positive response during the pesticide analysis. These may appear to be pesticides, and can meet all the EPA identification criteria for pesticides, but may instead be interference from the PCB or PAH in the sample. The presence of the "P" qualifier, as described on the following page, is another indication of the increased likelihood of false positive identification. In the samples in this submittal, the pattern of peaks in the pesticide analyses strongly suggests that the pesticide detections are actually from PCB in the sample, and are probably not pesticide compounds. Using the specified analytical methods, this cannot be positively confirmed. Non-routine analysis using high resolution GC/MS may provide a tool to positively identify any pesticides present in these samples.

MITKEM CORPORATION

No other unusual occurrences were noted during sample analysis.

This data report has been reviewed and is authorized for release as evidenced by the signature below.

Edward A. Lawler
Laboratory Operations Manager

Data Flag/Qualifiers:

J This flag indicates an estimated value due to either
- the compound was detected at below the Reporting Limit, or
- estimated concentration for Tentatively Identified Compound

B For organic analyses, this flag indicates the analyte was also detected in the associated Method Blank. The B flag has an alternative meaning for CLP-type metals analyses, indicating a "trace" concentration below the normal reporting limit and above the detection limit.

D This flag indicates the analyte concentration was obtained from a diluted analysis

E This flag indicates the analyte concentration exceeded the Calibration Range

P This flag is used for Pesticides/PCB/Herbicide analyte when there is a greater than 40% difference for detected concentration between the two GC columns used for Primary and Confirmation analyses. The lower of the two values is reported in the Analysis Report.

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: EAETP14F1
Lab ID: E1949-01
Analysis: Method 8082

Analysis Date: 11/28/98
Matrix: Soil, 50% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	66
Aroclor-1221	ND	130
Aroclor-1232	ND	66
Aroclor-1242	ND	66
Aroclor-1248	ND	66
Aroclor-1254	ND	66
Aroclor-1260	950,000 D	66

QC Batch: P1124-BS1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	82%
Decachlorobiphenyl	360% *

ND=Not Detected

* Out of QC limit.

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: EAETP14W4
Lab ID: E1949-04
Analysis: Method 8082

Analysis Date: 11/28/98
Matrix: Soil, 50% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	66
Aroclor-1221	ND	130
Aroclor-1232	ND	66
Aroclor-1242	ND	66
Aroclor-1248	ND	66
Aroclor-1254	ND	66
Aroclor-1260	5,000 D	66

QC Batch: P1124-BS1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	84%
Decachlorobiphenyl	95%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: EAETP14F3
Lab ID: E1949-05
Analysis: Method 8082

Analysis Date: 11/28/98
Matrix: Soil, 52% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	63
Aroclor-1221	ND	13,000
Aroclor-1232	ND	63
Aroclor-1242	ND	63
Aroclor-1248	ND	63
Aroclor-1254	ND	63
Aroclor-1260	50,000 D	63

QC Batch: P1124-BS1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	68%
Decachlorobiphenyl	109%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: EAETP14W9
Lab ID: E1949-12
Analysis: Method 8082

Analysis Date: 11/28/98
Matrix: Soil, 53% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	62
Aroclor-1221	ND	120
Aroclor-1232	ND	62
Aroclor-1242	ND	62
Aroclor-1248	ND	62
Aroclor-1254	ND	62
Aroclor-1260	1,400	62

QC Batch: P1124-BS1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	83%
Decachlorobiphenyl	80%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: EAETP14W10
Lab ID: E1949-13
Analysis: Method 8082

Analysis Date: 11/28/98
Matrix: Soil, 49% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	67
Aroclor-1221	ND	130
Aroclor-1232	ND	67
Aroclor-1242	ND	67
Aroclor-1248	ND	67
Aroclor-1254	ND	67
Aroclor-1260	7,100 D	67

QC Batch: P1124-BS1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	60%
Decachlorobiphenyl	176% *

ND=Not Detected

* Out of QC limit.

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: EAETP14F5
Lab ID: E1949-14
Analysis: Method 8082

Analysis Date: 11/28/98
Matrix: Soil, 51% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	65
Aroclor-1221	ND	130
Aroclor-1232	ND	65
Aroclor-1242	ND	65
Aroclor-1248	ND	65
Aroclor-1254	ND	65
Aroclor-1260	43,000 D	65

QC Batch: P1124-BS1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	118%
Decachlorobiphenyl	158% *

ND=Not Detected

* Out of QC limit.

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, P1124-BS1
Analysis: Method 8082

Analysis Date: 12/9/98
Matrix: Solid
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	33
Aroclor-1221	ND	66
Aroclor-1232	ND	33
Aroclor-1242	ND	33
Aroclor-1248	ND	33
Aroclor-1254	ND	33
Aroclor-1260	ND	33

QC Batch: P1124-BS1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	104%
Decachlorobiphenyl	89%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCBs)

Lab Control Summary

Client: Foster Wheeler Environmental Corp.
Lab ID for Blank Spike: P1124-LS2
Analysis: Method 8082

Matrix: Solid
Analysis Date for Blank Spike: 12/9/98

Analyte	% Recovery
Aroclor 1016	112
Aroclor 1260	100

QC Batch: P1124-BS1

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Client: Foster Wheeler Environmental Corp.
Client ID: EAETP14F1
Lab ID: E1949-01
Analysis: Method 8081

Analysis Date: 12/4/98
Matrix: Soil, 50% solids
Concentration in: ug/kg, dry weight basis
Dilution: 500

Analyte	Results	Reporting Limits
alpha-BHC	ND	1,700
gamma-BHC (Lindane)	ND	1,700
Heptachlor	ND	1,700
Aldrin	ND	1,700
beta-BHC	ND	1,700
delta-BHC	ND	1,700
Heptachlor epoxide	ND	1,700
Endosulfan I	ND	1,700
4,4'-DDE	ND	3,400
Dieldrin	9,500	3,400
Endrin	ND	3,400
4,4'-DDD	ND	3,400
Endosulfan II	ND	3,400
4,4'-DDT	ND	3,400
Endrin aldehyde	ND	3,400
Methoxychlor	ND	17,000
Endosulfan sulfate	6,000 P	3,400
Toxaphene	ND	170,000
Gamma chlordane	2,100 P	1,700
Endrin ketone	ND	3,400
Alpha chlordane	ND	1,700

QC Batch: P1124-BS1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	DL
Decachlorobiphenyl	DL

ND = Not Detected
DL = Diluted Out

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Client: Foster Wheeler Environmental Corp.
Client ID: EAETP14W4
Lab ID: E1949-04
Analysis: Method 8081

Analysis Date: 12/4/98
Matrix: Soil, 50% solids
Concentration in: ug/kg, dry weight basis
Dilution: 10

Analyte	Results	Reporting Limits
alpha-BHC	ND	34
gamma-BHC (Lindane)	ND	34
Heptachlor	ND	34
Aldrin	ND	34
beta-BHC	ND	34
delta-BHC	ND	34
Heptachlor epoxide	ND	34
Endosulfan I	ND	34
4,4'-DDE	ND	66
Dieldrin	ND	66
Endrin	ND	66
4,4'-DDD	ND	66
Endosulfan II	ND	66
4,4'-DDT	180 P	66
Endrin aldehyde	ND	66
Methoxychlor	ND	340
Endosulfan sulfate	73 P	66
Toxaphene	ND	3,400
Gamma chlordane	ND	34
Endrin ketone	ND	66
Alpha chlordane	ND	34

QC Batch: P1124-BS1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	DL
Decachlorobiphenyl	DL

ND = Not Detected
DL = Diluted Out

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Client: Foster Wheeler Environmental Corp.
Client ID: EAETP14F3
Lab ID: E1949-05
Analysis: Method 8081

Analysis Date: 12/4/98
Matrix: Soil, 52% solids
Concentration in: ug/kg, dry weight basis
Dilution: 10

Analyte	Results	Reporting Limits
alpha-BHC	ND	33
gamma-BHC (Lindane)	ND	33
Heptachlor	ND	33
Aldrin	ND	33
beta-BHC	ND	33
delta-BHC	ND	33
Heptachlor epoxide	ND	33
Endosulfan I	ND	33
4,4'-DDE	ND	63
Dieldrin	290	63
Endrin	ND	63
4,4'-DDD	ND	63
Endosulfan II	ND	63
4,4'-DDT	ND	63
Endrin aldehyde	72 P	63
Methoxychlor	ND	330
Endosulfan sulfate	270 P	63
Toxaphene	ND	3,300
Gamma chlordane	68 P	33
Endrin ketone	ND	66
Alpha chlordane	ND	33

QC Batch: P1124-BS1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	DL
Decachlorobiphenyl	DL

ND = Not Detected
DL = Diluted Out

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Client: Foster Wheeler Environmental Corp.
Client ID: EAETP14W9
Lab ID: E1949-12
Analysis: Method 8081

Analysis Date: 11/30/98
Matrix: Soil, 53% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
alpha-BHC	ND	3.2
gamma-BHC (Lindane)	ND	3.2
Heptachlor	ND	3.2
Aldrin	ND	3.2
beta-BHC	ND	3.2
delta-BHC	ND	3.2
Heptachlor epoxide	ND	3.2
Endosulfan I	ND	3.2
4,4'-DDE	ND	6.2
Dieldrin	ND	6.2
Endrin	ND	6.2
4,4'-DDD	ND	6.2
Endosulfan II	ND	6.2
4,4'-DDT	ND	6.2
Endrin aldehyde	ND	6.2
Methoxychlor	ND	32
Endosulfan sulfate	15 P	6.2
Toxaphene	ND	320
Gamma chlordane	ND	3.2
Endrin ketone	ND	6.4
Alpha chlordane	ND	3.2

QC Batch: P1124-BS1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	DL
Decachlorobiphenyl	DL

ND = Not Detected
DL = Diluted Out

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Client: Foster Wheeler Environmental Corp.
Client ID: EAETP14W10
Lab ID: E1949-13
Analysis: Method 8081

Analysis Date: 12/4/98
Matrix: Soil, 49% solids
Concentration in: ug/kg, dry weight basis
Dilution: 10

Analyte	Results	Reporting Limits
alpha-BHC	ND	35
gamma-BHC (Lindane)	ND	35
Heptachlor	ND	35
Aldrin	ND	35
beta-BHC	ND	35
delta-BHC	ND	35
Heptachlor epoxide	ND	35
Endosulfan I	ND	35
4,4'-DDE	ND	67
Dieldrin	ND	67
Endrin	ND	67
4,4'-DDD	91	67
Endosulfan II	ND	67
4,4'-DDT	ND	67
Endrin aldehyde	ND	67
Methoxychlor	ND	350
Endosulfan sulfate	420	67
Toxaphene	ND	3,500
Gamma chlordane	ND	35
Endrin ketone	ND	67
Alpha chlordane	ND	35

QC Batch: P1124-BS1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	DL
Decachlorobiphenyl	DL

ND = Not Detected
DL = Diluted Out

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Client: Foster Wheeler Environmental Corp.
Client ID: EAETP14F5
Lab ID: E1949-14
Analysis: Method 8081

Analysis Date: 12/4/98
Matrix: Soil, 51% solids
Concentration in: ug/kg, dry weight basis
Dilution: 10

Analyte	Results	Reporting Limits
alpha-BHC	ND	33
gamma-BHC (Lindane)	ND	33
Heptachlor	ND	33
Aldrin	ND	33
beta-BHC	ND	33
delta-BHC	ND	33
Heptachlor epoxide	ND	33
Endosulfan I	ND	33
4,4'-DDE	ND	65
Dieldrin	ND	65
Endrin	ND	65
4,4'-DDD	ND	65
Endosulfan II	ND	65
4,4'-DDT	ND	65
Endrin aldehyde	84 P	65
Methoxychlor	500	330
Endosulfan sulfate	350 P	65
Toxaphene	ND	3,500
Gamma chlordane	ND	33
Endrin ketone	ND	65
Alpha chlordane	ND	33

QC Batch: P1124-BS1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	DL
Decachlorobiphenyl	DL

ND = Not Detected
DL = Diluted Out

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, P1124-BS1
Analysis: Method 8081

Analysis Date: 12/4/98
Matrix: Solid
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
alpha-BHC	ND	1.7
gamma-BHC (Lindane)	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
beta-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
4,4'-DDE	ND	3.4
Dieldrin	ND	3.4
Endrin	ND	3.4
4,4'-DDD	ND	3.4
Endosulfan II	ND	3.4
4,4'-DDT	ND	3.4
Endrin aldehyde	ND	3.4
Methoxychlor	ND	17
Endosulfan sulfate	ND	3.4
Toxaphene	ND	170
Gamma chlordane	ND	1.7
Endrin ketone	ND	3.4
Alpha chlordane	ND	1.7

QC Batch: P1124-BS1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	108%
Decachlorobiphenyl	94%

ND = Not Detected

E1949-MB

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Lab Control Summary

Client: Foster Wheeler Environmental Corp.
Lab ID for Blank Spike: P1124-LCS1
Analysis: Method 8081

Matrix: Solid
Analysis Date for Blank Spike: 12/4/98

Analyte	% Recovery
gamma-BHC (Lindane)	110
Heptachlor	104
Aldrin	113
Dieldrin	108
Endrin	118
4,4'-DDT	100

QC Batch: P1124-BS1

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	11/30/98
Client ID:	EAETP14F1	Matrix:	Soil, 50% solids
Lab ID:	E1949-01	Analysis:	Method 8270
Dilution:	10	Concentration in:	ug/kg, dry weight basis

Analyte	Results	Reporting Limits
Phenol	ND	6,600
bis(2-Chloroethyl)ether	ND	6,600
2-Chlorophenol	ND	6,600
1,3-Dichlorobenzene	ND	6,600
1,4-Dichlorobenzene	140 J	6,600
1,2-Dichlorobenzene	ND	6,600
2-Methylphenol	ND	6,600
2,2'-oxybis(1-Chloropropane)	ND	6,600
4-Methylphenol	ND	6,600
n-Nitroso-di-n-propylamine	ND	6,600
Hexachloroethane	ND	6,600
Nitrobenzene	ND	6,600
Isophorone	ND	6,600
2-Nitrophenol	ND	6,600
2,4-Dimethylphenol	ND	6,600
bis(2-Chloroethoxy)methane	ND	6,600
2,4-Dichlorophenol	ND	6,600
1,2,4-Trichlorobenzene	ND	6,600
Naphthalene	ND	6,600
4-Chloroaniline	ND	6,600
Hexachlorobutadiene	ND	6,600
4-Chloro-3-methylphenol	ND	6,600
2-Methylnaphthalene	ND	6,600
Hexachlorocyclopentadiene	ND	6,600
2,4,6-Trichlorophenol	ND	6,600
2,4,5-Trichlorophenol	ND	17,000
2-Chloronaphthalene	ND	6,600
2-Nitroaniline	ND	17,000
Dimethylphthalate	ND	6,600
Acenaphthylene	ND	6,600
2,6-Dinitrotoluene	ND	6,600
3-Nitroaniline	ND	17,000
Acenaphthene	ND	6,600
2,4-Dinitrophenol	ND	17,000
4-Nitrophenol	ND	17,000
Dibenzofuran	ND	6,600
2,4-Dinitrotoluene	ND	6,600

MITKEM CORPORATION

Client ID: EAETP14F1

Lab ID: E1949-01

Analyte	Results	Reporting Limits
Diethylphthalate	ND	6,600
Fluorene	ND	6,600
4-Chlorophenyl-phenylether	ND	6,600
4-Nitroaniline	ND	17,000
4,6-Dinitro-2-methylphenol	ND	17,000
n-Nitrosodiphenylamine	ND	6,600
4-Bromophenyl-phenylether	ND	6,600
Hexachlorobenzene	ND	6,600
Pentachlorophenol	ND	17,000
Phenanthrene	710 J	6,600
Anthracene	ND	6,600
Di-n-butylphthalate	ND	6,600
Carbazole	ND	6,600
Fluoranthene	1,400 J	6,600
Pyrene	1,000 J	6,600
Butylbenzylphthalate	ND	6,600
Benzo(a)anthracene	920 J	6,600
Chrysene	870 J	6,600
3,3'-Dichlorobenzidine	ND	6,600
bis(2-Ethylhexyl)phthalate	ND	6,600
Di-n-octylphthalate	ND	6,600
Benzo(b)fluoranthene	1,000 J	6,600
Benzo(k)fluoranthene	ND	6,600
Benzo(a)pyrene	700 J	6,600
Indeno(1,2,3-cd)pyrene	ND	6,600
Dibenz(a,h)anthracene	ND	6,600
Benzo(g,h,i)perylene	ND	6,600

QC Batch: S1125-BS1

Surrogate Recovery:	
2-Fluorophenol	63%
Phenol-d5	70%
2-Chlorophenol-d4	72%
2,4,6-Tribromophenol	57%
1,2-Dichlorobenzene-d4	77%
Nitrobenzene-d5	76%
2-Fluorobiphenyl	75%
p-Terphenyl-d14	65%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	11/30/98
Client ID:	EAETP14W4	Matrix:	Soil, 50% solids
Lab ID:	E1949-04	Analysis:	Method 8270
Dilution:	10	Concentration in:	ug/kg, dry weight basis

Analyte	Results	Reporting Limits
Phenol	ND	6,600
bis(2-Chloroethyl)ether	ND	6,600
2-Chlorophenol	ND	6,600
1,3-Dichlorobenzene	ND	6,600
1,4-Dichlorobenzene	ND	6,600
1,2-Dichlorobenzene	ND	6,600
2-Methylphenol	ND	6,600
2,2'-oxybis(1-Chloropropane)	ND	6,600
4-Methylphenol	ND	6,600
n-Nitroso-di-n-propylamine	ND	6,600
Hexachloroethane	ND	6,600
Nitrobenzene	ND	6,600
Isophorone	ND	6,600
2-Nitrophenol	ND	6,600
2,4-Dimethylphenol	ND	6,600
bis(2-Chloroethoxy)methane	ND	6,600
2,4-Dichlorophenol	ND	6,600
1,2,4-Trichlorobenzene	ND	6,600
Naphthalene	ND	6,600
4-Chloroaniline	ND	6,600
Hexachlorobutadiene	ND	6,600
4-Chloro-3-methylphenol	ND	6,600
2-Methylnaphthalene	ND	6,600
Hexachlorocyclopentadiene	ND	6,600
2,4,6-Trichlorophenol	ND	6,600
2,4,5-Trichlorophenol	ND	17,000
2-Chloronaphthalene	ND	6,600
2-Nitroaniline	ND	17,000
Dimethylphthalate	ND	6,600
Acenaphthylene	910 J	6,600
2,6-Dinitrotoluene	ND	6,600
3-Nitroaniline	ND	17,000
Acenaphthene	ND	6,600
2,4-Dinitrophenol	ND	17,000
4-Nitrophenol	ND	17,000
Dibenzofuran	ND	6,600
2,4-Dinitrotoluene	ND	6,600

MITKEM CORPORATION

Client ID: EAETP14W4

Lab ID: E1949-04

Analyte	Results	Reporting Limits
Diethylphthalate	ND	6,600
Fluorene	ND	6,600
4-Chlorophenyl-phenylether	ND	6,600
4-Nitroaniline	ND	17,000
4,6-Dinitro-2-methylphenol	ND	17,000
n-Nitrosodiphenylamine	ND	6,600
4-Bromophenyl-phenylether	ND	6,600
Hexachlorobenzene	ND	6,600
Pentachlorophenol	1,000 J	17,000
Phenanthrene	4,500 J	6,600
Anthracene	1,200 J	6,600
Di-n-butylphthalate	ND	6,600
Carbazole	ND	6,600
Fluoranthene	8,300	6,600
Pyrene	6,200 J	6,600
Butylbenzylphthalate	ND	6,600
Benzo(a)anthracene	3,800 J	6,600
Chrysene	4,400 J	6,600
3,3'-Dichlorobenzidine	ND	6,600
bis(2-Ethylhexyl)phthalate	ND	6,600
Di-n-octylphthalate	ND	6,600
Benzo(b)fluoranthene	4,900 J	6,600
Benzo(k)fluoranthene	1,700 J	6,600
Benzo(a)pyrene	3,400 J	6,600
Indeno(1,2,3-cd)pyrene	2,100 J	6,600
Dibenz(a,h)anthracene	ND	6,600
Benzo(g,h,i)perylene	2,200 J	6,600

QC Batch: S1125-BS1

Surrogate Recovery:	
2-Fluorophenol	50%
Phenol-d5	54%
2-Chlorophenol-d4	58%
2,4,6-Tribromophenol	42%
1,2-Dichlorobenzene-d4	66%
Nitrobenzene-d5	62%
2-Fluorobiphenyl	66%
p-Terphenyl-d14	56%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	11/30/98
Client ID:	EAETP14F3	Matrix:	Soil, 52% solids
Lab ID:	E1949-05	Analysis:	Method 8270
Dilution:	10	Concentration in:	ug/kg, dry weight basis

Analyte	Results	Reporting Limits
Phenol	ND	6,300
bis(2-Chloroethyl)ether	ND	6,300
2-Chlorophenol	ND	6,300
1,3-Dichlorobenzene	ND	6,300
1,4-Dichlorobenzene	ND	6,300
1,2-Dichlorobenzene	ND	6,300
2-Methylphenol	ND	6,300
2,2'-oxybis(1-Chloropropane)	ND	6,300
4-Methylphenol	ND	6,300
n-Nitroso-di-n-propylamine	ND	6,300
Hexachloroethane	ND	6,300
Nitrobenzene	ND	6,300
Isophorone	ND	6,300
2-Nitrophenol	ND	6,300
2,4-Dimethylphenol	ND	6,300
bis(2-Chloroethoxy)methane	ND	6,300
2,4-Dichlorophenol	ND	6,300
1,2,4-Trichlorobenzene	ND	6,300
Naphthalene	ND	6,300
4-Chloroaniline	ND	6,300
Hexachlorobutadiene	ND	6,300
4-Chloro-3-methylphenol	ND	6,300
2-Methylnaphthalene	ND	6,300
Hexachlorocyclopentadiene	ND	6,300
2,4,6-Trichlorophenol	ND	6,300
2,4,5-Trichlorophenol	ND	16,000
2-Chloronaphthalene	ND	6,300
2-Nitroaniline	ND	16,000
Dimethylphthalate	ND	6,300
Acenaphthylene	1,400 J	6,300
2,6-Dinitrotoluene	ND	6,300
3-Nitroaniline	ND	16,000
Acenaphthene	ND	6,300
2,4-Dinitrophenol	ND	16,000
4-Nitrophenol	ND	16,000
Dibenzofuran	ND	6,300
2,4-Dinitrotoluene	ND	6,300

MITKEM CORPORATION

Client ID: EAETP14F3

Lab ID: E1949-05

Analyte	Results	Reporting Limits
Diethylphthalate	ND	6,300
Fluorene	ND	6,300
4-Chlorophenyl-phenylether	ND	6,300
4-Nitroaniline	ND	16,000
4,6-Dinitro-2-methylphenol	ND	16,000
n-Nitrosodiphenylamine	ND	6,300
4-Bromophenyl-phenylether	ND	6,300
Hexachlorobenzene	ND	6,300
Pentachlorophenol	ND	16,000
Phenanthrene	4,100 J	6,300
Anthracene	1,900 J	6,300
Di-n-butylphthalate	ND	6,300
Carbazole	730 J	6,300
Fluoranthene	8,900	6,300
Pyrene	6,000 J	6,300
Butylbenzylphthalate	ND	6,300
Benzo(a)anthracene	4,900 J	6,300
Chrysene	5,400 J	6,300
3,3'-Dichlorobenzidine	ND	6,300
bis(2-Ethylhexyl)phthalate	ND	6,300
Di-n-octylphthalate	ND	6,300
Benzo(b)fluoranthene	6,000 J	6,300
Benzo(k)fluoranthene	1,900 J	6,300
Benzo(a)pyrene	4,400 J	6,300
Indeno(1,2,3-cd)pyrene	2,800 J	6,300
Dibenz(a,h)anthracene	900 J	6,300
Benzo(g,h,i)perylene	3,000 J	6,300

QC Batch: S1125-BS1

Surrogate Recovery:	
2-Fluorophenol	62%
Phenol-d5	66%
2-Chlorophenol-d4	71%
2,4,6-Tribromophenol	63%
1,2-Dichlorobenzene-d4	80%
Nitrobenzene-d5	78%
2-Fluorobiphenyl	89%
p-Terphenyl-d14	66%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	11/30/98
Client ID:	EAETP14W9	Matrix:	Soil, 53% solids
Lab ID:	E1949-12	Analysis:	Method 8270
Dilution:	10	Concentration in:	ug/kg, dry weight basis

Analyte	Results	Reporting Limits
Phenol	ND	6,200
bis(2-Chloroethyl)ether	ND	6,200
2-Chlorophenol	ND	6,200
1,3-Dichlorobenzene	ND	6,200
1,4-Dichlorobenzene	ND	6,200
1,2-Dichlorobenzene	ND	6,200
2-Methylphenol	ND	6,200
2,2'-oxybis(1-Chloropropane)	ND	6,200
4-Methylphenol	ND	6,200
n-Nitroso-di-n-propylamine	ND	6,200
Hexachloroethane	ND	6,200
Nitrobenzene	ND	6,200
Isophorone	ND	6,200
2-Nitrophenol	ND	6,200
2,4-Dimethylphenol	ND	6,200
bis(2-Chloroethoxy)methane	ND	6,200
2,4-Dichlorophenol	ND	6,200
1,2,4-Trichlorobenzene	ND	6,200
Naphthalene	ND	6,200
4-Chloroaniline	ND	6,200
Hexachlorobutadiene	ND	6,200
4-Chloro-3-methylphenol	ND	6,200
2-Methylnaphthalene	ND	6,200
Hexachlorocyclopentadiene	ND	6,200
2,4,6-Trichlorophenol	ND	6,200
2,4,5-Trichlorophenol	ND	16,000
2-Chloronaphthalene	ND	6,200
2-Nitroaniline	ND	16,000
Dimethylphthalate	ND	6,200
Acenaphthylene	ND	6,200
2,6-Dinitrotoluene	ND	6,200
3-Nitroaniline	ND	16,000
Acenaphthene	ND	6,200
2,4-Dinitrophenol	ND	16,000
4-Nitrophenol	ND	16,000
Dibenzofuran	ND	6,200
2,4-Dinitrotoluene	ND	6,200

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MITKEM CORPORATION

Client ID: EAETP14W9 Lab ID: E1949-12

Analyte	Results	Reporting Limits
Diethylphthalate	ND	6,200
Fluorene	ND	6,200
4-Chlorophenyl-phenylether	ND	6,200
4-Nitroaniline	ND	16,000
4,6-Dinitro-2-methylphenol	ND	16,000
n-Nitrosodiphenylamine	ND	6,200
4-Bromophenyl-phenylether	ND	6,200
Hexachlorobenzene	ND	6,200
Pentachlorophenol	ND	16,000
Phenanthrene	1,000 J	6,200
Anthracene	ND	6,200
Di-n-butylphthalate	ND	6,200
Carbazole	ND	6,200
Fluoranthene	1,500 J	6,200
Pyrene	1,000 J	6,200
Butylbenzylphthalate	ND	6,200
Benzo(a)anthracene	700 J	6,200
Chrysene	690 J	6,200
3,3'-Dichlorobenzidine	ND	6,200
bis(2-Ethylhexyl)phthalate	ND	6,200
Di-n-octylphthalate	ND	6,200
Benzo(b)fluoranthene	900 J	6,200
Benzo(k)fluoranthene	ND	6,200
Benzo(a)pyrene	700 J	6,200
Indeno(1,2,3-cd)pyrene	ND	6,200
Dibenz(a,h)anthracene	ND	6,200
Benzo(g,h,i)perylene	ND	6,200

QC Batch: S1125-BS1

Surrogate Recovery:	
2-Fluorophenol	58%
Phenol-d5	64%
2-Chlorophenol-d4	65%
2,4,6-Tribromophenol	44%
1,2-Dichlorobenzene-d4	74%
Nitrobenzene-d5	70%
2-Fluorobiphenyl	77%
p-Terphenyl-d14	70%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	11/30/98
Client ID:	EAETP14W10	Matrix:	Soil, 49% solids
Lab ID:	E1949-13	Analysis:	Method 8270
Dilution:	10	Concentration in:	ug/kg, dry weight basis

Analyte	Results	Reporting Limits
Phenol	930 J	6,100
bis(2-Chloroethyl)ether	ND	6,100
2-Chlorophenol	ND	6,100
1,3-Dichlorobenzene	ND	6,100
1,4-Dichlorobenzene	ND	6,100
1,2-Dichlorobenzene	ND	6,100
2-Methylphenol	1,200 J	6,100
2,2'-oxybis(1-Chloropropane)	ND	6,100
4-Methylphenol	ND	6,100
n-Nitroso-di-n-propylamine	ND	6,100
Hexachloroethane	ND	6,100
Nitrobenzene	ND	6,100
Isophorone	ND	6,100
2-Nitrophenol	ND	6,100
2,4-Dimethylphenol	ND	6,100
bis(2-Chloroethoxy)methane	ND	6,100
2,4-Dichlorophenol	ND	6,100
1,2,4-Trichlorobenzene	ND	6,100
Naphthalene	44,000	6,100
4-Chloroaniline	ND	6,100
Hexachlorobutadiene	ND	6,100
4-Chloro-3-methylphenol	ND	6,100
2-Methylnaphthalene	12,000	6,100
Hexachlorocyclopentadiene	ND	6,100
2,4,6-Trichlorophenol	ND	6,100
2,4,5-Trichlorophenol	ND	17,000
2-Chloronaphthalene	ND	6,100
2-Nitroaniline	ND	17,000
Dimethylphthalate	ND	6,100
Acenaphthylene	1,100 J	6,100
2,6-Dinitrotoluene	ND	6,100
3-Nitroaniline	ND	17,000
Acenaphthene	52,000	6,100
2,4-Dinitrophenol	ND	17,000
4-Nitrophenol	ND	17,000
Dibenzofuran	34,000	6,100
2,4-Dinitrotoluene	ND	6,100

MITKEM CORPORATION

Client ID: EAETP14W10 Lab ID: E1949-13

Analyte	Results	Reporting Limits
Diethylphthalate	ND	6,100
Fluorene	53,000	6,100
4-Chlorophenyl-phenylether	ND	6,100
4-Nitroaniline	ND	17,000
4,6-Dinitro-2-methylphenol	ND	17,000
n-Nitrosodiphenylamine	ND	6,100
4-Bromophenyl-phenylether	ND	6,100
Hexachlorobenzene	ND	6,100
Pentachlorophenol	ND	17,000
Phenanthrene	470,000 D	6,100
Anthracene	93,000	6,100
Di-n-butylphthalate	ND	6,100
Carbazole	57,000	6,100
Fluoranthene	480,000 D	6,100
Pyrene	350,000 D	6,100
Butylbenzylphthalate	ND	6,100
Benzo(a)anthracene	200,000 D	6,100
Chrysene	180,000 D	6,100
3,3'-Dichlorobenzidine	ND	6,100
bis(2-Ethylhexyl)phthalate	ND	6,100
Di-n-octylphthalate	ND	6,100
Benzo(b)fluoranthene	190,000 D	6,100
Benzo(k)fluoranthene	50,000	6,100
Benzo(a)pyrene	160,000 D	6,100
Indeno(1,2,3-cd)pyrene	70,000	6,100
Dibenz(a,h)anthracene	20,000	6,100
Benzo(g,h,i)perylene	73,000	6,100

QC Batch: S1125-BS1

Surrogate Recovery:	
2-Fluorophenol	61%
Phenol-d5	68%
2-Chlorophenol-d4	73%
2,4,6-Tribromophenol	55%
1,2-Dichlorobenzene-d4	78%
Nitrobenzene-d5	74%
2-Fluorobiphenyl	83%
p-Terphenyl-d14	74%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	11/30/98
Client ID:	EAETP14F5	Matrix:	Soil, 51% solids
Lab ID:	E1949-14	Analysis:	Method 8270
Dilution:	10	Concentration in:	ug/kg, dry weight basis

Analyte	Results	Reporting Limits
Phenol	ND	6,500
bis(2-Chloroethyl)ether	ND	6,500
2-Chlorophenol	ND	6,500
1,3-Dichlorobenzene	ND	6,500
1,4-Dichlorobenzene	ND	6,500
1,2-Dichlorobenzene	ND	6,500
2-Methylphenol	530 J	6,500
2,2'-oxybis(1-Chloropropane)	ND	6,500
4-Methylphenol	ND	6,500
n-Nitroso-di-n-propylamine	ND	6,500
Hexachloroethane	ND	6,500
Nitrobenzene	ND	6,500
Isophorone	ND	6,500
2-Nitrophenol	ND	6,500
2,4-Dimethylphenol	ND	6,500
bis(2-Chloroethoxy)methane	ND	6,500
2,4-Dichlorophenol	ND	6,500
1,2,4-Trichlorobenzene	ND	6,500
Naphthalene	16,000	6,500
4-Chloroaniline	ND	6,500
Hexachlorobutadiene	ND	6,500
4-Chloro-3-methylphenol	ND	6,500
2-Methylnaphthalene	6,000 J	6,500
Hexachlorocyclopentadiene	ND	6,500
2,4,6-Trichlorophenol	ND	6,500
2,4,5-Trichlorophenol	ND	16,000
2-Chloronaphthalene	ND	6,500
2-Nitroaniline	ND	16,000
Dimethylphthalate	ND	6,500
Acenaphthylene	1,800 J	6,500
2,6-Dinitrotoluene	ND	6,500
3-Nitroaniline	ND	16,000
Acenaphthene	33,000	6,500
2,4-Dinitrophenol	ND	16,000
4-Nitrophenol	ND	16,000
Dibenzofuran	16,000	6,500
2,4-Dinitrotoluene	ND	6,500

MITKEM CORPORATION

Client ID: EAETP14F5 Lab ID: E1949-14

Analyte	Results	Reporting Limits
Diethylphthalate	ND	6,500
Fluorene	26,000	6,500
4-Chlorophenyl-phenylether	ND	6,500
4-Nitroaniline	ND	16,000
4,6-Dinitro-2-methylphenol	ND	16,000
n-Nitrosodiphenylamine	ND	6,500
4-Bromophenyl-phenylether	ND	6,500
Hexachlorobenzene	ND	6,500
Pentachlorophenol	ND	16,000
Phenanthrene	240,000 D	6,500
Anthracene	50,000	6,500
Di-n-butylphthalate	2,200 J	6,500
Carbazole	32,000	6,500
Fluoranthene	260,000 D	6,500
Pyrene	190,000 D	6,500
Butylbenzylphthalate	ND	6,500
Benzo(a)anthracene	100,000	6,500
Chrysene	90,000	6,500
3,3'-Dichlorobenzidine	ND	6,500
bis(2-Ethylhexyl)phthalate	770 J	6,500
Di-n-octylphthalate	ND	6,500
Benzo(b)fluoranthene	100,000	6,500
Benzo(k)fluoranthene	27,000	6,500
Benzo(a)pyrene	78,000	6,500
Indeno(1,2,3-cd)pyrene	40,000	6,500
Dibenz(a,h)anthracene	12,000	6,500
Benzo(g,h,i)perylene	40,000	6,500

QC Batch: S1125-BS1

Surrogate Recovery:	
2-Fluorophenol	66%
Phenol-d5	72%
2-Chlorophenol-d4	78%
2,4,6-Tribromophenol	61%
1,2-Dichlorobenzene-d4	84%
Nitrobenzene-d5	80%
2-Fluorobiphenyl	83%
p-Terphenyl-d14	75%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	11/30/98
Client ID:		Matrix:	Solid
Lab ID:	Method Blank, S1125-BS1	Analysis:	Method 8270
Dilution:	1	Concentration in:	ug/kg

Analyte	Results	Reporting Limits
Phenol	ND	330
bis(2-Chloroethyl)ether	ND	330
2-Chlorophenol	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
1,2-Dichlorobenzene	ND	330
2-Methylphenol	ND	330
2,2'-oxybis(1-Chloropropane)	ND	330
4-Methylphenol	ND	330
n-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
2-Nitrophenol	ND	330
2,4-Dimethylphenol	ND	330
bis(2-Chloroethoxy)methane	ND	330
2,4-Dichlorophenol	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	330
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
4-Chloro-3-methylphenol	ND	330
2-Methylnaphthalene	ND	330
Hexachlorocyclopentadiene	ND	330
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	830
2-Chloronaphthalene	ND	330
2-Nitroaniline	ND	830
Dimethylphthalate	ND	330
Acenaphthylene	ND	330
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	830
Acenaphthene	ND	330
2,4-Dinitrophenol	ND	830
4-Nitrophenol	ND	830
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330

MITKEM CORPORATION

Client ID:

Lab ID: Method Blank, S1125-BS1

Analyte	Results	Reporting Limits
Diethylphthalate	ND	330
Fluorene	ND	330
4-Chlorophenyl-phenylether	ND	330
4-Nitroaniline	ND	830
4,6-Dinitro-2-methylphenol	ND	830
n-Nitrosodiphenylamine	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Pentachlorophenol	ND	830
Phenanthrene	ND	330
Anthracene	ND	330
Di-n-butylphthalate	ND	330
Carbazole	ND	330
Fluoranthene	ND	330
Pyrene	ND	330
Butylbenzylphthalate	ND	330
Benzo(a)anthracene	ND	330
Chrysene	ND	330
3,3'-Dichlorobenzidine	ND	330
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	330
Benzo(k)fluoranthene	ND	330
Benzo(a)pyrene	ND	330
Indeno(1,2,3-cd)pyrene	ND	330
Dibenz(a,h)anthracene	ND	330
Benzo(g,h,i)perylene	ND	330

QC Batch: S1125-BS1

Surrogate Recovery:	
2-Fluorophenol	89%
Phenol-d5	78%
2-Chlorophenol-d4	82%
2,4,6-Tribromophenol	87%
1,2-Dichlorobenzene-d4	80%
Nitrobenzene-d5	90%
2-Fluorobiphenyl	85%
p-Terphenyl-d14	110%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Lab Control Summary

Client: Foster Wheeler Environmental Corp.
Lab ID for Blank Spike: S1125-LS1
Analysis: Method 8270

Matrix: Solid

Analysis Date for Blank Spike: 11/30/98

Analyte	% Recovery
Phenol	96
2-Chlorophenol	92
1,4-Dichlorobenzene	86
n-Nitroso-di-n-propylamine	96
1,2,4-Trichlorobenzene	92
4-Chloro-3-methylphenol	97
Acenaphthene	94
4-Nitrophenol	100
2,4-Dinitrotoluene	107
Pentachlorophenol	86
Pyrene	101

QC Batch: S1125-BS1

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: EAETP14F1
Lab ID: E1949-01
Analysis: Method 8260

Analysis Date: 11/25/98
Matrix: Soil, 84% solids
Concentration in: ug/kg, dry weight basis
Dilution: 50

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	300
Chloromethane	ND	300
Vinyl chloride	ND	300
Bromomethane	ND	300
Chloroethane	ND	300
Trichlorofluoromethane	ND	300
1,1-Dichloroethene	ND	300
Carbon disulfide	ND	300
Iodomethane	ND	300
Acetone	ND	300
Methylene chloride	ND	300
trans-1,2-Dichloroethene	ND	300
1,1-Dichloroethane	ND	300
Vinyl acetate	ND	300
2,2-Dichloropropane	ND	300
cis-1,2-Dichloroethene	ND	300
Methyl ethyl ketone	ND	300
Bromochloromethane	ND	300
Chloroform	ND	300
1,1,1-Trichloroethane	ND	300
Carbon tetrachloride	ND	300
1,1-Dichloropropene	ND	300
Benzene	ND	300
1,2-Dichloroethane	ND	300
Trichloroethene	ND	300
1,2-Dichloropropane	ND	300
Dibromomethane	ND	300
Bromodichloromethane	ND	300
2-Chloroethyl vinyl ether	ND	300
cis-1,3-Dichloropropene	ND	300
4-Methyl-2-pentanone	ND	300
Toluene	ND	300

MITKEM CORPORATION

Client ID: EAETP14F1

Lab ID: E1949-01

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	300
1,1,2-Trichloroethane	ND	300
Tetrachloroethene	ND	300
1,3-Dichloropropane	ND	300
2-Hexanone	ND	300
Dibromochloromethane	ND	300
1,2-Dibromoethane (EDB)	ND	300
Chlorobenzene	ND	300
1,1,1,2-Tetrachloroethane	ND	300
Ethylbenzene	ND	300
Xylenes, total	ND	300
Styrene	ND	300
Bromoform	ND	300
Isopropylbenzene	ND	300
Bromobenzene	ND	300
1,1,2,2-Tetrachloroethane	ND	300
1,2,3-Trichloropropane	ND	300
n-Propylbenzene	ND	300
2-Chlorotoluene	ND	300
4-Chlorotoluene	ND	300
1,3,5-Trimethylbenzene	ND	300
tert-Butylbenzene	ND	300
1,2,4-Trimethylbenzene	ND	300
sec-Butylbenzene	ND	300
1,3-Dichlorobenzene	ND	300
4-Isopropyltoluene	ND	300
1,4-Dichlorobenzene	ND	300
1,2-Dichlorobenzene	ND	300
n-Butylbenzene	ND	300
1,2-Dibromo-3-chloropropane	ND	300
1,2,4-Trichlorobenzene	470	300
Hexachlorobutadiene	ND	300
1,2,3-Trichlorobenzene	710	300
MTBE	ND	300
Naphthalene	ND	300

QC Batch: V1B1125A

Surrogate Recovery:	
1,2-Dichloroethane-d4	96%
Toluene-d8	99%
Bromofluorobenzene	97%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: EAETP14F2
Lab ID: E1949-02
Analysis: Method 8260

Analysis Date: 11/25/98
Matrix: Soil, 64% solids
Concentration in: ug/kg, dry weight basis
Dilution: 50

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	370
Chloromethane	ND	370
Vinyl chloride	ND	370
Bromomethane	ND	370
Chloroethane	ND	370
Trichlorofluoromethane	ND	370
1,1-Dichloroethene	ND	370
Carbon disulfide	ND	370
Iodomethane	ND	370
Acetone	ND	370
Methylene chloride	ND	370
trans-1,2-Dichloroethene	ND	370
1,1-Dichloroethane	ND	370
Vinyl acetate	ND	370
2,2-Dichloropropane	ND	370
cis-1,2-Dichloroethene	ND	370
Methyl ethyl ketone	ND	370
Bromochloromethane	ND	370
Chloroform	ND	370
1,1,1-Trichloroethane	ND	370
Carbon tetrachloride	ND	370
1,1-Dichloropropene	ND	370
Benzene	ND	370
1,2-Dichloroethane	ND	370
Trichloroethene	ND	370
1,2-Dichloropropane	ND	370
Dibromomethane	ND	370
Bromodichloromethane	ND	370
2-Chloroethyl vinyl ether	ND	370
cis-1,3-Dichloropropene	ND	370
4-Methyl-2-pentanone	ND	370
Toluene	ND	370

MITKEM CORPORATION

Client ID: EAETP14F2

Lab ID: E1949-02

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	370
1,1,2-Trichloroethane	ND	370
Tetrachloroethene	ND	370
1,3-Dichloropropane	ND	370
2-Hexanone	ND	370
Dibromochloromethane	ND	370
1,2-Dibromoethane (EDB)	ND	370
Chlorobenzene	ND	370
1,1,1,2-Tetrachloroethane	ND	370
Ethylbenzene	ND	370
Xylenes, total	ND	370
Styrene	ND	370
Bromoform	ND	370
Isopropylbenzene	ND	370
Bromobenzene	ND	370
1,1,2,2-Tetrachloroethane	ND	370
1,2,3-Trichloropropane	ND	370
n-Propylbenzene	ND	370
2-Chlorotoluene	ND	370
4-Chlorotoluene	ND	370
1,3,5-Trimethylbenzene	ND	370
tert-Butylbenzene	ND	370
1,2,4-Trimethylbenzene	ND	370
sec-Butylbenzene	ND	370
1,3-Dichlorobenzene	ND	370
4-Isopropyltoluene	ND	370
1,4-Dichlorobenzene	ND	370
1,2-Dichlorobenzene	ND	370
n-Butylbenzene	ND	370
1,2-Dibromo-3-chloropropane	ND	370
1,2,4-Trichlorobenzene	ND	370
Hexachlorobutadiene	ND	370
1,2,3-Trichlorobenzene	ND	370
MTBE	ND	370
Naphthalene	ND	370

QC Batch: V1B1125A

Surrogate Recovery:	
1,2-Dichloroethane-d4	98%
Toluene-d8	99%
Bromofluorobenzene	97%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: EAETP14W3
Lab ID: E1949-03
Analysis: Method 8260

Analysis Date: 11/25/98
Matrix: Soil, 85% solids
Concentration in: ug/kg, dry weight basis
Dilution: 50

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	350
Chloromethane	ND	350
Vinyl chloride	ND	350
Bromomethane	ND	350
Chloroethane	ND	350
Trichlorofluoromethane	ND	350
1,1-Dichloroethene	ND	350
Carbon disulfide	ND	350
Iodomethane	ND	350
Acetone	ND	350
Methylene chloride	ND	350
trans-1,2-Dichloroethene	ND	350
1,1-Dichloroethane	ND	350
Vinyl acetate	ND	350
2,2-Dichloropropane	ND	350
cis-1,2-Dichloroethene	ND	350
Methyl ethyl ketone	ND	350
Bromochloromethane	ND	350
Chloroform	ND	350
1,1,1-Trichloroethane	ND	350
Carbon tetrachloride	ND	350
1,1-Dichloropropene	ND	350
Benzene	ND	350
1,2-Dichloroethane	ND	350
Trichloroethene	ND	350
1,2-Dichloropropane	ND	350
Dibromomethane	ND	350
Bromodichloromethane	ND	350
2-Chloroethyl vinyl ether	ND	350
cis-1,3-Dichloropropene	ND	350
4-Methyl-2-pentanone	ND	350
Toluene	ND	350

MITKEM CORPORATION

Client ID: EAETP14W3

Lab ID: E1949-03

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	350
1,1,2-Trichloroethane	ND	350
Tetrachloroethene	ND	350
1,3-Dichloropropane	ND	350
2-Hexanone	ND	350
Dibromochloromethane	ND	350
1,2-Dibromoethane (EDB)	ND	350
Chlorobenzene	ND	350
1,1,1,2-Tetrachloroethane	ND	350
Ethylbenzene	ND	350
Xylenes, total	ND	350
Styrene	ND	350
Bromoform	ND	350
Isopropylbenzene	ND	350
Bromobenzene	ND	350
1,1,2,2-Tetrachloroethane	ND	350
1,2,3-Trichloropropane	ND	350
n-Propylbenzene	ND	350
2-Chlorotoluene	ND	350
4-Chlorotoluene	ND	350
1,3,5-Trimethylbenzene	ND	350
tert-Butylbenzene	ND	350
1,2,4-Trimethylbenzene	ND	350
sec-Butylbenzene	ND	350
1,3-Dichlorobenzene	ND	350
4-Isopropyltoluene	ND	350
1,4-Dichlorobenzene	ND	350
1,2-Dichlorobenzene	ND	350
n-Butylbenzene	ND	350
1,2-Dibromo-3-chloropropane	ND	350
1,2,4-Trichlorobenzene	ND	350
Hexachlorobutadiene	ND	350
1,2,3-Trichlorobenzene	1,300	350
MTBE	ND	350
Naphthalene	ND	350

QC Batch: V1B1125A

Surrogate Recovery:	
1,2-Dichloroethane-d4	97%
Toluene-d8	100%
Bromofluorobenzene	96%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: EAETP14W4
Lab ID: E1949-04
Analysis: Method 8260

Analysis Date: 11/25/98
Matrix: Soil, 85% solids
Concentration in: ug/kg, dry weight basis
Dilution: 50

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	310
Chloromethane	ND	310
Vinyl chloride	ND	310
Bromomethane	ND	310
Chloroethane	ND	310
Trichlorofluoromethane	ND	310
1,1-Dichloroethene	ND	310
Carbon disulfide	ND	310
Iodomethane	ND	310
Acetone	ND	310
Methylene chloride	ND	310
trans-1,2-Dichloroethene	ND	310
1,1-Dichloroethane	ND	310
Vinyl acetate	ND	310
2,2-Dichloropropane	ND	310
cis-1,2-Dichloroethene	ND	310
Methyl ethyl ketone	ND	310
Bromochloromethane	ND	310
Chloroform	ND	310
1,1,1-Trichloroethane	ND	310
Carbon tetrachloride	ND	310
1,1-Dichloropropene	ND	310
Benzene	ND	310
1,2-Dichloroethane	ND	310
Trichloroethene	ND	310
1,2-Dichloropropane	ND	310
Dibromomethane	ND	310
Bromodichloromethane	ND	310
2-Chloroethyl vinyl ether	ND	310
cis-1,3-Dichloropropene	ND	310
4-Methyl-2-pentanone	ND	310
Toluene	ND	310

MITKEM CORPORATION

Client ID: EAETP14W4

Lab ID: E1949-04

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	310
1,1,2-Trichloroethane	ND	310
Tetrachloroethene	ND	310
1,3-Dichloropropane	ND	310
2-Hexanone	ND	310
Dibromochloromethane	ND	310
1,2-Dibromoethane (EDB)	ND	310
Chlorobenzene	ND	310
1,1,1,2-Tetrachloroethane	ND	310
Ethylbenzene	ND	310
Xylenes, total	ND	310
Styrene	ND	310
Bromoform	ND	310
Isopropylbenzene	ND	310
Bromobenzene	ND	310
1,1,2,2-Tetrachloroethane	ND	310
1,2,3-Trichloropropane	ND	310
n-Propylbenzene	ND	310
2-Chlorotoluene	ND	310
4-Chlorotoluene	ND	310
1,3,5-Trimethylbenzene	ND	310
tert-Butylbenzene	ND	310
1,2,4-Trimethylbenzene	ND	310
sec-Butylbenzene	ND	310
1,3-Dichlorobenzene	ND	310
4-Isopropyltoluene	ND	310
1,4-Dichlorobenzene	ND	310
1,2-Dichlorobenzene	ND	310
n-Butylbenzene	ND	310
1,2-Dibromo-3-chloropropane	ND	310
1,2,4-Trichlorobenzene	ND	310
Hexachlorobutadiene	ND	310
1,2,3-Trichlorobenzene	ND	310
MTBE	ND	310
Naphthalene	ND	310

QC Batch: V1B1125A

Surrogate Recovery:	
1,2-Dichloroethane-d4	96%
Toluene-d8	100%
Bromofluorobenzene	97%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: EAETP14F3
Lab ID: E1949-05
Analysis: Method 8260

Analysis Date: 11/25/98
Matrix: Soil, 84% solids
Concentration in: ug/kg, dry weight basis
Dilution: 50

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	330
Chloromethane	ND	330
Vinyl chloride	ND	330
Bromomethane	ND	330
Chloroethane	ND	330
Trichlorofluoromethane	ND	330
1,1-Dichloroethene	ND	330
Carbon disulfide	ND	330
Iodomethane	ND	330
Acetone	ND	330
Methylene chloride	ND	330
trans-1,2-Dichloroethene	ND	330
1,1-Dichloroethane	ND	330
Vinyl acetate	ND	330
2,2-Dichloropropane	ND	330
cis-1,2-Dichloroethene	ND	330
Methyl ethyl ketone	ND	330
Bromochloromethane	ND	330
Chloroform	ND	330
1,1,1-Trichloroethane	ND	330
Carbon tetrachloride	ND	330
1,1-Dichloropropene	ND	330
Benzene	ND	330
1,2-Dichloroethane	ND	330
Trichloroethene	ND	330
1,2-Dichloropropane	ND	330
Dibromomethane	ND	330
Bromodichloromethane	ND	330
2-Chloroethyl vinyl ether	ND	330
cis-1,3-Dichloropropene	ND	330
4-Methyl-2-pentanone	ND	330
Toluene	ND	330

MITKEM CORPORATION

Client ID: EAETP14F3

Lab ID: E1949-05

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	330
1,1,2-Trichloroethane	ND	330
Tetrachloroethene	ND	330
1,3-Dichloropropane	ND	330
2-Hexanone	ND	330
Dibromochloromethane	ND	330
1,2-Dibromoethane (EDB)	ND	330
Chlorobenzene	ND	330
1,1,1,2-Tetrachloroethane	ND	330
Ethylbenzene	ND	330
Xylenes, total	ND	330
Styrene	ND	330
Bromoform	ND	330
Isopropylbenzene	ND	330
Bromobenzene	ND	330
1,1,2,2-Tetrachloroethane	ND	330
1,2,3-Trichloropropane	ND	330
n-Propylbenzene	ND	330
2-Chlorotoluene	ND	330
4-Chlorotoluene	ND	330
1,3,5-Trimethylbenzene	ND	330
tert-Butylbenzene	ND	330
1,2,4-Trimethylbenzene	ND	330
sec-Butylbenzene	ND	330
1,3-Dichlorobenzene	ND	330
4-Isopropyltoluene	ND	330
1,4-Dichlorobenzene	ND	330
1,2-Dichlorobenzene	ND	330
n-Butylbenzene	ND	330
1,2-Dibromo-3-chloropropane	ND	330
1,2,4-Trichlorobenzene	ND	330
Hexachlorobutadiene	ND	330
1,2,3-Trichlorobenzene	ND	330
MTBE	ND	330
Naphthalene	ND	330

QC Batch: V1B1125A

Surrogate Recovery:	
1,2-Dichloroethane-d4	95%
Toluene-d8	100%
Bromofluorobenzene	95%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: EAETP14W5
Lab ID: E1949-06
Analysis: Method 8260

Analysis Date: 11/25/98
Matrix: Soil, 90% solids
Concentration in: ug/kg, dry weight basis
Dilution: 50

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	250
Chloromethane	ND	250
Vinyl chloride	ND	250
Bromomethane	ND	250
Chloroethane	ND	250
Trichlorofluoromethane	ND	250
1,1-Dichloroethene	ND	250
Carbon disulfide	ND	250
Iodomethane	ND	250
Acetone	ND	250
Methylene chloride	ND	250
trans-1,2-Dichloroethene	ND	250
1,1-Dichloroethane	ND	250
Vinyl acetate	ND	250
2,2-Dichloropropane	ND	250
cis-1,2-Dichloroethene	ND	250
Methyl ethyl ketone	ND	250
Bromochloromethane	ND	250
Chloroform	ND	250
1,1,1-Trichloroethane	ND	250
Carbon tetrachloride	ND	250
1,1-Dichloropropene	ND	250
Benzene	ND	250
1,2-Dichloroethane	ND	250
Trichloroethene	ND	250
1,2-Dichloropropane	ND	250
Dibromomethane	ND	250
Bromodichloromethane	ND	250
2-Chloroethyl vinyl ether	ND	250
cis-1,3-Dichloropropene	ND	250
4-Methyl-2-pentanone	ND	250
Toluene	ND	250

MITKEM CORPORATION

Client ID: EAETP14W5

Lab ID: E1949-06

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	250
1,1,2-Trichloroethane	ND	250
Tetrachloroethene	ND	250
1,3-Dichloropropane	ND	250
2-Hexanone	ND	250
Dibromochloromethane	ND	250
1,2-Dibromoethane (EDB)	ND	250
Chlorobenzene	ND	250
1,1,1,2-Tetrachloroethane	ND	250
Ethylbenzene	ND	250
Xylenes, total	ND	250
Styrene	ND	250
Bromoform	ND	250
Isopropylbenzene	ND	250
Bromobenzene	ND	250
1,1,2,2-Tetrachloroethane	ND	250
1,2,3-Trichloropropane	ND	250
n-Propylbenzene	ND	250
2-Chlorotoluene	ND	250
4-Chlorotoluene	ND	250
1,3,5-Trimethylbenzene	ND	250
tert-Butylbenzene	ND	250
1,2,4-Trimethylbenzene	ND	250
sec-Butylbenzene	ND	250
1,3-Dichlorobenzene	ND	250
4-Isopropyltoluene	ND	250
1,4-Dichlorobenzene	ND	250
1,2-Dichlorobenzene	ND	250
n-Butylbenzene	ND	250
1,2-Dibromo-3-chloropropane	ND	250
1,2,4-Trichlorobenzene	1,700	250
Hexachlorobutadiene	ND	250
1,2,3-Trichlorobenzene	5,500	250
MTBE	ND	250
Naphthalene	ND	250

QC Batch: V1B1125A

Surrogate Recovery:	
1,2-Dichloroethane-d4	94%
Toluene-d8	100%
Bromofluorobenzene	96%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: EAETP14W1
Lab ID: E1949-07
Analysis: Method 8260

Analysis Date: 11/25/98
Matrix: Soil, 51% solids
Concentration in: ug/kg, dry weight basis
Dilution: 50

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	480
Chloromethane	ND	480
Vinyl chloride	ND	480
Bromomethane	ND	480
Chloroethane	ND	480
Trichlorofluoromethane	ND	480
1,1-Dichloroethene	ND	480
Carbon disulfide	ND	480
Iodomethane	ND	480
Acetone	ND	480
Methylene chloride	ND	480
trans-1,2-Dichloroethene	ND	480
1,1-Dichloroethane	ND	480
Vinyl acetate	ND	480
2,2-Dichloropropane	ND	480
cis-1,2-Dichloroethene	ND	480
Methyl ethyl ketone	ND	480
Bromochloromethane	ND	480
Chloroform	ND	480
1,1,1-Trichloroethane	ND	480
Carbon tetrachloride	ND	480
1,1-Dichloropropene	ND	480
Benzene	ND	480
1,2-Dichloroethane	ND	480
Trichloroethene	ND	480
1,2-Dichloropropane	ND	480
Dibromomethane	ND	480
Bromodichloromethane	ND	480
2-Chloroethyl vinyl ether	ND	480
cis-1,3-Dichloropropene	ND	480
4-Methyl-2-pentanone	ND	480
Toluene	ND	480

MITKEM CORPORATION

Client ID: EAETP14W1

Lab ID: E1949-07

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	480
1,1,2-Trichloroethane	ND	480
Tetrachloroethene	ND	480
1,3-Dichloropropane	ND	480
2-Hexanone	ND	480
Dibromochloromethane	ND	480
1,2-Dibromoethane (EDB)	ND	480
Chlorobenzene	ND	480
1,1,1,2-Tetrachloroethane	ND	480
Ethylbenzene	ND	480
Xylenes, total	ND	480
Styrene	ND	480
Bromoform	ND	480
Isopropylbenzene	ND	480
Bromobenzene	ND	480
1,1,2,2-Tetrachloroethane	ND	480
1,2,3-Trichloropropane	ND	480
n-Propylbenzene	ND	480
2-Chlorotoluene	ND	480
4-Chlorotoluene	ND	480
1,3,5-Trimethylbenzene	ND	480
tert-Butylbenzene	ND	480
1,2,4-Trimethylbenzene	ND	480
sec-Butylbenzene	ND	480
1,3-Dichlorobenzene	ND	480
4-Isopropyltoluene	ND	480
1,4-Dichlorobenzene	ND	480
1,2-Dichlorobenzene	ND	480
n-Butylbenzene	ND	480
1,2-Dibromo-3-chloropropane	ND	480
1,2,4-Trichlorobenzene	ND	480
Hexachlorobutadiene	ND	480
1,2,3-Trichlorobenzene	ND	480
MTBE	ND	480
Naphthalene	ND	480

QC Batch: V1B1125A

Surrogate Recovery:	
1,2-Dichloroethane-d4	95%
Toluene-d8	99%
Bromofluorobenzene	97%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: EAETP14F4
Lab ID: E1949-08
Analysis: Method 8260

Analysis Date: 11/27/98
Matrix: Soil, 86% solids
Concentration in: ug/kg, dry weight basis
Dilution: 50

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	270
Chloromethane	ND	270
Vinyl chloride	ND	270
Bromomethane	ND	270
Chloroethane	ND	270
Trichlorofluoromethane	ND	270
1,1-Dichloroethene	ND	270
Carbon disulfide	ND	270
Iodomethane	ND	270
Acetone	ND	270
Methylene chloride	ND	270
trans-1,2-Dichloroethene	ND	270
1,1-Dichloroethane	ND	270
Vinyl acetate	ND	270
2,2-Dichloropropane	ND	270
cis-1,2-Dichloroethene	ND	270
Methyl ethyl ketone	ND	270
Bromochloromethane	ND	270
Chloroform	ND	270
1,1,1-Trichloroethane	ND	270
Carbon tetrachloride	ND	270
1,1-Dichloropropene	ND	270
Benzene	ND	270
1,2-Dichloroethane	ND	270
Trichloroethene	ND	270
1,2-Dichloropropane	ND	270
Dibromomethane	ND	270
Bromodichloromethane	ND	270
2-Chloroethyl vinyl ether	ND	270
cis-1,3-Dichloropropene	ND	270
4-Methyl-2-pentanone	ND	270
Toluene	ND	270

MITKEM CORPORATION

Client ID: EAETP14F4

Lab ID: E1949-08

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	270
1,1,2-Trichloroethane	ND	270
Tetrachloroethene	ND	270
1,3-Dichloropropane	ND	270
2-Hexanone	ND	270
Dibromochloromethane	ND	270
1,2-Dibromoethane (EDB)	ND	270
Chlorobenzene	ND	270
1,1,1,2-Tetrachloroethane	ND	270
Ethylbenzene	ND	270
Xylenes, total	ND	270
Styrene	ND	270
Bromoform	ND	270
Isopropylbenzene	ND	270
Bromobenzene	ND	270
1,1,2,2-Tetrachloroethane	ND	270
1,2,3-Trichloropropane	ND	270
n-Propylbenzene	ND	270
2-Chlorotoluene	ND	270
4-Chlorotoluene	ND	270
1,3,5-Trimethylbenzene	ND	270
tert-Butylbenzene	ND	270
1,2,4-Trimethylbenzene	ND	270
sec-Butylbenzene	ND	270
1,3-Dichlorobenzene	ND	270
4-Isopropyltoluene	ND	270
1,4-Dichlorobenzene	ND	270
1,2-Dichlorobenzene	ND	270
n-Butylbenzene	ND	270
1,2-Dibromo-3-chloropropane	ND	270
1,2,4-Trichlorobenzene	ND	270
Hexachlorobutadiene	ND	270
1,2,3-Trichlorobenzene	ND	270
MTBE	ND	270
Naphthalene	ND	270

QC Batch: V1B1127A

Surrogate Recovery:	
1,2-Dichloroethane-d4	93%
Toluene-d8	100%
Bromofluorobenzene	97%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: EAETP14W6
Lab ID: E1949-09
Analysis: Method 8260

Analysis Date: 11/25/98
Matrix: Soil, 84% solids
Concentration in: ug/kg, dry weight basis
Dilution: 50

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	300
Chloromethane	ND	300
Vinyl chloride	ND	300
Bromomethane	ND	300
Chloroethane	ND	300
Trichlorofluoromethane	ND	300
1,1-Dichloroethene	ND	300
Carbon disulfide	ND	300
Iodomethane	ND	300
Acetone	ND	300
Methylene chloride	ND	300
trans-1,2-Dichloroethene	ND	300
1,1-Dichloroethane	ND	300
Vinyl acetate	ND	300
2,2-Dichloropropane	ND	300
cis-1,2-Dichloroethene	ND	300
Methyl ethyl ketone	ND	300
Bromochloromethane	ND	300
Chloroform	ND	300
1,1,1-Trichloroethane	ND	300
Carbon tetrachloride	ND	300
1,1-Dichloropropene	ND	300
Benzene	ND	300
1,2-Dichloroethane	ND	300
Trichloroethene	ND	300
1,2-Dichloropropane	ND	300
Dibromomethane	ND	300
Bromodichloromethane	ND	300
2-Chloroethyl vinyl ether	ND	300
cis-1,3-Dichloropropene	ND	300
4-Methyl-2-pentanone	ND	300
Toluene	ND	300

MITKEM CORPORATION

Client ID: EAETP14W6

Lab ID: E1949-09

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	300
1,1,2-Trichloroethane	ND	300
Tetrachloroethene	ND	300
1,3-Dichloropropane	ND	300
2-Hexanone	ND	300
Dibromochloromethane	ND	300
1,2-Dibromoethane (EDB)	ND	300
Chlorobenzene	ND	300
1,1,1,2-Tetrachloroethane	ND	300
Ethylbenzene	ND	300
Xylenes, total	ND	300
Styrene	ND	300
Bromoform	ND	300
Isopropylbenzene	ND	300
Bromobenzene	ND	300
1,1,2,2-Tetrachloroethane	ND	300
1,2,3-Trichloropropane	ND	300
n-Propylbenzene	ND	300
2-Chlorotoluene	ND	300
4-Chlorotoluene	ND	300
1,3,5-Trimethylbenzene	ND	300
tert-Butylbenzene	ND	300
1,2,4-Trimethylbenzene	ND	300
sec-Butylbenzene	ND	300
1,3-Dichlorobenzene	ND	300
4-Isopropyltoluene	ND	300
1,4-Dichlorobenzene	ND	300
1,2-Dichlorobenzene	ND	300
n-Butylbenzene	ND	300
1,2-Dibromo-3-chloropropane	ND	300
1,2,4-Trichlorobenzene	ND	300
Hexachlorobutadiene	ND	300
1,2,3-Trichlorobenzene	ND	300
MTBE	ND	300
Naphthalene	ND	300

QC Batch: V1B1125A

Surrogate Recovery:	
1,2-Dichloroethane-d4	96%
Toluene-d8	99%
Bromofluorobenzene	96%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: EAETP14W7
Lab ID: E1949-10
Analysis: Method 8260

Analysis Date: 11/25/98
Matrix: Soil, 86% solids
Concentration in: ug/kg, dry weight basis
Dilution: 50

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	280
Chloromethane	ND	280
Vinyl chloride	ND	280
Bromomethane	ND	280
Chloroethane	ND	280
Trichlorofluoromethane	ND	280
1,1-Dichloroethene	ND	280
Carbon disulfide	ND	280
Iodomethane	ND	280
Acetone	ND	280
Methylene chloride	ND	280
trans-1,2-Dichloroethene	ND	280
1,1-Dichloroethane	ND	280
Vinyl acetate	ND	280
2,2-Dichloropropane	ND	280
cis-1,2-Dichloroethene	ND	280
Methyl ethyl ketone	ND	280
Bromochloromethane	ND	280
Chloroform	ND	280
1,1,1-Trichloroethane	ND	280
Carbon tetrachloride	ND	280
1,1-Dichloropropene	ND	280
Benzene	ND	280
1,2-Dichloroethane	ND	280
Trichloroethene	ND	280
1,2-Dichloropropane	ND	280
Dibromomethane	ND	280
Bromodichloromethane	ND	280
2-Chloroethyl vinyl ether	ND	280
cis-1,3-Dichloropropene	ND	280
4-Methyl-2-pentanone	ND	280
Toluene	ND	280

MITKEM CORPORATION

Client ID: EAETP14W7

Lab ID: E1949-10

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	280
1,1,2-Trichloroethane	ND	280
Tetrachloroethene	ND	280
1,3-Dichloropropane	ND	280
2-Hexanone	ND	280
Dibromochloromethane	ND	280
1,2-Dibromoethane (EDB)	ND	280
Chlorobenzene	ND	280
1,1,1,2-Tetrachloroethane	ND	280
Ethylbenzene	ND	280
Xylenes, total	ND	280
Styrene	ND	280
Bromoform	ND	280
Isopropylbenzene	ND	280
Bromobenzene	ND	280
1,1,2,2-Tetrachloroethane	ND	280
1,2,3-Trichloropropane	ND	280
n-Propylbenzene	ND	280
2-Chlorotoluene	ND	280
4-Chlorotoluene	ND	280
1,3,5-Trimethylbenzene	ND	280
tert-Butylbenzene	ND	280
1,2,4-Trimethylbenzene	ND	280
sec-Butylbenzene	ND	280
1,3-Dichlorobenzene	ND	280
4-Isopropyltoluene	ND	280
1,4-Dichlorobenzene	ND	280
1,2-Dichlorobenzene	ND	280
n-Butylbenzene	ND	280
1,2-Dibromo-3-chloropropane	ND	280
1,2,4-Trichlorobenzene	ND	280
Hexachlorobutadiene	ND	280
1,2,3-Trichlorobenzene	ND	280
MTBE	ND	280
Naphthalene	ND	280

QC Batch: V1B1125A

Surrogate Recovery:	
1,2-Dichloroethane-d4	95%
Toluene-d8	99%
Bromofluorobenzene	97%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: EAETP14W8
Lab ID: E1949-11
Analysis: Method 8260

Analysis Date: 11/25/98
Matrix: Soil, 85% solids
Concentration in: ug/kg, dry weight basis
Dilution: 50

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	280
Chloromethane	ND	280
Vinyl chloride	ND	280
Bromomethane	ND	280
Chloroethane	ND	280
Trichlorofluoromethane	ND	280
1,1-Dichloroethene	ND	280
Carbon disulfide	ND	280
Iodomethane	ND	280
Acetone	ND	280
Methylene chloride	ND	280
trans-1,2-Dichloroethene	ND	280
1,1-Dichloroethane	ND	280
Vinyl acetate	ND	280
2,2-Dichloropropane	ND	280
cis-1,2-Dichloroethene	ND	280
Methyl ethyl ketone	ND	280
Bromochloromethane	ND	280
Chloroform	ND	280
1,1,1-Trichloroethane	ND	280
Carbon tetrachloride	ND	280
1,1-Dichloropropene	ND	280
Benzene	ND	280
1,2-Dichloroethane	ND	280
Trichloroethene	ND	280
1,2-Dichloropropane	ND	280
Dibromomethane	ND	280
Bromodichloromethane	ND	280
2-Chloroethyl vinyl ether	ND	280
cis-1,3-Dichloropropene	ND	280
4-Methyl-2-pentanone	ND	280
Toluene	ND	280

MITKEM CORPORATION

Client ID: EAETP14W8

Lab ID: E1949-11

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	280
1,1,2-Trichloroethane	ND	280
Tetrachloroethene	ND	280
1,3-Dichloropropane	ND	280
2-Hexanone	ND	280
Dibromochloromethane	ND	280
1,2-Dibromoethane (EDB)	ND	280
Chlorobenzene	ND	280
1,1,1,2-Tetrachloroethane	ND	280
Ethylbenzene	ND	280
Xylenes, total	370	280
Styrene	ND	280
Bromoform	ND	280
Isopropylbenzene	ND	280
Bromobenzene	ND	280
1,1,2,2-Tetrachloroethane	ND	280
1,2,3-Trichloropropane	ND	280
n-Propylbenzene	ND	280
2-Chlorotoluene	ND	280
4-Chlorotoluene	ND	280
1,3,5-Trimethylbenzene	ND	280
tert-Butylbenzene	ND	280
1,2,4-Trimethylbenzene	ND	280
sec-Butylbenzene	ND	280
1,3-Dichlorobenzene	ND	280
4-Isopropyltoluene	ND	280
1,4-Dichlorobenzene	ND	280
1,2-Dichlorobenzene	ND	280
n-Butylbenzene	ND	280
1,2-Dibromo-3-chloropropane	ND	280
1,2,4-Trichlorobenzene	ND	280
Hexachlorobutadiene	ND	280
1,2,3-Trichlorobenzene	ND	280
MTBE	ND	280
Naphthalene	770	280

QC Batch: V1B1125A

Surrogate Recovery:	
1,2-Dichloroethane-d4	95%
Toluene-d8	100%
Bromofluorobenzene	97%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: EAETP14W9
Lab ID: E1949-12
Analysis: Method 8260

Analysis Date: 11/25/98
Matrix: Soil, 88% solids
Concentration in: ug/kg, dry weight basis
Dilution: 50

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	260
Chloromethane	ND	260
Vinyl chloride	ND	260
Bromomethane	ND	260
Chloroethane	ND	260
Trichlorofluoromethane	ND	260
1,1-Dichloroethene	ND	260
Carbon disulfide	ND	260
Iodomethane	ND	260
Acetone	ND	260
Methylene chloride	ND	260
trans-1,2-Dichloroethene	ND	260
1,1-Dichloroethane	ND	260
Vinyl acetate	ND	260
2,2-Dichloropropane	ND	260
cis-1,2-Dichloroethene	ND	260
Methyl ethyl ketone	ND	260
Bromochloromethane	ND	260
Chloroform	ND	260
1,1,1-Trichloroethane	ND	260
Carbon tetrachloride	ND	260
1,1-Dichloropropene	ND	260
Benzene	ND	260
1,2-Dichloroethane	ND	260
Trichloroethene	ND	260
1,2-Dichloropropane	ND	260
Dibromomethane	ND	260
Bromodichloromethane	ND	260
2-Chloroethyl vinyl ether	ND	260
cis-1,3-Dichloropropene	ND	260
4-Methyl-2-pentanone	ND	260
Toluene	ND	260

MITKEM CORPORATION

Client ID: EAETP14W9

Lab ID: E1949-12

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	260
1,1,2-Trichloroethane	ND	260
Tetrachloroethene	ND	260
1,3-Dichloropropane	ND	260
2-Hexanone	ND	260
Dibromochloromethane	ND	260
1,2-Dibromoethane (EDB)	ND	260
Chlorobenzene	ND	260
1,1,1,2-Tetrachloroethane	ND	260
Ethylbenzene	ND	260
Xylenes, total	ND	260
Styrene	ND	260
Bromoform	ND	260
Isopropylbenzene	ND	260
Bromobenzene	ND	260
1,1,2,2-Tetrachloroethane	ND	260
1,2,3-Trichloropropane	ND	260
n-Propylbenzene	ND	260
2-Chlorotoluene	ND	260
4-Chlorotoluene	ND	260
1,3,5-Trimethylbenzene	ND	260
tert-Butylbenzene	ND	260
1,2,4-Trimethylbenzene	ND	260
sec-Butylbenzene	ND	260
1,3-Dichlorobenzene	ND	260
4-Isopropyltoluene	ND	260
1,4-Dichlorobenzene	ND	260
1,2-Dichlorobenzene	ND	260
n-Butylbenzene	ND	260
1,2-Dibromo-3-chloropropane	ND	260
1,2,4-Trichlorobenzene	ND	260
Hexachlorobutadiene	ND	260
1,2,3-Trichlorobenzene	ND	260
MTBE	ND	260
Naphthalene	ND	260

QC Batch: V1B1125A

Surrogate Recovery:	
1,2-Dichloroethane-d4	97%
Toluene-d8	99%
Bromofluorobenzene	97%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: EAETP14W10
Lab ID: E1949-13
Analysis: Method 8260

Analysis Date: 11/25/98
Matrix: Soil, 78% solids
Concentration in: ug/kg, dry weight basis
Dilution: 50

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	310
Chloromethane	ND	310
Vinyl chloride	ND	310
Bromomethane	ND	310
Chloroethane	ND	310
Trichlorofluoromethane	ND	310
1,1-Dichloroethene	ND	310
Carbon disulfide	ND	310
Iodomethane	ND	310
Acetone	ND	310
Methylene chloride	ND	310
trans-1,2-Dichloroethene	ND	310
1,1-Dichloroethane	ND	310
Vinyl acetate	ND	310
2,2-Dichloropropane	ND	310
cis-1,2-Dichloroethene	ND	310
Methyl ethyl ketone	ND	310
Bromochloromethane	ND	310
Chloroform	ND	310
1,1,1-Trichloroethane	ND	310
Carbon tetrachloride	ND	310
1,1-Dichloropropene	ND	310
Benzene	ND	310
1,2-Dichloroethane	ND	310
Trichloroethene	ND	310
1,2-Dichloropropane	ND	310
Dibromomethane	ND	310
Bromodichloromethane	ND	310
2-Chloroethyl vinyl ether	ND	310
cis-1,3-Dichloropropene	ND	310
4-Methyl-2-pentanone	ND	310
Toluene	ND	310

Client ID: EAETP14W10 Lab ID: E1949-13

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	310
1,1,2-Trichloroethane	ND	310
Tetrachloroethene	ND	310
1,3-Dichloropropane	ND	310
2-Hexanone	ND	310
Dibromochloromethane	ND	310
1,2-Dibromoethane (EDB)	ND	310
Chlorobenzene	ND	310
1,1,1,2-Tetrachloroethane	ND	310
Ethylbenzene	ND	310
Xylenes, total	ND	310
Styrene	ND	310
Bromoform	ND	310
Isopropylbenzene	ND	310
Bromobenzene	ND	310
1,1,2,2-Tetrachloroethane	ND	310
1,2,3-Trichloropropane	ND	310
n-Propylbenzene	ND	310
2-Chlorotoluene	ND	310
4-Chlorotoluene	ND	310
1,3,5-Trimethylbenzene	ND	310
tert-Butylbenzene	ND	310
1,2,4-Trimethylbenzene	ND	310
sec-Butylbenzene	ND	310
1,3-Dichlorobenzene	ND	310
4-Isopropyltoluene	ND	310
1,4-Dichlorobenzene	ND	310
1,2-Dichlorobenzene	ND	310
n-Butylbenzene	ND	310
1,2-Dibromo-3-chloropropane	ND	310
1,2,4-Trichlorobenzene	ND	310
Hexachlorobutadiene	ND	310
1,2,3-Trichlorobenzene	ND	310
MTBE	ND	310
Naphthalene	350	310

QC Batch: V1B1125A

Surrogate Recovery:	
1,2-Dichloroethane-d4	97%
Toluene-d8	100%
Bromofluorobenzene	97%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: EAETP14F5
Lab ID: E1949-14
Analysis: Method 8260

Analysis Date: 11/25/98
Matrix: Soil, 84% solids
Concentration in: ug/kg, dry weight basis
Dilution: 50

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	300
Chloromethane	ND	300
Vinyl chloride	ND	300
Bromomethane	ND	300
Chloroethane	ND	300
Trichlorofluoromethane	ND	300
1,1-Dichloroethene	ND	300
Carbon disulfide	ND	300
Iodomethane	ND	300
Acetone	ND	300
Methylene chloride	ND	300
trans-1,2-Dichloroethene	ND	300
1,1-Dichloroethane	ND	300
Vinyl acetate	ND	300
2,2-Dichloropropane	ND	300
cis-1,2-Dichloroethene	ND	300
Methyl ethyl ketone	ND	300
Bromochloromethane	ND	300
Chloroform	ND	300
1,1,1-Trichloroethane	ND	300
Carbon tetrachloride	ND	300
1,1-Dichloropropene	ND	300
Benzene	ND	300
1,2-Dichloroethane	ND	300
Trichloroethene	ND	300
1,2-Dichloropropane	ND	300
Dibromomethane	ND	300
Bromodichloromethane	ND	300
2-Chloroethyl vinyl ether	ND	300
cis-1,3-Dichloropropene	ND	300
4-Methyl-2-pentanone	ND	300
Toluene	ND	300

MITKEM CORPORATION

Client ID: EAETP14F5

Lab ID: E1949-14

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	300
1,1,2-Trichloroethane	ND	300
Tetrachloroethene	ND	300
1,3-Dichloropropane	ND	300
2-Hexanone	ND	300
Dibromochloromethane	ND	300
1,2-Dibromoethane (EDB)	ND	300
Chlorobenzene	ND	300
1,1,1,2-Tetrachloroethane	ND	300
Ethylbenzene	ND	300
Xylenes, total	ND	300
Styrene	ND	300
Bromoform	ND	300
Isopropylbenzene	ND	300
Bromobenzene	ND	300
1,1,2,2-Tetrachloroethane	ND	300
1,2,3-Trichloropropane	ND	300
n-Propylbenzene	ND	300
2-Chlorotoluene	ND	300
4-Chlorotoluene	ND	300
1,3,5-Trimethylbenzene	ND	300
tert-Butylbenzene	ND	300
1,2,4-Trimethylbenzene	ND	300
sec-Butylbenzene	ND	300
1,3-Dichlorobenzene	ND	300
4-Isopropyltoluene	ND	300
1,4-Dichlorobenzene	ND	300
1,2-Dichlorobenzene	ND	300
n-Butylbenzene	ND	300
1,2-Dibromo-3-chloropropane	ND	300
1,2,4-Trichlorobenzene	ND	300
Hexachlorobutadiene	ND	300
1,2,3-Trichlorobenzene	ND	300
MTBE	ND	300
Naphthalene	ND	300

QC Batch: V1B1125A

Surrogate Recovery:	
1,2-Dichloroethane-d4	95%
Toluene-d8	101%
Bromofluorobenzene	97%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, V1B1125A
Analysis: Method 8260

Analysis Date: 11/25/98
Matrix: Solid
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Carbon disulfide	ND	5
Iodomethane	ND	5
Acetone	ND	5
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Vinyl acetate	ND	5
2,2-Dichloropropane	ND	5
cis-1,2-Dichloroethene	ND	5
Methyl ethyl ketone	ND	5
Bromochloromethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
1,1-Dichloropropene	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Dibromomethane	ND	5
Bromodichloromethane	ND	5
2-Chloroethyl vinyl ether	ND	5
cis-1,3-Dichloropropene	ND	5
4-Methyl-2-pentanone	ND	5
Toluene	ND	5

MITKEM CORPORATION

Client ID:

Lab ID: Method Blank, V1B1125A

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,3-Dichloropropane	ND	5
2-Hexanone	ND	5
Dibromochloromethane	ND	5
1,2-Dibromoethane (EDB)	ND	5
Chlorobenzene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Ethylbenzene	ND	5
Xylenes, total	ND	5
Styrene	ND	5
Bromoform	ND	5
Isopropylbenzene	ND	5
Bromobenzene	ND	5
1,1,2,2-Tetrachloroethane	ND	5
1,2,3-Trichloropropane	ND	5
n-Propylbenzene	ND	5
2-Chlorotoluene	ND	5
4-Chlorotoluene	ND	5
1,3,5-Trimethylbenzene	ND	5
tert-Butylbenzene	ND	5
1,2,4-Trimethylbenzene	ND	5
sec-Butylbenzene	ND	5
1,3-Dichlorobenzene	ND	5
4-Isopropyltoluene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5
n-Butylbenzene	ND	5
1,2-Dibromo-3-chloropropane	ND	5
1,2,4-Trichlorobenzene	ND	5
Hexachlorobutadiene	ND	5
1,2,3-Trichlorobenzene	ND	5
MTBE	ND	5
Naphthalene	ND	5

QC Batch: V1B1125A

Surrogate Recovery:	
1,2-Dichloroethane-d4	97%
Toluene-d8	99%
Bromofluorobenzene	96%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, V1B1127A
Analysis: Method 8260

Analysis Date: 11/27/98
Matrix: Solid
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Carbon disulfide	ND	5
Iodomethane	ND	5
Acetone	ND	5
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Vinyl acetate	ND	5
2,2-Dichloropropane	ND	5
cis-1,2-Dichloroethene	ND	5
Methyl ethyl ketone	ND	5
Bromochloromethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
1,1-Dichloropropene	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Dibromomethane	ND	5
Bromodichloromethane	ND	5
2-Chloroethyl vinyl ether	ND	5
cis-1,3-Dichloropropene	ND	5
4-Methyl-2-pentanone	ND	5
Toluene	ND	5

MITKEM CORPORATION

Client ID:

Lab ID: Method Blank, V1B1127A

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,3-Dichloropropane	ND	5
2-Hexanone	ND	5
Dibromochloromethane	ND	5
1,2-Dibromoethane (EDB)	ND	5
Chlorobenzene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Ethylbenzene	ND	5
Xylenes, total	ND	5
Styrene	ND	5
Bromoform	ND	5
Isopropylbenzene	ND	5
Bromobenzene	ND	5
1,1,2,2-Tetrachloroethane	ND	5
1,2,3-Trichloropropane	ND	5
n-Propylbenzene	ND	5
2-Chlorotoluene	ND	5
4-Chlorotoluene	ND	5
1,3,5-Trimethylbenzene	ND	5
tert-Butylbenzene	ND	5
1,2,4-Trimethylbenzene	ND	5
sec-Butylbenzene	ND	5
1,3-Dichlorobenzene	ND	5
4-Isopropyltoluene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5
n-Butylbenzene	ND	5
1,2-Dibromo-3-chloropropane	ND	5
1,2,4-Trichlorobenzene	ND	5
Hexachlorobutadiene	ND	5
1,2,3-Trichlorobenzene	ND	5
MTBE	ND	5
Naphthalene	ND	5

QC Batch: V1B1127A

Surrogate Recovery:	
1,2-Dichloroethane-d4	96%
Toluene-d8	99%
Bromofluorobenzene	97%

ND = Not Detected

E1949-MB

MITKEM CORPORATION

Analysis Report: Total Petroleum Hydrocarbons

Client: Foster Wheeler Environmental Corp.
Analysis: Method 8100 M / 8015 M
Matrix: Soil

Concentration in: mg/kg, dry weight basis

Lab ID	Client ID	Result	Reporting Limit	% Solid	p-Terphenyl Surrogate Recovery %	Analysis Date
E1949-01	EAETP14F1	830	270	50	68	11/27/98
E1949-04	EAETP14W4	660	130	50	89	11/25/98
E1949-05	EAETP14F3	7,600	1,300	52	DL	11/27/98
E1949-12	EAETP14W9	2,400	250	53	92	11/25/98
E1949-13	EAETP14W10	5,400	1,400	49	DL	11/25/98
E1949-14	EAETP14F5	8,700	1,300	51	DL	11/27/98

QA/QC

Method Blank					
F1124-BS1	ND	13		78	11/24/98
Lab Control Sample (% Recovery)					
F1124-LS1	88			82	11/24/98

ND = Not Detected
DL = Diluted Out

The samples were quantitated using diesel as standard.

MITKEM CORPORATION

Analysis Report: Total Petroleum Hydrocarbons

Client: Foster Wheeler Environmental Corp.
Analysis: Method 418.1
Matrix: Soil
Concentration in: mg/kg

Lab ID	Client ID	Result	Reporting Limit	Analysis Date
E1949-01	EAETP14F1	95	25	11/28/98
E1949-04	EAETP14W4	71	25	11/28/98
E1949-05	EAETP14F3	5,800	25	11/28/98
E1949-12	EAETP14W9	430	25	11/28/98
E1949-13	EAETP14W10	53	25	11/28/98
E1949-14	EAETP14F5	930	25	11/28/98

E1949-TPHIR
Subcontracted

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	EAETP14F1	Concentration in:	mg/kg, dry weight basis
Lab ID:	E1949-01	Analysis Date:	11/30/98
Matrix:	Soil, 88% solid	Analysis Method:	7471A (Mercury) 6010A (Others)

Analyte	Results	Reporting Limit
Arsenic	7	1
Barium	10	20
Cadmium	0.6	0.5
Chromium	21	2
Lead	4	1
Mercury	ND	0.3
Selenium	ND	2
Silver	ND	3

QC Batch: 1125PBS

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	EAETP14W4	Concentration in:	mg/kg, dry weight basis
Lab ID:	E1949-04	Analysis Date:	11/30/98
Matrix:	Soil, 87% solid	Analysis Method:	7471A (Mercury) 6010A (Others)

Analyte	Results	Reporting Limit
Arsenic	11	1
Barium	44	20
Cadmium	0.6	0.5
Chromium	13	2
Lead	79	1
Mercury	ND	0.3
Selenium	ND	2
Silver	ND	3

QC Batch: 1125PBS

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	EAETP14F3	Concentration in:	mg/kg, dry weight basis
Lab ID:	E1949-05	Analysis Date:	11/30/98
Matrix:	Soil, 90% solid	Analysis Method:	7471A (Mercury) 6010A (Others)

Analyte	Results	Reporting Limit
Arsenic	15	1
Barium	40	20
Cadmium	1.0	0.5
Chromium	16	2
Lead	73	1
Mercury	ND	0.3
Selenium	ND	2
Silver	ND	3

QC Batch: 1125PBS

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	EAETP14W9	Concentration in:	mg/kg, dry weight basis
Lab ID:	E1949-12	Analysis Date:	11/30/98
Matrix:	Soil, 92% solid	Analysis Method:	7471A (Mercury) 6010A (Others)

Analyte	Results	Reporting Limit
Arsenic	7	1
Barium	12	20
Cadmium	0.5	0.5
Chromium	12	2
Lead	27	1
Mercury	ND	0.3
Selenium	ND	2
Silver	ND	3

QC Batch: 1125PBS

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	EAETP14W10	Concentration in:	mg/kg, dry weight basis
Lab ID:	E1949-13	Analysis Date:	11/30/98
Matrix:	Soil, 88% solid	Analysis Method:	7471A (Mercury) 6010A (Others)

Analyte	Results	Reporting Limit
Arsenic	16	1
Barium	28	20
Cadmium	1.2	0.5
Chromium	20	2
Lead	130	1
Mercury	ND	0.3
Selenium	ND	2
Silver	ND	3

QC Batch: 1125PBS

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	EAETP14F5	Concentration in:	mg/kg, dry weight basis
Lab ID:	E1949-14	Analysis Date:	11/30/98
Matrix:	Soil, 88% solid	Analysis Method:	7471A (Mercury) 6010A (Others)

Analyte	Results	Reporting Limit
Arsenic	8	1
Barium	22	20
Cadmium	0.7	0.5
Chromium	18	2
Lead	24	1
Mercury	ND	0.3
Selenium	ND	2
Silver	ND	3

QC Batch: 1125PBS

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:		Concentration in:	mg/kg
Lab ID:	Prep Blank, 1125PBS	Analysis Date:	11/30/98
		Analysis Method:	7471A (Mercury) 6010A (Others)

Analyte	Results	Reporting Limit
Arsenic	ND	1
Barium	ND	20
Cadmium	ND	0.5
Chromium	ND	2
Lead	ND	1
Mercury	ND	0.3
Selenium	ND	2
Silver	ND	3

QC Batch: 1125PBS

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Lab Control Sample, 1125LCSS
Analysis Method: 7471A (Mercury)
6010A (Others)

Matrix: Soil
Analysis Date: 11/30/98

Analyte	% Recovery
Arsenic	103
Barium	108
Cadmium	104
Chromium	103
Lead	104
Mercury	105
Selenium	96
Silver	103

QC Batch: 1125PBS

MITKEM CORPORATION

12/09/98 03:45 PM

Original

Lab Workorder #: **51949**

Lab Workorder **51949** RO

Logged In By: MAM

Reviewed By: _____

Client: **Foster Wheeler Environmental**
Lab Workorder ID: **Bldg #6, TP14**
Client Proj ID: **Tank Farm 5**
Client PO #: **014952**
Project / Profile Name: **Bldgs 6 and 179, NUWC**
Date Due: **11/30/98**
Customer Service: **EAL**
Del Req'd: **Commercial Reports**
Completed?:
Profile Notes: **PO 014592 for Bldg 6/179, PO 015207 for Interceptor.**

Date Opened: **11/24/98 17:44**
Date Closed: **11/30/98 15:25**

Project Status: **WP**

Lab ID	Client ID	Matrix	Analysis Code	Collected	Received	Due	Notes
51949001	EAETP14F1	S	418.1STRPH 8081S 8082S 8100S 8260S 8270S DRY WEIGHT RCRA8S	11/24/98 07:45	11/24/98	11/30/98	
51949002	EAETP14F2	S	8260S DRY WEIGHT	11/24/98 08:15	11/24/98	11/30/98	
51949003	EAETP14W3	S	8260S DRY WEIGHT	11/24/98 08:25	11/24/98	11/30/98	
51949004	EAETP14W4	S	418.1STRPH 8081S 8082S 8100S 8260S 8270S DRY WEIGHT RCRA8S	11/24/98 08:45	11/24/98	11/30/98	
51949005	EAETP14F3	S	418.1STRPH 8081S 8082S 8100S 8260S 8270S DRY WEIGHT	11/24/98 09:10	11/24/98	11/30/98	

077

MITKEM CORPORATION

Lab ID	Client ID	Matrix	Analysis Code	Collected	Received	Due	Notes
51949005	EAETP14F3	S	RCRA8S				
51949006	EAETP14W5	S	8260S DRY WEIGHT	11/24/98 09:15	11/24/98	11/30/98	
51949007	EAETP14W1	S	8260S DRY WEIGHT	11/24/98 09:35	11/24/98	11/30/98	
51949008	EAETP14F4	S	8260S DRY WEIGHT	11/24/98 13:25	11/24/98	11/30/98	
51949009	EAETP14W6	S	8260S DRY WEIGHT	11/24/98 13:30	11/24/98	11/30/98	
51949010	EAETP14W7	S	8260S DRY WEIGHT	11/24/98 13:50	11/24/98	11/30/98	
51949011	EAETP14W8	S	8260S DRY WEIGHT	11/24/98 14:00	11/24/98	11/30/98	
51949012	EAETP14W9	S	418.1STRPH 8081S 8082S 8100S 8260S 8270S DRY WEIGHT RCRA8S	11/24/98 14:35	11/24/98	11/30/98	
51949013	EAETP14W10	S	418.1STRPH 8081S 8082S 8100S 8260S 8270S DRY WEIGHT RCRA8S	11/24/98 14:30	11/24/98	11/30/98	
51949014	EAETP14F5	S	418.1STRPH 8081S 8082S 8100S 8260S 8270S DRY WEIGHT RCRA8S	11/24/98 15:00	11/24/98	11/30/98	

MITKEM CORPORATION

Lab ID	Client ID	Matrix	Analysis Code	Collected	Received	Due	Notes
51949015	Trip Blank	W	8260W	11/24/98 12:00	11/24/98	11/30/98	

INVOICE GOES TO:

Ellie Federico
Foster Wheeler Environmental
98 T Defense Highway
Middletown, RI, 02842
W: 842-6940
F : 842-6970

REPORT GOES TO:

Jon Cary
Foster Wheeler Environmental
98 T Defense Highway
Middletown, RI, 02842
W: 842-6940
F : 842-6970

MITKEM CORPORATION
Sample Condition Form

Page

Received By: AB	Reviewed By:	Date: 11/24/98	MITKEM Project: E1949
Client Project: TPS		Client: FW	

Condition:

1) Custody Seal(s) Present/Absent
Coolers/Bottles Intact/Broken

2) Custody Seal Number(s) N/A

3) Chain-of-Custody Present/Absent

4) Cooler Temperature 5°C N/A AB 11/24
Coolant Condition Blue Ice

5) Airbill(s) Present/Absent
Airbill Number(s)

6) Sample Bottles Intact
Broken
Leaking

7) Date Received 11/24/98

8) Time Received 1615

9) Project Due Date

Sample ID Lab	Sample ID Client	Preservation (pH) HNO_3	H_2SO_4	HCl	NaOH	Comments/Remark Corrective Action
01	EAETXMF1					
02	F2					
03	W3					
04	W4					
05	F3					
06	W5					
07	W1					
08	F4					
09	W6					
10	W7					
11	W8					
12	W9					
13	W10					
14	F5					
15	TB					

* See Sample Condition Notification/Corrective Action Form yes / no

Appendix H

Test Pit 14 Confirmatory Sample Results Summary and Laboratory Data

FOSTER WHEELER ENVIRONMENTAL CORPORATION
U.S. NAVY NORTHERN DIVISION REMEDIAL ACTION CONTRACT (RAC)
CONTRACT N62472-94-D-0398 DELIVERY ORDER 13 AND 60
DERECKTOR SHIPYARD TEST PIT 14 PCB CONTAMINATED SOIL REMOVAL - CONFIRMATORY SAMPLING RESULTS

RIDEM Direct Exposure Criteria --->	Residential	Commercial/ Industrial	B6-S1	B6-S2	B6-S3	B6-S4	B6-S5	B6-S6	B6-S7	B6-S8
Volatile Organics										
Benzene	2.5	200.0	-	-	-	-	-	-	-	-
Bromodichloromethane	10.0	92.0	-	-	-	-	-	-	-	-
Bromoform	81.0	720.0	-	-	-	-	-	-	-	-
Bromomethane	0.8	2,900.0	-	-	-	-	-	-	-	-
Carbon tetrachloride	1.5	44.0	-	-	-	-	-	-	-	-
Chlorobenzene	210.0	10,000.0	-	-	-	-	-	-	-	-
Chloroform	1.2	940.0	-	-	-	-	-	-	-	-
Dibromochloromethane	7.6	68.0	-	-	-	-	-	-	-	-
1,1-Dichloroethane	920.0	10,000.0	-	-	-	-	-	-	-	-
1,2-Dichloroethane	0.9	63.0	-	-	-	-	-	-	-	-
1,1-Dichloroethene	0.2	9.5	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	630.0	10,000.0	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	1,100.0	10,000.0	-	-	-	-	-	-	-	-
1,2-Dichloropropane	1.9	84.0	-	-	-	-	-	-	-	-
Ethylbenzene	71.0	10,000.0	-	-	-	-	-	-	-	-
Isopropyl benzene	27.0	10,000.0	-	-	-	-	-	-	-	-
Methyl-tert-butyl-ether	390.0	10,000.0	-	-	-	-	-	-	-	-
Methylene chloride	45.0	760.0	-	-	-	-	-	-	-	-
Styrene	13.0	190.0	-	-	-	-	-	-	-	-
1,1,1,2 Tetrachloroethane	2.2	220.0	-	-	-	-	-	-	-	-
1,1,2,2 Tetrachloroethane	1.3	29.0	-	-	-	-	-	-	-	-
Toluene	190.0	10,000.0	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	540.0	10,000.0	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	3.6	100.0	-	-	-	-	-	-	-	-
Vinyl chloride	0.02	3.00	-	-	-	-	-	-	-	-
Total Xylenes	110.0	10,000.0	-	-	-	-	-	-	-	-
Semivolatiles										
Acenaphthene	43.0	10,000.0	-	-	-	0.350 J	-	-	-	-
Acenaphthylene	23.0	10,000.0	-	-	-	-	-	-	-	-
Anthracene	35.0	10,000.0	-	-	-	0.690	-	-	-	-
Benzo(a)anthracene	0.9	7.8	0.042 J	0.270 J	-	1.100	0.084 J	0.090 J	-	-
Benzo(a)pyrene	0.4	0.8	-	0.320 J	-	0.970	0.080 J	0.087 J	-	-
Benzo(b)fluoranthene	0.9	7.8	0.050 J	0.5	-	1.200	0.130 J	0.150 J	-	-
Benzo(g,h,I)perylene	0.8	10,000.0	-	0.150 J	-	0.460	-	0.045 J	-	-
Benzo(k)fluoranthene	0.9	78.0	-	0.190 J	-	0.610	0.055 J	0.052 J	-	-
Bis(2-ethylhexyl)phthalate	46.0	410.0	-	-	-	-	0.046 J	-	-	-
Bis(2-chloroethyl)ether	0.6	5.2	-	-	-	-	-	-	-	-
Chrysene	0.4	780.0	0.045 J	0.370 J	-	1.200	0.130 J	0.130 J	-	-
Dibenzo(a,h)anthracene	0.4	0.8	-	0.053 J	-	0.140 J	-	-	-	-
1,2-Dichlorobenzene	510.0	10,000.0	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	430.0	10,000.0	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	27.0	240.0	-	-	-	-	-	-	-	-
3,3-Dichlorobenzidine	1.4	13.0	-	-	-	-	-	-	-	-
Diethyl phthalate	340.0	10,000.0	-	-	-	-	-	-	-	-
2,4-Dimethyl phenol	1,400.0	10,000.0	-	-	-	-	-	-	-	-
Dimethyl phthalate	1,900.0	10,000.0	-	-	-	-	-	-	-	-
2,4-Dinitrophenol	160.0	4,100.0	-	-	-	-	-	-	-	-
2,4-Dinitrotoluene	0.9	8.4	-	-	-	-	-	-	-	-
Fluoranthene	20.0	10,000.0	0.082 J	0.360 J	-	2.200	0.190 J	0.170 J	0.041 J	-
Fluorene	28.0	10,000.0	-	-	-	0.260 J	-	-	-	-
Hexachlorobenzene	0.4	3.6	-	-	-	-	-	-	-	-
Hexachlorobutadiene	8.2	73.0	-	-	-	-	-	-	-	-
Hexachloroethane	46.0	410.0	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	0.9	7.8	-	0.150 J	-	0.460	-	-	-	-
Naphthalene	54.0	10,000.0	-	-	-	0.091 J	-	-	-	-
Pentachlorophenol	5.3	48.0	-	-	-	-	-	-	-	-
Phenanthrene	40.0	10,000.0	0.060 J	0.140 J	-	1.900	0.160 J	0.130 J	-	-
Phenol	6,000.0	10,000.0	-	-	-	-	-	-	-	-
Pyrene	13.0	10,000.0	0.058 J	0.370 J	-	1.900	0.150 J	0.150 J	-	-
1,2,4-Trichlorobenzene	96.0	10,000.0	-	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	58.0	520.0	-	-	-	-	-	-	-	-
Pesticides/PCBs										
Chlordane	0.5	4.4	-	-	-	-	-	-	-	-
Dieldrin	0.04	0.40	-	0.004 P	-	-	-	-	0.007	0.007
Polychlorinated biphenyls	10.0	10.0	-	0.089	0.150	0.100	0.041	0.095	0.760	0.630
Inorganics										
Arsenic	1.7	3.8	13.0	17.0	9.0	10.0	12.0	16.0	11.0	12.0
Barium	5,500.0	10,000.0	19.0	17.0	-	13.0	20.0	-	-	-
Cadmium	39.0	1,000.0	1.4	1.6	2.9	2.5	1.4	1.4	2.4	2.9
Chromium III	1,400.0	10,000.0	n	n	n	n	n	n	n	n
Chromium VI	390.0	10,000.0	n	n	n	n	n	n	n	n
Chromium (Total)	na	na	10.0	12.0	26.0	23.0	10.0	10.0	25.0	29.0
Lead	150.0	500.0	18.0	18.0	19.0	21.0	29.0	23.0	11.0	11.0
Mercury	23.0	610.0	-	-	-	-	-	-	-	-
Selenium	390.0	10,000.0	-	-	-	-	-	-	2.0	2.0
Silver	200.0	10,000.0	-	-	-	-	-	-	-	-
TPH (8015M)	500.0	2,500.0	-	18	-	38	19	21	-	-

= Exceeds RIDEM Residential Exposure Criteria

- = Non-Detect Result

n = Not Analyzed

na = Not Applicable

J = Estimated value detected below the reporting limit
P = > than 40% difference between GC columns, reporting lower value

All results in mg/kg unless otherwise noted

MITKEM CORPORATION

"Environmental Testing Into The Next Century"

175 Metro Center Boulevard
Warwick, Rhode Island 02886-1755
Phone: (401)-732-3400 Fax: (401)-732-3499

FACSIMILE COVER SHEET

TO: Joe Cary

FROM: Melissa

COMPANY: Foster Wheeler

DATE: 1/20/99

FAX NUMBER: 742-6920

NUMBER OF PAGES: 44 (including cover sheet)

REFERENCE: Task Force 5

COMMENTS: Metals, VOA, VOA (Pesticides and PCB samples will be re-analyzed due to a out-of-limit calibration check. This will have any significant effect on the numbers for pest or PCB.)

MITKEM CORPORATION
175 Metro Center Boulevard
Warwick, Rhode Island 02886-1755
(401) 732-3400 • Fax (401) 732-3499
email: mitkem@worldnet.att.net

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

REPORT TO		INVOICE TO	
COMPANY: Foster Wheeler	PHONE: 842-6940	COMPANY:	PHONE:
NAME: Andrew Pragolato	FAX: 842-6970	NAME:	FAX:
ADDRESS: 98 Defeneck Hwy		ADDRESS:	
CITY/ST/ZIP: Middletown RI 02842		CITY/ST/ZIP:	

LAB PROJECT #: 4-39-7-7

DESIRED DUE TIME: 72 hr

CLIENT PROJECT NAME:

CLIENT PROJECT #:

CLIENT P.O.#:

REQUESTED ANALYSES

SAMPLE IDENTIFICATION	DATE/TIME SAMPLED	COMPOSITE	GRAB	WATER	SOIL	OTHER	LAB ID	# OF CONTAINERS	VOC 8260 (MOH)	TPH 8015	TPH 418.1	SVOC 8270	PCB 8082	Pesticide 8081	TCLP & Metals						COMMENTS
B6-S1	1/20/99 1300				X		-01	3	X												
B6-S2	1/20/99 1330				X		-02	3	X												
B6-S3	1/20/99 1348				X		-03	3	X												
B6-S4	1/20/99 1420				X		-04	3	X												
B6-S5	1/20/99 1445				X		-05	3	X												
B6-S6	1/20/99 1520				X		-06	3	X												
B6-S7	1/21/99 1000				X		-07	6	X	X	X	X	X	X	X						
B6-S8	1/21/99 1025				X		-08	6	X	X	X	X	X	X	X						
	/																				
	/																				
	/																				
	/																				

SEQ	RELINQUISHED BY	DATE/TIME	ACCEPTED BY	DATE/TIME
1	Andrew Pragolato	1/21/99 /	Cathy Rodrigues	1/22/99 2:30
2		/		/
3		/		/

ADDITIONAL REMARKS: Results & methods related to Telecon w/client 1/22/99 - [illegible]

COOLER TEMP: [illegible]

WHITE: LABORATORY COPY YELLOW: REPORT COPY PINK: CLIENTS COPY

MITKEM CORPORATION
175 Metro Center Boulevard
Warwick, Rhode Island 02886-1755
(401) 732-3400 • Fax (401) 732-3499
email: mitkem@worldnet.att.net

CHAIN-OF-CUSTODY RECORD

REPORT TO		INVOICE TO		
COMPANY: Foster Wheeler	PHONE: 842 6940	COMPANY	PHONE	LAB PROJECT #: 60064
NAME: Andrew Prophete	FAX: 842 6970	NAME	FAX	
ADDRESS: 99 Defense Hwy		ADDRESS		TURNAROUND TIME: 72 hr
CITY/ST/ZIP: Middletown RI 02842		CITY/ST/ZIP		

CLIENT PROJECT NAME: | CLIENT PROJECT #: | CLIENT P.O.#:

REQUESTED ANALYSES

SAMPLE IDENTIFICATION	DATE/TIME SAMPLED	COMPOSITE	GRAB	WATER	SOIL	OTHER	LAB ID	SEQUENCE NO. # OF CONTAINERS	~~VOC 8240/8260~~	TPH 9015	TPH 418.1	SVOC 8270	PCB 8082	Pesticides 8081	RCRA 8 metals	COMMENTS
B6-S1	1/20/99 1300				X		-01	3	X	X	X	X	X	X		
B6-S2	1/20/99 1320				X		-02	3	X	X	X	X	X			
B6-S3	1/20/99 1348				X		-03	3	X	X	X	X	X			
B6-S4	1/20/99 1420				X		-04	3	X	X	X	X	X			
B6-S5	1/20/99 1445				X		-05	3	X	X	X	X	X			
B6-S6	1/20/99 1520				X		-06	3	X	X	X	X	X			

SEQ.	RELINQUISHED BY	DATE/TIME	ACCEPTED BY	DATE/TIME
1	Andrew Prophete	1/21/99	Nathan Reynolds	1/21/99 2:30
2		/		/
3		/		/

ADDITIONAL REMARKS: RCRA 8 metals added per telecon w/client 1/22/99 - [illegible]

COOLER TEMP: < 4°C

WHITE: LABORATORY COPY YELLOW: REPORT COPY PINK: CLIENT'S COPY

01/26/99 TUE 16:45 FAX 401 732 3499 MITKEM CORPORATION 003

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S1
Lab ID: 60064-01
Analysis: Method 8081A

Analysis Date: 1/25/99
Matrix: Soil, 81% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Endrin ketone	ND	4.2
alpha-BHC	ND	2.1
gamma-BHC (Lindane)	ND	2.1
Heptachlor	ND	2.1
Aldrin	ND	2.1
beta-BHC	ND	2.1
delta-BHC	ND	2.1
Heptachlor epoxide	ND	2.1
Endosulfan I	ND	2.1
4,4'-DDE	9.9	4.2
Dieldrin	ND	4.2
Endrin	ND	4.2
4,4'-DDD	ND	4.2
Endosulfan II	ND	4.2
4,4'-DDT	4.9	4.2
Endrin aldehyde	ND	4.2
Methoxychlor	ND	21
Endosulfan sulfate	ND	4.2
Chlordane (technical)	ND	200
Toxaphene	ND	100
alpha-chlordane	ND	2.1
gamma-chlordane	ND	2.1

QC Batch: P0122-BS1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	97%
Decachlorobiphenyl	84%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S2
Lab ID: 60064-02
Analysis: Method 8081A

Analysis Date: 1/25/99
Matrix: Soil, 82% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Endrin ketone	ND	4.1
alpha-BHC	ND	2.1
gamma-BHC (Lindane)	ND	2.1
Heptachlor	ND	2.1
Aldrin	ND	2.1
beta-BHC	ND	2.1
delta-BHC	ND	2.1
Heptachlor epoxide	ND	2.1
Endosulfan I	ND	2.1
4,4'-DDE	15	4.1
Dieldrin	4.4 P	4.1
Endrin	ND	4.1
4,4'-DDD	5.5	4.1
Endosulfan II	ND	4.1
4,4'-DDT	9.8 P	4.1
Endrin aldehyde	ND	4.1
Methoxychlor	ND	21
Endosulfan sulfate	4.2 P	4.1
Chlordane (technical)	ND	200
Toxaphene	ND	100
alpha-chlordane	ND	2.1
gamma-chlordane	ND	2.1

QC Batch: P0122-BS1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	73%
Decachlorobiphenyl	73%

ND = Not detected

60064-02

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S3
Lab ID: 60064-03
Analysis: Method 8081A

Analysis Date: 1/25/99
Matrix: Soil, 94% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Endrin ketone	ND	3.6
alpha-BHC	ND	1.8
gamma-BHC (Lindane)	ND	1.8
Heptachlor	ND	1.8
Aldrin	ND	1.8
beta-BHC	ND	1.8
delta-BHC	ND	1.8
Heptachlor epoxide	ND	1.8
Endosulfan I	ND	1.8
4,4'-DDE	ND	3.6
Dieldrin	ND	3.6
Endrin	ND	3.6
4,4'-DDD	ND	3.6
Endosulfan II	ND	3.6
4,4'-DDT	ND	3.6
Endrin aldehyde	ND	3.6
Methoxychlor	ND	18
Endosulfan sulfate	ND	3.6
Chlordane (technical)	ND	180
Toxaphene	ND	88
alpha-chlordane	ND	1.8
gamma-chlordane	ND	1.8

QC Batch: P0122-BS1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	100%
Decachlorobiphenyl	79%

ND = Not detected

60064-03

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S4
Lab ID: 60064-04
Analysis: Method 8081A

Analysis Date: 1/25/99
Matrix: Soil, 89% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Endrin ketone	ND	3.8
alpha-BHC	ND	1.9
gamma-BHC (Lindane)	ND	1.9
Heptachlor	ND	1.9
Aldrin	ND	1.9
beta-BHC	ND	1.9
delta-BHC	ND	1.9
Heptachlor epoxide	ND	1.9
Endosulfan I	ND	1.9
4,4'-DDE	ND	3.8
Dieldrin	ND	3.8
Endrin	ND	3.8
4,4'-DDD	ND	3.8
Endosulfan II	ND	3.8
4,4'-DDT	ND	3.8
Endrin aldehyde	ND	3.8
Methoxychlor	ND	19
Endosulfan sulfate	8.4	3.8
Chlordane (technical)	ND	190
Toxaphene	ND	93
alpha-chlordane	ND	1.9
gamma-chlordane	ND	1.9

QC Batch: P0122-BS1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	59%
Decachlorobiphenyl	182% *

ND = Not detected
* Out of control due to matrix interference.

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S5
Lab ID: 60064-05
Analysis: Method 8081A

Analysis Date: 1/25/99
Matrix: Soil, 83% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Endrin ketone	ND	4.1
alpha-BHC	ND	2.0
gamma-BHC (Lindane)	ND	2.0
Heptachlor	ND	2.0
Aldrin	ND	2.0
beta-BHC	ND	2.0
delta-BHC	ND	2.0
Heptachlor epoxide	ND	2.0
Endosulfan I	ND	2.0
4,4'-DDE	9.8	4.1
Dieldrin	ND	4.1
Endrin	ND	4.1
4,4'-DDD	ND	4.1
Endosulfan II	ND	4.1
4,4'-DDT	8.4	4.1
Endrin aldehyde	ND	4.1
Methoxychlor	ND	20
Endosulfan sulfate	ND	4.1
Chlordane (technical)	ND	200
Toxaphene	ND	100
alpha-chlordane	ND	2.0
gamma-chlordane	ND	2.0

QC Batch: P0122-BS1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	66%
Decachlorobipheny!	60%

ND = Not detected

60064-05

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S6
Lab ID: 60064-06
Analysis: Method 8081A

Analysis Date: 1/26/99
Matrix: Soil, 79% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Endrin ketone	ND	4.3
alpha-BHC	ND	2.2
gamma-BHC (Lindane)	ND	2.2
Heptachlor	ND	2.2
Aldrin	ND	2.2
beta-BHC	ND	2.2
delta-BHC	ND	2.2
Heptachlor epoxide	ND	2.2
Endosulfan I	ND	2.2
4,4'-DDE	17	4.3
Dieldrin	ND	4.3
Endrin	ND	4.3
4,4'-DDD	ND	4.3
Endosulfan II	ND	4.3
4,4'-DDT	15	4.3
Endrin aldehyde	ND	4.3
Methoxychlor	ND	22
Endosulfan sulfate	ND	4.3
Chlordane (technical)	ND	210
Toxaphene	ND	100
alpha-chlordane	ND	2.2
gamma-chlordane	ND	2.2

QC Batch: P0122-BS1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	106%
Decachlorobiphenyl	84%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S7
Lab ID: 60064-07
Analysis: Method 8081A

Analysis Date: 1/26/99
Matrix: Soil, 90% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Endrin ketone	ND	3.8
alpha-BHC	ND	1.9
gamma-BHC (Lindane)	ND	1.9
Heptachlor	ND	1.9
Aldrin	ND	1.9
beta-BHC	ND	1.9
delta-BHC	ND	1.9
Heptachlor epoxide	ND	1.9
Endosulfan I	ND	1.9
4,4'-DDE	ND	3.8
Dieldrin	6.9	3.8
Endrin	ND	3.8
4,4'-DDD	ND	3.8
Endosulfan II	ND	3.8
4,4'-DDT	ND	3.8
Endrin aldehyde	ND	3.8
Methoxychlor	ND	19
Endosulfan sulfate	ND	3.8
Chlordane (technical)	ND	180
Toxaphene	ND	92
alpha-chlordane	ND	1.9
gamma-chlordane	ND	1.9

QC Batch: P0122-BS1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	99%
Decachlorobiphenyl	81%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S8
Lab ID: 60064-08
Analysis: Method 8081A

Analysis Date: 1/26/99
Matrix: Soil, 91% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Endrin ketone	ND	3.7
alpha-BHC	ND	1.9
gamma-BHC (Lindane)	ND	1.9
Heptachlor	ND	1.9
Aldrin	ND	1.9
beta-BHC	ND	1.9
delta-BHC	ND	1.9
Heptachlor epoxide	ND	1.9
Endosulfan I	ND	1.9
4,4'-DDE	ND	3.7
Dieldrin	6.7	3.7
Endrin	ND	3.7
4,4'-DDD	ND	3.7
Endosulfan II	ND	3.7
4,4'-DDT	ND	3.7
Endrin aldehyde	ND	3.7
Methoxychlor	ND	19
Endosulfan sulfate	ND	3.7
Chlordane (technical)	ND	180
Toxaphene	ND	91
alpha-chlordane	ND	1.9
gamma-chlordane	ND	1.9

QC Batch: P0122-BS1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	82%
Decachlorobiphenyl	71%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, P0122-BS1
Analysis: Method 8081A

Analysis Date: 1/25/99
Matrix: Solid
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Endrin ketone	ND	3.3
alpha-BHC	ND	1.7
gamma-BHC (Lindane)	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
beta-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
4,4'-DDE	ND	3.3
Dieldrin	ND	3.3
Endrin	ND	3.3
4,4'-DDD	ND	3.3
Endosulfan II	ND	3.3
4,4'-DDT	ND	3.3
Endrin aldehyde	ND	3.3
Methoxychlor	ND	17
Endosulfan sulfate	ND	3.3
Chlordane (technical)	ND	166
Toxaphene	ND	83
alpha-chlordane	ND	1.7
gamma-chlordane	ND	1.7

QC Batch: P0122-BS1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	92%
Decachlorobiphenyl	88%

ND = Not detected

60064-MB

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Lab Control Summary

Client: Foster Wheeler Environmental Corp.
Lab ID for Blank Spike: P0122-LCS1
Analysis: Method 8081A

Matrix: Solid
Analysis Date for Blank Spike: 1/25/99

Analyte	% Recovery
gamma-BHC (Lindane)	103
Heptachlor	99
Aldrin	102
Dieldrin	105
Endrin	113
4,4'-DDT	72

QC Batch: P0122-BS1

60064-LCS

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Matrix Spike Summary

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S1
Lab ID for Matrix Spike: 60064-01MS
Lab ID for Matrix Spike Duplicate: 60064-01MSD
Analysis: Method 8081A

Matrix: Soil

Analysis Date for Matrix Spike: 1/25/99
Analysis Date for Matrix Spike Duplicate: 1/25/99

% Recovery

Analyte	Matrix Spike	Matrix Spike Dup.	% RPD
gamma-BHC (Lindane)	96	95	1
Heptachlor	74	83	11
Aldrin	94	92	2
Dieldrin	92	93	1
Endrin	106	105	0.9
4,4'-DDT	115	120	4

QC Batch: P0122-BS1

MITKEM CORPORATION

Analysis Report: Total Petroleum Hydrocarbons

Client: Foster Wheeler Environmental Corp.
Analysis: Method 8100M / 8015M
Matrix: Soil

Concentration in: mg/kg, dry weight basis

Lab ID	Client ID	Result	Reporting Limit	% Solid	p-Terphenyl Surrogate Recovery %	Analysis Date
60064-01	B6-S1	ND	16	81	69	1/25/99
60064-02	B6-S2	18	16	82	66	1/25/99
60064-03	B6-S3	ND	14	94	61	1/25/99
60064-04	B6-S4	38	15	89	68	1/25/99
60064-05	B6-S5	19	16	83	55	1/25/99
60064-06	B6-S6	21	17	79	66	1/25/99
60064-07	B6-S7	ND	15	90	66	1/25/99
60064-08	B6-S8	ND	15	91	67	1/25/99

QA/QC

Method Blank					
F0122-BS1	ND	13		76	1/22/99
Lab Control Sample (% Recovery)					
F0122-LS1	78			76	1/22/99

ND = Not Detected

The samples were quantitated using diesel fuel as standard.

MITKEM CORPORATION

Analysis Report: Total Petroleum Hydrocarbons

Matrix Spike Summary

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S3
Lab ID for Matrix Spike: 60064-03 MS
Lab ID for Matrix Spike Duplicate: 60064-03 MSD
Analysis: Method 8100M/8015M

Matrix: Soil

Analysis Date for Matrix Spike: 1/25/99
Analysis Date for Matrix Spike Duplicate: 1/25/99

% Recovery

Analyte	Matrix Spike	Matrix Spike Dup.	% RPD
Diesel	83	96	14

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S1
Lab ID: 60064-01
Analysis: Method 8260B
Sample Aliquot: 17.5g/15 ml Methanol

Analysis Date: 1/25/99
Matrix: Soil, 85% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1
Aliquot used for Anaylsis: 100uL

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	250
Chloromethane	ND	250
Vinyl chloride	ND	250
Bromomethane	ND	250
Chloroethane	ND	250
Trichlorofluoromethane	ND	250
1,1-Dichloroethene	ND	250
Carbon disulfide	ND	250
Iodomethane	ND	250
Acetone	360	250
Methylene chloride	ND	250
trans-1,2-Dichloroethene	ND	250
1,1-Dichloroethane	ND	250
Vinyl acetate	ND	250
2,2-Dichloropropane	ND	250
cis-1,2-Dichloroethene	ND	250
Methyl ethyl ketone	350	250
Bromochloromethane	ND	250
Chloroform	ND	250
1,1,1-Trichloroethane	ND	250
Carbon tetrachloride	ND	250
1,1-Dichloropropene	ND	250
Benzene	ND	250
1,2-Dichloroethane	ND	250
Trichloroethene	ND	250
1,2-Dichloropropane	ND	250
Dibromomethane	ND	250
Bromodichloromethane	ND	250
2-Chloroethyl vinyl ether	ND	250
cis-1,3-Dichloropropene	ND	250
4-Methyl-2-pentanone	ND	250
Toluene	ND	250

MITKEM CORPORATION

Client ID: B6-S1

Lab ID: 60064-01

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	250
1,1,2-Trichloroethane	ND	250
Tetrachloroethene	ND	250
1,3-Dichloropropane	ND	250
2-Hexanone	ND	250
Dibromochloromethane	ND	250
1,2-Dibromoethane (EDB)	ND	250
Chlorobenzene	ND	250
1,1,1,2-Tetrachloroethane	ND	250
Ethylbenzene	ND	250
Xylenes, total	ND	250
Styrene	ND	250
Bromoform	ND	250
Isopropylbenzene	ND	250
Bromobenzene	ND	250
1,1,2,2-Tetrachloroethane	ND	250
1,2,3-Trichloropropane	ND	250
n-Propylbenzene	ND	250
2-Chlorotoluene	ND	250
4-Chlorotoluene	ND	250
1,3,5-Trimethylbenzene	ND	250
tert-Butylbenzene	ND	250
1,2,4-Trimethylbenzene	ND	250
sec-Butylbenzene	ND	250
1,3-Dichlorobenzene	ND	250
4-Isopropyltoluene	ND	250
1,4-Dichlorobenzene	ND	250
1,2-Dichlorobenzene	ND	250
n-Butylbenzene	ND	250
1,2-Dibromo-3-chloropropane	ND	250
1,2,4-Trichlorobenzene	ND	250
Hexachlorobutadiene	ND	250
1,2,3-Trichlorobenzene	ND	250
MTBE	ND	250
Naphthalene	ND	250

QC Batch: V5B0125A

Surrogate Recovery:	
1,2-Dichloroethane-d4	94%
Toluene-d8	94%
Bromofluorobenzene	100%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S2
Lab ID: 60064-02
Analysis: Method 8260B
Sample Aliquot: 14.9g/15 ml Methanol

Analysis Date: 1/25/99
Matrix: Soil, 81% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1
Aliquot used for Anaylsis: 100uL

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	310
Chloromethane	ND	310
Vinyl chloride	ND	310
Bromomethane	ND	310
Chloroethane	ND	310
Trichlorofluoromethane	ND	310
1,1-Dichloroethene	ND	310
Carbon disulfide	ND	310
Iodomethane	ND	310
Acetone	370	310
Methylene chloride	ND	310
trans-1,2-Dichloroethene	ND	310
1,1-Dichloroethane	ND	310
Vinyl acetate	ND	310
2,2-Dichloropropane	ND	310
cis-1,2-Dichloroethene	ND	310
Methyl ethyl ketone	410	310
Bromochloromethane	ND	310
Chloroform	ND	310
1,1,1-Trichloroethane	ND	310
Carbon tetrachloride	ND	310
1,1-Dichloropropene	ND	310
Benzene	ND	310
1,2-Dichloroethane	ND	310
Trichloroethene	ND	310
1,2-Dichloropropane	ND	310
Dibromomethane	ND	310
Bromodichloromethane	ND	310
2-Chloroethyl vinyl ether	ND	310
cis-1,3-Dichloropropene	ND	310
4-Methyl-2-pentanone	ND	310
Toluene	ND	310

MITKEM CORPORATION

Client ID: B6-S2

Lab ID: 60064-02

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	310
1,1,2-Trichloroethane	ND	310
Tetrachloroethene	ND	310
1,3-Dichloropropane	ND	310
2-Hexanone	ND	310
Dibromochloromethane	ND	310
1,2-Dibromoethane (EDB)	ND	310
Chlorobenzene	ND	310
1,1,1,2-Tetrachloroethane	ND	310
Ethylbenzene	ND	310
Xylenes, total	ND	310
Styrene	ND	310
Bromoform	ND	310
Isopropylbenzene	ND	310
Bromobenzene	ND	310
1,1,2,2-Tetrachloroethane	ND	310
1,2,3-Trichloropropane	ND	310
n-Propylbenzene	ND	310
2-Chlorotoluene	ND	310
4-Chlorotoluene	ND	310
1,3,5-Trimethylbenzene	ND	310
tert-Butylbenzene	ND	310
1,2,4-Trimethylbenzene	ND	310
sec-Butylbenzene	ND	310
1,3-Dichlorobenzene	ND	310
4-Isopropyltoluene	ND	310
1,4-Dichlorobenzene	ND	310
1,2-Dichlorobenzene	ND	310
n-Butylbenzene	ND	310
1,2-Dibromo-3-chloropropane	ND	310
1,2,4-Trichlorobenzene	ND	310
Hexachlorobutadiene	ND	310
1,2,3-Trichlorobenzene	ND	310
MTBE	ND	310
Naphthalene	ND	310

QC Batch: V5B0125A

Surrogate Recovery:	
1,2-Dichloroethane-d4	94%
Toluene-d8	94%
Bromofluorobenzene	100%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S3
Lab ID: 60064-03
Analysis: Method 8260B
Sample Aliquot: 15.3g/15 ml Methanol

Analysis Date: 1/25/99
Matrix: Soil, 91% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1
Aliquot used for Anaylsis: 100uL

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	270
Chloromethane	ND	270
Vinyl chloride	ND	270
Bromomethane	ND	270
Chloroethane	ND	270
Trichlorofluoromethane	ND	270
1,1-Dichloroethene	ND	270
Carbon disulfide	ND	270
Iodomethane	ND	270
Acetone	ND	270
Methylene chloride	ND	270
trans-1,2-Dichloroethene	ND	270
1,1-Dichloroethane	ND	270
Vinyl acetate	ND	270
2,2-Dichloropropane	ND	270
cis-1,2-Dichloroethene	ND	270
Methyl ethyl ketone	280	270
Bromochloromethane	ND	270
Chloroform	ND	270
1,1,1-Trichloroethane	ND	270
Carbon tetrachloride	ND	270
1,1-Dichloropropene	ND	270
Benzene	ND	270
1,2-Dichloroethane	ND	270
Trichloroethene	ND	270
1,2-Dichloropropane	ND	270
Dibromomethane	ND	270
Bromodichloromethane	ND	270
2-Chloroethyl vinyl ether	ND	270
cis-1,3-Dichloropropene	ND	270
4-Methyl-2-pentanone	ND	270
Toluene	ND	270

MITKEM CORPORATION

Client ID: B6-S3 Lab ID: 60064-03

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	270
1,1,2-Trichloroethane	ND	270
Tetrachloroethene	ND	270
1,3-Dichloropropane	ND	270
2-Hexanone	ND	270
Dibromochloromethane	ND	270
1,2-Dibromoethane (EDB)	ND	270
Chlorobenzene	ND	270
1,1,1,2-Tetrachloroethane	ND	270
Ethylbenzene	ND	270
Xylenes, total	ND	270
Styrene	ND	270
Bromoform	ND	270
Isopropylbenzene	ND	270
Bromobenzene	ND	270
1,1,2,2-Tetrachloroethane	ND	270
1,2,3-Trichloropropane	ND	270
n-Propylbenzene	ND	270
2-Chlorotoluene	ND	270
4-Chlorotoluene	ND	270
1,3,5-Trimethylbenzene	ND	270
tert-Butylbenzene	ND	270
1,2,4-Trimethylbenzene	ND	270
sec-Butylbenzene	ND	270
1,3-Dichlorobenzene	ND	270
4-Isopropyltoluene	ND	270
1,4-Dichlorobenzene	ND	270
1,2-Dichlorobenzene	ND	270
n-Butylbenzene	ND	270
1,2-Dibromo-3-chloropropane	ND	270
1,2,4-Trichlorobenzene	ND	270
Hexachlorobutadiene	ND	270
1,2,3-Trichlorobenzene	ND	270
MTBE	ND	270
Naphthalene	ND	270

QC Batch: V5B0125A

Surrogate Recovery:	
1,2-Dichloroethane-d4	94%
Toluene-d8	94%
Bromofluorobenzene	98%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S4
Lab ID: 60064-04
Analysis: Method 8260B
Sample Aliquot: 14.7g/15 ml Methanol

Analysis Date: 1/25/99
Matrix: Soil, 84% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1
Aliquot used for Anaylsis: 100uL

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	300
Chloromethane	ND	300
Vinyl chloride	ND	300
Bromomethane	ND	300
Chloroethane	ND	300
Trichlorofluoromethane	ND	300
1,1-Dichloroethene	ND	300
Carbon disulfide	ND	300
Iodomethane	ND	300
Acetone	330	300
Methylene chloride	ND	300
trans-1,2-Dichloroethene	ND	300
1,1-Dichloroethane	ND	300
Vinyl acetate	ND	300
2,2-Dichloropropane	ND	300
cis-1,2-Dichloroethene	ND	300
Methyl ethyl ketone	440	300
Bromochloromethane	ND	300
Chloroform	ND	300
1,1,1-Trichloroethane	ND	300
Carbon tetrachloride	ND	300
1,1-Dichloropropene	ND	300
Benzene	ND	300
1,2-Dichloroethane	ND	300
Trichloroethene	ND	300
1,2-Dichloropropane	ND	300
Dibromomethane	ND	300
Bromodichloromethane	ND	300
2-Chloroethyl vinyl ether	ND	300
cis-1,3-Dichloropropene	ND	300
4-Methyl-2-pentanone	ND	300
Toluene	ND	300

MITKEM CORPORATION

Client ID: B6-S4 Lab ID: 60064-04

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	300
1,1,2-Trichloroethane	ND	300
Tetrachloroethene	ND	300
1,3-Dichloropropane	ND	300
2-Hexanone	ND	300
Dibromochloromethane	ND	300
1,2-Dibromoethane (EDB)	ND	300
Chlorobenzene	ND	300
1,1,1,2-Tetrachloroethane	ND	300
Ethylbenzene	ND	300
Xylenes, total	ND	300
Styrene	ND	300
Bromoform	ND	300
Isopropylbenzene	ND	300
Bromobenzene	ND	300
1,1,2,2-Tetrachloroethane	ND	300
1,2,3-Trichloropropane	ND	300
n-Propylbenzene	ND	300
2-Chlorotoluene	ND	300
4-Chlorotoluene	ND	300
1,3,5-Trimethylbenzene	ND	300
tert-Butylbenzene	ND	300
1,2,4-Trimethylbenzene	ND	300
sec-Butylbenzene	ND	300
1,3-Dichlorobenzene	ND	300
4-Isopropyltoluene	ND	300
1,4-Dichlorobenzene	ND	300
1,2-Dichlorobenzene	ND	300
n-Butylbenzene	ND	300
1,2-Dibromo-3-chloropropane	ND	300
1,2,4-Trichlorobenzene	ND	300
Hexachlorobutadiene	ND	300
1,2,3-Trichlorobenzene	ND	300
MTBE	ND	300
Naphthalene	ND	300

QC Batch: V5B0125A

Surrogate Recovery:	
1,2-Dichloroethane-d4	94%
Toluene-d8	92%
Bromofluorobenzene	99%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S5
Lab ID: 60064-05
Analysis: Method 8260B
Sample Aliquot: 14.8g/15 ml Methanol

Analysis Date: 1/25/99
Matrix: Soil, 81% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1
Aliquot used for Anaylsis: 100uL

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	310
Chloromethane	ND	310
Vinyl chloride	ND	310
Bromomethane	ND	310
Chloroethane	ND	310
Trichlorofluoromethane	ND	310
1,1-Dichloroethene	ND	310
Carbon disulfide	ND	310
Iodomethane	ND	310
Acetone	520	310
Methylene chloride	ND	310
trans-1,2-Dichloroethene	ND	310
1,1-Dichloroethane	ND	310
Vinyl acetate	ND	310
2,2-Dichloropropane	ND	310
cis-1,2-Dichloroethene	ND	310
Methyl ethyl ketone	ND	310
Bromochloromethane	ND	310
Chloroform	ND	310
1,1,1-Trichloroethane	ND	310
Carbon tetrachloride	ND	310
1,1-Dichloropropene	ND	310
Benzene	ND	310
1,2-Dichloroethane	ND	310
Trichloroethene	ND	310
1,2-Dichloropropane	ND	310
Dibromomethane	ND	310
Bromodichloromethane	ND	310
2-Chloroethyl vinyl ether	ND	310
cis-1,3-Dichloropropene	ND	310
4-Methyl-2-pentanone	ND	310
Toluene	ND	310

MITKEM CORPORATION

Client ID: B6-S5

Lab ID: 60064-05

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	310
1,1,2-Trichloroethane	ND	310
Tetrachloroethene	ND	310
1,3-Dichloropropane	ND	310
2-Hexanone	ND	310
Dibromochloromethane	ND	310
1,2-Dibromoethane (EDB)	ND	310
Chlorobenzene	ND	310
1,1,1,2-Tetrachloroethane	ND	310
Ethylbenzene	ND	310
Xylenes, total	ND	310
Styrene	ND	310
Bromoform	ND	310
Isopropylbenzene	ND	310
Bromobenzene	ND	310
1,1,2,2-Tetrachloroethane	ND	310
1,2,3-Trichloropropane	ND	310
n-Propylbenzene	ND	310
2-Chlorotoluene	ND	310
4-Chlorotoluene	ND	310
1,3,5-Trimethylbenzene	ND	310
tert-Butylbenzene	ND	310
1,2,4-Trimethylbenzene	ND	310
sec-Butylbenzene	ND	310
1,3-Dichlorobenzene	ND	310
4-Isopropyltoluene	ND	310
1,4-Dichlorobenzene	ND	310
1,2-Dichlorobenzene	ND	310
n-Butylbenzene	ND	310
1,2-Dibromo-3-chloropropane	ND	310
1,2,4-Trichlorobenzene	ND	310
Hexachlorobutadiene	ND	310
1,2,3-Trichlorobenzene	ND	310
MTBE	ND	310
Naphthalene	ND	310

QC Batch: V5B0125A

Surrogate Recovery:	
1,2-Dichloroethane-d4	92%
Toluene-d8	92%
Bromofluorobenzene	100%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S6
Lab ID: 60064-06
Analysis: Method 8260B
Sample Aliquot: 13.9g/15 ml Methanol

Analysis Date: 1/25/99
Matrix: Soil, 83% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1
Aliquot used for Anaylsis: 100uL

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	330
Chloromethane	ND	330
Vinyl chloride	ND	330
Bromomethane	ND	330
Chloroethane	ND	330
Trichlorofluoromethane	ND	330
1,1-Dichloroethene	ND	330
Carbon disulfide	ND	330
Iodomethane	ND	330
Acetone	370	330
Methylene chloride	ND	330
trans-1,2-Dichloroethene	ND	330
1,1-Dichloroethane	ND	330
Vinyl acetate	ND	330
2,2-Dichloropropane	ND	330
cis-1,2-Dichloroethene	ND	330
Methyl ethyl ketone	430	330
Bromochloromethane	ND	330
Chloroform	ND	330
1,1,1-Trichloroethane	ND	330
Carbon tetrachloride	ND	330
1,1-Dichloropropene	ND	330
Benzene	ND	330
1,2-Dichloroethane	ND	330
Trichloroethene	ND	330
1,2-Dichloropropane	ND	330
Dibromomethane	ND	330
Bromodichloromethane	ND	330
2-Chloroethyl vinyl ether	ND	330
cis-1,3-Dichloropropene	ND	330
4-Methyl-2-pentanone	ND	330
Toluene	ND	330

MITKEM CORPORATION

Client ID: B6-S6

Lab ID: 60064-06

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	330
1,1,2-Trichloroethane	ND	330
Tetrachloroethene	ND	330
1,3-Dichloropropane	ND	330
2-Hexanone	ND	330
Dibromochloromethane	ND	330
1,2-Dibromoethane (EDB)	ND	330
Chlorobenzene	ND	330
1,1,1,2-Tetrachloroethane	ND	330
Ethylbenzene	ND	330
Xylenes, total	ND	330
Styrene	ND	330
Bromoform	ND	330
Isopropylbenzene	ND	330
Bromobenzene	ND	330
1,1,2,2-Tetrachloroethane	ND	330
1,2,3-Trichloropropane	ND	330
n-Propylbenzene	ND	330
2-Chlorotoluene	ND	330
4-Chlorotoluene	ND	330
1,3,5-Trimethylbenzene	ND	330
tert-Butylbenzene	ND	330
1,2,4-Trimethylbenzene	ND	330
sec-Butylbenzene	ND	330
1,3-Dichlorobenzene	ND	330
4-Isopropyltoluene	ND	330
1,4-Dichlorobenzene	ND	330
1,2-Dichlorobenzene	ND	330
n-Butylbenzene	ND	330
1,2-Dibromo-3-chloropropane	ND	330
1,2,4-Trichlorobenzene	ND	330
Hexachlorobutadiene	ND	330
1,2,3-Trichlorobenzene	ND	330
MTBE	ND	330
Naphthalene	ND	330

QC Batch: V5B0125A

Surrogate Recovery:	
1,2-Dichloroethane-d4	94%
Toluene-d8	92%
Bromofluorobenzene	98%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S7
Lab ID: 60064-07
Analysis: Method 8260B
Sample Aliquot: 16.2g/15 ml Methanol

Analysis Date: 1/25/99
Matrix: Soil, 88% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1
Aliquot used for Anaylsis: 100uL

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	260
Chloromethane	ND	260
Vinyl chloride	ND	260
Bromomethane	ND	260
Chloroethane	ND	260
Trichlorofluoromethane	ND	260
1,1-Dichloroethene	ND	260
Carbon disulfide	ND	260
Iodomethane	ND	260
Acetone	330	260
Methylene chloride	ND	260
trans-1,2-Dichloroethene	ND	260
1,1-Dichloroethane	ND	260
Vinyl acetate	ND	260
2,2-Dichloropropane	ND	260
cis-1,2-Dichloroethene	ND	260
Methyl ethyl ketone	300	260
Bromochloromethane	ND	260
Chloroform	ND	260
1,1,1-Trichloroethane	ND	260
Carbon tetrachloride	ND	260
1,1-Dichloropropene	ND	260
Benzene	ND	260
1,2-Dichloroethane	ND	260
Trichloroethene	ND	260
1,2-Dichloropropane	ND	260
Dibromomethane	ND	260
Bromodichloromethane	ND	260
2-Chloroethyl vinyl ether	ND	260
cis-1,3-Dichloropropene	ND	260
4-Methyl-2-pentanone	ND	260
Toluene	ND	260

MITKEM CORPORATION

Client ID: B6-S7

Lab ID: 60064-07

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	260
1,1,2-Trichloroethane	ND	260
Tetrachloroethene	ND	260
1,3-Dichloropropane	ND	260
2-Hexanone	ND	260
Dibromochloromethane	ND	260
1,2-Dibromoethane (EDB)	ND	260
Chlorobenzene	ND	260
1,1,1,2-Tetrachloroethane	ND	260
Ethylbenzene	ND	260
Xylenes, total	ND	260
Styrene	ND	260
Bromoform	ND	260
Isopropylbenzene	ND	260
Bromobenzene	ND	260
1,1,2,2-Tetrachloroethane	ND	260
1,2,3-Trichloropropane	ND	260
n-Propylbenzene	ND	260
2-Chlorotoluene	ND	260
4-Chlorotoluene	ND	260
1,3,5-Trimethylbenzene	ND	260
tert-Butylbenzene	ND	260
1,2,4-Trimethylbenzene	ND	260
sec-Butylbenzene	ND	260
1,3-Dichlorobenzene	ND	260
4-Isopropyltoluene	ND	260
1,4-Dichlorobenzene	ND	260
1,2-Dichlorobenzene	ND	260
n-Butylbenzene	ND	260
1,2-Dibromo-3-chloropropane	ND	260
1,2,4-Trichlorobenzene	ND	260
Hexachlorobutadiene	ND	260
1,2,3-Trichlorobenzene	ND	260
MTBE	ND	260
Naphthalene	ND	260

QC Batch: V5B0125A

Surrogate Recovery:	
1,2-Dichloroethane-d4	94%
Toluene-d8	92%
Bromofluorobenzene	96%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S8
Lab ID: 60064-08
Analysis: Method 8260B
Sample Aliquot: 16.9g/15 ml Methanol

Analysis Date: 1/25/99
Matrix: Soil, 85% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1
Aliquot used for Anaylsis: 100uL

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	260
Chloromethane	ND	260
Vinyl chloride	ND	260
Bromomethane	ND	260
Chloroethane	ND	260
Trichlorofluoromethane	ND	260
1,1-Dichloroethene	ND	260
Carbon disulfide	ND	260
Iodomethane	ND	260
Acetone	ND	260
Methylene chloride	ND	260
trans-1,2-Dichloroethene	ND	260
1,1-Dichloroethane	ND	260
Vinyl acetate	ND	260
2,2-Dichloropropane	ND	260
cis-1,2-Dichloroethene	ND	260
Methyl ethyl ketone	ND	260
Bromochloromethane	ND	260
Chloroform	ND	260
1,1,1-Trichloroethane	ND	260
Carbon tetrachloride	ND	260
1,1-Dichloropropene	ND	260
Benzene	ND	260
1,2-Dichloroethane	ND	260
Trichloroethene	ND	260
1,2-Dichloropropane	ND	260
Dibromomethane	ND	260
Bromodichloromethane	ND	260
2-Chloroethyl vinyl ether	ND	260
cis-1,3-Dichloropropene	ND	260
4-Methyl-2-pentanone	ND	260
Toluene	ND	260

MITKEM CORPORATION

Client ID: B6-S8 Lab ID: 60064-08

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	260
1,1,2-Trichloroethane	ND	260
Tetrachloroethene	ND	260
1,3-Dichloropropane	ND	260
2-Hexanone	ND	260
Dibromochloromethane	ND	260
1,2-Dibromoethane (EDB)	ND	260
Chlorobenzene	ND	260
1,1,1,2-Tetrachloroethane	ND	260
Ethylbenzene	ND	260
Xylenes, total	ND	260
Styrene	ND	260
Bromoform	ND	260
Isopropylbenzene	ND	260
Bromobenzene	ND	260
1,1,2,2-Tetrachloroethane	ND	260
1,2,3-Trichloropropane	ND	260
n-Propylbenzene	ND	260
2-Chlorotoluene	ND	260
4-Chlorotoluene	ND	260
1,3,5-Trimethylbenzene	ND	260
tert-Butylbenzene	ND	260
1,2,4-Trimethylbenzene	ND	260
sec-Butylbenzene	ND	260
1,3-Dichlorobenzene	ND	260
4-Isopropyltoluene	ND	260
1,4-Dichlorobenzene	ND	260
1,2-Dichlorobenzene	ND	260
n-Butylbenzene	ND	260
1,2-Dibromo-3-chloropropane	ND	260
1,2,4-Trichlorobenzene	ND	260
Hexachlorobutadiene	ND	260
1,2,3-Trichlorobenzene	ND	260
MTBE	ND	260
Naphthalene	ND	260

QC Batch: V5B0125A

Surrogate Recovery:	
1,2-Dichloroethane-d4	94%
Toluene-d8	94%
Bromofluorobenzene	98%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, V5B0125A
Analysis: Method 8260B

Analysis Date: 1/25/99
Matrix: Solid
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Carbon disulfide	ND	5
Iodomethane	ND	5
Acetone	ND	5
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Vinyl acetate	ND	5
2,2-Dichloropropane	ND	5
cis-1,2-Dichloroethene	ND	5
Methyl ethyl ketone	ND	5
Bromochloromethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
1,1-Dichloropropene	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Dibromomethane	ND	5
Bromodichloromethane	ND	5
2-Chloroethyl vinyl ether	ND	5
cis-1,3-Dichloropropene	ND	5
4-Methyl-2-pentanone	ND	5
Toluene	ND	5

60064-MB

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	B6-S1	Concentration in:	mg/kg, dry weight basis
Lab ID:	60064-01	Analysis Date:	1/25/99
Matrix:	Soil, 83% solid	Analysis Method:	7471A (Mercury) 6010A (Others)

Analyte	Results	Reporting Limit	
Arsenic	~~13~~	1	1.7 Res 3.8 Com
Barium	19	20	
Cadmium	1.4	0.5	
Chromium	10	2	
Lead	18	1	
Mercury	ND	0.3	
Selenium	ND	2	
Silver	ND	3	

QC Batch: 0122PBS

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	B6-S2	Concentration in:	mg/kg, dry weight basis
Lab ID:	60064-02	Analysis Date:	1/25/99
Matrix:	Soil, 83% solid	Analysis Method:	7471A (Mercury) 6010A (Others)

Analyte	Results	Reporting Limit	Res	Com
Arsenic	~~17~~	1	1.7	3.8
Barium	17	20		
Cadmium	1.6	0.5		
Chromium	12	2		
Lead	18	1		
Mercury	ND	0.3		
Selenium	ND	2		
Silver	ND	3		

QC Batch: 0122PBS

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	B6-S3	Concentration in:	mg/kg, dry weight basis
Lab ID:	60064-03	Analysis Date:	1/25/99
Matrix:	Soil, 92% solid	Analysis Method:	7471A (Mercury) 6010A (Others)

Analyte	Results	Reporting Limit		
Arsenic	9	1	1.7	3.8
Barium	ND	20		
Cadmium	2.9	0.5		
Chromium	26	2		
Lead	19	1		
Mercury	ND	0.3		
Selenium	ND	2		
Silver	ND	3		

QC Batch: 0122PBS

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	B6-S4	Concentration in:	mg/kg, dry weight basis
Lab ID:	60064-04	Analysis Date:	1/25/99
Matrix:	Soil, 87% solid	Analysis Method:	7471A (Mercury) 6010A (Others)

Analyte	Results	Reporting Limit	
Arsenic	10	1	1.7 3.8
Barium	13	20	
Cadmium	2.5	0.5	
Chromium	23	2	
Lead	21	1	
Mercury	ND	0.3	
Selenium	ND	2	
Silver	ND	3	

QC Batch: 0122PBS

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	B6-S5	Concentration in:	mg/kg, dry weight basis
Lab ID:	60064-05	Analysis Date:	1/25/99
Matrix:	Soil, 82% solid	Analysis Method:	7471A (Mercury) 6010A (Others)

Analyte	Results	Reporting Limit	
Arsenic	12	1	1.7 3.8
Barium	20	20	
Cadmium	1.4	0.5	
Chromium	10	2	
Lead	29	1	
Mercury	ND	0.3	
Selenium	ND	2	
Silver	ND	3	

QC Batch: 0122PBS

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	B6-S6	Concentration in:	mg/kg, dry weight basis
Lab ID:	60064-06	Analysis Date:	1/25/99
Matrix:	Soil, 80% solid	Analysis Method:	7471A (Mercury) 6010A (Others)

Analyte	Results	Reporting Limit	
Arsenic	16	1	1.7 3.8
Barium	ND	20	
Cadmium	1.4	0.5	
Chromium	10	2	
Lead	23	1	
Mercury	ND	0.3	
Selenium	ND	2	
Silver	ND	3	

QC Batch: 0122PBS

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	B6-S7	Concentration in:	mg/kg, dry weight basis
Lab ID:	60064-07	Analysis Date:	1/25/99
Matrix:	Soil, 88% solid	Analysis Method:	7471A (Mercury) 6010A (Others)

Analyte	Results	Reporting Limit	
Arsenic	~~1.1~~	1	1.7 3.8
Barium	ND	20	
Cadmium	2.4	0.5	
Chromium	25	2	
Lead	11	1	
Mercury	ND	0.3	
Selenium	2	2	
Silver	ND	3	

QC Batch: 0122PBS

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	B6-S8	Concentration in:	mg/kg, dry weight basis
Lab ID:	60064-08	Analysis Date:	1/25/99
Matrix:	Soil, 88% solid	Analysis Method:	7471A (Mercury) 6010A (Others)

Analyte	Results	Reporting Limit	
Arsenic	12	1	1.7 3.8
Barium	ND	20	
Cadmium	2.9	0.5	
Chromium	29	2	
Lead	11	1	
Mercury	ND	0.3	
Selenium	2	2	
Silver	ND	3	

QC Batch: 0122PBS

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Prep Blank, 0122PBS

Concentration in: mg/kg
Analysis Date: 1/25/99
Analysis Method: 7471A (Mercury)
6010A (Others)

Analyte	Results	Reporting Limit
Arsenic	ND	1
Barium	ND	20
Cadmium	ND	0.5
Chromium	ND	2
Lead	ND	1
Mercury	ND	0.3
Selenium	ND	2
Silver	ND	3

QC Batch: 0122PB

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:			
Lab ID:	Lab Control Sample, 0122LCSS	Analysis Date:	1/25/99
Matrix:	Soil	Analysis Method:	7471A (Mercury) 6010A (Others)

Analyte	% Recovery
Arsenic	96
Barium	102
Cadmium	98
Chromium	103
Lead	101
Mercury	91
Selenium	92
Silver	95

QC Batch: 0122PBS

PCBs

No # exceedences

Jon

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9 more

Pages

Paul

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S1
Lab ID: 60064-01
Analysis: Method 8082

Analysis Date: 1/25/99
Matrix: Soil, 81% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	41
Aroclor-1221	ND	82
Aroclor-1232	ND	41
Aroclor-1242	ND	41
Aroclor-1248	ND	41
Aroclor-1254	ND	41
Aroclor-1260	ND	41

QC Batch: P0122-BS1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	113%
Decachlorobiphenyl	94%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S2
Lab ID: 60064-02
Analysis: Method 8082

Analysis Date: 1/25/99
Matrix: Soil, 82% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	40
Aroclor-1221	ND	80
Aroclor-1232	ND	40
Aroclor-1242	ND	40
Aroclor-1248	ND	40
Aroclor-1254	ND	40
Aroclor-1260	89	40

QC Batch: P0122-BS1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	84%
Decachlorobiphenyl	82%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S3
Lab ID: 60064-03
Analysis: Method 8082

Analysis Date: 1/25/99
Matrix: Soil, 94% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	35
Aroclor-1221	ND	70
Aroclor-1232	ND	35
Aroclor-1242	ND	35
Aroclor-1248	ND	35
Aroclor-1254	ND	35
Aroclor-1260	150	35

QC Batch: P0122-BS1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-*m*-xylene	115%
Decachlorobiphenyl	88%

ND=Not Detected

60064-03

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S4
Lab ID: 60064-04
Analysis: Method 8082

Analysis Date: 1/25/99
Matrix: Soil, 89% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	37
Aroclor-1221	ND	74
Aroclor-1232	ND	37
Aroclor-1242	ND	37
Aroclor-1248	ND	37
Aroclor-1254	ND	37
Aroclor-1260	100	37

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	68%
Decachlorobiphenyl	198% *

QC Batch: P0122-BS1

ND=Not Detected

* Out of control limit.

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S5
Lab ID: 60064-05
Analysis: Method 8082

Analysis Date: 1/25/99
Matrix: Soil, 83% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	40
Aroclor-1221	ND	80
Aroclor-1232	ND	40
Aroclor-1242	ND	40
Aroclor-1248	ND	40
Aroclor-1254	ND	40
Aroclor-1260	41	40

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	76%
Decachlorobiphenyl	66%

QC Batch: P0122-BS1

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S6
Lab ID: 60064-06
Analysis: Method 8082

Analysis Date: 1/26/99
Matrix: Soil, 79% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	42
Aroclor-1221	ND	84
Aroclor-1232	ND	42
Aroclor-1242	ND	42
Aroclor-1248	ND	42
Aroclor-1254	ND	42
Aroclor-1260	95	42

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	112%
Decachlorobiphenyl	94%

QC Batch: P0122-BS1

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S7
Lab ID: 60064-07
Analysis: Method 8082

Analysis Date: 1/26/99
Matrix: Soil, 90% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	37
Aroclor-1221	ND	74
Aroclor-1232	ND	37
Aroclor-1242	ND	37
Aroclor-1248	ND	37
Aroclor-1254	ND	37
Aroclor-1260	760	37

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	114%
Decachlorobiphenyl	90%

QC Batch: P0122-BS1

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S8
Lab ID: 60064-08
Analysis: Method 8082

Analysis Date: 1/26/99
Matrix: Soil, 91% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	36
Aroclor-1221	ND	72
Aroclor-1232	ND	36
Aroclor-1242	ND	36
Aroclor-1248	ND	36
Aroclor-1254	ND	36
Aroclor-1260	630	36

QC Batch: P0122-BS1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	95%
Decachlorobiphenyl	79%

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, P0122-BS1
Analysis: Method 8082

Analysis Date: 1/25/99
Matrix: Solid
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	33
Aroclor-1221	ND	66
Aroclor-1232	ND	33
Aroclor-1242	ND	33
Aroclor-1248	ND	33
Aroclor-1254	ND	33
Aroclor-1260	ND	33

QC Batch: P0122-BS1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	106%
Decachlorobiphenyl	96%

ND=Not Detected

60064-MB

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S1
Lab ID: 60064-01
Dilution: 1

Analysis Date: 1/22/99
Matrix: Soil, 81% solids
Analysis: Method 8270C
Concentration in: ug/kg, dry weight basis

Analyte	Results	Reporting Limits
Phenol	ND	410
bis(2 Chloroethyl)ether	ND	410
2-Chlorophenol	ND	410
1,3-Dichlorobenzene	ND	410
1,4-Dichlorobenzene	ND	410
1,2-Dichlorobenzene	ND	410
2-Methylphenol	ND	410
2,2'-oxybis(1-Chloropropane)	ND	410
4-Methylphenol	ND	410
n-Nitroso-di-n-propylamine	ND	410
Hexachloroethane	ND	410
Nitrobenzene	ND	410
Isophorone	ND	410
2-Nitrophenol	ND	410
2,4-Dimethylphenol	ND	410
bis(2-Chloroethoxy)methane	ND	410
2,4-Dichlorophenol	ND	410
1,2,4-Trichlorobenzene	ND	410
Naphthalene	ND	410
4-Chloroaniline	ND	410
Hexachlorobutadiene	ND	410
4-Chloro-3-methylphenol	ND	410
2-Methylnaphthalene	ND	410
Hexachlorocyclopentadiene	ND	410
2,4,6-Trichlorophenol	ND	410
2,4,5-Trichlorophenol	ND	830
2-Chloronaphthalene	ND	410
2-Nitroaniline	ND	830
Dimethylphthalate	ND	410
Acenaphthylene	ND	410
2,6-Dinitrotoluene	ND	410
3-Nitroaniline	ND	830
Acenaphthene	ND	410
2,4-Dinitrophenol	ND	830
4-Nitrophenol	ND	830
Dibenzofuran	ND	410
2,4-Dinitrotoluene	ND	410

Client ID: B6-S1 Lab ID: 60064-01

Analyte	Results	Reporting Limits
Diethylphthalate	ND	410
Fluorene	ND	410
4-Chlorophenyl-phenylether	ND	410
4-Nitroaniline	ND	830
4,6-Dinitro-2-methylphenol	ND	830
n-Nitrosodiphenylamine	ND	410
4-Bromophenyl-phenylether	ND	410
Hexachlorobenzene	ND	410
Pentachlorophenol	ND	830
Phenanthrene	50 J	410
Anthracene	ND	410
Di-n-butylphthalate	ND	410
Carbazole	ND	410
Fluoranthene	82 J	410
Pyrene	58 J	410
Butylbenzylphthalate	ND	410
Benzo(a)anthracene	42 J	410
Chrysene	45 J	410
3,3'-Dichlorobenzidine	ND	410
bis(2-Ethylhexyl)phthalate	ND	410
Di-n-octylphthalate	ND	410
Benzo(b)fluoranthene	50 J	410
Benzo(k)fluoranthene	ND	410
Benzo(a)pyrene	ND	410
Indeno(1,2,3-cd)pyrene	ND	410
Dibenz(a,h)anthracene	ND	410
Benzo(g,h,i)perylene	ND	410

QC Batch: S0122-BS1

Surrogate Recovery:	
2-Fluorophenol	61%
Phenol-d5	73%
2-Chlorophenol-d4	78%
2,4,6-Tribromophenol	90%
1,2-Dichlorobenzene-d4	88%
Nitrobenzene-d5	81%
2-Fluorobiphenyl	88%
p-Terphenyl-d14	76%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	1/22/99
Client ID:	B6-S2	Matrix:	Soil, 82% solids
Lab ID:	60064-02	Analysis:	Method 8270C
Dilution:	1	Concentration in:	ug/kg, dry weight basis

Analyte	Results	Reporting Limits
Phenol	ND	400
bis(2-Chloroethyl)ether	ND	400
2-Chlorophenol	ND	400
1,3-Dichlorobenzene	ND	400
1,4-Dichlorobenzene	ND	400
1,2-Dichlorobenzene	ND	400
2-Methylphenol	ND	400
2,2'-oxybis(1-Chloropropane)	ND	400
4-Methylphenol	ND	400
n-Nitroso-di-n-propylamine	ND	400
Hexachloroethane	ND	400
Nitrobenzene	ND	400
Isophorone	ND	400
2-Nitrophenol	ND	400
2,4-Dimethylphenol	ND	400
bis(2-Chloroethoxy)methane	ND	400
2,4-Dichlorophenol	ND	400
1,2,4-Trichlorobenzene	ND	400
Naphthalene	ND	400
4-Chloroaniline	ND	400
Hexachlorobutadiene	ND	400
4-Chloro-3-methylphenol	ND	400
2-Methylnaphthalene	ND	400
Hexachlorocyclopentadiene	ND	400
2,4,6-Trichlorophenol	ND	400
2,4,5-Trichlorophenol	ND	820
2-Chloronaphthalene	ND	400
2-Nitroaniline	ND	820
Dimethylphthalate	ND	400
Acenaphthylene	ND	400
2,6-Dinitrotoluene	ND	400
3-Nitroaniline	ND	820
Acenaphthene	ND	400
2,4-Dinitrophenol	ND	820
4-Nitrophenol	ND	820
Dibenzofuran	ND	400
2,4-Dinitrotoluene	ND	400

MITKEM CORPORATION

Client ID: B6-S2 Lab ID: 60064-02

Analyte	Results	Reporting Limits
Diethylphthalate	ND	400
Fluorene	ND	400
4-Chlorophenyl-phenylether	ND	400
4-Nitroaniline	ND	820
4,6-Dinitro-2-methylphenol	ND	820
n-Nitrosodiphenylamine	ND	400
4-Bromophenyl-phenylether	ND	400
Hexachlorobenzene	ND	400
Pentachlorophenol	ND	820
Phenanthrene	140 J	400
Anthracene	ND	400
Di-n-butylphthalate	ND	400
Carbazole	ND	400
Fluoranthene	360 J	400
Pyrene	370 J	400
Butylbenzylphthalate	ND	400
Benzo(a)anthracene	270 J	400
Chrysene	370 J	400
3,3'-Dichlorobenzidine	ND	400
bis(2-Ethylhexyl)phthalate	ND	400
Di-n-octylphthalate	ND	400
Benzo(b)fluoranthene	500	400
Benzo(k)fluoranthene	190 J	400
Benzo(a)pyrene	320 J	400
Indeno(1,2,3-cd)pyrene	150 J	400
Dibenz(a,h)anthracene	53 J	400
Benzo(g,h,i)perylene	150 J	400

QC Batch: S0122-BS1

Surrogate Recovery:	
2-Fluorophenol	59%
Phenol-d5	69%
2-Chlorophenol-d4	75%
2,4,6-Tribromophenol	85%
1,2-Dichlorobenzene-d4	83%
Nitrobenzene-d5	77%
2-Fluorobiphenyl	84%
p-Terphenyl-d14	80%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	1/22/99
Client ID:	B6-S3	Matrix:	Soil, 94% solids
Lab ID:	60064-03	Analysis:	Method 8270C
Dilution:	1	Concentration in:	ug/kg, dry weight basis

Analyte	Results	Reporting Limits
Phenol	ND	350
bis(2-Chloroethyl)ether	ND	350
2-Chlorophenol	ND	350
1,3-Dichlorobenzene	ND	350
1,4-Dichlorobenzene	ND	350
1,2-Dichlorobenzene	ND	350
2-Methylphenol	ND	350
2,2'-oxybis(1-Chloropropane)	ND	350
4-Methylphenol	ND	350
n-Nitroso-di-n-propylamine	ND	350
Hexachloroethane	ND	350
Nitrobenzene	ND	350
Isophorone	ND	350
2-Nitrophenol	ND	350
2,4-Dimethylphenol	ND	350
bis(2-Chloroethoxy)methane	ND	350
2,4-Dichlorophenol	ND	350
1,2,4-Trichlorobenzene	ND	350
Naphthalene	ND	350
4-Chloroaniline	ND	350
Hexachlorobutadiene	ND	350
4-Chloro-3-methylphenol	ND	350
2-Methylnaphthalene	ND	350
Hexachlorocyclopentadiene	ND	350
2,4,6-Trichlorophenol	ND	350
2,4,5-Trichlorophenol	ND	710
2-Chloronaphthalene	ND	350
2-Nitroaniline	ND	710
Dimethylphthalate	ND	350
Acenaphthylene	ND	350
2,6-Dinitrotoluene	ND	350
3-Nitroaniline	ND	710
Acenaphthene	ND	350
2,4-Dinitrophenol	ND	710
4-Nitrophenol	ND	710
Dibenzofuran	ND	350
2,4-Dinitrotoluene	ND	350

MITKEM CORPORATION

Client ID: B6-S3 Lab ID: 60064-03

Analyte	Results	Reporting Limits
Diethylphthalate	ND	350
Fluorene	ND	350
4-Chlorophenyl-phenylether	ND	350
4-Nitroaniline	ND	710
4,6-Dinitro-2-methylphenol	ND	710
n-Nitrosodiphenylamine	ND	350
4-Bromophenyl-phenylether	ND	350
Hexachlorobenzene	ND	350
Pentachlorophenol	ND	710
Phenanthrene	ND	350
Anthracene	ND	350
Di-n-butylphthalate	ND	350
Carbazole	ND	350
Fluoranthene	ND	350
Pyrene	ND	350
Butylbenzylphthalate	ND	350
Benzo(a)anthracene	ND	350
Chrysene	ND	350
3,3'-Dichlorobenzidine	ND	350
bis(2-Ethylhexyl)phthalate	ND	350
Di-n-octylphthalate	ND	350
Benzo(b)fluoranthene	ND	350
Benzo(k)fluoranthene	ND	350
Benzo(a)pyrene	ND	350
Indeno(1,2,3-cd)pyrene	ND	350
Dibenz(a,h)anthracene	ND	350
Benzo(g,h,i)perylene	ND	350

QC Batch: S0122-BS1

Surrogate Recovery:	
2-Fluorophenol	65%
Phenol-d5	77%
2-Chlorophenol-d4	84%
2,4,6-Tribromophenol	84%
1,2-Dichlorobenzene-d4	97%
Nitrobenzene-d5	86%
2-Fluorobiphenyl	93%
p-Terphenyl-d14	77%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	1/22/99
Client ID:	B6-S4	Matrix:	Soil, 89% solids
Lab ID:	60064-04	Analysis:	Method 8270C
Dilution:	1	Concentration in:	ug/kg, dry weight basis

Analyte	Results	Reporting Limits
Phenol	ND	370
bis(2-Chloroethyl)ether	ND	370
2-Chlorophenol	ND	370
1,3-Dichlorobenzene	ND	370
1,4-Dichlorobenzene	ND	370
1,2-Dichlorobenzene	ND	370
2-Methylphenol	ND	370
2,2'-oxybis(1-Chloropropane)	ND	370
4-Methylphenol	ND	370
n-Nitroso-di-n-propylamine	ND	370
Hexachloroethane	ND	370
Nitrobenzene	ND	370
Isophorone	ND	370
2-Nitrophenol	ND	370
2,4-Dimethylphenol	ND	370
bis(2-Chloroethoxy)methane	ND	370
2,4-Dichlorophenol	ND	370
1,2,4-Trichlorobenzene	ND	370
Naphthalene	91 J	370
4-Chloroaniline	ND	370
Hexachlorobutadiene	ND	370
4-Chloro-3-methylphenol	ND	370
2-Methylnaphthalene	41 J	370
Hexachlorocyclopentadiene	ND	370
2,4,6-Trichlorophenol	ND	370
2,4,5-Trichlorophenol	ND	750
2-Chloronaphthalene	ND	370
2-Nitroaniline	ND	750
Dimethylphthalate	ND	370
Acenaphthylene	ND	370
2,6-Dinitrotoluene	ND	370
3-Nitroaniline	ND	750
Acenaphthene	350 J	370
2,4-Dinitrophenol	ND	750
4-Nitrophenol	ND	750
Dibenzofuran	130 J	370
2,4-Dinitrotoluene	ND	370

MITKEM CORPORATION

Client ID: B6-S4 Lab ID: 60064-04

Analyte	Results	Reporting Limits
Diethylphthalate	ND	370
Fluorene	260 J	370
4-Chlorophenyl-phenylether	ND	370
4-Nitroaniline	ND	750
4,6-Dinitro-2-methylphenol	ND	750
n-Nitrosodiphenylamine	ND	370
4-Bromophenyl-phenylether	ND	370
Hexachlorobenzene	ND	370
Pentachlorophenol	ND	750
Phenanthrene	1,900	370
Anthracene	690	370
Di-n-butylphthalate	ND	370
Carbazole	190 J	370
Fluoranthene	2,200	370
Pyrene	1,900	370
Butylbenzylphthalate	ND	370
Benzo(a)anthracene	1,100	370
Chrysene	1,200	370
3,3'-Dichlorobenzidine	ND	370
bis(2-Ethylhexyl)phthalate	ND	370
Di-n-octylphthalate	ND	370
Benzo(b)fluoranthene	1,200	370
Benzo(k)fluoranthene	610	370
Benzo(a)pyrene	.970	370
Indeno(1,2,3-cd)pyrene	460	370
Dibenz(a,h)anthracene	140 J	370
Benzo(g,h,i)perylene	460	370

.970 ppm

Residential = .4 ppm Com = .8 ppm

QC Batch: S0122-BS1

Surrogate Recovery:	
2-Fluorophenol	63%
Phenol-d5	73%
2-Chlorophenol-d4	79%
2,4,6-Tribromophenol	95%
1,2-Dichlorobenzene-d4	89%
Nitrobenzene-d5	83%
2-Fluorobiphenyl	94%
p-Terphenyl-d14	88%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	1/22/99
Client ID:	B6-S5	Matrix:	Soil, 83% solids
Lab ID:	60064-05	Analysis:	Method 8270C
Dilution:	1	Concentration in:	ug/kg, dry weight basis

Analyte	Results	Reporting Limits
Phenol	ND	400
bis(2-Chloroethyl)ether	ND	400
2-Chlorophenol	ND	400
1,3-Dichlorobenzene	ND	400
1,4-Dichlorobenzene	ND	400
1,2-Dichlorobenzene	ND	400
2-Methylphenol	ND	400
2,2'-oxybis(1-Chloropropane)	ND	400
4-Methylphenol	ND	400
n-Nitroso-di-n-propylamine	ND	400
Hexachloroethane	ND	400
Nitrobenzene	ND	400
Isophorone	ND	400
2-Nitrophenol	ND	400
2,4-Dimethylphenol	ND	400
bis(2-Chloroethoxy)methane	ND	400
2,4-Dichlorophenol	ND	400
1,2,4-Trichlorobenzene	ND	400
Naphthalene	ND	400
4-Chloroaniline	ND	400
Hexachlorobutadiene	ND	400
4-Chloro-3-methylphenol	ND	400
2-Methylnaphthalene	ND	400
Hexachlorocyclopentadiene	ND	400
2,4,6-Trichlorophenol	ND	400
2,4,5-Trichlorophenol	ND	810
2-Chloronaphthalene	ND	400
2-Nitroaniline	ND	810
Dimethylphthalate	ND	400
Acenaphthylene	ND	400
2,6-Dinitrotoluene	ND	400
3-Nitroaniline	ND	810
Acenaphthene	ND	400
2,4-Dinitrophenol	ND	810
4-Nitrophenol	ND	810
Dibenzofuran	ND	400
2,4-Dinitrotoluene	ND	400

MITKEM CORPORATION

Client ID: B6-S5 Lab ID: 60064-05

Analyte	Results	Reporting Limits
Diethylphthalate	ND	400
Fluorene	ND	400
4-Chlorophenyl-phenylether	ND	400
4-Nitroaniline	ND	810
4,6-Dinitro-2-methylphenol	ND	810
n-Nitrosodiphenylamine	ND	400
4-Bromophenyl-phenylether	ND	400
Hexachlorobenzene	ND	400
Pentachlorophenol	ND	810
Phenanthrene	160 J	400
Anthracene	ND	400
Di-n-butylphthalate	ND	400
Carbazole	ND	400
Fluoranthene	190 J	400
Pyrene	150 J	400
Butylbenzylphthalate	ND	400
Benzo(a)anthracene	84 J	400
Chrysene	130 J	400
3,3'-Dichlorobenzidine	ND	400
bis(2-Ethylhexyl)phthalate	46 J	400
Di-n-octylphthalate	ND	400
Benzo(b)fluoranthene	130 J	400
Benzo(k)fluoranthene	55 J	400
Benzo(a)pyrene	.080 J	400
Indeno(1,2,3-cd)pyrene	ND	400
Dibenz(a,h)anthracene	ND	400
Benzo(g,h,i)perylene	ND	400

Residential = .4

QC Batch: S0122-BS1

Surrogate Recovery:

2-Fluorophenol	64%
Phenol-d5	72%
2-Chlorophenol-d4	78%
2,4,6-Tribromophenol	90%
1,2-Dichlorobenzene-d4	88%
Nitrobenzene-d5	80%
2-Fluorobiphenyl	88%
p-Terphenyl-d14	82%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	1/22/99
Client ID:	B6-S6	Matrix:	Soil, 79% solids
Lab ID:	60064-06	Analysis:	Method 8270C
Dilution:	1	Concentration in:	ug/kg, dry weight basis

Analyte	Results	Reporting Limits
Phenol	ND	420
bis(2-Chloroethyl)ether	ND	420
2-Chlorophenol	ND	420
1,3-Dichlorobenzene	ND	420
1,4-Dichlorobenzene	ND	420
1,2-Dichlorobenzene	ND	420
2-Methylphenol	ND	420
2,2'-oxybis(1-Chloropropane)	ND	420
4-Methylphenol	ND	420
n-Nitroso-di-n-propylamine	ND	420
Hexachloroethane	ND	420
Nitrobenzene	ND	420
Isophorone	ND	420
2-Nitrophenol	ND	420
2,4-Dimethylphenol	ND	420
bis(2-Chloroethoxy)methane	ND	420
2,4-Dichlorophenol	ND	420
1,2,4-Trichlorobenzene	ND	420
Naphthalene	ND	420
4-Chloroaniline	ND	420
Hexachlorobutadiene	ND	420
4-Chloro-3-methylphenol	ND	420
2-Methylnaphthalene	49 J	420
Hexachlorocyclopentadiene	ND	420
2,4,6-Trichlorophenol	ND	420
2,4,5-Trichlorophenol	ND	850
2-Chloronaphthalene	ND	420
2-Nitroaniline	ND	850
Dimethylphthalate	ND	420
Acenaphthylene	ND	420
2,6-Dinitrotoluene	ND	420
3-Nitroaniline	ND	850
Acenaphthene	ND	420
2,4-Dinitrophenol	ND	850
4-Nitrophenol	ND	850
Dibenzofuran	ND	420
2,4-Dinitrotoluene	ND	420

MITKEM CORPORATION

Client ID: B6-S6 Lab ID: 60064-06

Analyte	Results	Reporting Limits
Diethylphthalate	ND	420
Fluorene	ND	420
4-Chlorophenyl-phenylether	ND	420
4-Nitroaniline	ND	850
4,6-Dinitro-2-methylphenol	ND	850
n-Nitrosodiphenylamine	ND	420
4-Bromophenyl-phenylether	ND	420
Hexachlorobenzene	ND	420
Pentachlorophenol	ND	850
Phenanthrene	130 J	420
Anthracene	ND	420
Di-n-butylphthalate	ND	420
Carbazole	ND	420
Fluoranthene	170 J	420
Pyrene	150 J	420
Butylbenzylphthalate	ND	420
Benzo(a)anthracene	90 J	420
Chrysene	130 J	420
3,3'-Dichlorobenzidine	ND	420
bis(2-Ethylhexyl)phthalate	ND	420
Di-n-octylphthalate	ND	420
Benzo(b)fluoranthene	150 J	420
Benzo(k)fluoranthene	52 J	420
Benzo(a)pyrene	87 J	420
Indeno(1,2,3-cd)pyrene	ND	420
Dibenz(a,h)anthracene	ND	420
Benzo(g,h,i)perylene	45 J	420

.9 Residential

QC Batch: S0122-BS1

Surrogate Recovery:

2-Fluorophenol	59%
Phenol-d5	67%
2-Chlorophenol-d4	74%
2,4,6-Tribromophenol	80%
1,2-Dichlorobenzene-d4	82%
Nitrobenzene-d5	76%
2-Fluorobiphenyl	85%
p-Terphenyl-d14	82%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	1/22/99
Client ID:	B6-S7	Matrix:	Soil, 90% solids
Lab ID:	60064-07	Analysis:	Method 8270C
Dilution:	1	Concentration in:	ug/kg, dry weight basis

Analyte	Results	Reporting Limits
Phenol	ND	370
bis(2-Chloroethyl)ether	ND	370
2-Chlorophenol	ND	370
1,3-Dichlorobenzene	ND	370
1,4-Dichlorobenzene	ND	370
1,2-Dichlorobenzene	ND	370
2-Methylphenol	ND	370
2,2'-oxybis(1-Chloropropane)	ND	370
4-Methylphenol	ND	370
n-Nitroso-di-n-propylamine	ND	370
Hexachloroethane	ND	370
Nitrobenzene	ND	370
Isophorone	ND	370
2-Nitrophenol	ND	370
2,4-Dimethylphenol	ND	370
bis(2-Chloroethoxy)methane	ND	370
2,4-Dichlorophenol	ND	370
1,2,4-Trichlorobenzene	ND	370
Naphthalene	ND	370
4-Chloroaniline	ND	370
Hexachlorobutadiene	ND	370
4-Chloro-3-methylphenol	ND	370
2-Methylnaphthalene	ND	370
Hexachlorocyclopentadiene	ND	370
2,4,6-Trichlorophenol	ND	370
2,4,5-Trichlorophenol	ND	740
2-Chloronaphthalene	ND	370
2-Nitroaniline	ND	740
Dimethylphthalate	ND	370
Acenaphthylene	ND	370
2,6-Dinitrotoluene	ND	370
3-Nitroaniline	ND	740
Acenaphthene	ND	370
2,4-Dinitrophenol	ND	740
4-Nitrophenol	ND	740
Dibenzofuran	ND	370
2,4-Dinitrotoluene	ND	370

MITKEM CORPORATION

Client ID: B6-S7 Lab ID: 60064-07

Analyte	Results	Reporting Limits
Diethylphthalate	ND	370
Fluorene	ND	370
4-Chlorophenyl-phenylether	ND	370
4-Nitroaniline	ND	740
4,6-Dinitro-2-methylphenol	ND	740
n-Nitrosodiphenylamine	ND	370
4-Bromophenyl-phenylether	ND	370
Hexachlorobenzene	ND	370
Pentachlorophenol	ND	740
Phenanthrene	ND	370
Anthracene	ND	370
Di-n-butylphthalate	ND	370
Carbazole	ND	370
Fluoranthene	41 J	370
Pyrene	ND	370
Butylbenzylphthalate	ND	370
Benzo(a)anthracene	ND	370
Chrysene	ND	370
3,3'-Dichlorobenzidine	ND	370
bis(2-Ethylhexyl)phthalate	ND	370
Di-n-octylphthalate	ND	370
Benzo(b)fluoranthene	ND	370
Benzo(k)fluoranthene	ND	370
Benzo(a)pyrene	ND	370
Indeno(1,2,3-cd)pyrene	ND	370
Dibenz(a,h)anthracene	ND	370
Benzo(g,h,i)perylene	ND	370

QC Batch: S0122-BS1

Surrogate Recovery:	
2-Fluorophenol	61%
Phenol-d5	71%
2-Chlorophenol-d4	79%
2,4,6-Tribromophenol	60%
1,2-Dichlorobenzene-d4	90%
Nitrobenzene-d5	80%
2-Fluorobiphenyl	90%
p-Terphenyl-d14	78%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	1/22/99
Client ID:	B6-S8	Matrix:	Soil, 91% solids
Lab ID:	60064-08	Analysis:	Method 8270C
Dilution:	1	Concentration in:	ug/kg, dry weight basis

Analyte	Results	Reporting Limits
Phenol	ND	360
bis(2-Chloroethyl)ether	ND	360
2-Chlorophenol	ND	360
1,3-Dichlorobenzene	ND	360
1,4-Dichlorobenzene	ND	360
1,2-Dichlorobenzene	ND	360
2-Methylphenol	ND	360
2,2'-oxybis(1-Chloropropane)	ND	360
4-Methylphenol	ND	360
n-Nitroso-di-n-propylamine	ND	360
Hexachloroethane	ND	360
Nitrobenzene	ND	360
Isophorone	ND	360
2-Nitrophenol	ND	360
2,4-Dimethylphenol	ND	360
bis(2-Chloroethoxy)methane	ND	360
2,4-Dichlorophenol	ND	360
1,2,4-Trichlorobenzene	ND	360
Naphthalene	ND	360
4-Chloroaniline	ND	360
Hexachlorobutadiene	ND	360
4-Chloro-3-methylphenol	ND	360
2-Methylnaphthalene	ND	360
Hexachlorocyclopentadiene	ND	360
2,4,6-Trichlorophenol	ND	360
2,4,5-Trichlorophenol	ND	740
2-Chloronaphthalene	ND	360
2-Nitroaniline	ND	740
Dimethylphthalate	ND	360
Acenaphthylene	ND	360
2,6-Dinitrotoluene	ND	360
3-Nitroaniline	ND	740
Acenaphthene	ND	360
2,4-Dinitrophenol	ND	740
4-Nitrophenol	ND	740
Dibenzofuran	ND	360
2,4-Dinitrotoluene	ND	360

MITKEM CORPORATION

Client ID: B6-S8 Lab ID: 60064-08

Analyte	Results	Reporting Limits
Diethylphthalate	ND	360
Fluorene	ND	360
4-Chlorophenyl-phenylether	ND	360
4-Nitroaniline	ND	740
4,6-Dinitro-2-methylphenol	ND	740
n-Nitrosodiphenylamine	ND	360
4-Bromophenyl-phenylether	ND	360
Hexachlorobenzene	ND	360
Pentachlorophenol	ND	740
Phenanthrene	ND	360
Anthracene	ND	360
Di-n-butylphthalate	ND	360
Carbazole	ND	360
Fluoranthene	ND	360
Pyrene	ND	360
Butylbenzylphthalate	ND	360
Benzo(a)anthracene	ND	360
Chrysene	ND	360
3,3'-Dichlorobenzidine	ND	360
bis(2-Ethylhexyl)phthalate	ND	360
Di-n-octylphthalate	ND	360
Benzo(b)fluoranthene	ND	360
Benzo(k)fluoranthene	ND	360
Benzo(a)pyrene	ND	360
Indeno(1,2,3-cd)pyrene	ND	360
Dibenz(a,h)anthracene	ND	360
Benzo(g,h,i)perylene	ND	360

QC Batch: S0122-BS1

Surrogate Recovery:	
2-Fluorophenol	61%
Phenol-d5	70%
2-Chlorophenol-d4	78%
2,4,6-Tribromophenol	82%
1,2-Dichlorobenzene-d4	86%
Nitrobenzene-d5	79%
2-Fluorobiphenyl	87%
p-Terphenyl-d14	80%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	1/22/99
Client ID:		Matrix:	Solid
Lab ID:	Method Blank, S0122-BS1	Analysis:	Method 8270C
Dilution:	1	Concentration in:	ug/kg

Analyte	Results	Reporting Limits
Phenol	ND	330
bis(2-Chloroethyl)ether	ND	330
2-Chlorophenol	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
1,2-Dichlorobenzene	ND	330
2-Methylphenol	ND	330
2,2'-oxybis(1-Chloropropane)	ND	330
4-Methylphenol	ND	330
n-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
2-Nitrophenol	ND	330
2,4-Dimethylphenol	ND	330
bis(2-Chloroethoxy)methane	ND	330
2,4-Dichlorophenol	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	330
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
4-Chloro-3-methylphenol	ND	330
2-Methylnaphthalene	ND	330
Hexachlorocyclopentadiene	ND	330
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	670
2-Chloronaphthalene	ND	330
2-Nitroaniline	ND	670
Dimethylphthalate	ND	330
Acenaphthylene	ND	330
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	670
Acenaphthene	ND	330
2,4-Dinitrophenol	ND	670
4-Nitrophenol	ND	670
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330

MITKEM CORPORATION

Client ID: Lab ID: Method Blank, S0122-BS1

Analyte	Results	Reporting Limits
Diethylphthalate	ND	330
Fluorene	ND	330
4-Chlorophenyl-phenylether	ND	330
4-Nitroaniline	ND	670
4,6-Dinitro-2-methylphenol	ND	670
n-Nitrosodiphenylamine	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Pentachlorophenol	ND	670
Phenanthrene	ND	330
Anthracene	ND	330
Di-n-butylphthalate	ND	330
Carbazole	ND	330
Fluoranthene	ND	330
Pyrene	ND	330
Butylbenzylphthalate	ND	330
Benzo(a)anthracene	ND	330
Chrysene	ND	330
3,3'-Dichlorobenzidine	ND	330
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	330
Benzo(k)fluoranthene	ND	330
Benzo(a)pyrene	ND	330
Indeno(1,2,3-cd)pyrene	ND	330
Dibenz(a,h)anthracene	ND	330
Benzo(g,h,i)perylene	ND	330

QC Batch: S0122-BS1

Surrogate Recovery:	
2-Fluorophenol	63%
Phenol-d5	73%
2-Chlorophenol-d4	81%
2,4,6-Tribromophenol	80%
1,2-Dichlorobenzene-d4	90%
Nitrobenzene-d5	84%
2-Fluorobiphenyl	91%
p-Terphenyl-d14	80%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Lab Control Summary

Client: Foster Wheeler Environmental Corp.
Lab ID for Blank Spike: S0122-BS1
Analysis: Method 8270C

Matrix: Solid
Analysis Date for Blank Spike: 1/22/99

Analyte	% Recovery
Phenol	87
2-Chlorophenol	91
1,4-Dichlorobenzene	90
n-Nitroso-di-n-propylamine	100
1,2,4-Trichlorobenzene	91
4-Chloro-3-methylphenol	91
Acenaphthene	91
4-Nitrophenol	87
2,4-Dinitrotoluene	94
Pentachlorophenol	93
Pyrene	89

QC Batch: S0122-BS1

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Matrix Spike Summary

Client: Foster Wheeler Environmental Corp.
Client ID: B6-S4
Lab ID for Matrix Spike: 60064-04 MS
Lab ID for Matrix Spike Duplicate: 60064-04 MSD
Analysis: Method 8270C

Matrix: Soil
Analysis Date for Matrix Spike: 1/22/99
Analysis Date for Matrix Spike Duplicate: 1/22/99

	% Recovery		
Analyte	Matrix Spike	Matrix Spike Dup.	% RPD
Phenol	82	84	2
2-Chlorophenol	84	86	2
1,4-Dichlorobenzene	80	80	0
n-Nitroso-di-n-propylamine	97	97	0
1,2,4-Trichlorobenzene	86	88	2
4-Chloro-3-methylphenol	94	94	0
Acenaphthene	97	160	49
4-Nitrophenol	78	77	1
2,4-Dinitrotoluene	88	88	0
Pentachlorophenol	63	49	25
Pyrene	130	380	98

QC Batch: S0122-BS1

Appendix I

Test Pit 14 Confirmatory Sample Results (Benzo(a)Pyrene) Laboratory Data

MITKEM CORPORATION

RECEIVED
FEB 26 1999

February 25, 1999

Foster Wheeler Environmental
98 T Defense Highway
Middletown, RI 02842
Attn: Mr. Andrew Prophete

RE: Client Project #: BLDG 6 – TP Excavation
Lab Project #: 60239

Dear Mr. Prophete:

Enclosed please find the data report of the required analysis for the sample associated with the above referenced project. If you have any questions regarding this report, please call me.

We appreciate your business.

Sincerely,

Edward A. Lawler
Laboratory Operations Manager

175 Metro Center Boulevard • Warwick, Rhode Island 02886-1755 • (401) 732-3400 • Fax (401) 732-3499
email: mitkem@worldnet.att.net

MITKEM CORPORATION

Client: Foster Wheeler Environmental Corp.

Client Project: BLDG 6 – TP Excavation

Lab Project: 60239

Date samples received: 2/22/99

Project Narrative

This data report includes the analysis results for one (1) soil sample that was received from Foster Wheeler Environmental Corp. on February 22, 1999. Analyses were performed per specification in the Chain of Custody form. For reference, a copy of the Mitkem Sample Log-In form is included for cross-referencing the client sample ID and laboratory sample ID.

All of the analyses were performed according to method specifications. No unusual occurrences were noted during sample analysis.

This data report has been reviewed and is authorized for release as evidenced by the signature below.

Edward A. Lawler
Laboratory Operations Manager

Data Flag/Qualifiers:

J This flag indicates an estimated value due to either
- the compound was detected at below the Reporting Limit, or
- estimated concentration for Tentatively Identified Compound

B For organic analyses, this flag indicates the analyte was also detected in the associated Method Blank. The B flag has an alternative meaning for CLP-type metals analyses, indicating a "trace" concentration below the normal reporting limit and above the detection limit.

D This flag indicates the analyte concentration was obtained from a diluted analysis

E This flag indicates the analyte concentration exceeded the Calibration Range

P This flag is used for Pesticides/PCB/Herbicide analyte when there is a greater than 40% difference for detected concentration between the two GC columns used for Primary and Confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is reported in the Analysis Report.

MITKEM CORPORATION

Analysis Report: Polynuclear Aromatic Hydrocarbons

Client: Foster Wheeler Environmental Corp.
Client ID: B6-W4B
Lab ID: 60239001
Analysis: Method 8270C

Analysis Date: 2/23/99
Matrix: Soil, 89% solid
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Benzo(a)pyrene	260 J	370

QC Batch: S0222-BS1

Surrogate Recovery:

1,2-Dichlorobenzene-d4	69%
Nitrobenzene-d5	69%
2-Fluorobiphenyl	70%
Terphenyl-d14	73%

MITKEM CORPORATION

Analysis Report: Polynuclear Aromatic Hydrocarbons

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, S0222-BS1
Analysis: Method 8270C

Analysis Date: 2/23/99
Matrix: Solid
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Benzo(a)pyrene	ND	330

QC Batch: S0222-BS1

Surrogate Recovery:

1,2-Dichlorobenzene-d4	71%
Nitrobenzene-d5	70%
2-Fluorobiphenyl	70%
Terphenyl-d14	72%

60239-MB

Data File: \Organic\SVOA\S1.i\990223.B\S1A7384.D
Report Date: 24-Feb-1999 09:18

Thru-Put Systems, Inc.

RECOVERY REPORT – LCS

Client Name:
Sample Matrix: SOLID
Lab Smp Id: S0222-LS1
Level: LOW
Data Type: MS DATA
SpikeList File: LCS_8270_SL.spk
Sublist File: all.sub
Method File: \Organic\SVOA\S1.i\990223.B\s1_8270C.m
Misc Info: ,,,2

Client SDG:
Fraction: SV
Client Smp ID: SBLK1FLCS
Operator: RC
SampleType: LCS
Quant Type: ISTD

SPIKE	COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
7	bis(2-Chloroethyl)	1700	1300	77.57	26-119
6	Phenol	1700	1300	76.78	38-109
9	2-Chlorophenol	1700	1300	79.53	49-104
10	1,3-Dichlorobenzen	1700	1200	71.58	42-99
12	1,4-Dichlorobenzen	1700	1200	72.92	43-100
14	1,2-Dichlorobenzen	1700	1300	75.99	47-100
16	2-Methylphenol	1700	1300	79.76	12-128
17	2,2'-oxybis(1-Chlo	1700	1200	71.70	35-124
19	4-Methylphenol	1700	1400	81.08	1-138
18	N-Nitroso-di-n-pro	1700	1400	84.74	44-113
20	Hexachloroethane	1700	1200	74.48	43-103
22	Nitrobenzene	1700	1300	77.82	55-103
23	Isophorone	1700	1000	62.27	41-100
24	2-Nitrophenol	1700	1300	79.48	53-104
25	2,4-Dimethyphenol	1700	1300	79.88	0-166
26	bis(2-Chloroethoxy	1700	1300	80.31	46-111
28	2,4-Dichlorophenol	1700	1300	79.78	28-129
29	1,2,4-Trichloroben	1700	1300	76.98	51-107
31	Naphthalene	1700	1300	77.91	54-104
32	4-Chloroaniline	1700	480	28.54	0-92
33	Hexachlorobutadien	1700	1300	79.20	49-110
34	4-Chloro-3-Methylp	1700	1400	84.84	0-161
35	2-Methylnaphthalen	1700	1300	77.84	46-116
36	Hexachlorocyclopen	1700	1000	60.16	21-137
37	2,4,6-Trichlorophe	1700	1200	75.11	4-140
38	2,4,5-Trichlorophe	1700	1400	82.74	3-156
40	2-Chloronaphthalen	1700	1400	81.27	60-107
41	2-Nitroaniline	1700	1300	78.25	50-114
42	Dimethylphthalate	1700	1400	85.05	61-111
43	2,6-Dinitrotoluene	1700	1400	82.13	54-116
44	Acenaphthylene	1700	1300	78.51	61-106
45	3-Nitroaniline	1700	2000	117.03	0-126
47	Acenaphthene	1700	1300	79.53	62-107

Data File: \Organic\SVOA\S1.i\990223.B\S1A7384.D
Report Date: 24-Feb-1999 09:18

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
48 2,4-Dinitrophenol	1700	900	54.18	31-119
50 4-Nitrophenol	1700	1500	91.31	0-166
51 2,4-Dinitrotoluene	1700	1400	85.82	58-115
49 Dibenzofuran	1700	1300	78.19	63-109
52 Diethylphthalate	1700	1400	86.91	58-116
53 Fluorene	1700	1400	83.29	61-112
54 4-Chlorophenyl-phe	1700	1400	85.50	60-113
55 4-Nitroaniline	1700	2200	131.04	0-135
56 4,6-Dinitro-2-meth	1700	1200	71.60	30-128
57 N-Nitrosodiphenyla	1700	1400	87.11	0-148
59 4-Bromophenyl-phen	1700	1300	78.06	65-118
60 Hexachlorobenzene	1700	1300	77.87	64-120
61 Pentachlorophenol	1700	1300	76.59	0-165
63 Phenanthrene	1700	1300	78.99	66-115
64 Anthracene	1700	1300	80.90	56-144
65 Carbazole	1700	3400	202.47*	52-128
66 Di-n-butylphthalat	1700	1500	88.52	69-112
67 Fluoranthene	1700	1400	84.76	65-116
68 Pyrene	1700	1300	76.88	47-138
70 Butylbenzylphthala	1700	1300	78.05	56-125
73 3,3'-Dichlorobenzi	1700	1000	61.60	0-139
71 Benzo(a)anthracene	1700	1400	82.16	64-116
74 Chrysene	1700	1400	81.16	60-116
75 bis(2-Ethylhexyl)p	1700	1300	80.87	55-124
76 Di-n-octylphthalat	1700	1100	67.12	55-133
77 Benzo(b)fluoranthe	1700	1100	67.36	51-128
78 Benzo(k)fluoranthe	1700	1500	90.01	51-139
79 Benzo(a)pyrene	1700	1200	75.11	61-120
81 Indeno(1,2,3-cd)py	1700	1500	92.73	45-123
82 Dibenzo(a,h)anthra	1700	1500	92.25	46-128
83 Benzo(g,h,i)peryle	1700	1600	95.37	43-128

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 3 2-Fluorophenol	2500	1800	70.49	13-129
$ 4 Phenol-d5	2500	1900	75.36	27-126
$ 8 2-Chlorophenol-d4	2500	1900	74.75	26-134
$ 13 1,2-Dichlorobenzen	1700	1200	73.04	18-140
$ 21 Nitrobenzene-d5	1700	1300	75.70	29-134
$ 39 2-Fluorobiphenyl	1700	1200	74.52	37-124
$ 58 2,4,6-Tribromophen	2500	1900	76.10	23-144
$ 69 Terphenyl-d14	1700	1300	76.32	36-140

MITKEM CORPORATION

02/22/99 04:58 PM | Page 1 of 1 | Original | Lab Workorder #: **60239**

Lab Workorder **60239** R0

Client: **Foster Wheeler Environmental**
Workorder ID: **Bldg.6-TP Excavation/DO13**
Client Project **Tank Farm 5**
Client PO #: ~~014952 / 015207~~ 016230
Project / Profile Name: **Bldgs 6 and 179, NUWC**
Date Due: **02/23/99**
Customer Service: **EAL**
Del Req'd: **Level 2 (1 copy)**
Completed?:

Logged In By: MAM
Reviewed By:

Date Opened: **02/22/99 12:56**
Date Closed: **02/22/99 12:59**

Project Status: **WP**

Lab ID	Client ID	Matrix	Analysis Code	Collected	Received	Due	Notes
60239001	B6-W4B	S	8270S DRY WEIGHT	02/22/99 11:00	02/22/99	02/23/99	Benzo(a)pyrene Only

INVOICE GOES TO:

Ellie Federico
Foster Wheeler Environmental
98 T Defense Highway
Middletown, RI, 02842
W: 842-6940
F : 842-6970

REPORT GOES TO:

Andrew Prophete
Foster Wheeler Environmental
98 T Defense Highway
Middletown, RI, 02842
W: (401)842-6940
F : (401)842-6970

007

MITKEM CORPORATION
175 Metro Center Boulevard
Warwick, Rhode Island 02886-1755
(401) 732-3400 • Fax (401) 732-3499
email: mitkem@worldnet.att.net

CHAIN-OF-CUSTODY RECORD

REPORT TO		INVOICE TO		
COMPANY Foster Wheeler	PHONE 842-6940	COMPANY	PHONE	LAB PROJECT #: 60239
NAME Andrew Prophete	FAX 842-6970	NAME	FAX	
ADDRESS 98 Defense Hwy		ADDRESS		TURNAROUND TIME: 24 hr
CITY/ST/ZIP Middletown RI 02842		CITY/ST/ZIP		

CLIENT PROJECT NAME:	CLIENT PROJECT #:	CLIENT P.O.#:
Bldg 6 - TP excavation	D013	

SAMPLE IDENTIFICATION	DATE/TIME SAMPLED	COMPOSITE	GRAB	WATER	SOIL	OTHER	LAB ID	# OF CONTAINERS	Benzo(a) pyrene	COMMENTS
B6-W4B	2/22/99 1100				X		01	1	X	
	/									
	/									
	/									
	/									
	/									
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	/									

TSF#	RELINQUISHED BY	DATE/TIME	ACCEPTED BY	DATE/TIME
1	[signature]	2/22/99 1115	Nathan Reynolds	2/22/99 11:15
2		/		/
3		/		/

ADDITIONAL REMARKS:

COOLER TEMP: <4°C

WHITE: LABORATORY COPY YELLOW: REPORT COPY PINK: CLIENT'S COPY

MITKEM CORPORATION
Sample Condition Form

Page__of__

Received By: JJH	Reviewed By: NR	Date: 2/22/99	MITKEM Project: 60239
Client Project: BLDG 6 TP Exterior		Client: F Wheeler	

Condition:		Sample ID Lab	Sample ID Client	Preservation (pH) HNO_3	H_2SO_4	HCl	NaOH	Comments/Remarks/ Corrective Action*
		01	B6-W4B					
1) Custody Seal(s)	Present/Absent							
	Coolers/Bottles							
	Intact/Broken							
2) Custody Seal Number(s)	N/A							
3) Chain-of-Custody	Present/Absent							
4) Cooler Temperature	4°c							
Coolant Condition								
5) Airbill(s)	Present/Absent							
Airbill Number(s)								
6) Sample Bottles	Intact							
	Broken							
	Leaking							
7) Date Received	2/22/99							
8) Time Received	11:15							
9) Project Due Date	24 HR							

* See Sample Condition Notification/Corrective Action Form yes (no)

Last Page of Data Report

Appendix J

Test Pit 14 Stockpile Sample Results Summary and Laboratory Data

FOSTER WHEELER ENVIRONMENTAL CORPORATION
U.S. NAVY NORTHERN DIVISION REMEDIAL ACTION CONTRACT (RAC)
CONTRACT N62472-94-D-0398 DELIVERY ORDER 13 AND 60

DERECKTOR SHIPYARD TEST PIT 14 PCB CONTAMINATED SOIL REMOVAL SOIL - STOCKPILE TESTING RESULTS

RIDEM Direct Exposure Criteria --->	Residential	Commercial/ Industrial	B6-WC- 01	B6-WC- 02	B6-WC- 03
Volatile Organics					
Benzene	2.5	200.0	-	-	-
Bromodichloromethane	10.0	92.0	-	-	-
Bromoform	81.0	720.0	-	-	-
Bromomethane	0.8	2,900.0	-	-	-
Carbon tetrachloride	1.5	44.0	-	-	-
Chlorobenzene	210.0	10,000.0	-	-	-
Chloroform	1.2	940.0	-	-	-
Dibromochloromethane	7.6	68.0	-	-	-
1,1-Dichloroethane	920.0	10,000.0	-	-	-
1,2-Dichloroethane	0.9	63.0	-	-	-
1,1-Dichloroethene	0.2	9.5	-	-	-
cis-1,2-Dichloroethene	630.0	10,000.0	-	-	-
trans-1,2-Dichloroethene	1,100.0	10,000.0	-	-	-
1,2-Dichloropropane	1.9	84.0	-	-	-
Ethylbenzene	71.0	10,000.0	-	-	-
Isopropyl benzene	27.0	10,000.0	-	-	-
Methyl-tert-butyl-ether	390.0	10,000.0	-	-	-
Methylene chloride	45.0	760.0	-	-	-
Styrene	13.0	190.0	-	-	-
1,1,1,2 Tetrachloroethane	2.2	220.0	-	-	-
1,1,2,2 Tetrachloroethane	1.3	29.0	-	-	-
Toluene	190.0	10,000.0	-	-	-
1,1,1-Trichloroethane	540.0	10,000.0	-	-	-
1,1,2-Trichloroethane	3.6	100.0	-	-	-
Vinyl chloride	0.02	3.00	-	-	-
Total Xylenes	110.0	10,000.0	-	-	-
Semivolatiles					
Acenaphthene	43.0	10,000.0	0.049 J	0.65 J	0.14 J
Acenaphthylene	23.0	10,000.0	-	0.17 J	0.510
Anthracene	35.0	10,000.0	0.093 J	0.32 J	0.610
Benzo(a)anthracene	0.9	7.8	0.26 J	0.930	2.400
Benzo(a)pyrene	0.4	0.8	0.23 J	0.760	2.000
Benzo(b)fluoranthene	0.9	7.8	0.26 J	0.990	2.700
Benzo(g,h,I)perylene	0.8	10,000.0	0.12 J	0.35 J	0.86 J
Benzo(k)fluoranthene	0.9	78.0	0.13 J	0.450	1.300
Bis(2-ethylhexyl)phthalate	46.0	410.0	.044 J	-	0.072 J
Bis(2-chloroethyl)ether	0.6	5.2	-	-	-
Chrysene	0.4	780.0	0.23 J	0.830	2.200
Dibenzo(a,h)anthracene	0.4	0.8	-	0.14 J	0.33 J
1,2-Dichlorobenzene	510.0	10,000.0	-	-	-
1,3-Dichlorobenzene	430.0	10,000.0	-	-	-
1,4-Dichlorobenzene	27.0	240.0	-	-	-
3,3-Dichlorobenzidine	1.4	13.0	-	-	-
Diethyl phthalate	340.0	10,000.0	-	-	-
2,4-Dimethyl phenol	1,400.0	10,000.0	-	-	-
Dimethyl phthalate	1,900.0	10,000.0	-	-	-
2,4-Dinitrophenol	160.0	4,100.0	-	-	-
2,4-Dinitrotoluene	0.9	8.4	-	-	-
Fluoranthene	20.0	10,000.0	0.500	1.900	4.700
Fluorene	28.0	10,000.0	-	0.14 J	0.28 J
Hexachlorobenzene	0.4	3.6	-	-	-
Hexachlorobutadiene	8.2	73.0	-	-	-
Hexachloroethane	46.0	410.0	-	-	-
Indeno(1,2,3-cd)pyrene	0.9	7.8	0.12 J	0.35 J	0.900
Naphthalene	54.0	10,000.0	-	-	0.070
Pentachlorophenol	5.3	48.0	-	-	-
Phenanthrene	40.0	10,000.0	0.28 J	1.200	2.700
Phenol	6,000.0	10,000.0	-	-	-
Pyrene	13.0	10,000.0	0.480	1.700	4.700
1,2,4-Trichlorobenzene	96.0	10,000.0	-	0.2 J	0.470
2,4,6-Trichlorophenol	58.0	520.0	-	-	-
Pesticides/PCBs					
Chlordane	0.5	4.4	-	-	-
Dieldrin	0.04	0.40	0.016	170 D	1.2 D
Polychlorinated biphenyls	10.0	10.0	2	27	180
Inorganics					
Arsenic	1.7	3.8	11	12	14
Barium	5,500.0	10,000.0	11	20	72
Cadmium	39.0	1,000.0	3.3	3.2	3.6
Chromium III	1,400.0	10,000.0	n	n	n
Chromium VI	390.0	10,000.0	n	n	n
Chromium (Total)	na	na	19	20	47
Lead	150.0	500.0	16	28	81
Mercury	23.0	610.0	-	-	-
Selenium	390.0	10,000.0	-	2	-
Silver	200.0	10,000.0	-	-	-
TPH	500.0	2,500.0	390	310	320

= Exceeds RIDEM Residential Exposure Criteria

- = Non-Detect Result

n = Not Analyzed

na = Not Applicable

All results in mg/kg unless otherwise noted
J = Estimated value detected below reporting limit
D = Concentration obtained from a diluted analysis

MITKEM CORPORATION
175 Metro Center Boulevard
Warwick, Rhode Island 02886-1755
(401) 732-3400 • Fax (401) 732-3499
email: mitkem@worldnet.att.net

CHAIN-OF-CUSTODY RECORD

REPORT TO		INVOICE TO		
COMPANY: Foster Wheeler	PHONE: 842-6940	COMPANY	PHONE	LAB PROJECT #: 60245
NAME: Andrew Prophete	FAX: 842-6970	NAME	FAX	
ADDRESS: 98 Defense Hwy		ADDRESS		TURNAROUND TIME: 72 hr
CITY/ST/ZIP: Middletown RI 02842		CITY/ST/ZIP		

CLIENT PROJECT NAME: Bldg 6 excavation
CLIENT PROJECT #: D013
CLIENT P.O.#:

REQUESTED ANALYSES

SAMPLE IDENTIFICATION	DATE/TIME SAMPLED	COMPOSITE	GRAB	WATER	SOIL	OTHER	LAB ID	# OF CONTAINERS	VOC 8260(mod)	SVOC 8270	TPH 9015	PCB 8082	Pesticides 8081	TRC	Paint Filter	RCRA 8 Metals					COMMENTS
B6-WC-01	2/22/99 1300				X		01	6	X	X	X	X	X	X	X	X					waste pile #1
B6-WC-02	2/22 1335				X		02	6	X	X	X	X	X	X	X	X					#2
B6-WC-03	2/22 1420				X		03	6	X	X	X	X	X	X	X	X					#3
	/																				
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TSF#	RELINQUISHED BY	DATE/TIME	ACCEPTED BY	DATE/TIME
1	Andrew Prophete	2/23/99	Nathan Reynolds	2/23/99 9:00
2		/		/
3		/		/

ADDITIONAL REMARKS: Add Paint Filter to analytes on P.O.

COOLER TEMP: <4°C

WHITE: LABORATORY COPY YELLOW: REPORT COPY PINK: CLIENT'S COPY

6°

MITKEM CORPORATION

RECEIVED
MAR 04 1999

February 26, 1999

Foster Wheeler Environmental
98 T Defense Highway
Middletown, RI 02842
Attn: Mr. Jon Cary

RE: Client Project #: Bldg 6 Excavation, NUWC
Lab Project #: 60245

Dear Mr. Cary:

Enclosed please find the data report of the required analyses for the samples associated with the above referenced project. If you have any questions regarding this report, please call me.

We appreciate your business.

Sincerely,

Edward A. Lawler
Laboratory Operations Manager

175 Metro Center Boulevard • Warwick, Rhode Island 02886-1755 • (401) 732-3400 • Fax (401) 732-3499
email: mitkem@worldnet.att.net

MITKEM CORPORATION

Client: Foster Wheeler Environmental Corp.

Client Project: Tank Farm 5, Bldgs 6 & 179, NUWC

Lab Project: 60245

Date samples received: 2/23/99

Project Narrative

This data report includes the analysis results for three (3) soil samples that were received from Foster Wheeler Environmental Corp. on February 23, 1999. Analyses were performed per specification in the Chain of Custody form. For reference, a copy of the Mitkem Sample Log-In form is included for cross-referencing the client sample ID and laboratory sample ID.

All of the analyses were performed according to method specifications. The recovery of one surrogate standard in PCB analysis of sample B6-WC-03 (Mitkem ID 60245003) was unusually high due to coelution with other material in the sample matrix. The same matrix interference was noted during the pesticide analysis of this same sample.

The values of several pesticide compounds in these samples have greater than a 40% difference between their concentration in the primary and confirmatory analyses. These values are flagged with a "P" on the data sheets. This is most likely due to interference from PCB in the samples, causing one pesticide value to be unusually high. This also indicates the increased likelihood of false-positive pesticide identifications. The lower concentration between the primary and confirmatory concentrations is reported on the data sheet due to the presence of interferences.

The common laboratory contaminant butylbenzylphthalate was detected in the semivolatile organic analysis of sample B6-WC-03 (Mitkem ID 60245003), as well as in the associated method blank. The value of this compound is flagged with a "B" in the sample, to indicate that it is potentially due to laboratory contamination.

No other unusual occurrences were noted during sample analysis.

This data report has been reviewed and is authorized for release as evidenced by the signature below.

Edward A. Lawler
Laboratory Operations Manager

Data Flag/Qualifiers:

J This flag indicates an estimated value due to either
- the compound was detected at below the Reporting Limit, or
- estimated concentration for Tentatively Identified Compound

B For organic analyses, this flag indicates the analyte was also detected in the associated Method Blank. The B flag has an alternative meaning for CLP-type metals analyses, indicating a "trace" concentration below the normal reporting limit and above the detection limit.

D This flag indicates the analyte concentration was obtained from a diluted analysis

E This flag indicates the analyte concentration exceeded the Calibration Range

P This flag is used for Pesticides/PCB/Herbicide analyte when there is a greater than 40% difference for detected concentration between the two GC columns used for Primary and Confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is reported in the Analysis Report.

MITKEM CORPORATION

Analysis Report: Total Petroleum Hydrocarbons

Client: Foster Wheeler Environmental Corp.
Analysis: Method 8100M / 8015M
Matrix: Soil

Concentration in: mg/kg, dry weight basis

Lab ID	Client ID	Result	Reporting Limit	% Solid	p-Terphenyl Surrogate Recovery %	Analysis Date
60245001	B6-WC-01	390	14	92	99	2/25/99
60245002	B6-WC-02	310	71	94	71	2/25/99
60245003	B6-WC-03	320	76	88	78	2/25/99

QA/QC

Method Blank				
F0224-BS1	ND	13	87	2/25/99
Lab Control Sample (% Recovery)				
F0224-LS1	81		73	2/25/99

ND = Not Detected

The samples were quantitated using diesel fuel as standard.

003
60245-TPH

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: B6-WC-01
Lab ID: 60245001
Analysis: Method 8082

Analysis Date: 2/26/99
Matrix: Soil, 92% solids
Concentration in: ug/kg, dry weight basis
Dilution: 5

Analyte	Results	Reporting Limits
Aroclor-1016	ND	180
Aroclor-1221	ND	180
Aroclor-1232	ND	180
Aroclor-1242	ND	180
Aroclor-1248	ND	180
Aroclor-1254	ND	180
Aroclor-1260	2,400	180

QC Batch: P0224-BS1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	80%
Decachlorobiphenyl	89%

ND=Not Detected

004

60245001

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: B6-WC-02
Lab ID: 60245002
Analysis: Method 8082

Analysis Date: 2/26/99
Matrix: Soil, 94% solids
Concentration in: ug/kg, dry weight basis
Dilution: 20

Analyte	Results	Reporting Limits
Aroclor-1016	ND	700
Aroclor-1221	ND	700
Aroclor-1232	ND	700
Aroclor-1242	ND	700
Aroclor-1248	ND	700
Aroclor-1254	ND	700
Aroclor-1260	27,000	700

QC Batch: P0224-BS1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	106%
Decachlorobiphenyl	117%

ND=Not Detected

005

60245002

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: B6-WC-03
Lab ID: 60245003
Analysis: Method 8082

Analysis Date: 2/26/99
Matrix: Soil, 88% solids
Concentration in: ug/kg, dry weight basis
Dilution: 100

Analyte	Results	Reporting Limits
Aroclor-1016	ND	3,800
Aroclor-1221	ND	3,800
Aroclor-1232	ND	3,800
Aroclor-1242	ND	3,800
Aroclor-1248	ND	3,800
Aroclor-1254	ND	3,800
Aroclor-1260	180,000	3,800

QC Batch: P0224-BS1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	107%
Decachlorobiphenyl	227% *

ND=Not Detected

* Out of control limit due to matrix interference.

006

60245003

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, P0224-BS1
Analysis: Method 8082

Analysis Date: 2/25/99
Matrix: Solid
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	33
Aroclor-1221	ND	33
Aroclor-1232	ND	33
Aroclor-1242	ND	33
Aroclor-1248	ND	33
Aroclor-1254	ND	33
Aroclor-1260	ND	33

QC Batch: P0224-BS1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	90%
Decachlorobiphenyl	85%

ND=Not Detected

007

60245-MB

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCBs)

Lab Control Summary

Client: Foster Wheeler Environmental Corp.
Lab ID for Blank Spike: B0224-LS1
Analysis: Method 8082

Matrix: Solid
Analysis Date for Blank Spike: 2/25/99

Analyte	% Recovery
Aroclor 1016	90
Aroclor 1260	92

QC Batch: P0224-BS1

008

60245-LCS

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Client: Foster Wheeler Environmental Corp.
Client ID: B6-WC-01
Lab ID: 60245001
Analysis: Method 8081A

Analysis Date: 2/26/99
Matrix: Soil, 92% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Endrin ketone	ND	3.6
alpha-BHC	ND	1.8
gamma-BHC (Lindane)	ND	1.8
Heptachlor	ND	1.8
Aldrin	ND	1.8
beta-BHC	ND	1.8
delta-BHC	ND	1.8
Heptachlor epoxide	ND	1.8
Endosulfan I	ND	1.8
4,4'-DDE	ND	3.6
Dieldrin	16	3.6
Endrin	ND	3.6
4,4'-DDD	ND	3.6
Endosulfan II	ND	3.6
4,4'-DDT	ND	3.6
Endrin aldehyde	13 P	3.6
Methoxychlor	18 P	18
Endosulfan sulfate	15 P	3.6
Chlordane (technical)	ND	180
Toxaphene	ND	90
alpha-chlordane	ND	1.8
gamma-chlordane	4.2 P	1.8

QC Batch: P0224-BS1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	78%
Decachlorobiphenyl	80%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Client: Foster Wheeler Environmental Corp.
Client ID: B6-WC-02
Lab ID: 60245002
Analysis: Method 8081A

Analysis Date: 2/26/99
Matrix: Soil, 94% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Endrin ketone	ND	3.5
alpha-BHC	ND	1.8
gamma-BHC (Lindane)	ND	1.8
Heptachlor	ND	1.8
Aldrin	ND	1.8
beta-BHC	ND	1.8
delta-BHC	ND	1.8
Heptachlor epoxide	ND	1.8
Endosulfan I	ND	1.8
4,4'-DDE	ND	3.5
Dieldrin	170 D	3.5
Endrin	9.7	3.5
4,4'-DDD	ND	3.5
Endosulfan II	ND	3.5
4,4'-DDT	ND	3.5
Endrin aldehyde	140 DP	3.5
Methoxychlor	170 DP	18
Endosulfan sulfate	140 DP	3.5
Chlordane (technical)	ND	180
Toxaphene	ND	88
alpha-chlordane	ND	1.8
gamma-chlordane	44 DP	1.8

QC Batch: P0224-BS1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	82%
Decachlorobiphenyl	450% *

ND = Not detected
* Out of control limit due to matrix interference.

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Client: Foster Wheeler Environmental Corp.
Client ID: B6-WC-03
Lab ID: 60245003
Analysis: Method 8081A

Analysis Date: 2/26/99
Matrix: Soil, 88% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Endrin ketone	ND	3.8
alpha-BHC	ND	1.9
gamma-BHC (Lindane)	ND	1.9
Heptachlor	ND	1.9
Aldrin	ND	1.9
beta-BHC	ND	1.9
delta-BHC	ND	1.9
Heptachlor epoxide	ND	1.9
Endosulfan I	ND	1.9
4,4'-DDE	24 P	3.8
Dieldrin	1,200 D	3.8
Endrin	100 D	3.8
4,4'-DDD	ND	3.8
Endosulfan II	ND	3.8
4,4'-DDT	ND	3.8
Endrin aldehyde	1,000 DP	3.8
Methoxychlor	760 DP	19
Endosulfan sulfate	860 DP	3.8
Chlordane (technical)	ND	190
Toxaphene	ND	94
alpha-chlordane	ND	1.9
gamma-chlordane	290 DP	1.9

QC Batch: P0224-BS1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	94%
Decachlorobiphenyl	527% *

ND = Not detected
* Out of control limit due to matrix interference.

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, P0224-BS1
Analysis: Method 8081A

Analysis Date: 2/25/99
Matrix: Solid
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Endrin ketone	ND	3.3
alpha-BHC	ND	1.7
gamma-BHC (Lindane)	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
beta-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
4,4'-DDE	ND	3.3
Dieldrin	ND	3.3
Endrin	ND	3.3
4,4'-DDD	ND	3.3
Endosulfan II	ND	3.3
4,4'-DDT	ND	3.3
Endrin aldehyde	ND	3.3
Methoxychlor	ND	17
Endosulfan sulfate	ND	3.3
Chlordane (technical)	ND	166
Toxaphene	ND	83
alpha-chlordane	ND	1.7
gamma-chlordane	ND	1.7

QC Batch: P0224-BS1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	95%
Decachlorobiphenyl	89%

ND = Not detected

60245-MB

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Lab Control Summary

Client: Foster Wheeler Environmental Corp.
Lab ID for Blank Spike: P0224-LS1
Analysis: Method 8081A

Matrix: Solid
Analysis Date for Blank Spike: 2/25/99

Analyte	% Recovery
gamma-BHC (Lindane)	84
Heptachlor	98
Aldrin	94
Dieldrin	90
Endrin	96
4,4'-DDT	87

QC Batch: P0224-BS1

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	2/26/99
Client ID:	B6-WC-01	Matrix:	Soil, 92% solids
Lab ID:	60245001	Analysis:	Method 8270C
Dilution:	1	Concentration in:	ug/kg, dry weight basis

Analyte	Results	Reporting Limits
Phenol	ND	360
bis(2-Chloroethyl)ether	ND	360
2-Chlorophenol	ND	360
1,3-Dichlorobenzene	ND	360
1,4-Dichlorobenzene	ND	360
1,2-Dichlorobenzene	ND	360
2-Methylphenol	ND	360
2,2'-oxybis(1-Chloropropane)	ND	360
4-Methylphenol	ND	360
n-Nitroso-di-n-propylamine	ND	360
Hexachloroethane	ND	360
Nitrobenzene	ND	360
Isophorone	ND	360
2-Nitrophenol	ND	360
2,4-Dimethylphenol	ND	360
bis(2-Chloroethoxy)methane	ND	360
2,4-Dichlorophenol	ND	360
1,2,4-Trichlorobenzene	ND	360
Naphthalene	ND	360
4-Chloroaniline	ND	360
Hexachlorobutadiene	ND	360
4-Chloro-3-methylphenol	ND	360
2-Methylnaphthalene	ND	360
Hexachlorocyclopentadiene	ND	360
2,4,6-Trichlorophenol	ND	360
2,4,5-Trichlorophenol	ND	730
2-Chloronaphthalene	ND	360
2-Nitroaniline	ND	730
Dimethylphthalate	ND	360
Acenaphthylene	ND	360
2,6-Dinitrotoluene	ND	360
3-Nitroaniline	ND	730
Acenaphthene	49 J	360
2,4-Dinitrophenol	ND	730
4-Nitrophenol	ND	730
Dibenzofuran	ND	360
2,4-Dinitrotoluene	ND	360

014

MITKEM CORPORATION

Client ID: B6-WC-01 Lab ID: 60245001

Analyte	Results	Reporting Limits
Diethylphthalate	ND	360
Fluorene	ND	360
4-Chlorophenyl-phenylether	ND	360
4-Nitroaniline	ND	730
4,6-Dinitro-2-methylphenol	ND	730
n-Nitrosodiphenylamine	ND	360
4-Bromophenyl-phenylether	ND	360
Hexachlorobenzene	ND	360
Pentachlorophenol	ND	730
Phenanthrene	280 J	360
Anthracene	93 J	360
Di-n-butylphthalate	ND	360
Carbazole	55 J	360
Fluoranthene	500	360
Pyrene	480	360
Butylbenzylphthalate	ND	360
Benzo(a)anthracene	260 J	360
Chrysene	230 J	360
3,3'-Dichlorobenzidine	ND	360
bis(2-Ethylhexyl)phthalate	44 J	360
Di-n-octylphthalate	ND	360
Benzo(b)fluoranthene	260 J	360
Benzo(k)fluoranthene	130 J	360
Benzo(a)pyrene	230 J	360
Indeno(1,2,3-cd)pyrene	120 J	360
Dibenz(a,h)anthracene	ND	360
Benzo(g,h,i)perylene	120 J	360

QC Batch: S0225-BS1

Surrogate Recovery:	
2-Fluorophenol	64%
Phenol-d5	67%
2-Chlorophenol-d4	68%
2,4,6-Tribromophenol	68%
1,2-Dichlorobenzene-d4	72%
Nitrobenzene-d5	70%
2-Fluorobiphenyl	76%
p-Terphenyl-d14	84%

ND = Not detected

015

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	2/26/99
Client ID:	B6-WC-02	Matrix:	Soil, 94% solids
Lab ID:	60245002	Analysis:	Method 8270C
Dilution:	1	Concentration in:	ug/kg, dry weight basis

Analyte	Results	Reporting Limits
Phenol	ND	350
bis(2-Chloroethyl)ether	ND	350
2-Chlorophenol	ND	350
1,3-Dichlorobenzene	ND	350
1,4-Dichlorobenzene	ND	350
1,2-Dichlorobenzene	ND	350
2-Methylphenol	ND	350
2,2'-oxybis(1-Chloropropane)	ND	350
4-Methylphenol	ND	350
n-Nitroso-di-n-propylamine	ND	350
Hexachloroethane	ND	350
Nitrobenzene	ND	350
Isophorone	ND	350
2-Nitrophenol	ND	350
2,4-Dimethylphenol	ND	350
bis(2-Chloroethoxy)methane	ND	350
2,4-Dichlorophenol	ND	350
1,2,4-Trichlorobenzene	200 J	350
Naphthalene	ND	350
4-Chloroaniline	ND	350
Hexachlorobutadiene	ND	350
4-Chloro-3-methylphenol	ND	350
2-Methylnaphthalene	ND	350
Hexachlorocyclopentadiene	ND	350
2,4,6-Trichlorophenol	ND	350
2,4,5-Trichlorophenol	ND	710
2-Chloronaphthalene	ND	350
2-Nitroaniline	ND	710
Dimethylphthalate	ND	350
Acenaphthylene	170 J	350
2,6-Dinitrotoluene	ND	350
3-Nitroaniline	ND	710
Acenaphthene	65 J	350
2,4-Dinitrophenol	ND	710
4-Nitrophenol	ND	710
Dibenzofuran	56 J	350
2,4-Dinitrotoluene	ND	350

016

MITKEM CORPORATION

Client ID: B6-WC-02

Lab ID: 60245002

Analyte	Results	Reporting Limits
Diethylphthalate	ND	350
Fluorene	140 J	350
4-Chlorophenyl-phenylether	ND	350
4-Nitroaniline	ND	710
4,6-Dinitro-2-methylphenol	ND	710
n-Nitrosodiphenylamine	ND	350
4-Bromophenyl-phenylether	ND	350
Hexachlorobenzene	ND	350
Pentachlorophenol	ND	710
Phenanthrene	1,200	350
Anthracene	320 J	350
Di-n-butylphthalate	ND	350
Carbazole	180 J	350
Fluoranthene	1,900	350
Pyrene	1,700	350
Butylbenzylphthalate	ND	350
Benzo(a)anthracene	930	350
Chrysene	830	350
3,3'-Dichlorobenzidine	ND	350
bis(2-Ethylhexyl)phthalate	ND	350
Di-n-octylphthalate	ND	350
Benzo(b)fluoranthene	990	350
Benzo(k)fluoranthene	450	350
Benzo(a)pyrene	760	350
Indeno(1,2,3-cd)pyrene	350 J	350
Dibenz(a,h)anthracene	140 J	350
Benzo(g,h,i)perylene	350 J	350

QC Batch: S0224-BS1

Surrogate Recovery:	
2-Fluorophenol	66%
Phenol-d5	71%
2-Chlorophenol-d4	74%
2,4,6-Tribromophenol	80%
1,2-Dichlorobenzene-d4	76%
Nitrobenzene-d5	72%
2-Fluorobiphenyl	82%
p-Terphenyl-d14	90%

ND = Not detected

017

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	2/26/99
Client ID:	B6-WC-03	Matrix:	Soil, 88% solids
Lab ID:	60245003	Analysis:	Method 8270C
Dilution:	1	Concentration in:	ug/kg, dry weight basis

Analyte	Results	Reporting Limits
Phenol	ND	380
bis(2-Chloroethyl)ether	ND	380
2-Chlorophenol	ND	380
1,3-Dichlorobenzene	ND	380
1,4-Dichlorobenzene	ND	380
1,2-Dichlorobenzene	ND	380
2-Methylphenol	ND	380
2,2'-oxybis(1-Chloropropane)	ND	380
4-Methylphenol	ND	380
n-Nitroso-di-n-propylamine	ND	380
Hexachloroethane	ND	380
Nitrobenzene	ND	380
Isophorone	ND	380
2-Nitrophenol	ND	380
2,4-Dimethylphenol	ND	380
bis(2-Chloroethoxy)methane	ND	380
2,4-Dichlorophenol	ND	380
1,2,4-Trichlorobenzene	470	380
Naphthalene	70 J	380
4-Chloroaniline	ND	380
Hexachlorobutadiene	ND	380
4-Chloro-3-methylphenol	ND	380
2-Methylnaphthalene	61 J	380
Hexachlorocyclopentadiene	ND	380
2,4,6-Trichlorophenol	ND	380
2,4,5-Trichlorophenol	ND	760
2-Chloronaphthalene	ND	380
2-Nitroaniline	ND	760
Dimethylphthalate	ND	380
Acenaphthylene	510	380
2,6-Dinitrotoluene	ND	380
3-Nitroaniline	ND	760
Acenaphthene	140 J	380
2,4-Dinitrophenol	ND	760
4-Nitrophenol	ND	760
Dibenzofuran	120 J	380
2,4-Dinitrotoluene	ND	380

018

MITKEM CORPORATION

Client ID: B6-WC-03 Lab ID: 60245003

Analyte	Results	Reporting Limits
Diethylphthalate	ND	380
Fluorene	280 J	380
4-Chlorophenyl-phenylether	ND	380
4-Nitroaniline	ND	760
4,6-Dinitro-2-methylphenol	ND	760
n-Nitrosodiphenylamine	ND	380
4-Bromophenyl-phenylether	ND	380
Hexachlorobenzene	ND	380
Pentachlorophenol	ND	760
Phenanthrene	2,700	380
Anthracene	610	380
Di-n-butylphthalate	ND	380
Carbazole	560	380
Fluoranthene	4,700	380
Pyrene	4,700	380
Butylbenzylphthalate	66 JB	380
Benzo(a)anthracene	2,400	380
Chrysene	2,200	380
3,3'-Dichlorobenzidine	ND	380
bis(2-Ethylhexyl)phthalate	72 J	380
Di-n-octylphthalate	ND	380
Benzo(b)fluoranthene	2,700	380
Benzo(k)fluoranthene	1,300	380
Benzo(a)pyrene	2,000	380
Indeno(1,2,3-cd)pyrene	900	380
Dibenz(a,h)anthracene	330 J	380
Benzo(g,h,i)perylene	860 J	380

QC Batch: S0224-BS1

Surrogate Recovery:	
2-Fluorophenol	58%
Phenol-d5	63%
2-Chlorophenol-d4	68%
2,4,6-Tribromophenol	74%
1,2-Dichlorobenzene-d4	67%
Nitrobenzene-d5	63%
2-Fluorobiphenyl	69%
p-Terphenyl-d14	89%

ND = Not detected

019

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	2/26/99
Client ID:		Matrix:	Solid
Lab ID:	Method Blank, S0224-BS1	Analysis:	Method 8270C
Dilution:	1	Concentration in:	ug/kg

Analyte	Results	Reporting Limits
Phenol	ND	330
bis(2-Chloroethyl)ether	ND	330
2-Chlorophenol	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
1,2-Dichlorobenzene	ND	330
2-Methylphenol	ND	330
2,2'-oxybis(1-Chloropropane)	ND	330
4-Methylphenol	ND	330
n-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
2-Nitrophenol	ND	330
2,4-Dimethylphenol	ND	330
bis(2-Chloroethoxy)methane	ND	330
2,4-Dichlorophenol	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	330
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
4-Chloro-3-methylphenol	ND	330
2-Methylnaphthalene	ND	330
Hexachlorocyclopentadiene	ND	330
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	670
2-Chloronaphthalene	ND	330
2-Nitroaniline	ND	670
Dimethylphthalate	ND	330
Acenaphthylene	ND	330
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	670
Acenaphthene	ND	330
2,4-Dinitrophenol	ND	670
4-Nitrophenol	ND	670
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330

020

60245-MB

MITKEM CORPORATION

Client ID: Lab ID: Method Blank, S0224-BS1

Analyte	Results	Reporting Limits
Diethylphthalate	ND	330
Fluorene	ND	330
4-Chlorophenyl-phenylether	ND	330
4-Nitroaniline	ND	670
4,6-Dinitro-2-methylphenol	ND	670
n-Nitrosodiphenylamine	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Pentachlorophenol	ND	670
Phenanthrene	ND	330
Anthracene	ND	330
Di-n-butylphthalate	ND	330
Carbazole	ND	330
Fluoranthene	ND	330
Pyrene	ND	330
Butylbenzylphthalate	37 J	330
Benzo(a)anthracene	ND	330
Chrysene	ND	330
3,3'-Dichlorobenzidine	ND	330
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	330
Benzo(k)fluoranthene	ND	330
Benzo(a)pyrene	ND	330
Indeno(1,2,3-cd)pyrene	ND	330
Dibenz(a,h)anthracene	ND	330
Benzo(g,h,i)perylene	ND	330

QC Batch: S0224-BS1

Surrogate Recovery:	
2-Fluorophenol	66%
Phenol-d5	72%
2-Chlorophenol-d4	73%
2,4,6-Tribromophenol	75%
1,2-Dichlorobenzene-d4	78%
Nitrobenzene-d5	73%
2-Fluorobiphenyl	75%
p-Terphenyl-d14	88%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	2/26/99
Client ID:		Matrix:	Solid
Lab ID:	Method Blank, S0225-BS1	Analysis:	Method 8270C
Dilution:	1	Concentration in:	ug/kg

Analyte	Results	Reporting Limits
Phenol	ND	330
bis(2-Chloroethyl)ether	ND	330
2-Chlorophenol	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
1,2-Dichlorobenzene	ND	330
2-Methylphenol	ND	330
2,2'-oxybis(1-Chloropropane)	ND	330
4-Methylphenol	ND	330
n-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
2-Nitrophenol	ND	330
2,4-Dimethylphenol	ND	330
bis(2-Chloroethoxy)methane	ND	330
2,4-Dichlorophenol	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	330
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
4-Chloro-3-methylphenol	ND	330
2-Methylnaphthalene	ND	330
Hexachlorocyclopentadiene	ND	330
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	670
2-Chloronaphthalene	ND	330
2-Nitroaniline	ND	670
Dimethylphthalate	ND	330
Acenaphthylene	ND	330
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	670
Acenaphthene	ND	330
2,4-Dinitrophenol	ND	670
4-Nitrophenol	ND	670
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330

022

MITKEM CORPORATION

Client ID:

Lab ID: Method Blank, S0225-BS1

Analyte	Results	Reporting Limits
Diethylphthalate	ND	330
Fluorene	ND	330
4-Chlorophenyl-phenylether	ND	330
4-Nitroaniline	ND	670
4,6-Dinitro-2-methylphenol	ND	670
n-Nitrosodiphenylamine	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Pentachlorophenol	ND	670
Phenanthrene	ND	330
Anthracene	ND	330
Di-n-butylphthalate	ND	330
Carbazole	ND	330
Fluoranthene	ND	330
Pyrene	ND	330
Butylbenzylphthalate	ND	330
Benzo(a)anthracene	ND	330
Chrysene	ND	330
3,3'-Dichlorobenzidine	ND	330
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	330
Benzo(k)fluoranthene	ND	330
Benzo(a)pyrene	ND	330
Indeno(1,2,3-cd)pyrene	ND	330
Dibenz(a,h)anthracene	ND	330
Benzo(g,h,i)perylene	ND	330

QC Batch: S0225-BS1

Surrogate Recovery:	
2-Fluorophenol	71%
Phenol-d5	74%
2-Chlorophenol-d4	77%
2,4,6-Tribromophenol	56%
1,2-Dichlorobenzene-d4	81%
Nitrobenzene-d5	74%
2-Fluorobiphenyl	74%
p-Terphenyl-d14	83%

ND = Not detected

023

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Lab Control Summary

Client: Foster Wheeler Environmental Corp.
Lab ID for Blank Spike: S0224-LS1
Analysis: Method 8270C

Matrix: Solid

Analysis Date for Blank Spike: 2/26/99

Analyte	% Recovery
Phenol	89
2-Chlorophenol	96
1,4-Dichlorobenzene	95
n-Nitroso-di-n-propylamine	110
1,2,4-Trichlorobenzene	94
4-Chloro-3-methylphenol	99
Acenaphthene	95
4-Nitrophenol	87
2,4-Dinitrotoluene	95
Pentachlorophenol	94
Pyrene	96

QC Batch: S0224-BS1

024

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Lab Control Summary

Client: Foster Wheeler Environmental Corp.
Lab ID for Blank Spike: S0225-LS1
Analysis: Method 8270C

Matrix: Solid

Analysis Date for Blank Spike: 2/26/99

Analyte	% Recovery
Phenol	81
2-Chlorophenol	84
1,4-Dichlorobenzene	82
n-Nitroso-di-n-propylamine	95
1,2,4-Trichlorobenzene	83
4-Chloro-3-methylphenol	86
Acenaphthene	85
4-Nitrophenol	83
2,4-Dinitrotoluene	86
Pentachlorophenol	59
Pyrene	87

QC Batch: S0225-BS1

025

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: B6-WC-01
Lab ID: 60245001
Analysis: Method 8260B

Analysis Date: 2/23/99
Matrix: Soil, 88% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	6
Chloromethane	ND	6
Vinyl chloride	ND	6
Bromomethane	ND	6
Chloroethane	ND	6
Trichlorofluoromethane	ND	6
1,1-Dichloroethene	ND	6
Carbon disulfide	ND	6
Iodomethane	ND	6
Acetone	ND	6
Methylene chloride	ND	6
trans-1,2-Dichloroethene	ND	6
1,1-Dichloroethane	ND	6
Vinyl acetate	ND	6
2,2-Dichloropropane	ND	6
cis-1,2-Dichloroethene	ND	6
Methyl ethyl ketone	ND	6
Bromochloromethane	ND	6
Chloroform	ND	6
1,1,1-Trichloroethane	ND	6
Carbon tetrachloride	ND	6
1,1-Dichloropropene	ND	6
Benzene	ND	6
1,2-Dichloroethane	ND	6
Trichloroethene	ND	6
1,2-Dichloropropane	ND	6
Dibromomethane	ND	6
Bromodichloromethane	ND	6
2-Chloroethyl vinyl ether	ND	6
cis-1,3-Dichloropropene	ND	6
4-Methyl-2-pentanone	ND	6
Toluene	ND	6

MITKEM CORPORATION

Client ID: B6-WC-01

Lab ID: 60245001

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	6
1,1,2-Trichloroethane	ND	6
Tetrachloroethene	ND	6
1,3-Dichloropropane	ND	6
2-Hexanone	ND	6
Dibromochloromethane	ND	6
1,2-Dibromoethane (EDB)	ND	6
Chlorobenzene	ND	6
1,1,1,2-Tetrachloroethane	ND	6
Ethylbenzene	ND	6
Xylenes, total	ND	6
Styrene	ND	6
Bromoform	ND	6
Isopropylbenzene	ND	6
Bromobenzene	ND	6
1,1,2,2-Tetrachloroethane	ND	6
1,2,3-Trichloropropane	ND	6
n-Propylbenzene	ND	6
2-Chlorotoluene	ND	6
4-Chlorotoluene	ND	6
1,3,5-Trimethylbenzene	ND	6
tert-Butylbenzene	ND	6
1,2,4-Trimethylbenzene	ND	6
sec-Butylbenzene	ND	6
1,3-Dichlorobenzene	ND	6
4-Isopropyltoluene	ND	6
1,4-Dichlorobenzene	ND	6
1,2-Dichlorobenzene	ND	6
n-Butylbenzene	ND	6
1,2-Dibromo-3-chloropropane	ND	6
1,2,4-Trichlorobenzene	ND	6
Hexachlorobutadiene	ND	6
1,2,3-Trichlorobenzene	ND	6
MTBE	ND	6
Naphthalene	ND	6

QC Batch: V5B0223A

Surrogate Recovery:	
1,2-Dichloroethane-d4	95%
Toluene-d8	75%
Bromofluorobenzene	118%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: B6-WC-02
Lab ID: 60245002
Analysis: Method 8260B

Analysis Date: 2/23/99
Matrix: Soil, 90% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	6
Chloromethane	ND	6
Vinyl chloride	ND	6
Bromomethane	ND	6
Chloroethane	ND	6
Trichlorofluoromethane	ND	6
1,1-Dichloroethene	ND	6
Carbon disulfide	ND	6
Iodomethane	ND	6
Acetone	ND	6
Methylene chloride	ND	6
trans-1,2-Dichloroethene	ND	6
1,1-Dichloroethane	ND	6
Vinyl acetate	ND	6
2,2-Dichloropropane	ND	6
cis-1,2-Dichloroethene	ND	6
Methyl ethyl ketone	ND	6
Bromochloromethane	ND	6
Chloroform	ND	6
1,1,1-Trichloroethane	ND	6
Carbon tetrachloride	ND	6
1,1-Dichloropropene	ND	6
Benzene	ND	6
1,2-Dichloroethane	ND	6
Trichloroethene	ND	6
1,2-Dichloropropane	ND	6
Dibromomethane	ND	6
Bromodichloromethane	ND	6
2-Chloroethyl vinyl ether	ND	6
cis-1,3-Dichloropropene	ND	6
4-Methyl-2-pentanone	ND	6
Toluene	ND	6

MITKEM CORPORATION

Client ID: B6-WC-02

Lab ID: 60245002

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	6
1,1,2-Trichloroethane	ND	6
Tetrachloroethene	ND	6
1,3-Dichloropropane	ND	6
2-Hexanone	ND	6
Dibromochloromethane	ND	6
1,2-Dibromoethane (EDB)	ND	6
Chlorobenzene	ND	6
1,1,1,2-Tetrachloroethane	ND	6
Ethylbenzene	ND	6
Xylenes, total	ND	6
Styrene	ND	6
Bromoform	ND	6
Isopropylbenzene	ND	6
Bromobenzene	ND	6
1,1,2,2-Tetrachloroethane	ND	6
1,2,3-Trichloropropane	ND	6
n-Propylbenzene	ND	6
2-Chlorotoluene	ND	6
4-Chlorotoluene	ND	6
1,3,5-Trimethylbenzene	ND	6
tert-Butylbenzene	ND	6
1,2,4-Trimethylbenzene	ND	6
sec-Butylbenzene	ND	6
1,3-Dichlorobenzene	ND	6
4-Isopropyltoluene	ND	6
1,4-Dichlorobenzene	ND	6
1,2-Dichlorobenzene	ND	6
n-Butylbenzene	ND	6
1,2-Dibromo-3-chloropropane	ND	6
1,2,4-Trichlorobenzene	22	6
Hexachlorobutadiene	ND	6
1,2,3-Trichlorobenzene	16	6
MTBE	ND	6
Naphthalene	ND	6

QC Batch: V5B0223A

Surrogate Recovery:	
1,2-Dichloroethane-d4	102%
Toluene-d8	72%
Bromofluorobenzene	123%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: B6-WC-03
Lab ID: 60245003
Analysis: Method 8260B

Analysis Date: 2/23/99
Matrix: Soil, 86% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	6
Chloromethane	ND	6
Vinyl chloride	ND	6
Bromomethane	ND	6
Chloroethane	ND	6
Trichlorofluoromethane	ND	6
1,1-Dichloroethene	ND	6
Carbon disulfide	ND	6
Iodomethane	ND	6
Acetone	ND	6
Methylene chloride	ND	6
trans-1,2-Dichloroethene	ND	6
1,1-Dichloroethane	ND	6
Vinyl acetate	ND	6
2,2-Dichloropropane	ND	6
cis-1,2-Dichloroethene	ND	6
Methyl ethyl ketone	ND	6
Bromochloromethane	ND	6
Chloroform	ND	6
1,1,1-Trichloroethane	ND	6
Carbon tetrachloride	ND	6
1,1-Dichloropropene	ND	6
Benzene	ND	6
1,2-Dichloroethane	ND	6
Trichloroethene	ND	6
1,2-Dichloropropane	ND	6
Dibromomethane	ND	6
Bromodichloromethane	ND	6
2-Chloroethyl vinyl ether	ND	6
cis-1,3-Dichloropropene	ND	6
4-Methyl-2-pentanone	ND	6
Toluene	ND	6

MITKEM CORPORATION

Client ID: B6-WC-03

Lab ID: 60245003

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	6
1,1,2-Trichloroethane	ND	6
Tetrachloroethene	ND	6
1,3-Dichloropropane	ND	6
2-Hexanone	ND	6
Dibromochloromethane	ND	6
1,2-Dibromoethane (EDB)	ND	6
Chlorobenzene	ND	6
1,1,1,2-Tetrachloroethane	ND	6
Ethylbenzene	ND	6
Xylenes, total	ND	6
Styrene	ND	6
Bromoform	ND	6
Isopropylbenzene	ND	6
Bromobenzene	ND	6
1,1,2,2-Tetrachloroethane	ND	6
1,2,3-Trichloropropane	ND	6
n-Propylbenzene	ND	6
2-Chlorotoluene	ND	6
4-Chlorotoluene	ND	6
1,3,5-Trimethylbenzene	ND	6
tert-Butylbenzene	ND	6
1,2,4-Trimethylbenzene	ND	6
sec-Butylbenzene	ND	6
1,3-Dichlorobenzene	ND	6
4-Isopropyltoluene	ND	6
1,4-Dichlorobenzene	ND	6
1,2-Dichlorobenzene	ND	6
n-Butylbenzene	ND	6
1,2-Dibromo-3-chloropropane	ND	6
1,2,4-Trichlorobenzene	33	6
Hexachlorobutadiene	ND	6
1,2,3-Trichlorobenzene	110	6
MTBE	ND	6
Naphthalene	ND	6

QC Batch: V5B0223A

Surrogate Recovery:	
1,2-Dichloroethane-d4	100%
Toluene-d8	72%
Bromofluorobenzene	132%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, V5B0223A
Analysis: Method 8260B

Analysis Date: 2/23/99
Matrix: Solid
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Carbon disulfide	ND	5
Iodomethane	ND	5
Acetone	ND	5
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Vinyl acetate	ND	5
2,2-Dichloropropane	ND	5
cis-1,2-Dichloroethene	ND	5
Methyl ethyl ketone	ND	5
Bromochloromethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
1,1-Dichloropropene	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Dibromomethane	ND	5
Bromodichloromethane	ND	5
2-Chloroethyl vinyl ether	ND	5
cis-1,3-Dichloropropene	ND	5
4-Methyl-2-pentanone	ND	5
Toluene	ND	5

MITKEM CORPORATION

Client ID:

Lab ID: Method Blank, V5B0223A

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,3-Dichloropropane	ND	5
2-Hexanone	ND	5
Dibromochloromethane	ND	5
1,2-Dibromoethane (EDB)	ND	5
Chlorobenzene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Ethylbenzene	ND	5
Xylenes, total	ND	5
Styrene	ND	5
Bromoform	ND	5
Isopropylbenzene	ND	5
Bromobenzene	ND	5
1,1,2,2-Tetrachloroethane	ND	5
1,2,3-Trichloropropane	ND	5
n-Propylbenzene	ND	5
2-Chlorotoluene	ND	5
4-Chlorotoluene	ND	5
1,3,5-Trimethylbenzene	ND	5
tert-Butylbenzene	ND	5
1,2,4-Trimethylbenzene	ND	5
sec-Butylbenzene	ND	5
1,3-Dichlorobenzene	ND	5
4-Isopropyltoluene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5
n-Butylbenzene	ND	5
1,2-Dibromo-3-chloropropane	ND	5
1,2,4-Trichlorobenzene	ND	5
Hexachlorobutadiene	ND	5
1,2,3-Trichlorobenzene	ND	5
MTBE	ND	5
Naphthalene	ND	5

QC Batch: V5B0223A

Surrogate Recovery:	
1,2-Dichloroethane-d4	91%
Toluene-d8	86%
Bromofluorobenzene	119%

ND = Not Detected

60245-MB

MITKEM CORPORATION

Analysis Report: Wet Chemistry Parameters

Client: Foster Wheeler Environmental Corp.
Client ID: B6-WC-01
Lab ID: 60245001

Matrix: Soil

Analyte	Results	Reporting Limit	Units	Analysis Method	Analysis Date
Cyanide, reactive	ND	1	mg/kg	SW846 7.3.3.2	2/23/99
Flashpoint	No Flash	*	deg F	SW846 1010 Mod.	2/23/99
Paint filter	ND	1	ml/100g	SW846 9095	2/23/99
pH	4.7		S.U.	SW846 9045C	2/24/99
Sulfides, reactive	ND	2	mg/kg	SW846 7.3.4.2	2/23/99

ND = Not Detected

*Up to 170 deg F

MITKEM CORPORATION

Analysis Report: Wet Chemistry Parameters

Client: Foster Wheeler Environmental Corp.
Client ID: B6-WC-02
Lab ID: 60245002

Matrix: Soil

Analyte	Results	Reporting Limit	Units	Analysis Method	Analysis Date
Cyanide, reactive	ND	1	mg/kg	SW846 7.3.3.2	2/23/99
Flashpoint	No Flash	*	deg F	SW846 1010 Mod.	2/23/99
Paint filter	ND	1	ml/100g	SW846 9095	2/23/99
pH	5.9		S.U.	SW846 9045C	2/24/99
Sulfides, reactive	ND	2	mg/kg	SW846 7.3.4.2	2/23/99

ND = Not Detected

*Up to 170 deg F

MITKEM CORPORATION

Analysis Report: Wet Chemistry Parameters

Client: Foster Wheeler Environmental Corp.
Client ID: B6-WC-03
Lab ID: 60245003

Matrix: Soil

Analyte	Results	Reporting Limit	Units	Analysis Method	Analysis Date
Cyanide, reactive	ND	1	mg/kg	SW846 7.3.3.2	2/23/99
Flashpoint	No Flash	*	deg F	SW846 1010 Mod.	2/23/99
Paint filter	ND	1	ml/100g	SW846 9095	2/23/99
pH	5.8		S.U.	SW846 9045C	2/24/99
Sulfides, reactive	ND	2	mg/kg	SW846 7.3.4.2	2/23/99

ND = Not Detected

*Up to 170 deg F

MITKEM CORPORATION

Analysis Report: Wet Chemistry Parameters

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank

Matrix: Soil

Analyte	Results	Reporting Limit	Units	Analysis Method	Analysis Date
Cyanide, reactive	ND	1	mg/kg	SW846 7.3.3.2	2/23/99
Sulfides, reactive	ND	2	mg/kg	SW846 7.3.4.2	2/23/99

ND = Not Detected

60245-MB

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	B6-WC-01	Concentration in:	mg/kg, dry weight basis
Lab ID:	60245001	Analysis Date:	2/25/99
Matrix:	Soil, 92% solid	Analysis Method:	7471A (Mercury) 6010A (Others)

Analyte	Results	Reporting Limit
Arsenic	11	1
Barium	11	20
Cadmium	3.3	0.5
Chromium	19	2
Lead	16	1
Mercury	ND	0.3
Selenium	ND	2
Silver	ND	3

QC Batch: 0224PBS

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	B6-WC-02	Concentration in:	mg/kg, dry weight basis
Lab ID:	60245002	Analysis Date:	2/25/99
Matrix:	Soil, 94% solid	Analysis Method:	7471A (Mercury) 6010A (Others)

Analyte	Results	Reporting Limit
Arsenic	12	1
Barium	20	20
Cadmium	3.2	0.5
Chromium	20	2
Lead	28	1
Mercury	ND	0.3
Selenium	2	2
Silver	ND	3

QC Batch: 0224PBS

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	B6-WC-03	Concentration in:	mg/kg, dry weight basis
Lab ID:	60245003	Analysis Date:	2/25/99
Matrix:	Soil, 88% solid	Analysis Method:	7471A (Mercury) 6010A (Others)

Analyte	Results	Reporting Limit
Arsenic	14	1
Barium	72	20
Cadmium	3.6	0.5
Chromium	47	2
Lead	81	1
Mercury	ND	0.3
Selenium	ND	2
Silver	ND	3

QC Batch: 0224PBS

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:		Concentration in:	mg/kg
Lab ID:	Prep Blank, 0224PBS	Analysis Date:	2/25/99
		Analysis Method:	7471A (Mercury) 6010A (Others)

Analyte	Results	Reporting Limit
Arsenic	ND	1
Barium	ND	20
Cadmium	ND	0.5
Chromium	ND	2
Lead	ND	1
Mercury	ND	0.3
Selenium	ND	2
Silver	ND	3

QC Batch: 0224PBS

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:			
Lab ID:	Lab Control Sample, 0224LCSS	Analysis Date:	2/25/99
Matrix:	Soil	Analysis Method:	7471A (Mercury) 6010A (Others)

Analyte	% Recovery
Arsenic	100
Barium	102
Cadmium	102
Chromium	100
Lead	102
Mercury	117
Selenium	98
Silver	99

QC Batch: 0224PBS

MITKEM CORPORATION

Lab Workorder **60245** R0

Client: **Foster Wheeler Environmental**
Workorder ID: **Bldg 6 Excavation/ DO13**
Client Project **Tank Farm 5**
Client PO #: **014952 / 015207**
Project / Profile Name: **Bldgs 6 and 179, NUWC**
Date Due: **02/26/99**
Customer Service: **EAL**
Del Req'd: **Level 2 (1 copy)**
Completed?:

Logged In By: ICB
Reviewed By: BJD

Date Opened: **02/23/99 10:48**
Date Closed: **02/23/99 11:06**

Project Status: **WP**

Lab ID	Client ID	Matrix	Analysis Code	Collected	Received	Due	Notes
60245001	B6-WC-01	S	1010 FlPt	02/22/99 13:00	02/23/99	02/26/99	
			8081S				
			8082S				
			8100S				
			8260S				
			8270S				
			9010S RCN				
			9030S RS				
			9045AS pH				
			9095SPAINT				
			DRY WEIGHT				
			RCRA8S				
60245002	B6-WC-02	S	1010 FlPt	02/22/99 13:35	02/23/99	02/26/99	
			8081S				
			8082S				
			8100S				
			8260S				
			8270S				
			9010S RCN				
			9030S RS				
			9045AS pH				
			9095SPAINT				
			DRY WEIGHT				
			RCRA8S				
60245003	B6-WC-03	S	1010 FlPt	02/22/99 14:20	02/23/99	02/26/99	
			8081S				
			8082S				
			8100S				
			8260S				
			8270S				

043

MITKEM CORPORATION

02/23/99 11:06 AM

Original

Lab Workorder #: **60245**

Lab ID	Client ID	Matrix	Analysis Code	Collected	Received	Due	Notes
60245003	B6-WC-03	S	9010S RCN				
			9030S RS				
			9045AS pH				
			9095SPAINT				
			DRY WEIGHT				
			RCRA8S				

INVOICE GOES TO:

Ellie Federico
Foster Wheeler Environmental
98 T Defense Highway
Middletown, RI, 02842
W: 842-6940
F : 842-6970

REPORT GOES TO:

Andrew Prophete
Foster Wheeler Environmental
98 T Defense Highway
Middletown, RI, 02842
W: (401)842-6940
F : (401)842-6970

MITKEM CORPORATION
Sample Condition Form

Page__of__

Received By: C. O. R.	Reviewed By: JA	Date: 2/23/99	MITKEM Project: 10245
Client Project: BLDG 60 / D013		Client: FOSTER WHEELER	

Condition:		Sample ID Lab	Sample ID Client	Preservation (pH) HNO_3	H_2SO_4	HCl	NaOH	Comments/Remarks/ Corrective Action*
		01	36-WC-01					
1) Custody Seal(s)	Present/Absent	02	02					
Coolers/Bottles		03	03					
Intact/Broken								
2) Custody Seal Number(s)	N/A							
3) Chain-of-Custody	Present/Absent							
Cooler Temperature	6°							
Coolant Condition	ICE							
5) Airbill(s)	Present/Absent							
Airbill Number(s)								
6) Sample Bottles	Intact							
	Broken							
	Leaking							
7) Date Received	2/23/99							
8) Time Received	900							
Project Due Date	72 hr							

* See Sample Condition Notification/Corrective Action Form yes / no

Appendix K

Test Pit 14 Soil Disposal Documentation

Naval Station Newport
TSCA Soil Disposal

TRUCK LOG

Pre-Testing Area: Bldg 6 PCB Soil Removal
Transporter:
Receiving Fac: Model City
Scale:

Contract Name: Naval Station Newport
Contract No.: MOA TASK ORDER
Contractor: Foster Wheeler

Shift:
Job Area:
Weather: Sunny (AM):

Contract Day No.
Day of Week: TUESDAY 5/30/99
PM:

TRUCK IN & OUT	TRUCK NAME	TARE WEIGHT	TRUCK REG. NO.	TRAILER REG. NO.	MANIFEST NO.	NET WEIGHT TONS	ESTIMATED QUANTITY(CY)
X 0715	DART	30700	7153493 OH	TLE 4379 OH	—	~~[illegible]~~	NO GO
~~0730~~							
0730 - 610	DART	35160	PUF 5619 OH	TLE 4359 OH	NYB9037476	~~44820~~	44060
0740 - ~~7020~~ 8:15	DART/SMART	32720	TIR 8554 OH	TLE 4384 OH	NYB9037467	~~48640~~	44820
0750 - 10:20	Logano 16	34320	26651A CT	0239482 MB	NYB9037449	~~48420~~	48420
0755 10:36	LOGANO 14	38260	26649A CT	0239487 MB	NYB9037458	~~48420~~	48640
X 0800 - 11:20	Franklin 50	33360	28271 MA	0116989 OH	—	~~50260~~	NO GO
0800 - 11:00	Franklin 56	33940	18348 MA	44273 MA	NYB9037422	50260	
0930 - 12:15	Franklin 938	36180	23030 MA	39539 MA	NYB9037404	56780	
0940 12:15	DART 127	31740	96F860 OH	TLE 4419 OH	NYB9037395	46900	
1000 12:15	DART 167	34000	TIR 9667 OH	TLE 4425 OH	NYB9037431	45120	
						192.50 TON	

Reported By: Don Pyle
Date: 3/30/99
Reviewed By: [signature]
Signature
Page: 3/30/99

NYB9037476

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please type or print. Do not staple.

CMC

(Hazardous Waste Manifest 4/97)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. R I 1 1 7 0 0 2 4 2 4 3 — Manifest Doc. No. 150705

2. Page 1 of 1

Information within heavy bold line is not required by Federal Law.

3. Generator's Name and Mailing Address
NAVAL STATION NEWPORT
BLDG 1 CODE 40E
NEWPORT RI 02841

4. Generator's Telephone Number 414-284-3427

A. NYB9037476

B. Generator's ID SAME

5. Transporter 1 (Company Name) DART TRUCKING CO INC

6. US EPA ID Number O H D 0 9 8 6 5 8 2 5

C. State Transporter's ID TLE 4359 Ohio

D. Transporter's Telephone (800) 541-8006

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, L.L.C.
1550 BALMER RD.
MODEL CITY NY 14107

10. US EPA ID Number N Y D 0 4 9 8 3 6 6 7 9

G. State Facility ID

H. Facility Telephone ( ) 716 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYL MIXTURE,9,UN2315,III	001	DT	2002T	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
a CL5529/R007 c
b d

K. Handling Codes for Wastes Listed Above
a L c
b d

15. Special Handling Instructions and Additional Information
a. PCB Out of Service Date: 03-30-99, Weight: ____, Type: _
CHEMTREC Emergency Response Number (800)424-9300
ERG#171
SR 493183-1

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: MARK J. RIELLY — Signature: Mark Rielly — Mo. Day Year: 03 30 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: DAVID PATTERSON — Signature: David Patterson — Mo. Day Year: 03 30 99

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Mo. Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name — Signature — Mo. Day Year

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

COPY 1—Disposer State—Mailed by TSD Facility

DISPOSAL STANDARDS FOR NEW YORK STATE REGULATED HAZARDOUS PCB WASTES

GENERATOR NAME: Naval Station Newport

MANIFEST # NYB9037476 CWM PROFILE # CL5529

UNIQUE DRUM# N/A OUT OF SERVICE DATE: 033099

The following New York State regulated and land restricted wastes are subject to 6 NYCRR Part 376. Refer to 6 NYCRR 376.4(f) for New York land disposal requirements. Check all that apply:

[ ] B001 [ ] B002 [ ] B003 [ ] B004 [ ] B005 [ ] B006 [✓] B007

Certification - Waste Meets Treatment Standards

[✓] I am the generator of the waste as identified above, that is restricted under 6 NYCRR Part 376. I have determined that this waste meets all applicable treatment standards set forth in 6 NYCRR 376 and, therefore, it can be land disposed without further treatment. **Waste does not include solidified B002 material (liquid with PCBs 50-500 ppm).**

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that waste complies with the treatment standards specified in Part 376, Section 376.4 and all applicable prohibitions set forth in subdivision 376.3(b) of Part 376 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification including the possibility of a fine or imprisonment.

Notification - Waste Does Not Meet Treatment Standards

[ ] I am the generator of a waste restricted under 6 NYCRR Part 376 as identified above. I notify that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste does not comply with the treatment standards specified in 6 NYCRR Part 376.4(f). This waste must be treated to the applicable standard set forth in 6 NYCRR 376.4(f) prior to land disposal.

GENERATOR'S SIGNATURE: Mary Reilly

TITLE: HAZ WASTE COORD. DATE: 3/30/99

Updated 05/19/98

WEIGHT RECORDED BY

HOWESCALE

Number _____ Date 3/30/99

IDENTIFICATION | WEIGHT

MR 30 99

79220 LB — lbs. Gross

35160 LB TR — lbs. Tare

44060 LB+ NET ✓ — lbs. Net

20,027 K

Commodity _____ @ _____ per lb.

Remarks: ENVIRONMETAL

Driver: On ☑ Off ☐

Load No. _____

Weigher _____

Shipper DART #3008

Seller / Buyer Bldg 6 PCB

Address _____

TR-200-3T

NYB9037467

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

CMC

(Hazardous Waste Manifest 4/97)

Please type or print. Do not staple.

In case of emergency or spill immediately call the National Response Center (800-424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: RI1170024243
Manifest Doc. No.: 150706

2. Page 1 of 1

Information within heavy bold line is not required by Federal Law.

3. Generator's Name and Mailing Address
NAVAL STATION NEWPORT
BLDG 1 CODE 40E
NEWPORT RI 02841

4. Generator's Telephone Number: 414 284-3427

A. NYB9037467

B. Generator's ID: SAME

5. Transporter 1 (Company Name): Dalt Trucking Co. Inc.

6. US EPA ID Number: OHD009865825

C. State Transporter's ID: TLE4584

D. Transporter's Telephone: (800 3527798

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, L.L.C.
1550 BALMER RD.
MODEL CITY NY 14107

10. US EPA ID Number: NYD049836679

G. State Facility ID

H. Facility Telephone ( ): 716 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYL MIXTURE,9,UN2315,III	001	DT	20373	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
a CL5529 / R007
b
c
d

K. Handling Codes for Wastes Listed Above
a: L
b:
c:
d:

15. Special Handling Instructions and Additional Information
a. PCB Out of Service Date: 03-30-99, Weight: ____, Type: _
CHEMTREC Emergency Response Number (800)424-9300
ERG#171
SR 49318 3-2

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: MARK J. RIELLY
Signature: Mark J Rielly
Mo. Day Year: 03 30 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Charles Phillis
Signature: Charles Phillis
Mo. Day Year: 03 30 99

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Mo. Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Mo. Day Year

COPY 1—Disposer State—Mailed by TSD Facility

DISPOSAL STANDARDS FOR NEW YORK STATE REGULATED HAZARDOUS PCB WASTES

GENERATOR NAME: Naval Station Newport

MANIFEST # NYB9037467 CWM PROFILE # CL5529

UNIQUE DRUM# N/A OUT OF SERVICE DATE: 3-30-99

The following New York State regulated and land restricted wastes are subject to 6 NYCRR Part 376. Refer to 6 NYCRR 376.4(f) for New York land disposal requirements. Check all that apply:

[ ] B001 [ ] B002 [ ] B003 [ ] B004 [ ] B005 [ ] B006 [✓] B007

Certification - Waste Meets Treatment Standards

[✓] I am the generator of the waste as identified above, that is restricted under 6 NYCRR Part 376. I have determined that this waste meets all applicable treatment standards set forth in 6 NYCRR 376 and, therefore, it can be land disposed without further treatment. **Waste does not include solidified B002 material (liquid with PCBs 50-500 ppm).**

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that waste complies with the treatment standards specified in Part 376, Section 376.4 and all applicable prohibitions set forth in subdivision 376.3(b) of Part 376 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification including the possibility of a fine or imprisonment.

Notification - Waste Does Not Meet Treatment Standards

[ ] I am the generator of a waste restricted under 6 NYCRR Part 376 as identified above. I notify that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste does not comply with the treatment standards specified in 6 NYCRR Part 376.4(f). This waste must be treated to the applicable standard set forth in 6 NYCRR 376.4(f) prior to land disposal.

GENERATOR'S SIGNATURE: [signature]

TITLE: HAZ WASTE COORD. DATE: 3/30/99

Updated 05/19/98

WEIGHT RECORDED BY

HOWESCALE

Number _____ Date 3/30/99

IDENTIFICATION WEIGHT

MR 30 99

35160 LB

lbs. Gross

lbs. Tare

lbs. Net

Commodity _____ @ _____ per lb.

Remarks: Environmental

Driver: On ☑ Off ☐

Load No. _____

Weigher _____

Shipper DART ~~3008~~ # 3008

Seller
Buyer Bldg 6 PCB

Address

TR-200-3T

NYB9037449

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

CMC

(Hazardous Waste Manifest 4/97)

Please type or print. Do not staple.

In case of emergency or spill immediately call the National Response Center (800) 8802 and the NYS Department of Environmental Conservation (518) 457-7362

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: RI1117002424 3 — Manifest Doc. No.: 50707

2. Page 1 of 1

Information within heavy bold line is not required by Federal Law.

3. Generator's Name and Mailing Address
NAVAL STATION NEWPORT
BLDG 1 CODE 40E
NEWPORT RI 02841

4. Generator's Telephone Number: 414 284-3427

A. NYB9037449

B. Generator's ID: SAME

5. Transporter 1 (Company Name): USA WASTE OF CT INC

6. US EPA ID Number: CTD983896341

C. State Transporter's ID: 023948-ME

D. Transporter's Telephone (860 342-4999

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, L.L.C.
1550 BALMER RD.
MODEL CITY NY 14107

10. US EPA ID Number: NYD049836679

G. State Facility ID

H. Facility Telephone ( ) 716 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYL MIXTURE,9,UN2315,III	001	DT	22109	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
a CL5529 / R007
b
c
d

K. Handling Codes for Wastes Listed Above
a: L
b:
c:
d:

15. Special Handling Instructions and Additional Information
a. PCB Out of Service Date: 03-30-99 Weight: ____, Type: _
CHEMTREC Emergency Response Number (800)424-9300
ERG#171
SR 493183-3

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

GENERATOR — Printed/Typed Name: MARK J. RIELLY — Signature: Mark J Rielly — Mo. Day Year: 03 30 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: ROB RADCLIFFE — Signature: Rob Radcliff — Mo. Day Year: 03 30 99

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Mo. Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Mo. Day Year

COPY 1—Disposer State—Mailed by TSD Facility

DISPOSAL STANDARDS FOR NEW YORK STATE REGULATED HAZARDOUS PCB WASTES

GENERATOR NAME: Naval Station Newport

MANIFEST # NYB9037449 CWM PROFILE # CL5529

UNIQUE DRUM# N/A OUT OF SERVICE DATE: 033099

The following New York State regulated and land restricted wastes are subject to 6 NYCRR Part 376. Refer to 6 NYCRR 376.4(f) for New York land disposal requirements. Check all that apply:

[ ] B001 [ ] B002 [ ] B003 [ ] B004 [ ] B005 [ ] B006 [✓] B007

Certification - Waste Meets Treatment Standards

[✓] I am the generator of the waste as identified above, that is restricted under 6 NYCRR Part 376. I have determined that this waste meets all applicable treatment standards set forth in 6 NYCRR 376 and, therefore, it can be land disposed without further treatment. **Waste does not include solidified B002 material (liquid with PCBs 50-500 ppm).**

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that waste complies with the treatment standards specified in Part 376, Section 376.4 and all applicable prohibitions set forth in subdivision 376.3(b) of Part 376 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification including the possibility of a fine or imprisonment.

Notification - Waste Does Not Meet Treatment Standards

[ ] I am the generator of a waste restricted under 6 NYCRR Part 376 as identified above. I notify that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste does not comply with the treatment standards specified in 6 NYCRR Part 376.4(f). This waste must be treated to the applicable standard set forth in 6 NYCRR 376.4(f) prior to land disposal.

GENERATOR'S SIGNATURE: Mary Reilly

TITLE: HAZ WASTE COORD. DATE: 3-30-99

Updated 05/19/98

WEIGHT RECORDED BY

HOWESCALE

Number _____ Date 3/30/99

IDENTIFICATION WEIGHT

MR 30 99

34980 LB — lbs. Gross

8240 LB TR — lbs. Tare

26740 LB+ NET — lbs. Net

URANIUM

TOTAL= 20,373 K

Commodity _____ @ _____ per lb.

Remarks: Environmental

Driver: On ☑ Off ☐

Load No. _____

Weigher [signature]

Shipper Dart # 9200

Seller / Buyer Bldg 6 PCB

Address _____

TR-200-3T

WEIGHT RECORDED BY

HOWESCALE

Number _____ Date 3/30/99

IDENTIFICATION WEIGHT

MR 30 99

42520 LB — lbs. Gross

24440 LB TR — lbs. Tare

18080 LB+ NET — lbs. Net

Commodity _____ @ _____ per lb.

Remarks: Environmental

Driver: On ☑ Off ☐

Load No. _____

Weigher [signature]

Shipper DART # 9200

Seller / Buyer Bldg 6 PCB

Address _____

TR-200-3T

WEIGHT RECORDED BY

HOWESCALE

Number _____ Date 3/30/99

IDENTIFICATION WEIGHT

MR 30 99

8240 LB lbs. Gross

lbs. Tare

lbs. Net

Commodity _____ @ _____ per lb.

Remarks: Environmental

Driver: On ☑ Off ☐

Load No. _____

Weigher [signature]

Shipper Dart #9200

Seller / Buyer Bldg #6 PCB Soil

Address _____

TR-200-3T

WEIGHT RECORDED BY

HOWESCALE

Number _____ Date 3/30/99

IDENTIFICATION WEIGHT

MR 30 99

24440 LB lbs. Gross

lbs. Tare

lbs. Net

Commodity _____ @ _____ per lb.

Remarks: Environmental

Driver: On ☑ Off ☐

Load No. _____

Weigher [signature]

Shipper Dart #9200

Seller / Buyer Bldg #6 PCB Soil

Address _____

TR-200-3T

NYB9037458

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

CMC

(Hazardous Waste Manifest 4/97)

Please type or print. Do not staple.

In case of emergency or spill immediately call the National Response Center (800)-8802 and the NYS Department of Environmental Conservation (518) 457-7362

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: RI 1 1 7 0 0 2 4 2 4 3 — Manifest Doc. No.: 50708

2. Page 1 of 1

Information within heavy bold line is not required by Federal Law.

3. Generator's Name and Mailing Address
NAVAL STATION NEWPORT
BLDG 1 CODE 40E
NEWPORT RI 02841

4. Generator's Telephone Number: 414 284-3427

A. NYB9037458

B. Generator's ID: SAME

5. Transporter 1 (Company Name): USA WASTE OF CT INC

6. US EPA ID Number: CTD983896341

C. State Transporter's ID: 0239482ME

D. Transporter's Telephone: 860 342-4189

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, L.L.C.
1550 BALMER RD.
MODEL CITY NY 14107

10. US EPA ID Number: NYD049836679

G. State Facility ID

H. Facility Telephone ( ): 716 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYL MIXTURE,9,UN2315,III	001	DT	22009	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
a CL5529 / R007 c
b d

K. Handling Codes for Wastes Listed Above
a L c
b d

15. Special Handling Instructions and Additional Information
a. PCB Out of Service Date: 03-30-99, Weight: ____, Type: _
CHEMTREC Emergency Response Number (800)424-9300
ERG#171
SR49318-4

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: MARK J. RIELLY — Signature: Mark J. Rielly — Mo. Day Year: 03 30 99

GENERATOR

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: SAM ROYBAL — Signature: [signature] — Mo. Day Year: 03 30 99

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Mo. Day Year

TRANSPORTER

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Mo. Day Year

FACILITY

COPY 1—Disposer State—Mailed by TSD Facility

DISPOSAL STANDARDS FOR NEW YORK STATE REGULATED HAZARDOUS PCB WASTES

GENERATOR NAME: Naval Station Newport

MANIFEST # NYB 9037458 CWM PROFILE # CL5529

UNIQUE DRUM# N/A OUT OF SERVICE DATE: 033099

The following New York State regulated and land restricted wastes are subject to 6 NYCRR Part 376. Refer to 6 NYCRR 376.4(f) for New York land disposal requirements. Check all that apply:

[ ] B001 [ ] B002 [ ] B003 [ ] B004 [ ] B005 [ ] B006 [✓] B007

Certification - Waste Meets Treatment Standards

[✓] I am the generator of the waste as identified above, that is restricted under 6 NYCRR Part 376. I have determined that this waste meets all applicable treatment standards set forth in 6 NYCRR 376 and, therefore, it can be land disposed without further treatment. **Waste does not include solidified B002 material (liquid with PCBs 50-500 ppm).**

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that waste complies with the treatment standards specified in Part 376, Section 376.4 and all applicable prohibitions set forth in subdivision 376.3(b) of Part 376 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification including the possibility of a fine or imprisonment.

Notification - Waste Does Not Meet Treatment Standards

[ ] I am the generator of a waste restricted under 6 NYCRR Part 376 as identified above. I notify that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste does not comply with the treatment standards specified in 6 NYCRR Part 376.4(f). This waste must be treated to the applicable standard set forth in 6 NYCRR 376.4(f) prior to land disposal.

GENERATOR'S SIGNATURE: [signature]

TITLE: HAZ WASTE COORD. DATE: 3-30-99

Updated 05/19/98

Number 5

WEIGHT RECORDED BY

HOWESCALE

Date 3/30/99

IDENTIFICATION

WEIGHT

MR 30 99

38260 LB

lbs. Gross

lbs. Tare

22,109 K

lbs. Net

Commodity _____ @ _____ per lb.

Remarks: Environmental

Driver: On ☑ Off ☐

Load No. _____

Weigher [signature]

Shipper Logono #14

Seller / Buyer Bldg #6 PCB Soil

Address _____

TR-200-3T

Number _____

WEIGHT RECORDED BY

HOWESCALE

Date 3/30/99

IDENTIFICATION

WEIGHT

MR 30 99

86900 LB

lbs. Gross

~~38260 LB TR~~

lbs. Tare

48640 LB+ NET

22,109 K

lbs. Net

Commodity _____ @ _____ per lb.

Remarks: Environmental

Driver: On ☑ Off ☐

Load No. _____

Weigher [signature]

Shipper Longo # 14

Seller / Buyer Bldg 6 PCB Soil

Address _____

TR-200-3T

NYB9037422

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please type or print. Do not staple.

CMC
(Hazardous Waste Manifest 4/97)

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. RI 1 1 1 7 0 0 2 4 2 4 3 — Manifest Doc. No. 50709
2. Page 1 of 1

Information within heavy bold line is not required by Federal Law.

3. Generator's Name and Mailing Address
NAVAL STATION NEWPORT
BLDG 1 CODE 40E
NEWPORT RI 02841

A. NYB9037422

B. Generator's ID SAME

4. Generator's Telephone ~~(401) 284-3427~~ (401) 841-3735

5. Transporter 1 (Company Name) Franklin Envi Rowmental
6. US EPA ID Number MAD 0 8 4 8 1 4 1 3 6

C. State Transporter's ID 44 873

D. Transporter's Telephone (508) 3646054

7. Transporter 2 (Company Name)
8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, L.L.C.
1550 BALMER RD.
MODEL CITY NY 14107

10. US EPA ID Number N Y D 0 4 9 8 3 6 6 7 9

G. State Facility ID

H. Facility Telephone ( ) 716 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYL MIXTURE,9,UN2315,III	001	DT	22845	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
a CL5529 / ROOT
b
c
d

K. Handling Codes for Wastes Listed Above
a L
b
c
d

15. Special Handling Instructions and Additional Information
a. PCB Out of Service Date: 03-30-99, Weight: ____, Type: _
CHEMTREC Emergency Response Number (800)424-9300
ERG#171
SR 493183-5

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

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Printed/Typed Name: MARK J. RIELLY — Signature: Mark J Rielly — Mo. Day Year: 03 30 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: STEVEN CORREIA — Signature: Steven Correia — Mo. Day Year: 03 30 99

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Mo. Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Mo. Day Year

COPY 1—Disposer State—Mailed by TSD Facility

DISPOSAL STANDARDS FOR NEW YORK STATE REGULATED HAZARDOUS PCB WASTES

GENERATOR NAME: Naval Station Newport

MANIFEST # NYB 9037422 CWM PROFILE # CL5529

UNIQUE DRUM# N/A OUT OF SERVICE DATE: 033099

The following New York State regulated and land restricted wastes are subject to 6 NYCRR Part 376. Refer to 6 NYCRR 376.4(f) for New York land disposal requirements. Check all that apply:

[ ] B001 [ ] B002 [ ] B003 [ ] B004 [ ] B005 [ ] B006 [✓] B007

Certification - Waste Meets Treatment Standards

[✓] I am the generator of the waste as identified above, that is restricted under 6 NYCRR Part 376. I have determined that this waste meets all applicable treatment standards set forth in 6 NYCRR 376 and, therefore, it can be land disposed without further treatment. **Waste does not include solidified B002 material (liquid with PCBs 50-500 ppm).**

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that waste complies with the treatment standards specified in Part 376, Section 376.4 and all applicable prohibitions set forth in subdivision 376.3(b) of Part 376 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification including the possibility of a fine or imprisonment.

Notification - Waste Does Not Meet Treatment Standards

[ ] I am the generator of a waste restricted under 6 NYCRR Part 376 as identified above. I notify that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste does not comply with the treatment standards specified in 6 NYCRR Part 376.4(f). This waste must be treated to the applicable standard set forth in 6 NYCRR 376.4(f) prior to land disposal.

GENERATOR'S SIGNATURE: Meg Reilly

TITLE: HAZ WASTE COORD. DATE: 3-30-99

Updated 05/19/98

WEIGHT RECORDED BY

Number _____ **HOWESCALE** Date 3-30-99

IDENTIFICATION

WEIGHT

33,940 TARE

MR 30 99

84200 LB GROSS

Lbs. Gross

50,260 Lbs. Tare

22,845 K Lbs. Net

Commodity WASTE @ _____ per lb.

Remarks: ENVIRONMENTAL Driver: On ☐ Off ☑

Load No. _____

Weigher SKZ

Shipper FRANKLIN #56

Seller / Buyer BLDG 6 - PCB SOIL

Address _____

TR-200-3T

WEIGHT RECORDED BY

Number #4 **HOWESCALE** Date 3/30/99

IDENTIFICATION

WEIGHT

MR 30 99

34320 LB

Lbs. Gross

Lbs. Tare

Lbs. Net

Commodity _____ @ _____ per lb.

Remarks: Environmental Driver: On ☑ Off ☐

Load No. _____

Weigher _____

Shipper LOGANO II 16

Seller / Buyer Bldg #6 PCB Soil

Address _____

TR-200-3T

WEIGHT RECORDED BY

HOWESCALE

Number #4

Date 3/30/99

IDENTIFICATION

WEIGHT

MR 30 99

82740 LB — lbs. Gross

34320 LB TR — lbs. Tare

48420 LB+ NET — lbs. Net

22009 K

Commodity _____ @ _____ per lb.

Remarks: Environmental

Driver: On ☑ Off ☐

Load No. _____

Weigher P Bennett

Shipper Longo #16

Seller / Buyer Bldg 6 PCB Soil

Address _____

TR-200-3T

NYB9037404

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please type or print. Do not staple.

CMC
(Hazardous Waste Manifest 4/97)

In case of emergency or spill immediately call the National Response Center (800)-8802 and the NYS Department of Environmental Conservation (518) 457-7362

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: R I 1 1 7 0 0 2 4 2 4 3
Manifest Doc. No.: 50710
2. Page 1 of 1

Information within heavy bold line is not required by Federal Law.

3. Generator's Name and Mailing Address
NAVAL STATION NEWPORT
BLDG 1 CODE 40E
NEWPORT RI 02841

4. Generator's Telephone ~~(401) 284-3427~~ (401) 841-3735

A. NYB9037404

B. Generator's ID: SAME

5. Transporter 1 (Company Name): FRANKLIN ENV SERVICES
6. US EPA ID Number: MA 0 6 8 4 8 1 4 1 3 6

C. State Transporter's ID: 39538 MASS
D. Transporter's Telephone: 800 446 4878

7. Transporter 2 (Company Name)
8. US EPA ID Number

E. State Transporter's ID
F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, L.L.C.
1550 BALMER RD.
MODEL CITY NY 14107

10. US EPA ID Number: N Y D 0 4 9 8 3 6 6 7 9

G. State Facility ID

H. Facility Telephone ( ): 716 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYL MIXTURE,9,UN2315,III	001	DT	25809	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
a CL5529 / R007
c
b
d

K. Handling Codes for Wastes Listed Above
a: L
c:
b:
d:

15. Special Handling Instructions and Additional Information
a. PCB Out of Service Date: 03-30-99 Weight: ____, Type: _
CHEMTREC Emergency Response Number (800)424-9300
ERG#171
SR- 493183-6

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: MARK J. RIELLY
Signature: Mark J Rielly
Mo. Day Year: 03 30 99

GENERATOR

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: GORDON N SULLIVAN
Signature: Gordon N Sullivan
Mo. Day Year: 03 30 99

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Mo. Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Mo. Day Year

COPY 1—Disposer State—Mailed by TSD Facility

DISPOSAL STANDARDS FOR NEW YORK STATE REGULATED HAZARDOUS PCB WASTES

GENERATOR NAME: Naval Station Newport

MANIFEST # NYB9 037404 CWM PROFILE # CL5529

UNIQUE DRUM# N/A OUT OF SERVICE DATE: 033099

The following New York State regulated and land restricted wastes are subject to 6 NYCRR Part 376. Refer to 6 NYCRR 376.4(f) for New York land disposal requirements. Check all that apply:

[ ] B001 [ ] B002 [ ] B003 [ ] B004 [ ] B005 [ ] B006 [X] B007

Certification - Waste Meets Treatment Standards

[X] I am the generator of the waste as identified above, that is restricted under 6 NYCRR Part 376. I have determined that this waste meets all applicable treatment standards set forth in 6 NYCRR 376 and, therefore, it can be land disposed without further treatment. **Waste does not include solidified B002 material (liquid with PCBs 50-500 ppm).**

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that waste complies with the treatment standards specified in Part 376, Section 376.4 and all applicable prohibitions set forth in subdivision 376.3(b) of Part 376 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification including the possibility of a fine or imprisonment.

Notification - Waste Does Not Meet Treatment Standards

[ ] I am the generator of a waste restricted under 6 NYCRR Part 376 as identified above. I notify that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste does not comply with the treatment standards specified in 6 NYCRR Part 376.4(f). This waste must be treated to the applicable standard set forth in 6 NYCRR 376.4(f) prior to land disposal.

GENERATOR'S SIGNATURE: [signature]

TITLE: HAZ WASTE COORD. DATE: 3-30-99

Updated 05/19/98

WEIGHT RECORDED BY

Number _____ **HOWESCALE** Date 3/30/99

IDENTIFICATION | WEIGHT

MR 30 99

92960 LB — lbs. Gross

~~36180 LB TR~~ — lbs. Tare

56780 LB+ NET — lbs. Net

25,809 K

Commodity _____ @ _____ per lb.

Remarks: Environmental

Driver: On ☐ Off ☑

Load No. _____

Weigher [signature]

Shipper FRANKLIN # 938

Seller / Buyer Bldg 6 — PCB SOIL

Address _____

TR-200-3T

WEIGHT RECORDED BY

Number _____ **HOWESCALE** Date 30 MAR 99

IDENTIFICATION | WEIGHT

MR 30 99

36180 LB — lbs. Gross

~~36180 LB TR~~ — lbs. Tare

0 LB+ NET — lbs. Net

Commodity _____ @ _____ per lb.

Remarks: _____

Driver: On ☐ Off ☑

Load No. _____

Weigher [signature] SKI

Shipper Envirovmental

Seller / Buyer Franklin Env. # 938

Address Bldg 6 — PCB SOIL

TR-200-3T

NYB9037395

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

CMC

(Hazardous Waste Manifest 4/97)

Please type or print. Do not staple.

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: RI 1 1 1 7 0 0 2 4 2 4 3 — Manifest Doc. No.: 50711

2. Page 1 of 1

Information within heavy bold line is not required by Federal Law.

3. Generator's Name and Mailing Address
NAVAL STATION NEWPORT
BLDG 1 CODE 40E
NEWPORT RI 02841

4. Generator's Telephone Number: ~~414-284-3427~~ (401) 841-3735

A. NYB9037395

B. Generator's ID: SAME

5. Transporter 1 (Company Name): Quest Trucking Co INC

6. US EPA ID Number: OHD009865825

C. State Transporter's ID: T264419

D. Transporter's Telephone (330) 541-9206

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, L.L.C.
1550 BALMER RD.
MODEL CITY NY 14107

10. US EPA ID Number: NYD049836679

G. State Facility ID

H. Facility Telephone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYL MIXTURE,9,UN2315,III	001	DT	21318	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
a CL5529 / R007
b
c
d

K. Handling Codes for Wastes Listed Above
a: L
b:
c:
d:

15. Special Handling Instructions and Additional Information
a. PCB Out of Service Date: 03-30-99 Weight: ____, Type: _
CHEMTREC Emergency Response Number (800)424-9300
ERG#171
SR 493183-7

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: MARK J. RIELLY — Signature: Mark Rielly — Mo. Day Year: 03 30 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Richard Edmiston — Signature: [signature] — Mo. Day Year: 03 30 99

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Mo. Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Mo. Day Year

COPY 1—Disposer State—Mailed by TSD Facility

DISPOSAL STANDARDS FOR NEW YORK STATE REGULATED HAZARDOUS PCB WASTES

GENERATOR NAME: Naval Station Newport

MANIFEST # NYB9037395 CWM PROFILE # CL5529

UNIQUE DRUM# N/A OUT OF SERVICE DATE: 03-30-99

The following New York State regulated and land restricted wastes are subject to 6 NYCRR Part 376. Refer to 6 NYCRR 376.4(f) for New York land disposal requirements. Check all that apply:

[ ] B001 [ ] B002 [ ] B003 [ ] B004 [ ] B005 [ ] B006 [✓] B007

Certification - Waste Meets Treatment Standards

[✓] I am the generator of the waste as identified above, that is restricted under 6 NYCRR Part 376. I have determined that this waste meets all applicable treatment standards set forth in 6 NYCRR 376 and, therefore, it can be land disposed without further treatment. **Waste does not include solidified B002 material (liquid with PCBs 50-500 ppm).**

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that waste complies with the treatment standards specified in Part 376, Section 376.4 and all applicable prohibitions set forth in subdivision 376.3(b) of Part 376 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification including the possibility of a fine or imprisonment.

Notification - Waste Does Not Meet Treatment Standards

[ ] I am the generator of a waste restricted under 6 NYCRR Part 376 as identified above. I notify that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste does not comply with the treatment standards specified in 6 NYCRR Part 376.4(f). This waste must be treated to the applicable standard set forth in 6 NYCRR 376.4(f) prior to land disposal.

GENERATOR'S SIGNATURE: Mary Reilly

TITLE: HAZ WASTE COORD. DATE: 3-30-99

Updated 05/19/98

WEIGHT RECORDED BY

Number _____ **HOWESCALE** Date 3/30/99

IDENTIFICATION WEIGHT

MR 30 99

78640 LB — lbs. Gross

~~31740 LB TR~~ — lbs. Tare

46900 LB+ NET — lbs. Net

21,318 K

Commodity _____ @ _____ per lb.

Remarks: Environmental

Driver: On ☐ Off ☑

Load No. _____

Weigher _____

Shipper Dart #127

Seller / Buyer Bldg 6 – PCB Soil

Address _____

TR-200-3T

WEIGHT RECORDED BY

Number _____ **HOWESCALE** Date 30 MAR 99

IDENTIFICATION WEIGHT

MR 30 99

31740 LB — lbs. Gross

~~31740 LB TR~~ — lbs. Tare

0 LB+ NET — lbs. Net

Commodity _____ @ _____ per lb.

Remarks: _____

Driver: On ☐ Off ☑

Load No. _____

Weigher _____ (SIG)

Shipper Environmental

Seller / Buyer Dart # 127

Address Bldg #6 – PCB Soil

TR-200-3T

NYB9037431

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

CMC

(Hazardous Waste Manifest 4/97)

Please type or print. Do not staple.

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. R I 1 1 7 0 0 2 4 2 4 3 — Manifest Doc. No. 50712

2. Page 1 of 1

Information within heavy bold line is not required by Federal Law.

A. NYB9037431

B. Generator's ID SAME

3. Generator's Name and Mailing Address
NAVAL STATION NEWPORT
BLDG 1 CODE 40E
NEWPORT RI 02841

4. Generator's Telephone Number ~~414-284-3427~~ (401) 841-3735

5. Transporter 1 (Company Name) OART Trucking Co. Inc

6. US EPA ID Number OHD009805825

C. State Transporter's ID TLB4425

D. Transporter's Telephone (800)352-7794

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, L.L.C.
1550 BALMER RD.
MODEL CITY NY 14107

10. US EPA ID Number NYD049836679

G. State Facility ID

H. Facility Telephone ( ) 716 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYL MIXTURE,9,UN2315,III	001	DT	20,509 ~~4,517.30~~ MR	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
a CL5529 / R007
b
c
d

K. Handling Codes for Wastes Listed Above
a L
b
c
d

15. Special Handling Instructions and Additional Information
a. PCB Out of Service Date: 03-30-99, Weight: ____, Type: _
CHEMTREC Emergency Response Number (800)424-9300
ERG#171
SR 493183-8

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: MARK J. RIELLY — Signature: Mark Rielly — Mo. Day Year: 03 30 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Scott Cooke — Signature: Scott Cooke — Mo. Day Year: 03 30 99

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Mo. Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Mo. Day Year

COPY 1—Disposer State—Mailed by TSD Facility

DISPOSAL STANDARDS FOR NEW YORK STATE REGULATED HAZARDOUS PCB WASTES

GENERATOR NAME: Naval Station Newport

MANIFEST # NYB9037431 CWM PROFILE # CL5529

UNIQUE DRUM# N/A OUT OF SERVICE DATE: 03-30-99

The following New York State regulated and land restricted wastes are subject to 6 NYCRR Part 376. Refer to 6 NYCRR 376.4(f) for New York land disposal requirements. Check all that apply:

[ ] B001 [ ] B002 [ ] B003 [ ] B004 [ ] B005 [ ] B006 [✓] B007

Certification - Waste Meets Treatment Standards

[✓] I am the generator of the waste as identified above, that is restricted under 6 NYCRR Part 376. I have determined that this waste meets all applicable treatment standards set forth in 6 NYCRR 376 and, therefore, it can be land disposed without further treatment. **Waste does not include solidified B002 material (liquid with PCBs 50-500 ppm).**

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that waste complies with the treatment standards specified in Part 376, Section 376.4 and all applicable prohibitions set forth in subdivision 376.3(b) of Part 376 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification including the possibility of a fine or imprisonment.

Notification - Waste Does Not Meet Treatment Standards

[ ] I am the generator of a waste restricted under 6 NYCRR Part 376 as identified above. I notify that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste does not comply with the treatment standards specified in 6 NYCRR Part 376.4(f). This waste must be treated to the applicable standard set forth in 6 NYCRR 376.4(f) prior to land disposal.

GENERATOR'S SIGNATURE: Mary Reilly

TITLE: HAZ WASTE COORD. DATE: 3-30-99

Updated 05/19/98

WEIGHT RECORDED BY

HOWESCALE

Number _____ Date 3/30/99

IDENTIFICATION | WEIGHT

MR 30 99

79120 LB — lbs. Gross

34,000 — lbs. Tare

45,120

20,509 K — lbs. Net

Commodity _____ @ _____ per lb.

Remarks: Environmental

Driver: On ☑ Off ☐

Load No. _____

Weigher [signature]

Shipper DART #167

Seller / Buyer Bldg #6 – PCB Soil

Address _____

TR-200-3T

INFORMATION REVIEWED BY/DATE

NOTE: SOIL STOCKPILES (3) ARE LOCATED AT DSY CONCRETE PLATFORM.

FOSTER WHEELER ENVIRONMENTAL CORPORATION

NETC NEWPORT BLDG #6 (TP-14) REMEDIAL ACTIONS
NAVY RAC CONTRACT NO. N62472-94-D-0398
DELIVERY ORDER NO. 13C

DAY Tue.
3-30-99
DATE

PCB LADEN SOIL REMOVAL TRUCK LOG

SHT of

	TRUCK INFORMATION				LOADING INFO.			DOCUMENTATION			ON-SITE INFO.		
	TRUCKING COMPANY NAME	TRUCK ID NUMBER	TRUCK REG. STATE MO./YR.	RI & MA DOT PERMIT NO.	LOAD COVER SCREEN IN PLACE Y/N	ANY VISIBLE DEBRIS ON TRUCK Y/N	CHECK ITEMS B/U ALARM COVER GATE LOCK Y/N	WEIGHT TICKET NO.	MANIFEST SIGNED BY GEN. Y/N	MANIFEST SIGNED BY D. FACIL. Y/N	TIME IN	TIME OUT	INFORMATION DOCUMENTED BY (INITIALS)
No DEM Sticker 1	~~DART~~	~~442~~	~~OHIO TLE4379~~	~~RI 000756~~	~~Y~~	~~N~~	~~Y~~	~~#1~~			~~0800~~	[illegible]	~~[illegible]~~
2	DART	3008	OHIO TLE4359	2272	"	"	NO B.U.A	2			0805	812	"
3	SHARP	1157	TLE4384	536	"	"	NO B.U.A	3			0810	0820	"
4	LOGANO	16	MAINE 02-39482	667	"	"	NO BUA	4			0825	0833	"
5	LOGANO	14	MAINE 02-39487	667	"	"	NO BUA	5			0835	942	"
No DEM Sticker 6	~~Franklin~~	~~50~~	~~MAINE 01-16959~~	~~312~~	~~"~~	~~"~~	~~NO BUA~~	~~6~~			~~0900~~	~~0928~~	~~"~~
7	Franklin	56	MA 44273	312	"	"	NO BUA	7			0900	0945	"
8	DART	127	TLE4414	534	"	"	NO BUA	8			0950	1020	"
9	Sullys	938	MA. 39539	24361	"	"	~~X~~	9			955	1030	"
10	DART	167 #2	OHIO TLE4475	536	"	"	X	10			1030	1040	"
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													
26													

CONTRACT FOR T&D W/CHARTER ENVIRONMENTAL, TRANSPORTER 1/LOGANO, WASTE PROFILE SHT. WMI CL5529

PLSRTL (#122) 3-25-99

BLDG #6 INFO. 3-25-99

NYB9037278

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please type or print. Do not staple.

CMC

(Hazardous Waste Manifest 4/97)

In case of emergency or spill immediately call the National Response Center (8 34-8802 and the NYS Department of Environmental Conservation (518) 457-7362

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: R I 1 1 7 0 0 2 4 2 4 3
Manifest Doc. No.: 50713
2. Page 1 of 1

Information within heavy bold line is not required by Federal Law.

A. NYB9037278

B. Generator's ID: SAME

3. Generator's Name and Mailing Address
NAVAL STATION NEWPORT
BLDG 1 CODE 40E
NEWPORT RI 02841

4. Generator's Telephone Number: ~~(401) 284-3497~~ (401) 841-3735

C. State Transporter's ID: 0239481 ME

D. Transporter's Telephone: 860 342-0657

5. Transporter 1 (Company Name): USA WASTE of CT INC

6. US EPA ID Number: CTD983896341

E. State Transporter's ID

7. Transporter 2 (Company Name)

8. US EPA ID Number

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, L.L.C.
1550 BALMER RD.
MODEL CITY NY 14107

10. US EPA ID Number: N Y D 0 4 9 8 3 6 6 7 9

G. State Facility ID

H. Facility Telephone ( ): 716 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYL MIXTURE,9,UN2315,III	001	DT	24900	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
a CL5529 / R007
c
b
d

K. Handling Codes for Wastes Listed Above
a: L
c:
b:
d:

15. Special Handling Instructions and Additional Information
a. PCB Out of Service Date: 03-31-99 Weight: ____, Type: _
CHEMTREC Emergency Response Number (800)424-9300
ERG#171
WT IS EST.
SR493495-1

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: MARK J. RIELLY
Signature: Mark Rielly
Mo. Day Year: 03 31 99

GENERATOR

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Kevin Lewis
Signature: Kevin Lewis
Mo. Day Year: 03 31 99

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Mo. Day Year

TRANSPORTER

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Mo. Day Year

FACILITY

COPY 1—Disposer State—Mailed by TSD Facility

DISPOSAL STANDARDS FOR NEW YORK STATE REGULATED HAZARDOUS PCB WASTES

GENERATOR NAME: Naval Station Newport

MANIFEST # NYB9037278 CWM PROFILE # CL5529

UNIQUE DRUM# N/A OUT OF SERVICE DATE: 3-31-99

The following New York State regulated and land restricted wastes are subject to 6 NYCRR Part 376. Refer to 6 NYCRR 376.4(f) for New York land disposal requirements. Check all that apply:

[ ] B001 [ ] B002 [ ] B003 [ ] B004 [ ] B005 [ ] B006 [X] B007

Certification - Waste Meets Treatment Standards

[X] I am the generator of the waste as identified above, that is restricted under 6 NYCRR Part 376. I have determined that this waste meets all applicable treatment standards set forth in 6 NYCRR 376 and, therefore, it can be land disposed without further treatment. **Waste does not include solidified B002 material (liquid with PCBs 50-500 ppm).**

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that waste complies with the treatment standards specified in Part 376, Section 376.4 and all applicable prohibitions set forth in subdivision 376.3(b) of Part 376 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification including the possibility of a fine or imprisonment.

Notification - Waste Does Not Meet Treatment Standards

[ ] I am the generator of a waste restricted under 6 NYCRR Part 376 as identified above. I notify that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste does not comply with the treatment standards specified in 6 NYCRR Part 376.4(f). This waste must be treated to the applicable standard set forth in 6 NYCRR 376.4(f) prior to land disposal.

GENERATOR'S SIGNATURE: [signature]

TITLE: HAZ WASTE COORD. DATE: 3-31-99

Updated 05/19/98

WEIGHT RECORDED BY

HOWESCALE

Number

Date 3/31/99

IDENTIFICATION

WEIGHT

MR 31 99

84960 LB — lbs. Gross

~~30180 LB TR~~ — lbs. Tare

54780 LB+ NET — lbs. Net

24,900 K

Commodity _____ @ _____ per lb.

Remarks: Environmental

Driver: On ☑ Off ☐

Load No. _____

Weigher P Bennd

Shipper Log AND #26

Seller / Buyer Bldg 6 PCB Soil

Address

TR-200-3T

NYB9037269

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

CMC

(Hazardous Waste Manifest 4/97)

Please type or print. Do not staple.

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: RI1170024243 Manifest Doc. No.: 150714

2. Page 1 of 1

Information within heavy bold line is not required by Federal Law.

A. NYB9037269

B. Generator's ID: SAME

C. State Transporter's ID: 0239480-ME

D. Transporter's Telephone: (860) 342-4[illegible]

E. State Transporter's ID

F. Transporter's Telephone ( )

G. State Facility ID

H. Facility Telephone ( ) 716 754-8231

3. Generator's Name and Mailing Address
NAVAL STATION NEWPORT
BLDG 1 CODE 40E
NEWPORT RI 02841

4. Generator's Telephone Number: ~~444-284-3427~~ (401) 841-3735

5. Transporter 1 (Company Name): USA Waste of CT. Inc

6. US EPA ID Number: CTD983896341

7. Transporter 2 (Company Name)

8. US EPA ID Number

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, L.L.C.
1550 BALMER RD.
MODEL CITY NY 14107

10. US EPA ID Number: NYD049836679

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYL MIXTURE,9,UN2315,III	001	DT	24236	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
a CL5529 / ROOT
b
c
d

K. Handling Codes for Wastes Listed Above
a: L
b:
c:
d:

15. Special Handling Instructions and Additional Information
a. PCB Out of Service Date: 03-31-99 Weight: ____, Type: _
CHEMTREC Emergency Response Number (800)424-9300
ERG#171
SR493495-2

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: MARK J. RIELLY Signature: Mark Rielly Mo. 03 Day 31 Year 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Kendall Knox Signature: Kendall Knox Mo. 03 Day 31 Year 99

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name Signature Mo. Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name Signature Mo. Day Year

COPY 1—Disposer State—Mailed by TSD Facility

DISPOSAL STANDARDS FOR NEW YORK STATE REGULATED HAZARDOUS PCB WASTES

GENERATOR NAME: Naval Station Newport

MANIFEST # NYB9037269 CWM PROFILE # CL5529

UNIQUE DRUM# N/A OUT OF SERVICE DATE: 3-31-99

The following New York State regulated and land restricted wastes are subject to 6 NYCRR Part 376. Refer to 6 NYCRR 376.4(f) for New York land disposal requirements. Check all that apply:

[ ] B001 [ ] B002 [ ] B003 [ ] B004 [ ] B005 [ ] B006 [✓] B007

Certification - Waste Meets Treatment Standards

[✓] I am the generator of the waste as identified above, that is restricted under 6 NYCRR Part 376. I have determined that this waste meets all applicable treatment standards set forth in 6 NYCRR 376 and, therefore, it can be land disposed without further treatment. **Waste does not include solidified B002 material (liquid with PCBs 50-500 ppm).**

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that waste complies with the treatment standards specified in Part 376, Section 376.4 and all applicable prohibitions set forth in subdivision 376.3(b) of Part 376 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification including the possibility of a fine or imprisonment.

Notification - Waste Does Not Meet Treatment Standards

[ ] I am the generator of a waste restricted under 6 NYCRR Part 376 as identified above. I notify that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste does not comply with the treatment standards specified in 6 NYCRR Part 376.4(f). This waste must be treated to the applicable standard set forth in 6 NYCRR 376.4(f) prior to land disposal.

GENERATOR'S SIGNATURE: Mary Reilly

TITLE: HAZ WASTE COORD. DATE: 3-31-99

Updated 05/19/98

WEIGHT RECORDED BY

Number _____ **HOWESCALE** Date 3-31-99

IDENTIFICATION | WEIGHT

MR 31 99

84820 LB — lbs. Gross

31500 LB TR — lbs. Tare

53320 LB+ NET — lbs. Net

24,236 K

Commodity PCB SOIL @ _____ per lb.

Remarks: _____ Driver: On ☐ Off ☒

Load No. _____

Weigher SKZ-MSLLegm

Shipper LAGANO #25

Seller / Buyer BLDG 6

Address _____

TR-200-3T

NYB9037287

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

CMC

Please type or print. Do not staple.

(Hazardous Waste Manifest 4/97)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. RI1170024243 Manifest Doc. No. 50716

2. Page 1 of

Information within heavy bold line is not required by Federal Law.

3. Generator's Name and Mailing Address
NAVAL STATION NEWPORT
BLDG 1 CODE 40E
NEWPORT RI 02841

4. Generator's Telephone ~~Number 284-3427~~ (401) 841-3735

A. NYB9037287

B. Generator's ID SAME

5. Transporter 1 (Company Name) DART TRUCKING CO INC

6. US EPA ID Number ~~OHD98165~~ OHD009865825

C. State Transporter's ID TLE4381 014

D. Transporter's Telephone (800) 552 4192

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, L.L.C.
1550 BALMER RD.
MODEL CITY NY 14107

10. US EPA ID Number NYD049836679

G. State Facility ID

H. Facility Telephone ( ) 716 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYL MIXTURE,9,UN2315,III	001	DT	21354	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
a CL5529 / R007 c
b d

K. Handling Codes for Wastes Listed Above
a L c
b d

15. Special Handling Instructions and Additional Information
a. PCB Out of Service Date: 03-31-99, Weight: ____, Type: _
CHEMTREC Emergency Response Number (800)424-9300
ERG#171
SR 493495-3

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name MARK J. RIELLY Signature Mark Rielly Mo. Day Year 03 31 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name WAYNE A. KOHN JR Signature Wayne A. Kohn Mo. Day Year 03 31 99

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name Signature Mo. Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name Signature Mo. Day Year

GENERATOR

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

COPY 1—Disposer State—Mailed by TSD Facility

DISPOSAL STANDARDS FOR NEW YORK STATE REGULATED HAZARDOUS PCB WASTES

GENERATOR NAME: Naval Station Newport

MANIFEST # NYB9037287 CWM PROFILE # CL5529

UNIQUE DRUM# N/A OUT OF SERVICE DATE: 3-31-99

The following New York State regulated and land restricted wastes are subject to 6 NYCRR Part 376. Refer to 6 NYCRR 376.4(f) for New York land disposal requirements. Check all that apply:

[ ] B001 [ ] B002 [ ] B003 [ ] B004 [ ] B005 [ ] B006 [✓] B007

Certification - Waste Meets Treatment Standards

[✓] I am the generator of the waste as identified above, that is restricted under 6 NYCRR Part 376. I have determined that this waste meets all applicable treatment standards set forth in 6 NYCRR 376 and, therefore, it can be land disposed without further treatment. **Waste does not include solidified B002 material (liquid with PCBs 50-500 ppm).**

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that waste complies with the treatment standards specified in Part 376, Section 376.4 and all applicable prohibitions set forth in subdivision 376.3(b) of Part 376 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification including the possibility of a fine or imprisonment.

Notification - Waste Does Not Meet Treatment Standards

[ ] I am the generator of a waste restricted under 6 NYCRR Part 376 as identified above. I notify that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste does not comply with the treatment standards specified in 6 NYCRR Part 376.4(f). This waste must be treated to the applicable standard set forth in 6 NYCRR 376.4(f) prior to land disposal.

GENERATOR'S SIGNATURE: Mary Reilly

TITLE: HAZ WASTE COORD. DATE: 3-31-99.

Updated 05/19/98

Number #2

WEIGHT RECORDED BY

HOWESCALE

Date 3/31/99

IDENTIFICATION | WEIGHT

MR 31 99

31500 LB — lbs. Gross

~~31500 LB TR~~ — lbs. Tare

0 LB+ NET — lbs. Net

Commodity _____ @ _____ per lb.

Remarks: _____ Driver: On ☐ Off ☑

Load No. _____

Weigher [signature]

Shipper Environmental Bldg #6 PCB soil

Seller / Buyer Lagano #25

Address _____

TR-200-3T

Number _____

WEIGHT RECORDED BY

HOWESCALE

Date 3/31/99

IDENTIFICATION | WEIGHT

MR 31 99

81460 LB — lbs. Gross

~~34400 LB TR~~ — lbs. Tare

46980 LB+ NET — lbs. Net

21,354 K

Commodity _____ @ _____ per lb.

Remarks: Environmental — Driver: On ☐ Off ☑

Load No. _____

Weigher [signature]

Shipper Dart #122

Seller / Buyer Bldg 6 - PCB Soil

Address _____

TR-200-3T

WEIGHT RECORDED BY

HOWESCALE

Number #4 Date 3/31/99

IDENTIFICATION WEIGHT

MR 31 99

34480 LB

lbs. Gross

lbs. Tare

lbs. Net

Commodity _____ @ _____ per lb.

Remarks: Environmental

Driver: On ☐ Off ☑

Load No. _____

Weigher _____

Shipper Dart #122

Seller / Buyer Bldg 6 - PCB Soil

Address _____

TR-200-3T

NYB9037251

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

CMC

Please type or print. Do not staple.

(Hazardous Waste Manifest 4/97)

In case of emergency or spill immediately call the National Response Center (! 124-8802 and the NYS Department of Environmental Conservation (518) 457-7362

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: R I 1 1 7 0 0 2 4 2 4 3 — Manifest Doc. No.: 50717

2. Page 1 of 1

Information within heavy bold line is not required by Federal Law.

3. Generator's Name and Mailing Address
NAVAL STATION NEWPORT
BLDG 1 CODE 40E
NEWPORT RI 02841

4. Generator's Telephone Number ( ) ~~414-284-3427~~ (401) 841-3735

A. NYB9037251

B. Generator's ID: SAME

5. Transporter 1 (Company Name): DART Trucking Co INC

6. US EPA ID Number: OHD009816582 5

C. State Transporter's ID: TL 4379 OH

D. Transporter's Telephone: 800 827 7794

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, L.L.C.
1550 BALMER RD.
MODEL CITY NY 14107

10. US EPA ID Number: N Y D 0 4 9 8 3 6 6 7 9

G. State Facility ID

H. Facility Telephone ( ) 716 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYL MIXTURE,9,UN2315,III	001	DT	20673	K	EPA B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
CL5529 / R007
a c
b d

K. Handling Codes for Wastes Listed Above
a [L] c
b d

15. Special Handling Instructions and Additional Information
a. PCB Out of Service Date: 03-31-99 Weight: ____, Type: _
CHEMTREC Emergency Response Number (800)424-9300
ERG#171
SR493495-4

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: MARK J. RIELLY — Signature: Mark Rielly — Mo. 03 Day 31 Year 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: CLINT WEAVER — Signature: Clint Weaver — Mo. 03 Day 31 Year 99

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Mo. Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Mo. Day Year

COPY 1—Disposer State—Mailed by TSD Facility

DISPOSAL STANDARDS FOR NEW YORK STATE REGULATED HAZARDOUS PCB WASTES

GENERATOR NAME: Naval Station Newport

MANIFEST # NY6903 7251 CWM PROFILE # CL5529

UNIQUE DRUM# N/A OUT OF SERVICE DATE: 033/99

The following New York State regulated and land restricted wastes are subject to 6 NYCRR Part 376. Refer to 6 NYCRR 376.4(f) for New York land disposal requirements. Check all that apply:

[ ] B001 [ ] B002 [ ] B003 [ ] B004 [ ] B005 [ ] B006 [✓] B007

Certification - Waste Meets Treatment Standards

[✓] I am the generator of the waste as identified above, that is restricted under 6 NYCRR Part 376. I have determined that this waste meets all applicable treatment standards set forth in 6 NYCRR 376 and, therefore, it can be land disposed without further treatment. **Waste does not include solidified B002 material (liquid with PCBs 50-500 ppm).**

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that waste complies with the treatment standards specified in Part 376, Section 376.4 and all applicable prohibitions set forth in subdivision 376.3(b) of Part 376 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification including the possibility of a fine or imprisonment.

Notification - Waste Does Not Meet Treatment Standards

[ ] I am the generator of a waste restricted under 6 NYCRR Part 376 as identified above. I notify that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste does not comply with the treatment standards specified in 6 NYCRR Part 376.4(f). This waste must be treated to the applicable standard set forth in 6 NYCRR 376.4(f) prior to land disposal.

GENERATOR'S SIGNATURE: [signature]

TITLE: HAZ WASTE COORD. DATE: 3-31-99

Updated 05/19/98

Number #3

WEIGHT RECORDED BY

HOWESCALE

Date 3/31/99

IDENTIFICATION

WEIGHT

MR 31 99

31440 LB — lbs. Gross

~~31440 LB TR~~ — lbs. Tare

0 LB+ NET

45,480 LBS — lbs. Net

20,673 K

Commodity _____ @ _____ per lb.

Remarks: _____ Driver: On ☑ Off ☐

Load No. _____

Weigher [signature]

Shipper Environmental Bldg #6 PCB soil

Seller

Buyer Dart #175

Address

TR-200-3T

WEIGHT RECORDED BY

HOWESCALE

Number _____

Date 3/31/99

IDENTIFICATION

WEIGHT

MR 31 99

76920 LB — lbs. Gross

Full

DW

lbs. Tare

lbs. Net

Commodity _____ @ _____ per lb.

Remarks: ENVIRONMENTAL

Driver: On ☑ Off ☐

Load No. _____

Weigher HURTEAU

Shipper Dart #179

Seller

Buyer

Address

TR-200-3T

NYB9037296

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

CMC

(Hazardous Waste Manifest 4/97)

Please type or print. Do not staple.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: RI1170024243 — Manifest Doc. No.: 50718

2. Page 1 of 1

Information within heavy bold line is not required by Federal Law.

3. Generator's Name and Mailing Address
NAVAL STATION NEWPORT
BLDG 1 CODE 40E
NEWPORT RI 02841

4. Generator's Telephone Number: ~~414-284-3427~~ (401) 841-3735

A. NYB9037296

B. Generator's ID: SAME

5. Transporter 1 (Company Name): U.S.A Waste of Ohio

6. US EPA ID Number: OHD983896341

C. State Transporter's ID: 0234485ME

D. Transporter's Telephone: (860) 342-0449

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, L.L.C.
1550 BALMER RD.
MODEL CITY NY 14107

10. US EPA ID Number: NYD049836679

G. State Facility ID

H. Facility Telephone ( ): 716 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYL MIXTURE,9,UN2315,III	001	DT	20973	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
a CL5529 / R007
c
b
d

K. Handling Codes for Wastes Listed Above
a: L
c:
b:
d:

15. Special Handling Instructions and Additional Information
a. PCB Out of Service Date: 03-31-99, Weight: ____, Type: _
CHEMTREC Emergency Response Number (800)424-9300
ERG#171
WT IS EST
SR493495-5

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: MARK J. RIELLY — Signature: [signature] — Mo. Day Year: 03 31 99

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: TED Lukasik — Signature: [signature] — Mo. Day Year: 03 31 99

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Mo. Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name — Signature — Mo. Day Year

GENERATOR — TRANSPORTER — FACILITY

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

COPY 1—Disposer State—Mailed by TSD Facility

DISPOSAL STANDARDS FOR NEW YORK STATE REGULATED HAZARDOUS PCB WASTES

GENERATOR NAME: Naval Station Newport

MANIFEST # NYB9037296 CWM PROFILE # CL5529

UNIQUE DRUM# N/A OUT OF SERVICE DATE: 033199

The following New York State regulated and land restricted wastes are subject to 6 NYCRR Part 376. Refer to 6 NYCRR 376.4(f) for New York land disposal requirements. Check all that apply:

[ ] B001 [ ] B002 [ ] B003 [ ] B004 [ ] B005 [ ] B006 [✓] B007

Certification - Waste Meets Treatment Standards

[✓] I am the generator of the waste as identified above, that is restricted under 6 NYCRR Part 376. I have determined that this waste meets all applicable treatment standards set forth in 6 NYCRR 376 and, therefore, it can be land disposed without further treatment. **Waste does not include solidified B002 material (liquid with PCBs 50-500 ppm).**

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that waste complies with the treatment standards specified in Part 376, Section 376.4 and all applicable prohibitions set forth in subdivision 376.3(b) of Part 376 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification including the possibility of a fine or imprisonment.

Notification - Waste Does Not Meet Treatment Standards

[ ] I am the generator of a waste restricted under 6 NYCRR Part 376 as identified above. I notify that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste does not comply with the treatment standards specified in 6 NYCRR Part 376.4(f). This waste must be treated to the applicable standard set forth in 6 NYCRR 376.4(f) prior to land disposal.

GENERATOR'S SIGNATURE: Mary Reilly

TITLE: HAZ WASTE COORD. DATE: 3-31-99

Updated 05/19/98

WEIGHT RECORDED BY

HOWESCALE

Number _____ Date 3/31/99

IDENTIFICATION | WEIGHT

MR 31 99

80240 LB — lbs. Gross

~~34100 LB TR~~ — lbs. Tare

46140 LB+ NET — lbs. Net

20,973 K

Commodity ~~PCB SOIL~~ @ _____ per lb.

Remarks: WASTE

Driver: On ☐ Off ☑

Load No. _____

Weigher [signature]

Shipper LAGANO #22

Seller / Buyer ENVIRONMENTAL

Address _____

TR-200-3T

WEIGHT RECORDED BY

HOWESCALE

Number #7 Date 3/31/99

IDENTIFICATION | WEIGHT

MR 31 99

34100 LB — lbs. Gross

lbs. Tare

lbs. Net

Commodity _____ @ _____ per lb.

Remarks: Empty

Driver: On ☑ Off ☐

Load No. _____

Weigher [signature]

Shipper Longo 22

Seller / Buyer Bldg 6 — PCB Soil

Address _____

TR-200-3T

NYB9037314

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

CMC

(Hazardous Waste Manifest 4/97)

Please type or print. Do not staple.

In case of emergency or spill immediately call the National Response Center (124-8802 and the NYS Department of Environmental Conservation (518) 457-7362

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: R I 1 1 7 0 0 2 4 2 4 3
Manifest Doc. No.: 50719
2. Page 1 of 1

Information within heavy bold line is not required by Federal Law.

3. Generator's Name and Mailing Address
NAVAL STATION NEWPORT
BLDG 1 CODE 40E
NEWPORT RI 02841

4. Generator's Telephone Number: ~~414-284-3427~~ (401) 841-3735

A. NYB9037314

B. Generator's ID: SAME

5. Transporter 1 (Company Name): ZECCO INCORPORATED
6. US EPA ID Number: MAD052924495
C. State Transporter's ID: 25953 MA
D. Transporter's Telephone: (393) 2537

7. Transporter 2 (Company Name)
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, L.L.C.
1550 BALMER RD.
MODEL CITY NY 14107

10. US EPA ID Number: N Y D 0 4 9 8 3 6 6 7 9
G. State Facility ID
H. Facility Telephone ( ): 716 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYL MIXTURE,9,UN2315,III	001	DT	20455	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
a CL5529/ROOT
c
b
d

K. Handling Codes for Wastes Listed Above
a: L
c:
b:
d:

15. Special Handling Instructions and Additional Information
a. PCB Out of Service Date: 03-31-99 Weight: ____, Type: _
CHEMTREC Emergency Response Number (800)424-9300
ERG#171
SR 493495-6

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

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Printed/Typed Name: MARK J. RIELLY
Signature: Mark J Rielly
Mo. Day Year: 03 31 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: William Flynn
Signature: William Flynn
Mo. Day Year: 03 31 99

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Mo. Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Mo. Day Year

COPY 1—Disposer State—Mailed by TSD Facility

DISPOSAL STANDARDS FOR NEW YORK STATE REGULATED HAZARDOUS PCB WASTES

GENERATOR NAME: Naval Station Newport

MANIFEST # NYB9037314 CWM PROFILE # CL5529

UNIQUE DRUM# N/A OUT OF SERVICE DATE: 03/31/99

The following New York State regulated and land restricted wastes are subject to 6 NYCRR Part 376. Refer to 6 NYCRR 376.4(f) for New York land disposal requirements. Check all that apply:

[ ] B001 [ ] B002 [ ] B003 [ ] B004 [ ] B005 [ ] B006 [✓] B007

Certification - Waste Meets Treatment Standards

[✓] I am the generator of the waste as identified above, that is restricted under 6 NYCRR Part 376. I have determined that this waste meets all applicable treatment standards set forth in 6 NYCRR 376 and, therefore, it can be land disposed without further treatment. **Waste does not include solidified B002 material (liquid with PCBs 50-500 ppm).**

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that waste complies with the treatment standards specified in Part 376, Section 376.4 and all applicable prohibitions set forth in subdivision 376.3(b) of Part 376 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification including the possibility of a fine or imprisonment.

Notification - Waste Does Not Meet Treatment Standards

[ ] I am the generator of a waste restricted under 6 NYCRR Part 376 as identified above. I notify that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste does not comply with the treatment standards specified in 6 NYCRR Part 376.4(f). This waste must be treated to the applicable standard set forth in 6 NYCRR 376.4(f) prior to land disposal.

GENERATOR'S SIGNATURE: Mary Reilly

TITLE: HAZ WASTE COORD. DATE: 3-31-99

Updated 05/19/98

WEIGHT RECORDED BY

HOWESCALE

Number _____ Date 3/31/99

IDENTIFICATION WEIGHT

MR 31 99

79860 LB — lbs. Gross

~~34860 LB TR~~ — lbs. Tare

45000 LB+ NET — lbs. Net

20,455 K

Commodity _____ @ _____ per lb.

Remarks: Environmental

Driver: On ☐ Off ☐

Load No. _____

Weigher P Brand

Shipper Zecco TK 45

Seller / Buyer Bldg 6 TCB SOIL

Address _____

TR-200-3T

WEIGHT RECORDED BY

HOWESCALE

Number _____ Date 3/31/99

IDENTIFICATION WEIGHT

MR 31 99

34860 LB — lbs. Gross

lbs. Tare

lbs. Net

Commodity _____ @ _____ per lb.

Remarks: Environmental

Driver: On ☑ Off ☐

Load No. _____

Weigher P Brand

Shipper Zecco T 45

Seller / Buyer Bldg 6 - PCB Soil

Address _____

TR-200-3T

NYB9037305

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please type or print. Do not staple.

CMC

(Hazardous Waste Manifest 4/97)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. R I 1 1 7 0 0 2 4 2 4 3 — Manifest Doc. No. 50720

2. Page 1 of 1

Information within heavy bold line is not required by Federal Law.

3. Generator's Name and Mailing Address
NAVAL STATION NEWPORT
BLDG 1 CODE 40E
NEWPORT RI 02841

4. Generator's Telephone Number ~~414-284-3427~~ (401) 841-3735

A. NYB9037305

B. Generator's ID SAME

5. Transporter 1 (Company Name) ZECCO INC

6. US EPA ID Number MAD052924495

C. State Transporter's ID MA25954

D. Transporter's Telephone (508) 393-2537

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, L.L.C.
1550 BALMER RD.
MODEL CITY NY 14107

10. US EPA ID Number NYD049836679

G. State Facility ID

H. Facility Telephone ( ) 716 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYL MIXTURE,9,UN2315,III	001	DT	23064	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
a CL5529 / R007 c
b d

K. Handling Codes for Wastes Listed Above
a L c
b d

15. Special Handling Instructions and Additional Information
a. PCB Out of Service Date: 03-31-99 Weight: ____, Type: _
CHEMTREC Emergency Response Number (800)424-9300
ERG#171
SR 493495-7

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: MARK J. RIELLY — Signature: Mark Rielly — Mo. Day Year: 03 31 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: JOHN FAGAN — Signature: John Fagan — Mo. Day Year: 03 31 99

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Mo. Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Mo. Day Year

In case of emergency or spill immediately call the National Response Center (800-8802 and the NYS Department of Environmental Conservation (518) 457-7362

COPY 1—Disposer State—Mailed by TSD Facility

DISPOSAL STANDARDS FOR NEW YORK STATE REGULATED HAZARDOUS PCB WASTES

GENERATOR NAME: Naval Station Newport

MANIFEST # NYB 9037305 CWM PROFILE # CL5529

UNIQUE DRUM# N/A OUT OF SERVICE DATE: 033199

The following New York State regulated and land restricted wastes are subject to 6 NYCRR Part 376. Refer to 6 NYCRR 376.4(f) for New York land disposal requirements. Check all that apply:

[ ] B001 [ ] B002 [ ] B003 [ ] B004 [ ] B005 [ ] B006 [✓] B007

Certification - Waste Meets Treatment Standards

[✓] I am the generator of the waste as identified above, that is restricted under 6 NYCRR Part 376. I have determined that this waste meets all applicable treatment standards set forth in 6 NYCRR 376 and, therefore, it can be land disposed without further treatment. **Waste does not include solidified B002 material (liquid with PCBs 50-500 ppm).**

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that waste complies with the treatment standards specified in Part 376, Section 376.4 and all applicable prohibitions set forth in subdivision 376.3(b) of Part 376 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification including the possibility of a fine or imprisonment.

Notification - Waste Does Not Meet Treatment Standards

[ ] I am the generator of a waste restricted under 6 NYCRR Part 376 as identified above. I notify that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste does not comply with the treatment standards specified in 6 NYCRR Part 376.4(f). This waste must be treated to the applicable standard set forth in 6 NYCRR 376.4(f) prior to land disposal.

GENERATOR'S SIGNATURE: Mary Reilly

TITLE: HAZ WASTE COORD. DATE: 3-31-99

Updated 05/19/98

WEIGHT RECORDED BY

HOWESCALE

Number _____ Date 3/31/99

IDENTIFICATION WEIGHT

MR 31 99

34300 LB Lbs. Gross

Lbs. Tare

Lbs. Net

Commodity _____ @ _____ per lb.

Remarks: Environmental

Driver: On ☑ Off ☐

Load No. _____

Weigher [signature]

Shipper Zecco T42

Seller
Buyer Bldg 6 – PCB SoIC

Address

TR-200-3T

NYB9037323

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

CMC

(Hazardous Waste Manifest 4/97)

Please type or print. Do not staple.

In case of emergency or spill immediately call the National Response Center (800) 1-8802 and the NYS Department of Environmental Conservation (518) 457-7362

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: R I 1 1 7 0 0 2 4 2 4 3 — Manifest Doc. No.: 50721

2. Page 1 of 1

Information within heavy bold line is not required by Federal Law.

3. Generator's Name and Mailing Address
NAVAL STATION NEWPORT
BLDG 1 CODE 40E
NEWPORT RI 02841

4. Generator's Telephone Number: ~~(401) 284-3427~~ (401) 841-3735

A. NYB9037323

B. Generator's ID: SAME

5. Transporter 1 (Company Name): DART TRUCKING CO INC

6. US EPA ID Number: OHD009865825

C. State Transporter's ID: XA71741 R

D. Transporter's Telephone: (800) 541 8206

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, L.L.C.
1550 BALMER RD.
MODEL CITY NY 14107

10. US EPA ID Number: N Y D 0 4 9 8 3 6 6 7 9

G. State Facility ID

H. Facility Telephone ( ): 716 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYL MIXTURE,9,UN2315,III	001	DT	21236	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
a CL5529 / R007
b
c
d

K. Handling Codes for Wastes Listed Above
a L
b
c
d

15. Special Handling Instructions and Additional Information
a. PCB Out of Service Date: 03-31-99 Weight: ____, Type: _
CHEMTREC Emergency Response Number (800)424-9300
ERG#171
SR 493495-8

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

GENERATOR

Printed/Typed Name: MARK J. RIELLY — Signature: Mark Rielly — Mo. Day Year: 03 31 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: John Brooks — Signature: John Brooks — Mo. Day Year: 03 31 99

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Mo. Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name — Signature — Mo. Day Year

COPY 1—Disposer State—Mailed by TSD Facility

DISPOSAL STANDARDS FOR NEW YORK STATE REGULATED HAZARDOUS PCB WASTES

GENERATOR NAME: Naval Station Newport

MANIFEST # NYB9037323 CWM PROFILE # CL5529

UNIQUE DRUM# N/A OUT OF SERVICE DATE: 3-31-99

The following New York State regulated and land restricted wastes are subject to 6 NYCRR Part 376. Refer to 6 NYCRR 376.4(f) for New York land disposal requirements. Check all that apply:

[ ] B001 [ ] B002 [ ] B003 [ ] B004 [ ] B005 [ ] B006 [✓] B007

Certification - Waste Meets Treatment Standards

[✓] I am the generator of the waste as identified above, that is restricted under 6 NYCRR Part 376. I have determined that this waste meets all applicable treatment standards set forth in 6 NYCRR 376 and, therefore, it can be land disposed without further treatment. **Waste does not include solidified B002 material (liquid with PCBs 50-500 ppm).**

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that waste complies with the treatment standards specified in Part 376, Section 376.4 and all applicable prohibitions set forth in subdivision 376.3(b) of Part 376 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification including the possibility of a fine or imprisonment.

Notification - Waste Does Not Meet Treatment Standards

[ ] I am the generator of a waste restricted under 6 NYCRR Part 376 as identified above. I notify that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste does not comply with the treatment standards specified in 6 NYCRR Part 376.4(f). This waste must be treated to the applicable standard set forth in 6 NYCRR 376.4(f) prior to land disposal.

GENERATOR'S SIGNATURE: [signature]

TITLE: HAZ WASTE COORD. DATE: 3-31-99

Updated 05/19/98

WEIGHT RECORDED BY

HOWESCALE

Number _____ Date 3/31/99

IDENTIFICATION WEIGHT

MR 31 99

80260 LB — lbs. Gross

~~33540 LB TR~~ — lbs. Tare

46720 LB+ NET — lbs. Net

21,236 K

Commodity _____ @ _____ per lb.

Remarks: Environmental

Driver: On ☐ Off ☑

Load No. _____

Weigher [signature]

Shipper Dart 9746

Seller / Buyer Bld. 6 - PCB Soil

Address _____

TR-200-3T

WEIGHT RECORDED BY

HOWESCALE

Number _____ Date 3/31/99

IDENTIFICATION WEIGHT

MR 31 99

33540 LB — lbs. Gross

lbs. Tare

21,236 K — lbs. Net

Commodity _____ @ _____ per lb.

Remarks: Environmental

Driver: On ☐ Off ☑

Load No. _____

Weigher [signature]

Shipper DART 9746

Seller / Buyer Bld 6 — PCB Soil

Address _____

TR-200-3T

NYB9037341

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

CMC

(Hazardous Waste Manifest 4/97)

Please type or print. Do not staple.

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: RI1170024243
Manifest Doc. No.: 50722
2. Page 1 of 1

Information within heavy bold line is not required by Federal Law.

3. Generator's Name and Mailing Address
NAVAL STATION NEWPORT
BLDG 1 CODE 40E
NEWPORT RI 02841

4. Generator's Telephone Number: ~~401 284 3427~~ (401) 841-3735

A. NYB9037341

B. Generator's ID: SAME

5. Transporter 1 (Company Name): DART TRUCKING CO. INC
6. US EPA ID Number: OHD009865825
C. State Transporter's ID: TLA 6393 OHIO
D. Transporter's Telephone: (800) 352-4192

7. Transporter 2 (Company Name)
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, L.L.C.
1550 BALMER RD.
MODEL CITY NY 14107

10. US EPA ID Number: NYD049836679
G. State Facility ID
H. Facility Telephone: 716 754-8231

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYL MIXTURE,9,UN2315,III	001	DT	16836	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
a CL5529 / R007
c
b
d

K. Handling Codes for Wastes Listed Above
a: L
c:
b:
d:

15. Special Handling Instructions and Additional Information
a. PCB Out of Service Date: 03-31-99, Weight: ____, Type: _
CHEMTREC Emergency Response Number (800)424-9300
ERG#171
SR 493495-9

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: MARK J. RIELLY
Signature: Mark Rielly
Mo. Day Year: 03 31 99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Bill Whitlatch
Signature: Bill Whitlatch
Mo. Day Year: 03 31 99

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Mo. Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Mo. Day Year

COPY 1—Disposer State—Mailed by TSD Facility

DISPOSAL STANDARDS FOR NEW YORK STATE REGULATED HAZARDOUS PCB WASTES

GENERATOR NAME: Naval Station Newport

MANIFEST # NYB9037341 CWM PROFILE # CL5529

UNIQUE DRUM# N/A OUT OF SERVICE DATE: 3-31-99

The following New York State regulated and land restricted wastes are subject to 6 NYCRR Part 376. Refer to 6 NYCRR 376.4(f) for New York land disposal requirements. Check all that apply:

[ ] B001 [ ] B002 [ ] B003 [ ] B004 [ ] B005 [ ] B006 [✓] B007

Certification - Waste Meets Treatment Standards

[✓] I am the generator of the waste as identified above, that is restricted under 6 NYCRR Part 376. I have determined that this waste meets all applicable treatment standards set forth in 6 NYCRR 376 and, therefore, it can be land disposed without further treatment. **Waste does not include solidified B002 material (liquid with PCBs 50-500 ppm).**

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that waste complies with the treatment standards specified in Part 376, Section 376.4 and all applicable prohibitions set forth in subdivision 376.3(b) of Part 376 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification including the possibility of a fine or imprisonment.

Notification - Waste Does Not Meet Treatment Standards

[ ] I am the generator of a waste restricted under 6 NYCRR Part 376 as identified above. I notify that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste does not comply with the treatment standards specified in 6 NYCRR Part 376.4(f). This waste must be treated to the applicable standard set forth in 6 NYCRR 376.4(f) prior to land disposal.

GENERATOR'S SIGNATURE: [signature]

TITLE: HAZ WASTE COORD. DATE: 3-31-99.

Updated 05/19/98

WEIGHT RECORDED BY

Number _____ **HOWESCALE** Date 3/31/99

IDENTIFICATION WEIGHT

MR 31 99 — lbs. Gross

71820 LB

~~34780 LB TR~~ — lbs. Tare

37040 LB+ NET — lbs. Net

16,836 K

Commodity _____ @ _____ per lb.

Remarks: Environmental

Driver: On ☑ Off ☐

Load No. _____

Weigher _____

Shipper Sharp #1

Seller / Buyer Bldg 6 — PCB Soil

Address _____

TR-200-3T

WEIGHT RECORDED BY

Number _____ **HOWESCALE** Date 3/31/99

IDENTIFICATION WEIGHT

MR 31 99 — lbs. Gross

34780 LB

~~34780 LB TR~~ — lbs. Tare

0 LB+ NET — lbs. Net

Commodity _____ @ _____ per lb.

Remarks: _____

Driver: On ☐ Off ☐

Load No. _____

Weigher _____

Shipper Environmental Bldg #6 PCB Soil

Seller / Buyer Sharp #1

Address _____

TR-200-3T

NYB9037359

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

CMC

(Hazardous Waste Manifest 4/97)

Please type or print. Do not staple.

In case of emergency or spill immediately call the National Response Center (518) 457-7362 (518) 424-8802 and the NYS Department of Environmental Conservation

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: RI1170024243
Manifest Doc. No.: 50723

2. Page 1 of 1

Information within heavy bold line is not required by Federal Law.

A. NYB9037359

B. Generator's ID: SAME

3. Generator's Name and Mailing Address
NAVAL STATION NEWPORT
BLDG 1 CODE 40E
NEWPORT RI 02841

4. Generator's Telephone ~~Number: 414-284-3427~~ (401) 841-3735

5. Transporter 1 (Company Name): DART TRANSPORT

6. US EPA ID Number: OHD009865825

C. State Transporter's ID: NA6395044

D. Transporter's Telephone (800) 538-0255

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, L.L.C.
1550 BALMER RD.
MODEL CITY NY 14107

10. US EPA ID Number: NYD049836679

G. State Facility ID

H. Facility Telephone ( ) 716 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, POLYCHLORINATED BIPHENYL MIXTURE,9,UN2315,III	001	DT	15455	K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
a CL5529 / R007
b
c
d

K. Handling Codes for Wastes Listed Above
a L
b
c
d

15. Special Handling Instructions and Additional Information
a. PCB Out of Service Date: 03-31-99, Weight: ____, Type: _
CHEMTREC Emergency Response Number (800)424-9300
ERG#171
SR493495-10
#9000

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

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Printed/Typed Name: MARK J. RIELLY
Signature: Mark Rielly
Mo. Day Year: 03 31 99

GENERATOR

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: GLEN KOFFEL
Signature: Glen Koffel
Mo. Day Year: 03 31 99

TRANSPORTER

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Mo. Day Year

19. Discrepancy Indication Space

FACILITY

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Mo. Day Year

COPY 1—Disposer State—Mailed by TSD Facility

DISPOSAL STANDARDS FOR NEW YORK STATE REGULATED HAZARDOUS PCB WASTES

GENERATOR NAME: Naval Station Newport

MANIFEST # NYB9037359 CWM PROFILE # CL5529

UNIQUE DRUM# N/A OUT OF SERVICE DATE: 3-31-99

The following New York State regulated and land restricted wastes are subject to 6 NYCRR Part 376. Refer to 6 NYCRR 376.4(f) for New York land disposal requirements. Check all that apply:

[ ] B001 [ ] B002 [ ] B003 [ ] B004 [ ] B005 [ ] B006 [X] B007

Certification - Waste Meets Treatment Standards

[X] I am the generator of the waste as identified above, that is restricted under 6 NYCRR Part 376. I have determined that this waste meets all applicable treatment standards set forth in 6 NYCRR 376 and, therefore, it can be land disposed without further treatment. **Waste does not include solidified B002 material (liquid with PCBs 50-500 ppm).**

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Notification - Waste Does Not Meet Treatment Standards

[ ] I am the generator of a waste restricted under 6 NYCRR Part 376 as identified above. I notify that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste does not comply with the treatment standards specified in 6 NYCRR Part 376.4(f). This waste must be treated to the applicable standard set forth in 6 NYCRR 376.4(f) prior to land disposal.

GENERATOR'S SIGNATURE: Mary Reilly

TITLE: HAZ WASTE COORD. DATE: 3-31-99

Updated 05/19/98

WEIGHT RECORDED BY

Number _____ **HOWESCALE** Date 3/31/99

IDENTIFICATION WEIGHT

MR 31 99

67700 LB lbs. Gross

~~33700 LB TR~~ lbs. Tare

34000 LB+ NET lbs. Net

15,455 K

Commodity _____ @ _____ per lb.

Remarks: Environmental

Driver: On ☑ Off ☐

Load No. _____

Weigher _____

Shipper Sharp #2

Seller

Buyer Bldg 6 – PCB Soil

Address

TR-200-3T

WEIGHT RECORDED BY

Number _____ **HOWESCALE** Date 3/31/99

IDENTIFICATION WEIGHT

MR 31 99

33700 LB lbs. Gross

~~33700 LB TR~~ lbs. Tare

0 LB+ NET lbs. Net

5,455 K

Commodity _____ @ _____ per lb.

Remarks: _____

Driver: ~~On~~ ☐ Off ☐

Load No. _____

Weigher _____

Shipper Environmental Bldg #6 PCB Soil

Seller

Buyer Sharp #2

Address

TR-200-3T

INFORMATION REVIEWED BY/DATE	FOSTER WHEELER ENVIRONMENTAL CORPORATION	DAY Wed
NOTE: SOIL STOCKPILES (3) ARE LOCATED AT D&J CONCRETE PLATFORM.	NETC NEWPORT BLDG #6 (TP-14) REMEDIAL ACTIONS NAVY RAC CONTRACT NO. N62472-94-D-0398 DELIVERY ORDER NO. 13C	DATE 3-31-99
	PCB LADEN SOIL REMOVAL TRUCK LOG	SHT of

	TRUCK INFORMATION				LOADING INFO.			DOCUMENTATION			ON-SITE INFO.		
	TRUCKING COMPANY NAME	TRUCK ID NUMBER	TRUCK REG. STATE MO./YR.	RI & MA DOT PERMIT NO.	LOAD COVER SCREEN IN PLACE Y/N	ANY VISIBLE DEBRIS ON TRUCK Y/N	CHECK ITEMS B/U ALARM COVER GATE LOCK Y/N	WEIGHT TICKET NO.	MANIFEST SIGNED BY GEN. Y/N	MANIFEST SIGNED BY D. FACIL. Y/N	TIME IN	TIME OUT	INFORMATION DOCUMENTED BY (INITIALS)
1	Logano	26	MAINE 02-39481	RI 667	Y	N	Y	#1			0650	0748	[illegible]
2	Logano	25	Maine 02-39480	667	Y	N	Y	2			0650	0745	"
3	Dart	179	OHIO TLE4379	536	X	N	NBA	3			0700	755	"
4	Dart	122	OHIO TLE4341	536	X	N	X	4			0800	0825	"
5	ZECCO	T47	MA 25954	175407	Y	N	Y	5			0835	835	"
6	ZECCO	T45	MA 25953	175407	X	N	Y	6			840	850	"
7	Logano	22	MAINE 02-39445	667	X	N	NBA	7			845	915	"
8	DART	974G	Penn. XA71741	536	Y	N	NBA	8			1010	1050	"
9	DART	9600	OHIO TLA6393	536	X	N	Y	9			1145		"
10	DART	9000	OHIO TLA6395	536	X	N	X	10			1145		"
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													
26													

CONTRACT FOR T&D W/CHARTER ENVIRONMENTAL, TRANSPORTER 1/LOGANO, WASTE PROFILE SHT. WMI CL5529

PLSRTL (#122) 3-25-99

BLDG #6 INFO. 3-25-99

INFORMATION REVIEWED BY/DATE NOTE: SOIL STOCKPILES (3) ARE LOCATED AT DSY CONCRETE PLATFORM.	FOSTER WHEELER ENVIRONMENTAL CORPORATION NETC NEWPORT BLDG #6 (TP-14) REMEDIAL ACTIONS NAVY RAC CONTRACT NO. N62472-94-D-0398 DELIVERY ORDER NO. 13C PCB LADEN SOIL REMOVAL TRUCK LOG	DAY DATE SHT of

	TRUCK INFORMATION				LOADING INFO.			DOCUMENTATION			ON-SITE INFO.		
	TRUCKING COMPANY NAME	TRUCK ID NUMBER	TRUCK REG. STATE MO./YR.	RI & MA DOT PERMIT NO.	LOAD COVER SCREEN IN PLACE Y/N	ANY VISIBLE DEBRIS ON TRUCK Y/N	CHECK ITEMS B/U ALARM COVER GATE LOCK Y/N	WEIGHT TICKET NO.	MANIFEST SIGNED BY GEN. Y/N	MANIFEST SIGNED BY D. FACIL.. Y/N	TIME IN	TIME OUT	INFORMATION DOCUMENTED BY (INITIALS)
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
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CONTRACT FOR T&D W/CHARTER ENVIRONMENTAL, TRANSPORTER 1/LOGANO, WASTE PROFILE SHT. WMI CL5529

PLSRTL (#122) 3-25-99

BLDG #6 INFO. 3-25-99

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

Service Agreement on File? ☒YES ☐NO

☐Hazardous ☐Non-Hazardous ☒TSCA

Profile Number: WMI CL 5529

Renewal Date: / /

A. Waste Generator Information

1. Generator Name: NAVAL Station Newport
2. SIC Code:
3. Facility Street Address: One Simonpietri Drive
4. Phone: (401) 841-3735
5. Facility City: Newport, RI
6. State/Province: Rhode Island
7. Zip/Postal Code: 02841
8. Generator USEPA/Federal ID #: RI 1170024243
9. County:
10. State/Province ID #:
11. Customer Name: CHARTER ENVIRONMENTAL, INC
12. Customer Phone: (617) 889-2228
13. Customer Contact: Robert Delhome
14. Customer Fax: (617) 889-0220
15. Billing Address 85 Crescent Avenue, Chelsea, MA 02150 ☐Same as above

B. Waste Stream Information

1. **Description**
   a. Name of Waste: TSCA Contaminated Soil
   b. Process Generating Waste: Remediation activity

c. Color	d. Strong odor (describe):	e. Physical state @ 70°F	f. Layers	g. Free liquid range
Brown/Black	NO	☒Solid ☐Liquid ☐Gas ☐Sludge ☐Other	☐Single Layer ☐Multi-layer N/A	to 0 % h. pH: Range 6 to 8 %

i. Liquid Flash Point: ☐<73°F ☐73-99°F ☐100-139°F ☐140-199°F ☐≥ 200°F ☒Not applicable

j. Chemical Composition (List all constituents [including halogenated organics, debris, and UHC's] present in any concentration and submit representative analysis):

Constituents	Concentration Range	Constituents	Concentration Range
Soil / Dirt	90-100%		
Poly sheeting	0-10%		
PCB's	Analytical Attached		

TOTAL COMPOSITION MUST EQUAL OR EXCEED 100%

k. ☐Oxidizer ☐Pyrophoric ☐Explosive ☐Radioactive ☐Carcinogen ☐Infectious ☐Shock Sensitive ☐Water Reactive

l. Does the waste represented by this profile contain any of the carcinogens which require OSHA notification? (list in Section B.1.j) ☐YES ☒NO

m. Does the waste represented by this profile contain dioxins? (list in Section B.1.j) ☐YES ☒NO

n. Does the waste represented by this profile contain asbestos? ☐YES ☒NO
   If yes ☐friable ☐non-friable

o. Does the waste represented by this profile contain benzene? ☐YES ☒NO
   If yes, concentration _____ ppm
   Is the waste subject to the benzene waste operations NESHAP? ☐YES ☒NO

p. Is the waste subject to RCRA Subpart CC controls? ☐YES ☒NO
   If yes, volatile organic concentration _____ ppmw

q. Does the waste contain any Class I or Class II ozone-depleting substances? ☐YES ☒NO

r. Does the waste contain debris? (list in Section B.1.j) ☒YES ☐NO

2. **Quantity of Waste**
   Estimated Annual Volume 450 ☐Tons ☒Yards ☐Drums ☐Other (specify) _____

3. **Shipping Information**
   a. Packaging:
   ☒Bulk Solid; Type/Size: Dump Trailer ☐Bulk Liquid; Type/Size: _____
   ☐Drum; Type; Size: _____ ☐Other: _____
   b. Shipping Frequency: Units 450 yards Per: ☐Month ☐Quarter ☐Year ☒One time ☐Other
   c. Is this a U.S. Department of Transportation (USDOT) Hazardous Material? (If no, skip d, e, and f) ☒YES ☐NO

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

Instructions

Information on this form is used to determine if the waste may be transported, treated, stored or disposed in a legal, safe, and environmentally sound manner. This information will be maintained in strict confidence. Answers must be provided for sections A, B, and C and must be printed in ink or typed. A response of "NONE" or NA" (not applicable) can be made if appropriate. If additional space is needed, indicate on the form that additional information is attached, and attach the information to Generator's Waste Profile Sheet. If you have questions concerning this form, please contact the Contractor's sales representative.

A. Waste Generator Information

1. **Generator Name** - Enter the name of the facility where the waste is generated.
2. **SIC Code** - Enter the four digit Standard Industrial Classification Code for the facility where the waste is generated.
3. **Facility Street Address** - Enter the street address (not P.O. Box) of the facility where the waste is generated.
4. **Phone** - Enter Generator's area code and phone number.
5. **Facility City** - Enter the city where the waste is generated.
6. **State/Province** - Enter the state or province where the waste is generated.
7. **Zip/Postal Code** - Enter the generating facility's zip or postal code.
8. **Generator USEPA/Federal ID #** - Enter the identification number issued by the USEPA, Canadian, or Mexican Federal Agency to the facility generating the waste (if applicable).
9. **County** - Enter the county where the waste is generated.
10. **State/Province ID #** - Enter the identification number issued by the state or province to the facility generating the waste (if applicable).
11. **Customer Name** - Entity that the Contractor is directly working with regarding the represented waste stream. If the same as the Generator, mark "Same as Above".
12. **Customer Phone** - Enter technical contact's area code and telephone number.
13. **Customer Contact** - Enter the name of the person who can answer technical questions about the waste.
14. **Customer Fax** - Area code and facsimile number for the customer.
15. **Billing Address** - Address where bill for services should be sent.

B. Waste Stream Information

1.a. **Name of Waste** - Enter a name generally descriptive of this waste (e.g., paint sludge, fluorescent bulbs).

1.b. **Process Generating Waste** - Describe the process generating the waste in detail. List the specific process/operation or source that generates the waste (e.g., incineration of municipal refuse, asbestos removal, wastewater treatment, building maintenance).

At a minimum, the Generator should answer the following questions in determining the process generating the waste.

- What chemicals are stored and/or used at the facility?
- Is the waste generated from the production/manufacturing of any of the following industries: wood preservation; inorganic pigments; organic pigments; pesticides; explosives; petroleum refining; iron and steel, copper, lead or zinc production?
- Is the waste a result from degreasing, solvent parts cleaning, recovery/reclaiming of solvents (bottoms), wastewater treatment (sludges), or electroplating?

1.c. **Color** - Describe the color of the waste (e.g., blue, transparent, varies).

1.d. **Strong odor** - DO NOT SMELL THE WASTE! If the waste has a known odor, then describe (e.g., acrid, pungent, solvent, sweet).

1.e. **Physical state @ 70°F** - If the four boxes provided do not apply, a descriptive phrase may be entered after "Other" (e.g., multi-phase).

1.f. **Layers** - Single Layer means the waste is homogenous. Multi-layer means the waste is comprised of two or more layers (e.g., oil/water/sludge).

1.g. **Free liquid range** - Range (in percent by volume) of free liquids in the waste.

1.h. **pH Range** - Indicate the pH range.

1.i. **Liquid Flash Point** - Indicate the flash point obtained using the appropriate test method.

1.j. **Chemical Composition** - List all organic and/or inorganic components of the waste using chemical names. If trade names are used, attach Material Safety Data Sheets or other documents that adequately describe the composition of the waste. For each component, estimate the range (in percent) in which the component is present.

1.k. Check all that apply.

1.l. Identify any element, chemical compound, or mixture in concentration of 0.1 percent or greater that is considered a carcinogen or potential carcinogen pursuant to OSHA.

1.m. Indicate if the waste contains any dioxins (list in Section B.1.j).

1.n. Indicate if the waste contains asbestos. Indicate if the asbestos is friable.

1.o. Indicate if the waste contains benzene, the level in ppm, and whether it is subject to the benzene NESHAP.

1.p. Indicate if the waste is subject to RCRA Subpart CC control. In addition, indicate the volatile organic concentration, if known, in parts per million weight.

1.q. Indicate if the waste contains any Class I or Class II ozone-depleting controlled substances.

1.r. Indicate if the waste contains debris (list size and type in B.1.j).

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

d. Reportable Quantity (lbs.;kgs.): 1 lb e. Hazard Class/ID #: 9

f. USDOT Shipping Name: RQ Polychlorinated Biphenyls, Solid, UN 2315, PG III

g. Personal Protective Equipment Requirements: Hard Hat, SAFETY Glasses, gloves

h. Transporter/Transfer Station:

C. Generator's Certification (Please check appropriate responses, sign, and date below.)

1. Is this a USEPA hazardous waste (40 CFR Part 261)? If the answer is no, skip to 2. ☐YES ☒NO
   a. If yes, identify ALL USEPA listed and characteristic waste code numbers (D, F, K, P, U)
   b. If a characteristic hazardous waste, do underlying hazardous constituents (UHCs) apply? (If yes, list in Section B.1.j) ☐YES ☐NO
   c. Does this waste contain debris? (if yes, list size and type in Chemical Composition - B.1.) ☐YES ☐NO

2. Is this a state hazardous waste? ☒YES ☐NO
   Identify ALL state hazardous waste codes R007

3. Is the waste from a CERCLA (40 CFR 300, Appendix B) or state mandated clean-up? ☐YES ☒NO
   If yes, attach Record of Decision (ROD), 104/106 or 122 order or court order that governs site clean-up activity. For state mandated clean-up, provide relevant documentation.

4. Does the waste represented by this waste profile sheet contain radioactive material, or is disposal regulated by the Nuclear Regulatory Commission? ☐YES ☒NO

5. Does the waste represented by this waste profile sheet contain concentrations of Polychlorinated Biphenyls (PCBs) regulated by 40 CFR 761? (if yes, list in Chemical Composition - B.1.j) ☒YES ☐NO
   a. If yes, were the PCBs imported into the U.S.? ☐YES ☒NO

6. Do the waste profile sheet and all attachments contain true and accurate descriptions of the waste material, and has all relevant information within the possession of the Generator regarding known or suspected hazards pertaining to the waste been disclosed to the Contractor? ☒YES ☐NO

7. Will all changes which occur in the character of the waste be identified by the Generator and disclosed to the Contractor prior to providing the waste to the Contractor? ☒YES ☐NO

☒Check here if a Certificate of Destruction or Disposal is required.

Any sample submitted is representative as defined in 40 CFR 261 - Appendix I or by using an equivalent method. I authorize WM to obtain a sample from any waste shipment for purposes of recertification. If this certification is made by a broker, the undersigned signs as authorized agent of the generator and has confirmed the information contained in this Profile Sheet from information provided by the generator and additional information as it has determined to be reasonably necessary. If approved for management, Contractor has all the necessary permits and licenses for the waste that has been characterized and identified by this approved profile.

X Certification Signature: Mark J. Rielly Title: HAZWASTE COORD

Name (Type or Print): MARK J. RIELLY Company Name: NAVSTA NEWPORT Date: 3-18-99

☐Check if additional information is attached. Indicate the number of attached pages

D. WM Management's Decision

FOR WM USE ONLY

1. Management Method ☐Landfill ☐Non-hazardous Solidification ☐Bioremediation ☐Incineration ☐Hazardous Stabilization ☐Other (Specify)
2. Proposed Ultimate Management Facility:
3. Precautions, Special Handling Procedures, or Limitation on Approval:
4. Waste Form 5. Source 6. System Type

Special Waste Decision ☐Approved ☐Disapproved

Salesperson's Signature: Date:

Division Approval Signature (Optional): Date:

Special Waste Approvals Person Signature: Date:

Form WMI-4153 (09/97)

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

2. **Quantity of Waste** - Approximate volume in tons, yards, or other (e.g., drums, gallons) that will be received by the ultimate management facility. This volume amount is not intended for use in complying with state and/or permit restrictions.

3.a. **Packaging** - Choose the appropriate option or "other" along with a description.

3.b. **Shipping Frequency** - Choose the appropriate option or "other" along with a description.

3.c. **Is this a U.S. Department of Transportation (USDOT) hazardous material?** - Choose the appropriate response: yes or no.

3.d. **Reportable Quantity (lbs.; kgs.)** - If the answer to 3.c. is yes, enter the Reportable Quantity (RQ) established by 40 CFR 302.4 or equivalent Canadian or Mexican regulation for this waste. Indicate the appropriate units for the RQ.

3.e. **Hazard Class/ID #** - If the answer to 3.c. is yes, indicate the proper USDOT hazard class and identification number.

3.f. **USDOT Shipping Name** - IF the answer to 3.c. is yes, enter the proper USDOT shipping name for the waste.

3.g. **Personal Protective Equipment Requirements** - All personal protective equipment necessary to safely manage the waste stream.

3.h. **Transporter/Transfer Station** - Transporter and/or transfer station name.

C. Generator's Certification (Please check appropriate responses, sign and date below.)

Indicate the appropriate response to questions/statements 1, 2, 3, 4, 5, 6, and 7. By signing this Generator's Waste Profile Sheet, the Generator certifies the responses are true and accurate with respect to the waste stream(s) listed.

Certification Signature - Signature of an authorized employee of the Generator or authorized representative of the generator.
Title - Enter Employee's title.
Name - Type or Print Employee's name.
Company Name - Company employing the person certifying the Generator's Waste Profile Sheet.
Date - Enter the date this Generator's Waste Profile Sheet is signed.

D. WM Management's Decision — FOR WM USE ONLY

To be completed by WM.

SENT BY: 3-17-99 ; 13:58 ;CWM MODEL CITY-ADMIN→ 617 889 0220;# 5/ 8

MANIFEST REGULATIONS FOR PCB SHIPMENTS

40 CFR Part 761.207(a)

A generator who relinquishes PCB waste for offsite disposal shall prepare a hazardous waste manifest. The following information must be supplied on the manifest.

(1) For bulk loads, the:
- identity of the waste,
- earliest date of removal from service for disposal, and
- weight in kilograms (KG for item 14. on the manifest) of the waste.

(2) For **EACH** container, the:
- unique identifying number,
- type of PCB waste (e.g. soil, debris, small capacitors, etc.),
- earliest date of removal from service for disposal, and
- weight in kilograms.

(3) For each article, the:
- serial number or other identification if no serial number,
- the date of removal from service for disposal, and
- weight in kilograms.

Use the enclosed continuation form for non-bulk (drum) loads.

40 CFR Part 761.207(b)

If the state to which the shipment is manifested supplies the manifest then the generator must use that manifest. The New York State Department of Environmental Conservation (NYSDEC) supplies and requires the use of a New York manifest for PCB and RCRA hazardous waste materials.

40 CFR Part 761.207(j)

Manifests are required for materials at concentrations of 50 ppm or greater PCB. Manifests are also required for PCB wastes less than 50 ppm as a result of dilution including spill cleanups.

6 NYCRR Part 371.4(e)

NYSDEC requires that wastes containing 50 ppm or greater PCB be classified with the following STATE Waste No. in section I. on the manifest.

- B001 - Concentrated PCB Oil
- B002 - 50 to <500 ppm PCB Oil
- B003 - 500 ppm or greater PCB Oil
- B004 - 50 to <500 ppm PCB Articles (excluding small capacitors)
- B005 - 500 ppm or greater PCB Articles (excluding transformers)
- B006 - 500 ppm or greater PCB Transformers
- B007 - PCB Contaminated soil, solids, sludge, clothing, rags and dredge material

Articles include capacitors, transformers, circuit breakers, cable, pumps, etc. PCB Articles, except capacitors, containing between 50 and 500 ppm PCB do not require a "B" code if all free flowing liquid has been drained. The drained liquid is a listed hazardous waste, as is any solvent used for flushing. Small capacitors do not require a "B" code.

6 NYCRR Part 376

NYSDEC requires the use of a PCB Landban Form for **EACH** load. Use the reverse side of the enclosed PCB continuation form.

DISPOSAL STANDARDS FOR NEW YORK STATE REGULATED HAZARDOUS PCB WASTES

GENERATOR NAME: Naval Station Newport

MANIFEST #_____ CWM PROFILE #_____

UNIQUE DRUM#_____ OUT OF SERVICE DATE:_____

The following New York State regulated and land restricted wastes are subject to 6 NYCRR Part 376. Refer to 6 NYCRR 376.4(f) for New York land disposal requirements. Check all that apply:

[ ] B001 [ ] B002 [ ] B003 [ ] B004 [ ] B005 [ ] B006 [X] B007

Certification - Waste Meets Treatment Standards

[ ] I am the generator of the waste as identified above, that is restricted under 6 NYCRR Part 376. I have determined that this waste meets all applicable treatment standards set forth in 6 NYCRR 376 and, therefore, it can be land disposed without further treatment. **Waste does not include solidified B002 material (liquid with PCBs 50-500 ppm).**

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that waste complies with the treatment standards specified in Part 376, Section 376.4 and all applicable prohibitions set forth in subdivision 376.3(b) of Part 376 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification including the possibility of a fine or imprisonment.

Notification - Waste Does Not Meet Treatment Standards

[ ] I am the generator of a waste restricted under 6 NYCRR Part 376 as identified above. I notify that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste does not comply with the treatment standards specified in 6 NYCRR Part 376.4(f). This waste must be treated to the applicable standard set forth in 6 NYCRR 376.4(f) prior to land disposal.

GENERATOR'S SIGNATURE:_____

TITLE:_____ DATE:_____

Updated 05/19/98

NYB8897895

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please type or print. Do not staple.

(Hazardous Waste Manifest 4/87)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. R I 1 1 7 0 0 2 4 2 4 3 — Manifest Doc. No.
2. Page 1 of 1

Information within heavy bold line is not required by Federal Law.

3. Generator's Name and Mailing Address
Naval Station Newport
One Simon Pietri Drive
Newport, RI 02841

A. NYB8897895

B. Generator's ID

4. Generator's Telephone Number (401) 841-3735

5. Transporter 1 (Company Name): Logano Transportation
6. US EPA ID Number: C T D 9 8 3 8 9 6 3 4 1

C. State Transporter's ID

D. Transporter's Telephone ( )

7. Transporter 2 (Company Name)
8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
CWM Chemical Services LLC
1550 Balmer Road
Model City, NY 14107

10. US EPA ID Number: N Y D 0 4 9 8 3 8 6 7 9

G. State Facility ID

H. Facility Telephone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, Polychlorinated Biphenyls, Solid 9, UN2315, PG III	001	CM		K	EPA / STATE B007
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
a B007 ERG #171
b
c
d

K. Handling Codes for Wastes Listed Above
a
b
c
d

15. Special Handling Instructions and Additional Information: CHEMTREC Emergency Response # 800 424 9300

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name | Signature | Mo. Day Year

GENERATOR

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Mo. Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Mo. Day Year

TRANSPORTER

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Mo. Day Year

FACILITY

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

COPY 1–Disposer State–Mailed by TSD Facility

Appendix L

Sump 42-5 Sump Confirmatory Sample Results Summary and Laboratory Data

FOSTER WHEELER ENVIRONMENTAL CORPORATION
U.S. NAVY NORTHERN DIVISION REMEDIAL ACTION CONTRACT (RAC)
CONTRACT N62472-94-D-0398 DELIVERY ORDER 13 AND 60
DERECKTOR SHIPYARD BUILDING 42 S42-5 SUMP CONFIRMATION SAMPLE RESULTS

RIDEM Direct Exposure Criteria --->	Residential	Commercial/ Industrial	S42 SWE	S42 BOT	S42 SWS	S42 SWW	S42 SWN
Volatile Organics							
Acetone	7,800.0	10,000.0	0.042 B	0.02 B	0.061 B	0.041 B	0.035 B
Benzene	2.5	200.0	-	-	-	-	-
Bromodichloromethane	10.0	92.0	-	-	-	-	-
Bromoform	81.0	720.0	-	-	-	-	-
Bromomethane	0.8	2,900.0	-	-	-	-	-
Carbon tetrachloride	1.5	44.0	-	-	-	-	-
Chlorobenzene	210.0	10,000.0	-	-	-	-	-
Chloroform	1.2	940.0	-	-	-	-	-
Dibromochloromethane	7.6	68.0	-	-	-	-	-
1,1-Dichloroethane	920.0	10,000.0	-	-	-	-	-
1,2-Dichloroethane	0.9	63.0	-	-	-	-	-
1,1-Dichloroethene	0.2	9.5	-	-	-	-	-
cis-1,2-Dichloroethene	630.0	10,000.0	-	-	-	-	-
trans-1,2-Dichloroethene	1,100.0	10,000.0	-	-	-	-	-
1,2-Dichloropropane	1.9	84.0	-	-	-	-	-
Ethylbenzene	71.0	10,000.0	-	-	-	-	-
Isopropyl benzene	27.0	10,000.0	-	-	-	-	-
Methyl-tert-butyl-ether	390.0	10,000.0	-	-	-	-	-
Methylene chloride	45.0	760.0	-	-	-	-	0.001 JB
Styrene	13.0	190.0	-	-	-	-	-
1,1,1,2 Tetrachloroethane	2.2	220.0	-	-	-	-	-
1,1,2,2 Tetrachloroethane	1.3	29.0	-	-	-	-	-
Toluene	190.0	10,000.0	-	-	-	0.01 J	-
1,1,1-Trichloroethane	540.0	10,000.0	-	-	-	-	-
1,1,2-Trichloroethane	3.6	100.0	-	-	-	-	-
Vinyl chloride	0.02	3.00	-	-	-	-	-
Total Xylenes	110.0	10,000.0	-	-	-	-	0.001 J
Semivolatiles							
Acenaphthene	43.0	10,000.0	-	-	-	-	0.041 J
Acenaphthylene	23.0	10,000.0	-	-	-	-	0.043 J
Anthracene	35.0	10,000.0	-	-	-	-	0.12 J
Benzo(a)anthracene	0.9	7.8	-	-	0.075 J	-	0.360
Benzo(a)pyrene	0.4	0.8	-	-	0.049 J	-	0.370
Benzo(b)fluoranthene	0.9	7.8	-	-	0.071 J	-	0.470
Benzo(g,h,I)perylene	0.8	10,000.0	-	-	-	-	0.25 J
Benzo(k)fluoranthene	0.9	78.0	-	-	-	-	0.150
Bis(2-ethylhexyl)phthalate	46.0	410.0	-	-	-	-	-
Bis(2-chloroethyl)ether	0.6	5.2	-	-	-	-	-
Chrysene	0.4	780.0	-	-	0.09 J	-	0.460
Dibenzo(a,h)anthracene	0.4	0.8	-	-	-	-	-
1,2-Dichlorobenzene	510.0	10,000.0	-	-	-	-	-
1,3-Dichlorobenzene	430.0	10,000.0	-	-	-	-	-
1,4-Dichlorobenzene	27.0	240.0	-	-	-	-	-
3,3-Dichlorobenzidine	1.4	13.0	-	-	-	-	-
Diethyl phthalate	340.0	10,000.0	-	-	-	-	-
2,4-Dimethyl phenol	1,400.0	10,000.0	-	-	-	-	-
Dimethyl phthalate	1,900.0	10,000.0	-	-	-	-	-
2,4-Dinitrophenol	160.0	4,100.0	-	-	-	-	-
2,4-Dinitrotoluene	0.9	8.4	-	-	-	-	-
Fluoranthene	20.0	10,000.0	-	-	0.15 J	-	0.830
Fluorene	28.0	10,000.0	-	-	-	-	0.044 J
Hexachlorobenzene	0.4	3.6	-	-	-	-	-
Hexachlorobutadiene	8.2	73.0	-	-	-	-	-
Hexachloroethane	46.0	410.0	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	0.9	7.8	-	-	-	-	0.24 J
Naphthalene	54.0	10,000.0	-	-	-	-	-
Pentachlorophenol	5.3	48.0	-	-	-	-	-
Phenanthrene	40.0	10,000.0	-	-	0.13 J	-	0.470
Phenol	6,000.0	10,000.0	-	-	-	-	-
Pyrene	13.0	10,000.0	-	-	0.11 J	-	0.720
1,2,4-Trichlorobenzene	96.0	10,000.0	-	-	-	-	-
2,4,6-Trichlorophenol	58.0	520.0	-	-	-	-	-
PCBs							
Polychlorinated biphenyls	10.0	10.0	-	-	-	-	0.100
Inorganics							
Arsenic	1.7	3.8	21	16	21	15	22
Barium	5,500.0	10,000.0	22	28	25	34	37
Cadmium	39.0	1,000.0	1.9	1.7	1.9	1.7	2.0
Chromium III	1,400.0	10,000.0	n	n	n	n	n
Chromium VI	390.0	10,000.0	n	n	n	n	n
Chromium (Total)	na	na	13	13	13	12	15
Lead	150.0	500.0	10	15	17	16	26
Mercury	23.0	610.0	-	-	-	-	-
Selenium	390.0	10,000.0	-	-	-	-	-
Silver	200.0	10,000.0	3	-	-	3	-
TPH (8015M)	500.0	2,500.0	-	-	-	-	130

= Exceeds RIDEM Residential Exposure Criteria

- = Non-Detect Result

n = Not Analyzed

na = Not Applicable

J = Estimated value detected below the reporting limit

B = Analyte was also detected in the Method Blank

All results in mg/kg unless otherwise noted

MITKEM CORPORATION
175 Metro Center Boulevard
Warwick, Rhode Island 02886-1755
(401) 732-3400 • Fax (401) 732-3499
email: mitkem@mitkem.com

CHAIN-OF-CUSTODY RECORD

Melville

REPORT TO		INVOICE TO		
COMPANY Foster Wheeler	PHONE 683-5259	COMPANY Foster Wheeler	PHONE 845-6929	LAB PROJECT #: 70729
NAME Josh Holder	FAX 683-5183	NAME Josh Holder	FAX 845-4169	
ADDRESS 195 Burma Rd		ADDRESS P.O. Box 4350		TURNAROUND TIME: 5-DAY (STANDARD)
CITY/ST/ZIP Portsmouth RI 02871		CITY/ST/ZIP Middletown, RI 02842		

CLIENT PROJECT NAME: 0060 542-5 Sump Pit
CLIENT PROJECT #: RFP-002261
CLIENT P.O.#:

REQUESTED ANALYSES

SAMPLE IDENTIFICATION	DATE/TIME SAMPLED	COMPOSITE	GRAB	WATER	SOIL	OTHER	LAB ID	# OF CONTAINERS	RCRA8 -4oz	TPH 8015/8240/8082	VOCs 8260 -MeOH	VOCs 8260 -NaHSO4									COMMENTS
542 SWE	5/16/00 1430		X		X		01	5	1	1	1	2									
542BOT	5/16/00 1440		X		X		02	5	1	1	1	2									
542 SWS	5/16/00 1450		X		X		03	5	1	1	1	2									
542 SWW	5/16/00 1500		X		X			5	1	1	1	2									Hold until 5/18
542 SWN	5/17/00 0820		X		X		04	5	1	1	1	2									
	/																				
	/																				
	/																				
	/																				
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	/																				

TSF#	RELINQUISHED BY	DATE/TIME	ACCEPTED BY	DATE/TIME
1	Joshua Holden	5/17/00 10:22	Jan Healy	5/17/00 10:22
2		/		/
3		/		/

ADDITIONAL REMARKS: Det Limits must meet RIDEC Residential Cleanup Criteria

COOLER TEMP: 3°C

WHITE: LABORATORY COPY YELLOW: REPORT COPY PINK: CLIENT'S COPY

MITKEM CORPORATION

May 24, 2000

Foster Wheeler Environmental Corp.
42 Defense Highway, Pier One
Middletown, RI 70729
Attn: Mr. Josh Holden

RE: Client Project: 0060 S42-5 SUMP PIT, 5/16-17 Samples
Lab Project #: 70729

Dear Mr. Holden:

Enclosed please find the data report of the required analyses for the samples associated with the above referenced project. If you have any questions regarding this report, please call me.

We appreciate your business.

Sincerely,

Edward A. Lawler
Laboratory Operations Manager

175 Metro Center Boulevard • Warwick, Rhode Island 02886-1755
(401) 732-3400 • Fax (401) 732-3499 • email: mitkem@mitkem.com

MITKEM CORPORATION

Client: Foster Wheeler Environmental

Client Project: S42-5 Sump Pit, 5/17-17 Samples

Lab Project: 70729

Date samples received: 5/17/00

Project Narrative

This data report includes the analysis results for four (4) soil samples that were received from Foster Wheeler Environmental on May 17, 2000. Analyses were performed per specification in the Chain of Custody form. For reference, a copy of the Mitkem Sample Log-In form is included for cross-referencing the client sample ID and laboratory sample ID.

All of the analyses were performed according to method specifications. Results for arsenic are reported to the laboratory method detection limit to achieve project objectives. The reporting limit for selenium is elevated due to sample matrix interference. No other unusual occurrences were noted during sample analysis.

This data report has been reviewed and is authorized for release as evidenced by the signature below.

Edward A. Lawler
Laboratory Operations Manager

Data Flag/Qualifiers:

J This flag indicates an estimated value due to either
- the compound was detected at below the Reporting Limit, or
- estimated concentration for Tentatively Identified Compound

B For organic analyses, this flag indicates the analyte was also detected in the associated Method Blank. . The B flag has an alternative meaning for CLP-type metals analyses, indicating a "trace" concentration below the normal reporting limit and above the detection limit.

D This flag indicates the analyte concentration was obtained from a diluted analysis

E This flag indicates the analyte concentration exceeded the Calibration Range

P This flag is used for Pesticides/PCB/Herbicide analyte when there is a greater than 40% difference for detected concentration between the two GC columns used for Primary and Confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is reported in the Analysis Report.

U Not Detected. This compound was analyzed-for but not detected. Reporting limit is the value listed.

MITKEM CORPORATION

Analysis Report: Total Petroleum Hydrocarbons

Client: Foster Wheeler Environmental Corp.
Analysis: Method 8100M / 8015M
Matrix: Soil

Concentration in: mg/kg, dry weight basis

Lab ID	Client ID	Result	Reporting Limit	% Solid	p-Terphenyl Surrogate Recovery %	Analysis Date
70729001	S42SWE	ND	15	88	60	5/18/00
70729002	S42BOT	ND	32	83	65	5/18/00
70729003	S42SWS	ND	31	86	69	5/18/00
70729004	S42SWN	130	29	91	72	5/18/00

QA/QC

Method Blank				
F0518-BS1	ND	13	64	5/18/00
Lab Control Sample (% Recovery)				
F0518-LS1	88		67	5/18/00

ND = Not Detected

The samples were quantitated using diesel fuel as standard.

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	S42SWE	Concentration in:	mg/kg, dry weight basis
Lab ID:	70729001	Analysis Date:	5/19/00
Matrix:	Soil, 87% Solid	Analysis Method:	7471A (Mercury) 6010B (Others)

Analyte	Results	Reporting Limit
Arsenic	21	0.4 *
Barium	22	20
Cadmium	1.9	0.5
Chromium	13	2
Lead	10	1
Mercury	ND	0.1
Selenium	ND	4 **
Silver	3	3

QC Batch: 0518 PBW

*Reported to MDL.
**Elevated due to sample matrix effects.

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	S42BOT	Concentration in:	mg/kg, dry weight basis
Lab ID:	70729002	Analysis Date:	5/19/00
Matrix:	Soil, 84% Solid	Analysis Method:	7471A (Mercury) 6010B (Others)

Analyte	Results	Reporting Limit
Arsenic	16	0.4 *
Barium	28	20
Cadmium	1.7	0.5
Chromium	13	2
Lead	15	1
Mercury	ND	0.1
Selenium	ND	3 **
Silver	ND	3

QC Batch: 0518 PBW

*Reported to MDL.
**Elevated due to sample matrix effects.

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	S42SWS	Concentration in:	mg/kg, dry weight basis
Lab ID:	70729003	Analysis Date:	5/19/00
Matrix:	Soil, 87% Solid	Analysis Method:	7471A (Mercury) 6010B (Others)

Analyte	Results	Reporting Limit
Arsenic	21	0.4 *
Barium	25	20
Cadmium	1.9	0.5
Chromium	13	2
Lead	17	1
Mercury	ND	0.1
Selenium	ND	2
Silver	ND	3

QC Batch: 0518 PBW

ND = Not Detected

*Reported to MDL

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	S42SWN	Concentration in:	mg/kg, dry weight basis
Lab ID:	70729004	Analysis Date:	5/19/00
Matrix:	Soil, 89% Solid	Analysis Method:	7471A (Mercury) 6010B (Others)

Analyte	Results	Reporting Limit
Arsenic	22	0.4 *
Barium	37	20
Cadmium	2.0	0.5
Chromium	15	2
Lead	26	1
Mercury	ND	0.1
Selenium	ND	4 **
Silver	3	3

QC Batch: 0518 PBW

*Reported to MDL.

**Elevated due to sample matrix effects.

ND=Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Prep Blank, 0518PBW

Concentration in: mg/kg
Analysis Date: 5/19/00
Analysis Method: 7471A (Mercury)
6010B (Others)

Analyte	Results	Reporting Limit
Arsenic	ND	0.4 *
Barium	ND	20
Cadmium	ND	0.5
Chromium	ND	2
Lead	ND	1
Mercury	ND	0.1
Selenium	ND	2
Silver	ND	3

QC Batch: 0518 PBW

*Reported to MDL.

ND=Not Detected

70729-Prep Blank

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:		Analysis Date:	5/19/00
Lab ID:	Lab Control Sample, 0518LCSS	Analysis Method:	7471A (Mercury)
Matrix:	Soil		6010B (Others)

Analyte	% Recovery
Arsenic	100
Barium	95
Cadmium	99
Chromium	93
Lead	99
Mercury	121
Selenium	93
Silver	92

QC Batch: 0518 PBS

70729-LCS

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S42SWE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix: (soil/water) SOIL Lab Sample ID: 70729001

Sample wt/vol: 9.7 (g/mL) G Lab File ID: V6A4363

Level: (low/med) LOW Date Received: 05/17/00

% Moisture: not dec. 12 Date Analyzed: 05/21/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	3	U
74-87-3	Chloromethane	3	U
75-01-4	Vinyl Chloride	3	U
74-83-9	Bromomethane	3	U
75-00-3	Chloroethane	3	U
75-69-4	Trichlorofluoromethane	3	U
75-35-4	1,1-Dichloroethene	3	U
67-64-1	Acetone	42	B
74-88-4	Iodomethane	3	U
75-15-0	Carbon Disulfide	3	U
75-09-2	Methylene Chloride	3	U
156-60-5	trans-1,2-Dichloroethene	3	U
1634-04-4	Methyl tert-butyl ether	3	U
75-34-3	1,1-Dichloroethane	3	U
108-05-4	Vinyl acetate	3	U
78-93-3	2-Butanone	8	
156-59-2	cis-1,2-Dichloroethene	3	U
590-20-7	2,2-Dichloropropane	3	U
74-97-5	Bromochloromethane	3	U
67-66-3	Chloroform	3	U
71-55-6	1,1,1-Trichloroethane	3	U
563-58-6	1,1-Dichloropropene	3	U
56-23-5	Carbon Tetrachloride	3	U
107-06-2	1,2-Dichloroethane	3	U
71-43-2	Benzene	3	U
79-01-6	Trichloroethene	3	U
78-87-5	1,2-Dichloropropane	3	U
74-95-3	Dibromomethane	3	U
75-27-4	Bromodichloromethane	3	U
110-75-8	2-Chloroethyl vinyl ether	3	U
10061-01-5	cis-1,3-Dichloropropene	3	U
108-10-1	4-Methyl-2-pentanone	3	U
108-88-3	Toluene	3	U
10061-02-6	trans-1,3-Dichloropropene	3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S42SWE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix: (soil/water) SOIL Lab Sample ID: 70729001

Sample wt/vol: 9.7 (g/mL) G Lab File ID: V6A4363

Level: (low/med) LOW Date Received: 05/17/00

% Moisture: not dec. 12 Date Analyzed: 05/21/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-00-5	1,1,2-Trichloroethane	3	U
142-28-9	1,3-Dichloropropane	3	U
127-18-4	Tetrachloroethene	3	U
591-78-6	2-Hexanone	3	U
124-48-1	Dibromochloromethane	3	U
106-93-4	1,2-Dibromoethane	3	U
108-90-7	Chlorobenzene	3	U
630-20-6	1,1,1,2-Tetrachloroethane	3	U
100-41-4	Ethylbenzene	3	U
1330-20-7	Xylene (Total)	3	U
100-42-5	Styrene	3	U
75-25-2	Bromoform	3	U
98-82-8	Isopropylbenzene	3	U
79-34-5	1,1,2,2-Tetrachloroethane	3	U
108-86-1	Bromobenzene	3	U
96-18-4	1,2,3-Trichloropropane	3	U
103-65-1	n-Propylbenzene	3	U
95-49-8	2-Chlorotoluene	3	U
108-67-8	1,3,5-Trimethylbenzene	3	U
106-43-4	4-Chlorotoluene	3	U
98-06-6	tert-Butylbenzene	3	U
95-63-6	1,2,4-Trimethylbenzene	3	U
135-98-8	sec-Butylbenzene	3	U
99-87-6	4-Isopropyltoluene	3	U
541-73-1	1,3-Dichlorobenzene	3	U
106-46-7	1,4-Dichlorobenzene	3	U
104-51-8	n-Butylbenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	3	U
120-82-1	1,2,4-Trichlorobenzene	3	U
87-68-3	Hexachlorobutadiene	3	U
91-20-3	Naphthalene	2	J
87-61-6	1,2,3-Trichlorobenzene	3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S42BOT

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix: (soil/water) SOIL Lab Sample ID: 70729002

Sample wt/vol: 9.3 (g/mL) G Lab File ID: V6A4364

Level: (low/med) LOW Date Received: 05/17/00

% Moisture: not dec. 17 Date Analyzed: 05/21/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	3	U
74-87-3	Chloromethane	3	U
75-01-4	Vinyl Chloride	3	U
74-83-9	Bromomethane	3	U
75-00-3	Chloroethane	3	U
75-69-4	Trichlorofluoromethane	3	U
75-35-4	1,1-Dichloroethene	3	U
67-64-1	Acetone	20	B
74-88-4	Iodomethane	3	U
75-15-0	Carbon Disulfide	3	U
75-09-2	Methylene Chloride	3	U
156-60-5	trans-1,2-Dichloroethene	3	U
1634-04-4	Methyl tert-butyl ether	3	U
75-34-3	1,1-Dichloroethane	3	U
108-05-4	Vinyl acetate	3	U
78-93-3	2-Butanone	5	
156-59-2	cis-1,2-Dichloroethene	3	U
590-20-7	2,2-Dichloropropane	3	U
74-97-5	Bromochloromethane	3	U
67-66-3	Chloroform	3	U
71-55-6	1,1,1-Trichloroethane	3	U
563-58-6	1,1-Dichloropropene	3	U
56-23-5	Carbon Tetrachloride	3	U
107-06-2	1,2-Dichloroethane	3	U
71-43-2	Benzene	3	U
79-01-6	Trichloroethene	3	U
78-87-5	1,2-Dichloropropane	3	U
74-95-3	Dibromomethane	3	U
75-27-4	Bromodichloromethane	3	U
110-75-8	2-Chloroethyl vinyl ether	3	U
10061-01-5	cis-1,3-Dichloropropene	3	U
108-10-1	4-Methyl-2-pentanone	3	U
108-88-3	Toluene	3	U
10061-02-6	trans-1,3-Dichloropropene	3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S42BOT

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix: (soil/water) SOIL Lab Sample ID: 70729002

Sample wt/vol: 9.3 (g/mL) G Lab File ID: V6A4364

Level: (low/med) LOW Date Received: 05/17/00

% Moisture: not dec. 17 Date Analyzed: 05/21/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-00-5	1,1,2-Trichloroethane	3	U
142-28-9	1,3-Dichloropropane	3	U
127-18-4	Tetrachloroethene	3	U
591-78-6	2-Hexanone	3	U
124-48-1	Dibromochloromethane	3	U
106-93-4	1,2-Dibromoethane	3	U
108-90-7	Chlorobenzene	3	U
630-20-6	1,1,1,2-Tetrachloroethane	3	U
100-41-4	Ethylbenzene	3	U
1330-20-7	Xylene (Total)	3	U
100-42-5	Styrene	3	U
75-25-2	Bromoform	3	U
98-82-8	Isopropylbenzene	3	U
79-34-5	1,1,2,2-Tetrachloroethane	3	U
108-86-1	Bromobenzene	3	U
96-18-4	1,2,3-Trichloropropane	3	U
103-65-1	n-Propylbenzene	3	U
95-49-8	2-Chlorotoluene	3	U
108-67-8	1,3,5-Trimethylbenzene	3	U
106-43-4	4-Chlorotoluene	3	U
98-06-6	tert-Butylbenzene	3	U
95-63-6	1,2,4-Trimethylbenzene	3	U
135-98-8	sec-Butylbenzene	3	U
99-87-6	4-Isopropyltoluene	3	U
541-73-1	1,3-Dichlorobenzene	3	U
106-46-7	1,4-Dichlorobenzene	3	U
104-51-8	n-Butylbenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	3	U
120-82-1	1,2,4-Trichlorobenzene	3	U
87-68-3	Hexachlorobutadiene	3	U
91-20-3	Naphthalene	3	U
87-61-6	1,2,3-Trichlorobenzene	3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S42SWS

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix: (soil/water) SOIL Lab Sample ID: 70729003

Sample wt/vol: 8.2 (g/mL) G Lab File ID: V6A4365

Level: (low/med) LOW Date Received: 05/17/00

% Moisture: not dec. 14 Date Analyzed: 05/21/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	4	U
74-87-3	Chloromethane	4	U
75-01-4	Vinyl Chloride	4	U
74-83-9	Bromomethane	4	U
75-00-3	Chloroethane	4	U
75-69-4	Trichlorofluoromethane	4	U
75-35-4	1,1-Dichloroethene	4	U
67-64-1	Acetone	61	B
74-88-4	Iodomethane	4	U
75-15-0	Carbon Disulfide	4	U
75-09-2	Methylene Chloride	4	U
156-60-5	trans-1,2-Dichloroethene	4	U
1634-04-4	Methyl tert-butyl ether	4	U
75-34-3	1,1-Dichloroethane	4	U
108-05-4	Vinyl acetate	4	U
78-93-3	2-Butanone	9	
156-59-2	cis-1,2-Dichloroethene	4	U
590-20-7	2,2-Dichloropropane	4	U
74-97-5	Bromochloromethane	4	U
67-66-3	Chloroform	4	U
71-55-6	1,1,1-Trichloroethane	4	U
563-58-6	1,1-Dichloropropene	4	U
56-23-5	Carbon Tetrachloride	4	U
107-06-2	1,2-Dichloroethane	4	U
71-43-2	Benzene	4	U
79-01-6	Trichloroethene	4	U
78-87-5	1,2-Dichloropropane	4	U
74-95-3	Dibromomethane	4	U
75-27-4	Bromodichloromethane	4	U
110-75-8	2-Chloroethyl vinyl ether	4	U
10061-01-5	cis-1,3-Dichloropropene	4	U
108-10-1	4-Methyl-2-pentanone	4	U
108-88-3	Toluene	4	U
10061-02-6	trans-1,3-Dichloropropene	4	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S42SWS

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix: (soil/water) SOIL Lab Sample ID: 70729003

Sample wt/vol: 8.2 (g/mL) G Lab File ID: V6A4365

Level: (low/med) LOW Date Received: 05/17/00

% Moisture: not dec. 14 Date Analyzed: 05/21/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-00-5	1,1,2-Trichloroethane	4	U
142-28-9	1,3-Dichloropropane	4	U
127-18-4	Tetrachloroethene	4	U
591-78-6	2-Hexanone	4	U
124-48-1	Dibromochloromethane	4	U
106-93-4	1,2-Dibromoethane	4	U
108-90-7	Chlorobenzene	4	U
630-20-6	1,1,1,2-Tetrachloroethane	4	U
100-41-4	Ethylbenzene	4	U
1330-20-7	Xylene (Total)	4	U
100-42-5	Styrene	4	U
75-25-2	Bromoform	4	U
98-82-8	Isopropylbenzene	4	U
79-34-5	1,1,2,2-Tetrachloroethane	4	U
108-86-1	Bromobenzene	4	U
96-18-4	1,2,3-Trichloropropane	4	U
103-65-1	n-Propylbenzene	4	U
95-49-8	2-Chlorotoluene	4	U
108-67-8	1,3,5-Trimethylbenzene	4	U
106-43-4	4-Chlorotoluene	4	U
98-06-6	tert-Butylbenzene	4	U
95-63-6	1,2,4-Trimethylbenzene	4	U
135-98-8	sec-Butylbenzene	4	U
99-87-6	4-Isopropyltoluene	4	U
541-73-1	1,3-Dichlorobenzene	4	U
106-46-7	1,4-Dichlorobenzene	4	U
104-51-8	n-Butylbenzene	4	U
95-50-1	1,2-Dichlorobenzene	4	U
96-12-8	1,2-Dibromo-3-chloropropane	4	U
120-82-1	1,2,4-Trichlorobenzene	4	U
87-68-3	Hexachlorobutadiene	4	U
91-20-3	Naphthalene	4	U
87-61-6	1,2,3-Trichlorobenzene	4	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S42SWN

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix: (soil/water) SOIL Lab Sample ID: 70729004

Sample wt/vol: 8.3 (g/mL) G Lab File ID: V6A4366

Level: (low/med) LOW Date Received: 05/17/00

% Moisture: not dec. 9 Date Analyzed: 05/21/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	3	U
74-87-3	Chloromethane	3	U
75-01-4	Vinyl Chloride	3	U
74-83-9	Bromomethane	3	U
75-00-3	Chloroethane	3	U
75-69-4	Trichlorofluoromethane	3	U
75-35-4	1,1-Dichloroethene	3	U
67-64-1	Acetone	35	B
74-88-4	Iodomethane	3	U
75-15-0	Carbon Disulfide	3	U
75-09-2	Methylene Chloride	1	JB
156-60-5	trans-1,2-Dichloroethene	3	U
1634-04-4	Methyl tert-butyl ether	3	U
75-34-3	1,1-Dichloroethane	3	U
108-05-4	Vinyl acetate	3	U
78-93-3	2-Butanone	8	
156-59-2	cis-1,2-Dichloroethene	3	U
590-20-7	2,2-Dichloropropane	3	U
74-97-5	Bromochloromethane	3	U
67-66-3	Chloroform	3	U
71-55-6	1,1,1-Trichloroethane	3	U
563-58-6	1,1-Dichloropropene	3	U
56-23-5	Carbon Tetrachloride	3	U
107-06-2	1,2-Dichloroethane	3	U
71-43-2	Benzene	3	U
79-01-6	Trichloroethene	3	U
78-87-5	1,2-Dichloropropane	3	U
74-95-3	Dibromomethane	3	U
75-27-4	Bromodichloromethane	3	U
110-75-8	2-Chloroethyl vinyl ether	3	U
10061-01-5	cis-1,3-Dichloropropene	3	U
108-10-1	4-Methyl-2-pentanone	3	U
108-88-3	Toluene	3	U
10061-02-6	trans-1,3-Dichloropropene	3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S42SWN

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix: (soil/water) SOIL Lab Sample ID: 70729004

Sample wt/vol: 8.3 (g/mL) G Lab File ID: V6A4366

Level: (low/med) LOW Date Received: 05/17/00

% Moisture: not dec. 9 Date Analyzed: 05/21/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-00-5	1,1,2-Trichloroethane	3	U
142-28-9	1,3-Dichloropropane	3	U
127-18-4	Tetrachloroethene	3	U
591-78-6	2-Hexanone	3	U
124-48-1	Dibromochloromethane	3	U
106-93-4	1,2-Dibromoethane	3	U
108-90-7	Chlorobenzene	3	U
630-20-6	1,1,1,2-Tetrachloroethane	3	U
100-41-4	Ethylbenzene	3	U
1330-20-7	Xylene (Total)	1	J
100-42-5	Styrene	3	U
75-25-2	Bromoform	3	U
98-82-8	Isopropylbenzene	3	U
79-34-5	1,1,2,2-Tetrachloroethane	3	U
108-86-1	Bromobenzene	3	U
96-18-4	1,2,3-Trichloropropane	3	U
103-65-1	n-Propylbenzene	3	U
95-49-8	2-Chlorotoluene	3	U
108-67-8	1,3,5-Trimethylbenzene	3	U
106-43-4	4-Chlorotoluene	3	U
98-06-6	tert-Butylbenzene	3	U
95-63-6	1,2,4-Trimethylbenzene	3	U
135-98-8	sec-Butylbenzene	3	U
99-87-6	4-Isopropyltoluene	3	U
541-73-1	1,3-Dichlorobenzene	3	U
106-46-7	1,4-Dichlorobenzene	3	U
104-51-8	n-Butylbenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	3	U
120-82-1	1,2,4-Trichlorobenzene	3	U
87-68-3	Hexachlorobutadiene	3	U
91-20-3	Naphthalene	3	U
87-61-6	1,2,3-Trichlorobenzene	3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK6L

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix: (soil/water) SOIL Lab Sample ID: V6B0521A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V6A4352

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 05/21/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (mL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	5	U
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	4	J
74-88-4	Iodomethane	5	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	2	J
156-60-5	trans-1,2-Dichloroethene	5	U
1634-04-4	Methyl tert-butyl ether	5	U
75-34-3	1,1-Dichloroethane	5	U
108-05-4	Vinyl acetate	5	U
78-93-3	2-Butanone	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
590-20-7	2,2-Dichloropropane	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
563-58-6	1,1-Dichloropropene	5	U
56-23-5	Carbon Tetrachloride	5	U
107-06-2	1,2-Dichloroethane	5	U
71-43-2	Benzene	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
110-75-8	2-Chloroethyl vinyl ether	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK6L

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix: (soil/water) SOIL Lab Sample ID: V6B0521A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V6A4352

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 05/21/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (mL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-00-5	1,1,2-Trichloroethane	5	U
142-28-9	1,3-Dichloropropane	5	U
127-18-4	Tetrachloroethene	2	J
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	5	U
108-90-7	Chlorobenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (Total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
98-82-8	Isopropylbenzene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-86-1	Bromobenzene	5	U
96-18-4	1,2,3-Trichloropropane	5	U
103-65-1	n-Propylbenzene	5	U
95-49-8	2-Chlorotoluene	5	U
108-67-8	1,3,5-Trimethylbenzene	5	U
106-43-4	4-Chlorotoluene	5	U
98-06-6	tert-Butylbenzene	5	U
95-63-6	1,2,4-Trimethylbenzene	5	U
135-98-8	sec-Butylbenzene	5	U
99-87-6	4-Isopropyltoluene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
104-51-8	n-Butylbenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
87-68-3	Hexachlorobutadiene	5	U
91-20-3	Naphthalene	5	U
87-61-6	1,2,3-Trichlorobenzene	5	U

2B
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Level: (low/med) LOW

	EPA SAMPLE NO.	SMC1 #	SMC2 (DCE) #	SMC3 (TOL) #	OTHER (BFB) #	TOT OUT
01	VBLK6L	106	94	105	104	0
02	VBLK6LLCS	113	106	104	110	0
03	S42SWE	115	119	106	114	0
04	S42BOT	112	122	107	108	0
05	S42SWS	112	105	104	98	0
06	S42SWN	114	108	105	98	0
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		QC LIMITS
SMC1	= Dibromofluoromethane	(76-133)
SMC2 (DCE)	= 1,2-Dichloroethane-d4	(72-134)
SMC3 (TOL)	= Toluene-d8	(71-115)
OTHER (BFB)	= Bromofluorobenzene	(49-146)

Column to be used to flag recovery values

* Values outside of contract required QC limits

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix Spike - Sample No.: VBLK6L Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	50	0.0	52	104	28-162
Chloromethane	50	0.0	49	98	40-146
Vinyl Chloride	50	0.0	45	90	52-145
Bromomethane	50	0.0	49	98	34-154
Chloroethane	50	0.0	48	96	52-145
Trichlorofluoromethane	50	0.0	58	116	50-151
1,1-Dichloroethene	50	0.0	49	98	58-142
Acetone	50	4	33	58	12-171
Iodomethane	50	0.0	56	112	54-155
Carbon Disulfide	50	0.0	52	104	51-147
Methylene Chloride	50	2	46	88	53-141
trans-1,2-Dichloroethen	50	0.0	52	104	58-140
Methyl tert-butyl ether	50	0.0	40	80	56-144
1,1-Dichloroethane	50	0.0	54	108	60-139
Vinyl acetate	50	0.0	54	108	52-146
2-Butanone	50	0.0	41	82	33-164
cis-1,2-Dichloroethene	50	0.0	51	102	62-140
2,2-Dichloropropane	50	0.0	56	112	58-140
Bromochloromethane	50	0.0	51	102	61-141
Chloroform	50	0.0	54	108	60-140
1,1,1-Trichloroethane	50	0.0	62	124	60-142
1,1-Dichloropropene	50	0.0	51	102	63-141
Carbon Tetrachloride	50	0.0	62	124	60-143
1,2-Dichloroethane	50	0.0	60	120	57-144
Benzene	50	0.0	52	104	62-140
Trichloroethene	50	0.0	52	104	63-136
1,2-Dichloropropane	50	0.0	52	104	62-140
Dibromomethane	50	0.0	58	116	60-144

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix Spike - Sample No.: VBLK6L Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Bromodichloromethane	50	0.0	59	118	60-142
2-Chloroethyl vinyl eth	50	0.0	0.0	0*	48-157
cis-1,3-Dichloropropene	50	0.0	54	108	62-140
4-Methyl-2-pentanone	50	0.0	52	104	44-162
Toluene	50	0.0	50	100	62-141
trans-1,3-Dichloroprope	50	0.0	56	112	60-143
1,1,2-Trichloroethane	50	0.0	52	104	60-144
1,3-Dichloropropane	50	0.0	54	108	58-142
Tetrachloroethene	50	2	51	98	59-140
2-Hexanone	50	0.0	48	96	33-171
Dibromochloromethane	50	0.0	59	118	60-141
1,2-Dibromoethane	50	0.0	52	104	58-144
Chlorobenzene	50	0.0	51	102	61-140
1,1,1,2-Tetrachloroetha	50	0.0	56	112	61-139
Ethylbenzene	50	0.0	52	104	61-139
Xylene (Total)	150	0.0	150	100	61-141
Styrene	50	0.0	51	102	62-141
Bromoform	50	0.0	58	116	56-147
Isopropylbenzene	50	0.0	54	108	59-142
1,1,2,2-Tetrachloroetha	50	0.0	47	94	60-149
Bromobenzene	50	0.0	51	102	58-138
1,2,3-Trichloropropane	50	0.0	52	104	50-148
n-Propylbenzene	50	0.0	47	94	57-141
2-Chlorotoluene	50	0.0	50	100	58-140
1,3,5-Trimethylbenzene	50	0.0	51	102	58-141
4-Chlorotoluene	50	0.0	49	98	58-138
tert-Butylbenzene	50	0.0	51	102	57-142
1,2,4-Trimethylbenzene	50	0.0	50	100	58-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix Spike - Sample No.: VBLK6L Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
sec-Butylbenzene	50	0.0	50	100	55-143
4-Isopropyltoluene	50	0.0	51	102	56-142
1,3-Dichlorobenzene	50	0.0	48	96	59-138
1,4-Dichlorobenzene	50	0.0	50	100	59-138
n-Butylbenzene	50	0.0	51	102	55-143
1,2-Dichlorobenzene	50	0.0	49	98	59-139
1,2-Dibromo-3-chloropro	50	0.0	50	100	37-159
1,2,4-Trichlorobenzene	50	0.0	48	96	52-143
Hexachlorobutadiene	50	0.0	50	100	47-146
Naphthalene	50	0.0	45	90	42-153
1,2,3-Trichlorobenzene	50	0.0	48	96	50-144

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 1 out of 67 outside limits

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK6L

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Lab File ID: V6A4352 Lab Sample ID: V6B0521A

Date Analyzed: 05/21/00 Time Analyzed: 0955

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

Instrument ID: V6

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VBLK6LLCS	V6L0521A	V6A4353	1024
02	S42SWE	70729001	V6A4363	1518
03	S42BOT	70729002	V6A4364	1546
04	S42SWS	70729003	V6A4365	1615
05	S42SWN	70729004	V6A4366	1643
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COMMENTS:

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S42SWE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix: (soil/water) SOIL Lab Sample ID: 70729001

Sample wt/vol: 35.4 (g/mL) G Lab File ID: S2B4814

Level: (low/med) LOW Date Received: 05/17/00

% Moisture: 12 decanted: (Y/N) N Date Extracted: 05/18/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/20/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	320	U
111-44-4	bis(2-Chloroethyl)Ether	320	U
95-57-8	2-Chlorophenol	320	U
541-73-1	1,3-Dichlorobenzene	320	U
106-46-7	1,4-Dichlorobenzene	320	U
95-50-1	1,2-Dichlorobenzene	320	U
95-48-7	2-Methylphenol	320	U
108-60-1	2,2'-oxybis(1-Chloropropane)	320	U
106-44-5	4-Methylphenol	320	U
621-64-7	N-Nitroso-di-n-propylamine	320	U
67-72-1	Hexachloroethane	320	U
98-95-3	Nitrobenzene	320	U
78-59-1	Isophorone	320	U
88-75-5	2-Nitrophenol	320	U
105-67-9	2,4-Dimethyphenol	320	U
120-83-2	2,4-Dichlorophenol	320	U
120-82-1	1,2,4-Trichlorobenzene	320	U
91-20-3	Naphthalene	320	U
106-47-8	4-Chloroaniline	320	U
111-91-1	bis(2-Chloroethoxy)methane	320	U
87-68-3	Hexachlorobutadiene	320	U
59-50-7	4-Chloro-3-Methylphenol	320	U
91-57-6	2-Methylnaphthalene	320	U
77-47-4	Hexachlorocyclopentadiene	320	U
88-06-2	2,4,6-Trichlorophenol	320	U
95-95-4	2,4,5-Trichlorophenol	640	U
91-58-7	2-Chloronaphthalene	320	U
88-74-4	2-Nitroaniline	640	U
131-11-3	Dimethylphthalate	320	U
208-96-8	Acenaphthylene	320	U
606-20-2	2,6-Dinitrotoluene	320	U
99-09-2	3-Nitroaniline	640	U
83-32-9	Acenaphthene	320	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S42BOT

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix: (soil/water) SOIL Lab Sample ID: 70729002

Sample wt/vol: 35.2 (g/mL) G Lab File ID: S2B4815

Level: (low/med) LOW Date Received: 05/17/00

% Moisture: 17 decanted: (Y/N) N Date Extracted: 05/18/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/20/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)Ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	2,2'-oxybis(1-Chloropropane)	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethyphenol	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-Methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	690	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	690	U
131-11-3	Dimethylphthalate	340	U
208-96-8	Acenaphthylene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
99-09-2	3-Nitroaniline	690	U
83-32-9	Acenaphthene	340	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S42BOT

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix: (soil/water) SOIL Lab Sample ID: 70729002

Sample wt/vol: 35.2 (g/mL) G Lab File ID: S2B4815

Level: (low/med) LOW Date Received: 05/17/00

% Moisture: 17 decanted: (Y/N) N Date Extracted: 05/18/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/20/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	690	U
100-02-7	4-Nitrophenol	690	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	690	U
534-52-1	4,6-Dinitro-2-methylphenol	690	U
86-30-6	N-Nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	690	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
86-74-8	Carbazole	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	340	U
56-55-3	Benzo(a)anthracene	340	U
218-01-9	Chrysene	340	U
117-81-7	bis(2-Ethylhexyl)phthalate	340	U
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	340	U
53-70-3	Dibenzo(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S42SWS

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix: (soil/water) SOIL Lab Sample ID: 70729003

Sample wt/vol: 35.0 (g/mL) G Lab File ID: S2B4816

Level: (low/med) LOW Date Received: 05/17/00

% Moisture: 14 decanted: (Y/N) N Date Extracted: 05/18/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/20/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)Ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethyphenol	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-Methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	670	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	670	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	670	U
83-32-9	Acenaphthene	330	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S42SWS

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix: (soil/water) SOIL Lab Sample ID: 70729003

Sample wt/vol: 35.0 (g/mL) G Lab File ID: S2B4816

Level: (low/med) LOW Date Received: 05/17/00

% Moisture: 14 decanted: (Y/N) N Date Extracted: 05/18/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/20/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	670	U
100-02-7	4-Nitrophenol	670	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	670	U
534-52-1	4,6-Dinitro-2-methylphenol	670	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	670	U
85-01-8	Phenanthrene	130	J
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	150	J
129-00-0	Pyrene	110	J
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	75	J
218-01-9	Chrysene	90	J
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	71	J
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	49	J
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S42SWN

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix: (soil/water) SOIL Lab Sample ID: 70729004

Sample wt/vol: 35.3 (g/mL) G Lab File ID: S3A3184

Level: (low/med) LOW Date Received: 05/17/00

% Moisture: 9 decanted: (Y/N) N Date Extracted: 05/18/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/22/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	310	U
111-44-4	bis(2-Chloroethyl)Ether	310	U
95-57-8	2-Chlorophenol	310	U
541-73-1	1,3-Dichlorobenzene	310	U
106-46-7	1,4-Dichlorobenzene	310	U
95-50-1	1,2-Dichlorobenzene	310	U
95-48-7	2-Methylphenol	310	U
108-60-1	2,2'-oxybis(1-Chloropropane)	310	U
106-44-5	4-Methylphenol	310	U
621-64-7	N-Nitroso-di-n-propylamine	310	U
67-72-1	Hexachloroethane	310	U
98-95-3	Nitrobenzene	310	U
78-59-1	Isophorone	310	U
88-75-5	2-Nitrophenol	310	U
105-67-9	2,4-Dimethylphenol	310	U
120-83-2	2,4-Dichlorophenol	310	U
120-82-1	1,2,4-Trichlorobenzene	310	U
91-20-3	Naphthalene	310	U
106-47-8	4-Chloroaniline	310	U
111-91-1	bis(2-Chloroethoxy)methane	310	U
87-68-3	Hexachlorobutadiene	310	U
59-50-7	4-Chloro-3-Methylphenol	310	U
91-57-6	2-Methylnaphthalene	310	U
77-47-4	Hexachlorocyclopentadiene	310	U
88-06-2	2,4,6-Trichlorophenol	310	U
95-95-4	2,4,5-Trichlorophenol	620	U
91-58-7	2-Chloronaphthalene	310	U
88-74-4	2-Nitroaniline	620	U
131-11-3	Dimethylphthalate	310	U
208-96-8	Acenaphthylene	43	J
606-20-2	2,6-Dinitrotoluene	310	U
99-09-2	3-Nitroaniline	620	U
83-32-9	Acenaphthene	41	J

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S42SWN

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix: (soil/water) SOIL Lab Sample ID: 70729004

Sample wt/vol: 35.3 (g/mL) G Lab File ID: S3A3184

Level: (low/med) LOW Date Received: 05/17/00

% Moisture: 9 decanted: (Y/N) N Date Extracted: 05/18/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/22/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	620	U
100-02-7	4-Nitrophenol	620	U
132-64-9	Dibenzofuran	310	U
121-14-2	2,4-Dinitrotoluene	310	U
84-66-2	Diethylphthalate	310	U
7005-72-3	4-Chlorophenyl-phenylether	310	U
86-73-7	Fluorene	44	J
100-01-6	4-Nitroaniline	620	U
534-52-1	4,6-Dinitro-2-methylphenol	620	U
86-30-6	N-Nitrosodiphenylamine (1)	310	U
101-55-3	4-Bromophenyl-phenylether	310	U
118-74-1	Hexachlorobenzene	310	U
87-86-5	Pentachlorophenol	620	U
85-01-8	Phenanthrene	470	
120-12-7	Anthracene	120	J
86-74-8	Carbazole	53	J
84-74-2	Di-n-butylphthalate	310	U
206-44-0	Fluoranthene	830	
129-00-0	Pyrene	720	
85-68-7	Butylbenzylphthalate	310	U
91-94-1	3,3'-Dichlorobenzidine	310	U
56-55-3	Benzo(a)anthracene	360	
218-01-9	Chrysene	460	
117-81-7	bis(2-Ethylhexyl)phthalate	73	J
117-84-0	Di-n-octylphthalate	310	U
205-99-2	Benzo(b)fluoranthene	470	
207-08-9	Benzo(k)fluoranthene	150	J
50-32-8	Benzo(a)pyrene	370	
193-39-5	Indeno(1,2,3-cd)pyrene	240	J
53-70-3	Dibenzo(a,h)anthracene	310	U
191-24-2	Benzo(g,h,i)perylene	250	J

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK3U

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix: (soil/water) SOIL Lab Sample ID: S0518-BS1

Sample wt/vol: 35.0 (g/mL) G Lab File ID: S3A3178

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 05/18/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/22/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	280	U
111-44-4	bis(2-Chloroethyl)Ether	280	U
95-57-8	2-Chlorophenol	280	U
541-73-1	1,3-Dichlorobenzene	280	U
106-46-7	1,4-Dichlorobenzene	280	U
95-50-1	1,2-Dichlorobenzene	280	U
95-48-7	2-Methylphenol	280	U
108-60-1	2,2'-oxybis(1-Chloropropane)	280	U
106-44-5	4-Methylphenol	280	U
621-64-7	N-Nitroso-di-n-propylamine	280	U
67-72-1	Hexachloroethane	280	U
98-95-3	Nitrobenzene	280	U
78-59-1	Isophorone	280	U
88-75-5	2-Nitrophenol	280	U
105-67-9	2,4-Dimethylphenol	280	U
120-83-2	2,4-Dichlorophenol	280	U
120-82-1	1,2,4-Trichlorobenzene	280	U
91-20-3	Naphthalene	280	U
106-47-8	4-Chloroaniline	280	U
111-91-1	bis(2-Chloroethoxy)methane	280	U
87-68-3	Hexachlorobutadiene	280	U
59-50-7	4-Chloro-3-Methylphenol	280	U
91-57-6	2-Methylnaphthalene	280	U
77-47-4	Hexachlorocyclopentadiene	280	U
88-06-2	2,4,6-Trichlorophenol	280	U
95-95-4	2,4,5-Trichlorophenol	570	U
91-58-7	2-Chloronaphthalene	280	U
88-74-4	2-Nitroaniline	570	U
131-11-3	Dimethylphthalate	280	U
208-96-8	Acenaphthylene	280	U
606-20-2	2,6-Dinitrotoluene	280	U
99-09-2	3-Nitroaniline	570	U
83-32-9	Acenaphthene	280	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK3U

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix: (soil/water) SOIL Lab Sample ID: S0518-BS1

Sample wt/vol: 35.0 (g/mL) G Lab File ID: S3A3178

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 05/18/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/22/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	570	U
100-02-7	4-Nitrophenol	570	U
132-64-9	Dibenzofuran	280	U
121-14-2	2,4-Dinitrotoluene	280	U
84-66-2	Diethylphthalate	280	U
7005-72-3	4-Chlorophenyl-phenylether	280	U
86-73-7	Fluorene	280	U
100-01-6	4-Nitroaniline	570	U
534-52-1	4,6-Dinitro-2-methylphenol	570	U
86-30-6	N-Nitrosodiphenylamine (1)	280	U
101-55-3	4-Bromophenyl-phenylether	280	U
118-74-1	Hexachlorobenzene	280	U
87-86-5	Pentachlorophenol	570	U
85-01-8	Phenanthrene	280	U
120-12-7	Anthracene	280	U
86-74-8	Carbazole	280	U
84-74-2	Di-n-butylphthalate	280	U
206-44-0	Fluoranthene	280	U
129-00-0	Pyrene	280	U
85-68-7	Butylbenzylphthalate	280	U
91-94-1	3,3'-Dichlorobenzidine	280	U
56-55-3	Benzo(a)anthracene	280	U
218-01-9	Chrysene	280	U
117-81-7	bis(2-Ethylhexyl)phthalate	280	U
117-84-0	Di-n-octylphthalate	280	U
205-99-2	Benzo(b)fluoranthene	280	U
207-08-9	Benzo(k)fluoranthene	280	U
50-32-8	Benzo(a)pyrene	280	U
193-39-5	Indeno(1,2,3-cd)pyrene	280	U
53-70-3	Dibenzo(a,h)anthracene	280	U
191-24-2	Benzo(g,h,i)perylene	280	U

(1) - Cannot be separated from Diphenylamine

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Level: (low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	S7 (2CP)#	S8 (DCB)#	TOT OUT
01	S42SWE	77	87	96	75	75	69	76	85	0
02	S42BOT	76	86	92	74	74	75	76	83	0
03	S42SWS	70	80	82	67	68	68	68	76	0
04	SBLK3U	76	77	82	69	55	50	57	76	0
05	SBLK3ULCS	80	81	83	81	77	102	75	80	0
06	S42SWN	72	78	84	78	72	106	70	68	0
07										
08										
09										
10										
11										
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		QC LIMITS	
S1 (NBZ)	= Nitrobenzene-d5	(36-128)	
S2 (FBP)	= 2-Fluorobiphenyl	(42-123)	
S3 (TPH)	= Terphenyl-d14	(41-132)	
S4 (PHL)	= Phenol-d5	(34-119)	
S5 (2FP)	= 2-Fluorophenol	(22-120)	
S6 (TBP)	= 2,4,6-Tribromophenol	(32-133)	
S7 (2CP)	= 2-Chlorophenol-d4	(35-124)	(advisory)
S8 (DCB)	= 1,2-Dichlorobenzene-d4	(27-131)	(advisory)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix Spike - Sample No.: SBLK3U Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Phenol	1700	0.0	1400	82	38-109
bis(2-Chloroethyl)Ether	1700	0.0	1300	76	26-119
2-Chlorophenol	1700	0.0	1300	76	49-104
1,3-Dichlorobenzene	1700	0.0	1300	76	42- 99
1,4-Dichlorobenzene	1700	0.0	1300	76	43-100
1,2-Dichlorobenzene	1700	0.0	1300	76	47-100
2-Methylphenol	1700	0.0	1200	70	12-128
2,2'-oxybis(1-Chloropro	1700	0.0	1400	82	35-124
4-Methylphenol	1700	0.0	1200	70	1-138
N-Nitroso-di-n-prop.(1)	1700	0.0	1400	82	44-113
Hexachloroethane	1700	0.0	1200	70	43-103
Nitrobenzene	1700	0.0	1300	76	55-103
Isophorone	1700	0.0	1400	82	41-100
2-Nitrophenol	1700	0.0	1400	82	53-104
2,4-Dimethylphenol	1700	0.0	540	32*	50-150
2,4-Dichlorophenol	1700	0.0	1500	88	28-129
1,2,4-Trichlorobenzene	1700	0.0	1400	82	51-107
Naphthalene	1700	0.0	1400	82	54-104
4-Chloroaniline	1700	0.0	600	35	0- 92
bis(2-Chloroethoxy)meth	1700	0.0	1300	76	46-111
Hexachlorobutadiene	1700	0.0	1500	88	49-110
4-Chloro-3-Methylphenol	1700	0.0	1300	76	0-161
2-Methylnaphthalene	1700	0.0	1300	76	46-116
Hexachlorocyclopentadie	1700	0.0	1200	70	21-137
2,4,6-Trichlorophenol	1700	0.0	1400	82	4-140
2,4,5-Trichlorophenol	1700	0.0	1300	76	3-156
2-Chloronaphthalene	1700	0.0	1300	76	60-107
2-Nitroaniline	1700	0.0	890	52	50-114

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix Spike - Sample No.: SBLK3U Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Dimethylphthalate	1700	0.0	1300	76	61-111
Acenaphthylene	1700	0.0	1300	76	61-106
2,6-Dinitrotoluene	1700	0.0	1400	82	54-116
3-Nitroaniline	1700	0.0	830	49	0-126
Acenaphthene	1700	0.0	1300	76	62-107
2,4-Dinitrophenol	1700	0.0	1500	88	31-119
4-Nitrophenol	1700	0.0	1200	70	0-166
Dibenzofuran	1700	0.0	1400	82	63-109
2,4-Dinitrotoluene	1700	0.0	1400	82	58-115
Diethylphthalate	1700	0.0	1200	70	58-116
4-Chlorophenyl-phenylet	1700	0.0	1500	88	60-113
Fluorene	1700	0.0	1400	82	61-112
4-Nitroaniline	1700	0.0	940	55	0-135
4,6-Dinitro-2-methylphe	1700	0.0	1500	88	30-128
N-Nitrosodiphenylamine	1700	0.0	1300	76	0-148
4-Bromophenyl-phenyleth	1700	0.0	1400	82	65-118
Hexachlorobenzene	1700	0.0	1500	88	64-120
Pentachlorophenol	1700	0.0	1100	65	0-165
Phenanthrene	1700	0.0	1400	82	66-115
Anthracene	1700	0.0	1200	70	56-144
Carbazole	1700	0.0	1300	76	52-128
Di-n-butylphthalate	1700	0.0	1200	70	69-112
Fluoranthene	1700	0.0	1400	82	65-116
Pyrene	1700	0.0	1400	82	47-138
Butylbenzylphthalate	1700	0.0	1200	70	56-125
3,3'-Dichlorobenzidine	1700	0.0	740	44	0-139
Benzo(a)anthracene	1700	0.0	1300	76	64-116
Chrysene	1700	0.0	1400	82	60-116

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

36 A

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix Spike - Sample No.: SBLK3U Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
bis(2-Ethylhexyl)phthal	1700	0.0	1200	70	55-124
Di-n-octylphthalate	1700	0.0	1300	76	55-133
Benzo(b)fluoranthene	1700	0.0	1400	82	51-128
Benzo(k)fluoranthene	1700	0.0	1400	82	51-139
Benzo(a)pyrene	1700	0.0	1300	76	61-120
Indeno(1,2,3-cd)pyrene	1700	0.0	1500	88	45-123
Dibenzo(a,h)anthracene	1700	0.0	1700	100	46-128
Benzo(g,h,i)perylene	1700	0.0	1500	88	43-128

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 1 out of 64 outside limits

COMMENTS: _____

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK3U

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Lab File ID: S3A3178 Lab Sample ID: S0518-BS1

Instrument ID: S3 Date Extracted: 05/18/00

Matrix: (soil/water) SOIL Date Analyzed: 05/22/00

Level:(low/med) LOW Time Analyzed: 1552

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	S42SWE	70729001	S2B4814	05/20/00
02	S42BOT	70729002	S2B4815	05/20/00
03	S42SWS	70729003	S2B4816	05/20/00
04	SBLK3ULCS	S0518-LS1	S3A3179	05/22/00
05	S42SWN	70729004	S3A3184	05/22/00
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COMMENTS:

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

S42SWE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix: (soil/water) SOIL Lab Sample ID: 70729001

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E1C0558F

% Moisture: 12 decanted: (Y/N) N Date Received: 05/17/00

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 05/18/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/19/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	38	U
11104-28-2------	Aroclor-1221	38	U
1114-16-5-------	Aroclor-1232	38	U
53469-21-9------	Aroclor-1242	38	U
12672-29-6------	Aroclor-1248	38	U
11097-69-1------	Aroclor-1254	38	U
11096-82-5------	Aroclor-1260	38	U

FORM I PCB

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

S42BOT

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix: (soil/water) SOIL Lab Sample ID: 70729002

Sample wt/vol: 30.4 (g/mL) G Lab File ID: E1C0559F

% Moisture: 17 decanted: (Y/N) N Date Received: 05/17/00

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 05/18/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/19/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
1114-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	40	U
11096-82-5	Aroclor-1260	40	U

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

S42SWS

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix: (soil/water) SOIL Lab Sample ID: 70729003

Sample wt/vol: 30.6 (g/mL) G Lab File ID: E1C0560F

% Moisture: 14 decanted: (Y/N) N Date Received: 05/17/00

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 05/18/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/19/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
1114-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U

FORM I PCB

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

S42SWN

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix: (soil/water) SOIL Lab Sample ID: 70729004

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E1C0561F

% Moisture: 9 decanted: (Y/N) N Date Received: 05/17/00

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 05/18/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/19/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	36	U
1114-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	100	
11096-82-5	Aroclor-1260	36	U

FORM I PCB

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

BBLK01

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix: (soil/water) SOIL Lab Sample ID: B0518-BS1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E1C0556F

% Moisture: 0 decanted: (Y/N) N Date Received: _____

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 05/18/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/19/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
1114-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U

FORM I PCB

FORM 2
SOIL PCB SURROGATE RECOVERY

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

GC Column(1): DB-1701 ID: 0.53 (mm) GC Column(2): DB-608 ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	BBLK01	74	74	82	82			0
02	BBLK01LCS	75	72	85	84			0
03	S42SWE	79	83	89	93			0
04	S42BOT	78	80	82	88			0
05	S42SWS	81	82	91	92			0
06	S42SWN	66	73	64	76			0
07								
08								
09								
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ADVISORY
QC LIMITS

S1 (TCX) = Tetrachloro-m-xylene (42-147)
S2 (DCB) = Decachlorobiphenyl (29-155)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

FORM 3
SOIL PCB LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Matrix Spike - Sample No.: BBLK01

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Aroclor-1016	330	0.00	270	82	62-155
Aroclor-1260	330	0.00	270	82	56-173

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 2 outside limits

COMMENTS: _____

FORM 4
PCB METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

BBLK01

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70729

Lab Sample ID: B0518-BS1 Lab File ID: E1C0556F

Matrix (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SONC

Sulfur Cleanup (Y/N) Y Date Extracted: 05/18/00

Date Analyzed (1): 05/19/00 Date Analyzed (2): 05/19/00

Time Analyzed (1): 1750 Time Analyzed (2): 1750

Instrument ID (1): E1 Instrument ID (2): E1

GC Column (1): DB-1701 ID: 0.53(mm) GC Column (2): DB-608 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	BBLK01LCS	B0518-LS1	05/19/00	05/19/00
02	S42SWE	70729001	05/19/00	05/19/00
03	S42BOT	70729002	05/19/00	05/19/00
04	S42SWS	70729003	05/19/00	05/19/00
05	S42SWN	70729004	05/19/00	05/19/00
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COMMENTS:

FORM IV PCB

MITKEM CORPORATION

05/17/00 03:51 PM

Original

Lab Workorder #: **70729**

Lab Workorder **70729** **R0**

Logged In By: _____

Reviewed By: _____

Client: **Foster Wheeler Environmental**
Lab Workorder ID: **0060 S42-5 SUMP PIT RFP-002261**
Client Proj ID: **Bldg. 42**
Client PO #: **026697**
Project / Profile Name: **Middletown, RI**
Date Due: **05/24/00**
Customer Service: **EAL**
Del Req'd: **Level 2 (1 copy)**
Completed?:
Profile Notes: **Must meet RIDEM DEC Residential Rept Limits. (not for waste char sample)**

Date Opened: **05/17/00 15:26**
Date Closed: **05/17/00 15:30**

Project Status: **WP**

Lab ID	Client ID	Matrix	Type	Analysis Code	Collected	Received	Due	Notes
70729001	S42SWE	S	SAMPLE	8260S 8270S RCRA8S 8100S TPH 8082S DRY WEIGHT	05/16/00 14:30	05/17/00	05/24/00	MeOH & NaHSO4 VIALS
70729002	S42BOT	S	SAMPLE	8260S 8270S RCRA8S 8100S TPH 8082S DRY WEIGHT	05/16/00 14:40	05/17/00	05/24/00	MeOH & NaHSO4 VIALS
70729003	S42SWS	S	SAMPLE	8260S 8270S RCRA8S 8100S TPH 8082S DRY WEIGHT	05/16/00 14:50	05/17/00	05/24/00	MeOH & NaHSO4 VIALS
70729004	S42SWN	S	SAMPLE	8260S 8270S RCRA8S 8100S TPH 8082S DRY WEIGHT	05/17/00 08:20	05/17/00	05/24/00	MeOH & NaHSO4 VIALS

047

MITKEM CORPORATION

INVOICE GOES TO:

Accounts Payable
Foster Wheeler Environmental
P.O. Box 4530
Middletown, RI, 02842

REPORT GOES TO:

Josh Holden
Foster Wheeler Environmental
42 Defense Highway
Peir One
Middletown, RI, 02842
W : 401-845-6929
F : 401-845-4169

MITKEM CORPORATION
Sample Condition Form

Page ___ of ___

Received By: NR	Reviewed By: DJK	Date: 5/17/00	MITKEM Project #: 70729
Client Project: ØØ60 S42-5 SUMP PIT		Client: FOSTER WHEELER	

Condition:

1) Custody Seal(s) Present / Absent
Coolers / Bottles
Intact / Broken

2) Custody Seal Number(s) N/A

3) Chain-of-Custody Present / Absent

4) Cooler Temperature 3°C
Coolant Condition ICE

5) Airbill(s)
Airbill Number(s)

6) Sample Bottles Intact
Broken
Leaking

7) Date Received 5/17/00

8) Time Received 10:22

Lab Sample ID	Preservation (pH) HNO_3	H_2SO_4	HCl	NaOH	VOA Matrix	Comments/Remarks/ Corrective Action*
70729001						
70729002						
70729003						
70729004						

VOA Matrix Key:

US = Unpreserved Soil
UA = Unpreserved Aqueous
B = Both MeOH & $NaHSO_4$
Na = $NaHSO_4$
M = MeOH
E = Encore
H = HCl

* See Sample Notification Form yes / no

Last Page of Data Report

MITKEM CORPORATION
175 Metro Center Boulevard
Warwick, Rhode Island 02886-1755
(401) 732-3400 • Fax (401) 732-3499
email: mitkem@mitkem.com

CHAIN-OF-CUSTODY RECORD

70736

REPORT TO		INVOICE TO		
COMPANY Foster Wheeler	PHONE 683-5259	COMPANY Foster Wheeler	PHONE 845-6929	LAB PROJECT #: ~~70729~~
NAME Josh Holder	FAX 683-5183	NAME Josh Holder	FAX 845-4169	
ADDRESS 195 Burma Rd		ADDRESS P.O. Box 4350		TURNAROUND TIME: 5-DAY (STANDARD)
CITY/ST/ZIP Portsmouth RI 02871		CITY/ST/ZIP Middletown, RI 02842		

CLIENT PROJECT NAME: 0660 542-S Sump Pit
CLIENT PROJECT #: RFP-002261
CLIENT P.O.#:

REQUESTED ANALYSES

SAMPLE IDENTIFICATION	DATE/TIME SAMPLED	COMPOSITE	GRAB	WATER	SOIL	OTHER	LAB ID	# OF CONTAINERS	RCRA8 -4.0	TPH 8015/8290/8082	VOCs 8260 - MeOH	VOCs 8260 - NaHSO4	COMMENTS
542 SWE	5/16/00 1430		X		X		01	5	1	1	1	2	
542BOT	5/16/00 1440		X		X		02	5	1	1	1	2	
542 SWS	5/16/00 1450		X		X		03	5	1	1	1	2	
542 SWW	5/16/00 1500		X		X		01	5	1	1	1	2	~~Hold until 5/18~~
542 SWN	5/17/00 0820		X		X		01	5	1	1	1	2	
	/												
	/												
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TSF#	RELINQUISHED BY	DATE/TIME	ACCEPTED BY	DATE/TIME
1	Joshua Holden	5/17/00 10:22	Jan J Healy	5/17/00 10:22
2		/		/
3		/		/

ADDITIONAL REMARKS: Det Limits must meet RIDEC Residential Cleanup Criteria

COOLER TEMP: 3°C

WHITE: LABORATORY COPY YELLOW: REPORT COPY PINK: CLIENT'S COPY

C31

MITKEM CORPORATION

May 25, 2000

Foster Wheeler Environmental Corp.
42 Defense Highway, Pier One
Middletown, RI 02842
Attn: Mr. Josh Holden

RE: Client Project: 242-5 SUMP, 5/16 Sample
Lab Project #: 70736

Dear Mr. Holden:

Enclosed please find the data report of the required analyses for the samples associated with the above referenced project. If you have any questions regarding this report, please call me.

We appreciate your business.

Sincerely,

Edward A. Lawler
Laboratory Operations Manager

175 Metro Center Boulevard • Warwick, Rhode Island 02886-1755
(401) 732-3400 • Fax (401) 732-3499 • email: mitkem@mitkem.com

MITKEM CORPORATION

Client: Foster Wheeler Environmental Corp.

Client Project: 242-5 SUMP, 5/16 Samples

Lab Project: 70736

Date samples received: 5/17/00

Project Narrative

This data report includes the analysis results for one (1) soil sample that was received from Foster Wheeler Environmental Corp. on May 17, 2000. This sample was "on hold" until May 18, 2000. Analyses were performed per specification in the Chain of Custody form. For reference, a copy of the Mitkem Sample Log-In form is included for cross-referencing the client sample ID and laboratory sample ID.

All of the analyses were performed according to method specifications. Results for arsenic are reported to the laboratory method detection limit to achieve project objectives. No other unusual occurrences were noted during sample analysis.

This data report has been reviewed and is authorized for release as evidenced by the signature below.

Edward A. Lawler
Laboratory Operations Manager

Data Flag/Qualifiers:

J This flag indicates an estimated value due to either
- the compound was detected at below the Reporting Limit, or
- estimated concentration for Tentatively Identified Compound

B For organic analyses, this flag indicates the analyte was also detected in the associated Method Blank. The B flag has an alternative meaning for CLP-type metals analyses, indicating a "trace" concentration below the normal reporting limit and above the detection limit.

D This flag indicates the analyte concentration was obtained from a diluted analysis

E This flag indicates the analyte concentration exceeded the Calibration Range

P This flag is used for Pesticides/PCB/Herbicide analyte when there is a greater than 40% difference for detected concentration between the two GC columns used for Primary and Confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is reported in the Analysis Report.

U Not Detected. This compound was analyzed-for but not detected. Reporting limit is the value listed.

MITKEM CORPORATION

Analysis Report: Total Petroleum Hydrocarbons

Client: Foster Wheeler Environmental Corp.
Analysis: Method 8100M / 8015M
Matrix: Soil

Concentration in: mg/kg, dry weight basis

Lab ID	Client ID	Result	Reporting Limit	% Solid	p-Terphenyl Surrogate Recovery %	Analysis Date
70736001	S42SWW	ND	18	75	67	5/23/00

QA/QC

Method Blank				
F0519-BS1	ND	13	70	5/20/00
Lab Control Sample (% Recovery)				
F0519-LS1	94		74	5/20/00

ND = Not Detected

The samples were quantitated using diesel fuel as standard.

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	S42SWW	Concentration in:	mg/kg, dry weight basis
Lab ID:	70736001	Analysis Date:	5/20/00
Matrix:	Soil, 76% Solid	Analysis Method:	7471A (Mercury) 6010B (Others)

Analyte	Results	Reporting Limit
Arsenic	15	0.4 *
Barium	34	20
Cadmium	1.7	0.5
Chromium	12	2
Lead	16	1
Mercury	ND	0.1
Selenium	ND	2
Silver	ND	3

*Reported to MDL.

QC Batch: 0519PBS

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Prep Blank, 0519PBS

Concentration in: mg/kg
Analysis Date: 5/20/00
Analysis Method: 7471A (Mercury)
6010B (Others)

Analyte	Results	Reporting Limit
Arsenic	ND	0.4 *
Barium	ND	20
Cadmium	ND	0.5
Chromium	ND	2
Lead	ND	1
Mercury	ND	0.1
Selenium	ND	2
Silver	ND	3

QC Batch: 0519PBS

*Reported to MDL.

ND = Not Detected

70736-PB

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:		Concentration in:	mg/kg
Lab ID:	Lab Control Sample, 0519LCSS	Analysis Date:	5/20/00
		Analysis Method:	7471A (Mercury) 6010B (Others)

Analyte	% Recovery
Arsenic	95
Barium	95
Cadmium	96
Chromium	96
Lead	93
Mercury	113
Selenium	89
Silver	94

QC Batch: 0519PBS

70736-LCS

000

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S42SWW

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70736

Matrix: (soil/water) SOIL Lab Sample ID: 70736001

Sample wt/vol: 8.3 (g/mL) G Lab File ID: V6A4474

Level: (low/med) LOW Date Received: 05/17/00

% Moisture: not dec. 24 Date Analyzed: 05/24/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	4	U
74-87-3	Chloromethane	4	U
75-01-4	Vinyl Chloride	4	U
74-83-9	Bromomethane	4	U
75-00-3	Chloroethane	4	U
75-69-4	Trichlorofluoromethane	4	U
75-35-4	1,1-Dichloroethene	4	U
67-64-1	Acetone	41	B
74-88-4	Iodomethane	4	U
75-15-0	Carbon Disulfide	4	U
75-09-2	Methylene Chloride	4	U
156-60-5	trans-1,2-Dichloroethene	4	U
1634-04-4	Methyl tert-butyl ether	4	U
75-34-3	1,1-Dichloroethane	4	U
108-05-4	Vinyl acetate	4	U
78-93-3	2-Butanone	10	
156-59-2	cis-1,2-Dichloroethene	4	U
590-20-7	2,2-Dichloropropane	4	U
74-97-5	Bromochloromethane	4	U
67-66-3	Chloroform	4	U
71-55-6	1,1,1-Trichloroethane	4	U
563-58-6	1,1-Dichloropropene	4	U
56-23-5	Carbon Tetrachloride	4	U
107-06-2	1,2-Dichloroethane	4	U
71-43-2	Benzene	4	U
79-01-6	Trichloroethene	4	U
78-87-5	1,2-Dichloropropane	4	U
74-95-3	Dibromomethane	4	U
75-27-4	Bromodichloromethane	4	U
110-75-8	2-Chloroethyl vinyl ether	4	U
10061-01-5	cis-1,3-Dichloropropene	4	U
108-10-1	4-Methyl-2-pentanone	4	U
108-88-3	Toluene	1	J
10061-02-6	trans-1,3-Dichloropropene	4	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S42SWW

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70736

Matrix: (soil/water) SOIL Lab Sample ID: 70736001

Sample wt/vol: 8.3 (g/mL) G Lab File ID: V6A4474

Level: (low/med) LOW Date Received: 05/17/00

% Moisture: not dec. 24 Date Analyzed: 05/24/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-00-5	1,1,2-Trichloroethane	4	U
142-28-9	1,3-Dichloropropane	4	U
127-18-4	Tetrachloroethene	4	U
591-78-6	2-Hexanone	4	U
124-48-1	Dibromochloromethane	4	U
106-93-4	1,2-Dibromoethane	4	U
108-90-7	Chlorobenzene	4	U
630-20-6	1,1,1,2-Tetrachloroethane	4	U
100-41-4	Ethylbenzene	4	U
1330-20-7	Xylene (Total)	4	U
100-42-5	Styrene	4	U
75-25-2	Bromoform	4	U
98-82-8	Isopropylbenzene	4	U
79-34-5	1,1,2,2-Tetrachloroethane	4	U
108-86-1	Bromobenzene	4	U
96-18-4	1,2,3-Trichloropropane	4	U
103-65-1	n-Propylbenzene	4	U
95-49-8	2-Chlorotoluene	4	U
108-67-8	1,3,5-Trimethylbenzene	4	U
106-43-4	4-Chlorotoluene	4	U
98-06-6	tert-Butylbenzene	4	U
95-63-6	1,2,4-Trimethylbenzene	4	U
135-98-8	sec-Butylbenzene	4	U
99-87-6	4-Isopropyltoluene	4	U
541-73-1	1,3-Dichlorobenzene	4	U
106-46-7	1,4-Dichlorobenzene	4	U
104-51-8	n-Butylbenzene	4	U
95-50-1	1,2-Dichlorobenzene	4	U
96-12-8	1,2-Dibromo-3-chloropropane	4	U
120-82-1	1,2,4-Trichlorobenzene	4	U
87-68-3	Hexachlorobutadiene	4	U
91-20-3	Naphthalene	4	U
87-61-6	1,2,3-Trichlorobenzene	4	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK6R

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70736

Matrix: (soil/water) SOIL Lab Sample ID: V6B0524A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V6A4472

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 05/24/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (mL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	5	U
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	11	
74-88-4	Iodomethane	5	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	4	J
156-60-5	trans-1,2-Dichloroethene	5	U
1634-04-4	Methyl tert-butyl ether	5	U
75-34-3	1,1-Dichloroethane	5	U
108-05-4	Vinyl acetate	5	U
78-93-3	2-Butanone	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
590-20-7	2,2-Dichloropropane	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
563-58-6	1,1-Dichloropropene	5	U
56-23-5	Carbon Tetrachloride	5	U
107-06-2	1,2-Dichloroethane	5	U
71-43-2	Benzene	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
110-75-8	2-Chloroethyl vinyl ether	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK6R

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70736

Matrix: (soil/water) SOIL Lab Sample ID: V6B0524A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V6A4472

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 05/24/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-00-5	1,1,2-Trichloroethane	5	U
142-28-9	1,3-Dichloropropane	5	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	5	U
108-90-7	Chlorobenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (Total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
98-82-8	Isopropylbenzene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-86-1	Bromobenzene	5	U
96-18-4	1,2,3-Trichloropropane	5	U
103-65-1	n-Propylbenzene	5	U
95-49-8	2-Chlorotoluene	5	U
108-67-8	1,3,5-Trimethylbenzene	5	U
106-43-4	4-Chlorotoluene	5	U
98-06-6	tert-Butylbenzene	5	U
95-63-6	1,2,4-Trimethylbenzene	5	U
135-98-8	sec-Butylbenzene	5	U
99-87-6	4-Isopropyltoluene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
104-51-8	n-Butylbenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
87-68-3	Hexachlorobutadiene	5	U
91-20-3	Naphthalene	5	U
87-61-6	1,2,3-Trichlorobenzene	5	U

2B
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70736

Level:(low/med) LOW

	EPA SAMPLE NO.	SMC1 #	SMC2 (DCE)#	SMC3 (TOL)#	OTHER (BFB)#	TOT OUT
01	VBLK6R	111	103	105	102	0
02	VBLK6RLCS	118	115	109	110	0
03	S42SWW	112	114	102	102	0
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
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29						
30						

		QC LIMITS
SMC1	= Dibromofluoromethane	(76-133)
SMC2 (DCE)	= 1,2-Dichloroethane-d4	(72-134)
SMC3 (TOL)	= Toluene-d8	(71-115)
OTHER(BFB)	= Bromofluorobenzene	(49-146)

Column to be used to flag recovery values

* Values outside of contract required QC limits

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70736

Matrix Spike - Sample No.: VBLK6R Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	50	0.0	47	94	28-162
Chloromethane	50	0.0	54	108	40-146
Vinyl Chloride	50	0.0	50	100	52-145
Bromomethane	50	0.0	60	120	34-154
Chloroethane	50	0.0	60	120	52-145
Trichlorofluoromethane	50	0.0	63	126	50-151
1,1-Dichloroethene	50	0.0	50	100	58-142
Acetone	50	11	64	106	12-171
Iodomethane	50	0.0	56	112	54-155
Carbon Disulfide	50	0.0	50	100	51-147
Methylene Chloride	50	4	50	92	53-141
trans-1,2-Dichloroethen	50	0.0	52	104	58-140
Methyl tert-butyl ether	50	0.0	36	72	56-144
1,1-Dichloroethane	50	0.0	56	112	60-139
Vinyl acetate	50	0.0	60	120	52-146
2-Butanone	50	0.0	62	124	33-164
cis-1,2-Dichloroethene	50	0.0	53	106	62-140
2,2-Dichloropropane	50	0.0	55	110	58-140
Bromochloromethane	50	0.0	58	116	61-141
Chloroform	50	0.0	56	112	60-140
1,1,1-Trichloroethane	50	0.0	62	124	60-142
1,1-Dichloropropene	50	0.0	52	104	63-141
Carbon Tetrachloride	50	0.0	63	126	60-143
1,2-Dichloroethane	50	0.0	64	128	57-144
Benzene	50	0.0	53	106	62-140
Trichloroethene	50	0.0	54	108	63-136
1,2-Dichloropropane	50	0.0	55	110	62-140
Dibromomethane	50	0.0	63	126	60-144

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70736

Matrix Spike - Sample No.: VBLK6R Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Bromodichloromethane	50	0.0	60	120	60-142
2-Chloroethyl vinyl eth	50	0.0	0.0	0*	48-157
cis-1,3-Dichloropropene	50	0.0	57	114	62-140
4-Methyl-2-pentanone	50	0.0	64	128	44-162
Toluene	50	0.0	52	104	62-141
trans-1,3-Dichloroprope	50	0.0	61	122	60-143
1,1,2-Trichloroethane	50	0.0	57	114	60-144
1,3-Dichloropropane	50	0.0	56	112	58-142
Tetrachloroethene	50	0.0	50	100	59-140
2-Hexanone	50	0.0	61	122	33-171
Dibromochloromethane	50	0.0	62	124	60-141
1,2-Dibromoethane	50	0.0	59	118	58-144
Chlorobenzene	50	0.0	52	104	61-140
1,1,1,2-Tetrachloroetha	50	0.0	56	112	61-139
Ethylbenzene	50	0.0	52	104	61-139
Xylene (Total)	150	0.0	150	100	61-141
Styrene	50	0.0	53	106	62-141
Bromoform	50	0.0	63	126	56-147
Isopropylbenzene	50	0.0	55	110	59-142
1,1,2,2-Tetrachloroetha	50	0.0	53	106	60-149
Bromobenzene	50	0.0	53	106	58-138
1,2,3-Trichloropropane	50	0.0	58	116	50-148
n-Propylbenzene	50	0.0	49	98	57-141
2-Chlorotoluene	50	0.0	50	100	58-140
1,3,5-Trimethylbenzene	50	0.0	52	104	58-141
4-Chlorotoluene	50	0.0	48	96	58-138
tert-Butylbenzene	50	0.0	52	104	57-142
1,2,4-Trimethylbenzene	50	0.0	51	102	58-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70736

Matrix Spike - Sample No.: VBLK6R Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
sec-Butylbenzene	50	0.0	51	102	55-143
4-Isopropyltoluene	50	0.0	52	104	56-142
1,3-Dichlorobenzene	50	0.0	50	100	59-138
1,4-Dichlorobenzene	50	0.0	51	102	59-138
n-Butylbenzene	50	0.0	52	104	55-143
1,2-Dichlorobenzene	50	0.0	50	100	59-139
1,2-Dibromo-3-chloropro	50	0.0	60	120	37-159
1,2,4-Trichlorobenzene	50	0.0	47	94	52-143
Hexachlorobutadiene	50	0.0	52	104	47-146
Naphthalene	50	0.0	49	98	42-153
1,2,3-Trichlorobenzene	50	0.0	48	96	50-144

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 1 out of 67 outside limits

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK6R

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70736

Lab File ID: V6A4472 Lab Sample ID: V6B0524A

Date Analyzed: 05/24/00 Time Analyzed: 1012

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

Instrument ID: V6

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VBLK6RLCS	V6L0524A	V6A4473	1044
02	S42SWW	70736001	V6A4474	1122
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
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24				
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26				
27				
28				
29				
30				

COMMENTS:

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S42SWW

Lab Name: MITKEM CORPORATION Contract: 68-D6-0063

Lab Code: MITKEM Case No.: 28053 SAS No.: SDG No.: 70736

Matrix: (soil/water) SOIL Lab Sample ID: 70736001

Sample wt/vol: 35.4 (g/mL) G Lab File ID: S3A3205

Level: (low/med) LOW Date Received: 05/17/00

% Moisture: 25 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/23/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	370	U
111-44-4	bis(2-Chloroethyl)Ether	370	U
95-57-8	2-Chlorophenol	370	U
541-73-1	1,3-Dichlorobenzene	370	U
106-46-7	1,4-Dichlorobenzene	370	U
95-50-1	1,2-Dichlorobenzene	370	U
95-48-7	2-Methylphenol	370	U
108-60-1	2,2'-oxybis(1-Chloropropane)	370	U
106-44-5	4-Methylphenol	370	U
621-64-7	N-Nitroso-di-n-propylamine	370	U
67-72-1	Hexachloroethane	370	U
98-95-3	Nitrobenzene	370	U
78-59-1	Isophorone	370	U
88-75-5	2-Nitrophenol	370	U
105-67-9	2,4-Dimethylphenol	370	U
120-83-2	2,4-Dichlorophenol	370	U
120-82-1	1,2,4-Trichlorobenzene	370	U
91-20-3	Naphthalene	370	U
106-47-8	4-Chloroaniline	370	U
111-91-1	bis(2-Chloroethoxy)methane	370	U
87-68-3	Hexachlorobutadiene	370	U
59-50-7	4-Chloro-3-Methylphenol	370	U
91-57-6	2-Methylnaphthalene	370	U
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	370	U
95-95-4	2,4,5-Trichlorophenol	760	U
91-58-7	2-Chloronaphthalene	370	U
88-74-4	2-Nitroaniline	760	U
131-11-3	Dimethylphthalate	370	U
208-96-8	Acenaphthylene	370	U
606-20-2	2,6-Dinitrotoluene	370	U
99-09-2	3-Nitroaniline	760	U
83-32-9	Acenaphthene	370	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S42SWW

Lab Name: MITKEM CORPORATION Contract: 68-D6-0063

Lab Code: MITKEM Case No.: 28053 SAS No.: SDG No.: 70736

Matrix: (soil/water) SOIL Lab Sample ID: 70736001

Sample wt/vol: 35.4 (g/mL) G Lab File ID: S3A3205

Level: (low/med) LOW Date Received: 05/17/00

% Moisture: 25 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/23/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	760	U
100-02-7	4-Nitrophenol	760	U
132-64-9	Dibenzofuran	370	U
121-14-2	2,4-Dinitrotoluene	370	U
84-66-2	Diethylphthalate	370	U
7005-72-3	4-Chlorophenyl-phenylether	370	U
86-73-7	Fluorene	370	U
100-01-6	4-Nitroaniline	760	U
534-52-1	4,6-Dinitro-2-methylphenol	760	U
86-30-6	N-Nitrosodiphenylamine (1)	370	U
101-55-3	4-Bromophenyl-phenylether	370	U
118-74-1	Hexachlorobenzene	370	U
87-86-5	Pentachlorophenol	760	U
85-01-8	Phenanthrene	370	U
120-12-7	Anthracene	370	U
86-74-8	Carbazole	370	U
84-74-2	Di-n-butylphthalate	370	U
206-44-0	Fluoranthene	370	U
129-00-0	Pyrene	370	U
85-68-7	Butylbenzylphthalate	370	U
91-94-1	3,3'-Dichlorobenzidine	370	U
56-55-3	Benzo(a)anthracene	370	U
218-01-9	Chrysene	370	U
117-81-7	bis(2-Ethylhexyl)phthalate	370	U
117-84-0	Di-n-octylphthalate	370	U
205-99-2	Benzo(b)fluoranthene	370	U
207-08-9	Benzo(k)fluoranthene	370	U
50-32-8	Benzo(a)pyrene	370	U
193-39-5	Indeno(1,2,3-cd)pyrene	370	U
53-70-3	Dibenzo(a,h)anthracene	370	U
191-24-2	Benzo(g,h,i)perylene	370	U

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK3R

Lab Name: MITKEM CORPORATION Contract: 68-D6-0063

Lab Code: MITKEM Case No.: 28053 SAS No.: SDG No.: 70736

Matrix: (soil/water) SOIL Lab Sample ID: S0519-BS1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: S3A3160

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/19/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)Ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-Methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	670	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	670	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	670	U
83-32-9	Acenaphthene	330	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK3R

Lab Name: MITKEM CORPORATION Contract: 68-D6-0063

Lab Code: MITKEM Case No.: 28053 SAS No.: SDG No.: 70736

Matrix: (soil/water) SOIL Lab Sample ID: S0519-BS1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: S3A3160

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/19/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	670	U
100-02-7	4-Nitrophenol	670	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	670	U
534-52-1	4,6-Dinitro-2-methylphenol	670	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	670	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: MITKEM CORPORATION Contract: 68-D6-0063

Lab Code: MITKEM Case No.: 28053 SAS No.: SDG No.: 70736

Level: (low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 (2CP) #	S8 (DCB) #	TOT OUT
01	SBLK3R	76	77	78	80	76	85	72	75	0
02	SBLK3RLCS	76	75	78	76	72	100	71	74	0
03	S42SWW	69	71	78	71	69	101	66	67	0
04										
05										
06										
07										
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		QC LIMITS	
S1 (NBZ)	= Nitrobenzene-d5	(36-128)	
S2 (FBP)	= 2-Fluorobiphenyl	(42-123)	
S3 (TPH)	= Terphenyl-d14	(41-132)	
S4 (PHL)	= Phenol-d5	(34-119)	
S5 (2FP)	= 2-Fluorophenol	(22-120)	
S6 (TBP)	= 2,4,6-Tribromophenol	(32-133)	
S7 (2CP)	= 2-Chlorophenol-d4	(35-124)	(advisory)
S8 (DCB)	= 1,2-Dichlorobenzene-d4	(27-131)	(advisory)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract: 68-D6-0063

Lab Code: MITKEM Case No.: 28053 SAS No.: SDG No.: 70736

Matrix Spike - Sample No.: SBLK3R Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Phenol	1700	0.0	1300	76	38-109
bis(2-Chloroethyl)Ether	1700	0.0	1200	70	26-119
2-Chlorophenol	1700	0.0	1300	76	49-104
1,3-Dichlorobenzene	1700	0.0	1200	70	42- 99
1,4-Dichlorobenzene	1700	0.0	1200	70	43-100
1,2-Dichlorobenzene	1700	0.0	1300	76	47-100
2-Methylphenol	1700	0.0	1200	70	12-128
2,2'-oxybis(1-Chloropro	1700	0.0	1400	82	35-124
4-Methylphenol	1700	0.0	1400	82	1-138
N-Nitroso-di-n-prop.(1)	1700	0.0	1300	76	44-113
Hexachloroethane	1700	0.0	1200	70	43-103
Nitrobenzene	1700	0.0	1200	70	55-103
Isophorone	1700	0.0	1300	76	41-100
2-Nitrophenol	1700	0.0	1300	76	53-104
2,4-Dimethylphenol	1700	0.0	1300	76	50-150
2,4-Dichlorophenol	1700	0.0	1400	82	28-129
1,2,4-Trichlorobenzene	1700	0.0	1400	82	51-107
Naphthalene	1700	0.0	1300	76	54-104
4-Chloroaniline	1700	0.0	650	38	0- 92
bis(2-Chloroethoxy)meth	1700	0.0	1300	76	46-111
Hexachlorobutadiene	1700	0.0	1400	82	49-110
4-Chloro-3-Methylphenol	1700	0.0	1400	82	0-161
2-Methylnaphthalene	1700	0.0	1300	76	46-116
Hexachlorocyclopentadie	1700	0.0	1200	70	21-137
2,4,6-Trichlorophenol	1700	0.0	1400	82	4-140
2,4,5-Trichlorophenol	1700	0.0	1200	70	3-156
2-Chloronaphthalene	1700	0.0	1300	76	60-107
2-Nitroaniline	1700	0.0	870	51	50-114

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract: 68-D6-0063

Lab Code: MITKEM Case No.: 28053 SAS No.: SDG No.: 70736

Matrix Spike - Sample No.: SBLK3R Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Dimethylphthalate	1700	0.0	1300	76	61-111
Acenaphthylene	1700	0.0	1200	70	61-106
2,6-Dinitrotoluene	1700	0.0	1400	82	54-116
3-Nitroaniline	1700	0.0	840	49	0-126
Acenaphthene	1700	0.0	1200	70	62-107
2,4-Dinitrophenol	1700	0.0	1000	59	31-119
4-Nitrophenol	1700	0.0	1100	65	0-166
Dibenzofuran	1700	0.0	1400	82	63-109
2,4-Dinitrotoluene	1700	0.0	1400	82	58-115
Diethylphthalate	1700	0.0	1200	70	58-116
4-Chlorophenyl-phenylet	1700	0.0	1500	88	60-113
Fluorene	1700	0.0	1400	82	61-112
4-Nitroaniline	1700	0.0	970	57	0-135
4,6-Dinitro-2-methylphe	1700	0.0	1200	70	30-128
N-Nitrosodiphenylamine	1700	0.0	1300	76	0-148
4-Bromophenyl-phenyleth	1700	0.0	1400	82	65-118
Hexachlorobenzene	1700	0.0	1500	88	64-120
Pentachlorophenol	1700	0.0	980	58	0-165
Phenanthrene	1700	0.0	1300	76	66-115
Anthracene	1700	0.0	1400	82	56-144
Carbazole	1700	0.0	1300	76	52-128
Di-n-butylphthalate	1700	0.0	1200	70	69-112
Fluoranthene	1700	0.0	1500	88	65-116
Pyrene	1700	0.0	1400	82	47-138
Butylbenzylphthalate	1700	0.0	1100	65	56-125
3,3'-Dichlorobenzidine	1700	0.0	860	50	0-139
Benzo(a)anthracene	1700	0.0	1400	82	64-116
Chrysene	1700	0.0	1400	82	60-116

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract: 68-D6-0063

Lab Code: MITKEM Case No.: 28053 SAS No.: SDG No.: 70736

Matrix Spike - Sample No.: SBLK3R Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
bis(2-Ethylhexyl)phthal	1700	0.0	1100	65	55-124
Di-n-octylphthalate	1700	0.0	1100	65	55-133
Benzo(b)fluoranthene	1700	0.0	1400	82	51-128
Benzo(k)fluoranthene	1700	0.0	1300	76	51-139
Benzo(a)pyrene	1700	0.0	1300	76	61-120
Indeno(1,2,3-cd)pyrene	1700	0.0	1500	88	45-123
Dibenzo(a,h)anthracene	1700	0.0	1600	94	46-128
Benzo(g,h,i)perylene	1700	0.0	1500	88	43-128

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 64 outside limits

COMMENTS: _____

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK3R

Lab Name: MITKEM CORPORATION Contract: 68-D6-0063

Lab Code: MITKEM Case No.: 28053 SAS No.: SDG No.: 70736

Lab File ID: S3A3160 Lab Sample ID: S0519-BS1

Instrument ID: S3 Date Extracted: 05/19/00

Matrix: (soil/water) SOIL Date Analyzed: 05/19/00

Level:(low/med) LOW Time Analyzed: 1601

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SBLK3RLCS	S0519-LS1	S3A3161	05/19/00
02	S42SWW	70736001	S3A3205	05/23/00
03				
04				
05				
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COMMENTS:

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

S42SWW

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70736

Matrix: (soil/water) SOIL Lab Sample ID: 70736001

Sample wt/vol: 30.8 (g/mL) G Lab File ID: E3C1051F

% Moisture: 25 decanted: (Y/N) N Date Received: 05/17/00

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 05/19/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/22/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	43	U
11104-28-2	Aroclor-1221	43	U
1114-16-5	Aroclor-1232	43	U
53469-21-9	Aroclor-1242	43	U
12672-29-6	Aroclor-1248	43	U
11097-69-1	Aroclor-1254	43	U
11096-82-5	Aroclor-1260	43	U

FORM I PCB

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

BBLK3A

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70736

Matrix: (soil/water) SOIL Lab Sample ID: B0519-BS1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3C1049F

% Moisture: 0 decanted: (Y/N) N Date Received: _____

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 05/19/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/22/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
1114-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U

FORM 2
SOIL PCB SURROGATE RECOVERY

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70736

GC Column(1): DB-1701 ID: 0.53 (mm) GC Column(2): DB-608 ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	BBLK3A	69	72	99	78			0
02	BBLK3ALCS	73	67	91	70			0
03	S42SWW	85	82	101	80			0
04								
05								
06								
07								
08								
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30								

ADVISORY
QC LIMITS

S1 (TCX) = Tetrachloro-m-xylene (42-147)
S2 (DCB) = Decachlorobiphenyl (29-155)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

FORM 3
SOIL PCB LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70736

Matrix Spike - Sample No.: BBLK3A

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Aroclor-1016	330	0.00	220	67	62-155
Aroclor-1260	330	0.00	210	64	56-173

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM III PCB

FORM 4
PCB METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

BBLK3A

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70736

Lab Sample ID: B0519-BS1 Lab File ID: E3C1049F

Matrix (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SONC

Sulfur Cleanup (Y/N) Y Date Extracted: 05/19/00

Date Analyzed (1): 05/22/00 Date Analyzed (2): 05/22/00

Time Analyzed (1): 1446 Time Analyzed (2): 1446

Instrument ID (1): E3 Instrument ID (2): E3

GC Column (1): DB-1701 ID: 0.53(mm) GC Column (2): DB-608 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	BBLK3ALCS	B0519-LS1	05/22/00	05/22/00
02	S42SWW	70736001	05/22/00.	05/22/00
03				
04				
05				
06				
07				
08				
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COMMENTS:

FORM IV PCB

MITKEM CORPORATION

05/19/00 11:58 AM

Original

Lab Workorder #: **70736**

Lab Workorder **70736** **R0**

Logged In By: SW

Reviewed By:

Client: **Foster Wheeler Environmental**
Lab Workorder ID: **0060 S42-5 SUMP ST.**
Client Proj ID: **Bldg. 42**
Client PO #: **026697**
Project / Profile Name: **Middletown, RI**
Date Due: ~~05/24/00~~ 5/25/00
Customer Service: **EAL**
Del Req'd: **Level 2 (1 copy)**
Completed?:
Profile Notes: **Must meet RIDEM DEC Residential Rept Limits. (not for waste char sample)** Off Hold 5/18/00

Date Opened: **05/19/00 09:48**
Date Closed: **05/19/00 11:57**

Project Status: **WP**

Lab ID	Client ID	Matrix	Type	Analysis Code	Collected	Received	Due	Notes
70736001	S42SWW	S	SAMPLE	8082S	05/16/00 14:30	05/17/00	~~05/24~~/00 5/25/00	
				8100S TPH				
				8260S				
				8270S				
				DRY WEIGHT				
				RCRA8S				

INVOICE GOES TO:

Accounts Payable
Foster Wheeler Environmental
P.O. Box 4530
Middletown, RI, 02842

REPORT GOES TO:

Josh Holden
Foster Wheeler Environmental
42 Defense Highway
Peir One
Middletown, RI, 02842
W : 401-845-6929
F : 401-845-4169

030

MITKEM CORPORATION
Sample Condition Form

Page ____ of ____

Received By: NN	Reviewed By: am	Date: 5/17/00	MITKEM Project #: 70736
Client Project: Ø060 542-5 Sump PT		Client: FOSTER WHEELER	

Condition:		Lab Sample ID	Preservation (pH) HNO_3	H_2SO_4	HCl	NaOH	VOA Matrix	Comments/Remarks/ Corrective Action*
		70736001					M/NA	
1) Custody Seal(s)	Present / Absent							
	Coolers / ~~Bottles~~							
	Intact / ~~Broken~~							
2) Custody Seal Number(s)								
3) Chain-of-Custody	Present / Absent							
4) Cooler Temperature	3°C							
Coolant Condition	ICE							
5) Airbill(s)								
Airbill Number(s)								
6) Sample Bottles	Intact							
	Broken							
	Leaking							
7) Date Received	5/17/00							
8) Time Received	10:22							

VOA Matrix Key:

US = Unpreserved Soil
UA = Unpreserved Aqueous
B = Both MeOH & $NaHSO_4$
Na = $NaHSO_4$
M = MeOH
E = Encore
H = HCl

* See Sample Notification Form yes / no

Last Page of Data Report

Appendix M

Sump 42-5 Pipeline Confirmatory Sample Results Summary and Laboratory Data

FOSTER WHEELER ENVIRONMENTAL CORPORATION
U.S. NAVY NORTHERN DIVISION REMEDIAL ACTION CONTRACT (RAC)
CONTRACT N62472-94-D-0398 DELIVERY ORDER 13 AND 60
DERECKTOR SHIPYARD BUILDING 42 S42-5 SUMP PIPE REMOVAL SOIL SAMPLE RESULTS

RIDEM Direct Exposure Criteria --->	Residential	Commercial/ Industrial	S1	E1	N1-0	N1-50	N1-100	N1-150	N1-200	N1-250	N1-A	N1-B	N1-C	N1-D	N1-E
Volatile Organics															
Acetone	7,800.0	10,000.0	0.055 B	0.046 B	0.007 B	0.018 B	0.052 B	0.026 B	0.024 B	0.11 B	0.023 B	0.022 B	0.015 B	0.014 B	0.013 B
Benzene	2.5	200.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	10.0	92.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform	81.0	720.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromomethane	0.8	2,900.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	1.5	44.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	210.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	1.2	940.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	7.6	68.0	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	920.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	0.9	63.0	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	0.2	9.5	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	630.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	1,100.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	1.9	84.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	71.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropyl benzene	27.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl-tert-butyl-ether	390.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride	45.0	760.0	-	0.001 J	-	-	-	-	-	-	0.001 JB	-	-	-	0.001 JB
Styrene	13.0	190.0	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1,2 Tetrachloroethane	2.2	220.0	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2 Tetrachloroethane	1.3	29.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	190.0	10,000.0	-	0.002 J	-	0.0009 J	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	540.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	3.6	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	0.02	3.00	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Xylenes	110.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Semivolatiles															
Acenaphthene	43.0	10,000.0	-	-	-	0.046 J	-	-	-	-	-	0.27 J	-	-	-
Acenaphthylene	23.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene	35.0	10,000.0	-	-	-	0.064 J	0.048 J	-	-	0.082 J	-	0.490	-	-	-
Benzo(a)anthracene	0.9	7.8	-	0.038 J	-	0.12 J	0.14 J	0.064 J	-	0.28 J	-	1.300	-	-	-
Benzo(a)pyrene	0.4	0.8	-	0.039 J	-	0.098 J	0.14 J	0.054 J	-	0.23 J	-	0.690	-	-	-
Benzo(b)fluoranthene	0.9	7.8	-	0.044 J	-	0.14 J	0.17 J	0.063 J	-	0.3 J	-	0.910	-	-	-
Benzo(g,h,I)perylene	0.8	10,000.0	-	-	-	-	0.056 J	-	-	0.12 J	-	-	-	-	-
Benzo(k)fluoranthene	0.9	78.0	-	-	-	0.06 J	0.084 J	0.042 J	-	0.18 J	-	0.350	-	-	-
Bis(2-ethylhexyl)phthalate	46.0	410.0	0.044J	-	-	-	0.053 J	0.039 J	-	0.064 J	-	-	-	-	-
Bis(2-chloroethyl)ether	0.6	5.2	-	0.037 J	-	-	-	-	-	-	-	-	-	-	-
Chrysene	0.4	780.0	-	0.042 J	-	0.14 J	0.17 J	0.082 J	-	0.350	-	1.300	-	-	-
Dibenzo(a,h)anthracene	0.4	0.8	-	-	-	-	-	-	-	0.046 J	-	-	-	-	-
1,2-Dichlorobenzene	510.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	430.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	27.0	240.0	-	-	-	-	-	-	-	-	-	-	-	-	-
3,3-Dichlorobenzidine	1.4	13.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Diethyl phthalate	340.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dimethyl phenol	1,400.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethyl phthalate	1,900.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dinitrophenol	160.0	4,100.0	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dinitrotoluene	0.9	8.4	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoranthene	20.0	10,000.0	0.044 J	0.062 J	0.041 J	0.3 J	0.29 J	0.081 J	-	0.580	0.044 J	4.400	-	-	0.041 J
Fluorene	28.0	10,000.0	-	-	-	0.086 J	-	-	-	-	-	0.730	-	-	-
Hexachlorobenzene	0.4	3.6	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobutadiene	8.2	73.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachloroethane	46.0	410.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	0.9	7.8	-	-	-	0.062 J	0.066 J	-	-	0.14 J	-	-	-	-	-
Naphthalene	54.0	10,000.0	-	-	0.001 J	-	-	-	-	-	-	-	-	-	-
Pentachlorophenol	5.3	48.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	40.0	10,000.0	-	0.036 J	-	0.29 J	0.19 J	-	-	0.330	-	5.200	-	-	0.037 J
Phenol	6,000.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene	13.0	10,000.0	0.039 J	0.058 J	0.034 J	0.23 J	0.26 J	0.071 J	-	0.430	0.038 J	3.000	-	-	0.036 J
1,2,4-Trichlorobenzene	96.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	58.0	520.0	-	-	-	-	-	-	-	-	-	-	-	-	-
PCBs															
Polychlorinated biphenyls	10.0	10.0	-	-	-	-	0.058 P	-	-	-	-	-	-	-	-
Inorganics															
Arsenic	1.7	3.8	25	25	10	17	15	18	20	11	19	27	20	16	21
Barium	5,500.0	10,000.0	28	30	23	29	35	29	26	24	28	24	20	23	23
Cadmium	39.0	1,000.0	2.1	2.1	2.8	1.6	1.5	1.7	2.0	1.7	1.7	1.9	1.9	1.9	2.4
Chromium III	1,400.0	10,000.0	n	n	n	n	n	n	n	n	n	n	n	n	n
Chromium VI	390.0	10,000.0	n	n	n	n	n	n	n	n	n	n	n	n	n
Chromium (Total)	na	na	14	15	22	12	12	14	15	13	12	13	14	13	16
Lead	150.0	500.0	15	29	14	16	20	14	11	14	13	12	11	12	45
Mercury	23.0	610.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	390.0	10,000.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	200.0	10,000.0	3	3	5	-	-	-	3	-	-	3	3	3	4
TPH (8015M)	500.0	2,500.0	-	-	-	31	-	-	-	-	15	21	-	-	-

= Exceeds RIDEM Residential Exposure Criteria

- = Non-Detect Result

n = Not Analyzed

na = Not Applicable

J = Estimated value detect below the reporting limit

P = > than 40% difference between GC columns, reporting lower value

B = Analyte was also detected in the Method Blank

All results in mg/kg unless otherwise noted

MITKEM CORPORATION
175 Metro Center Boulevard
Warwick, Rhode Island 02886-1755
(401) 732-3400 • Fax (401) 732-3499
email: mitkem@mitkem.com

CHAIN-OF-CUSTODY RECORD

REPORT TO		INVOICE TO		
COMPANY Foster Wheeler	PHONE 683-5259	COMPANY Foster Wheeler	PHONE	LAB PROJECT #: 70741
NAME Josh Holden	FAX 5218	NAME	FAX	
ADDRESS 195 Burma Rd		ADDRESS PO Box 4350		TURNAROUND TIME: 5 DAY
CITY/ST/ZIP Portsmouth RI		CITY/ST/ZIP Middletown RI 02842		

CLIENT PROJECT NAME: 542-5 Sump
CLIENT PROJECT #: 12540060
CLIENT P.O.#:

REQUESTED ANALYSES

SAMPLE IDENTIFICATION	DATE/TIME SAMPLED	COMPOSITE	GRAB	WATER	SOIL	OTHER	LAB ID	# OF CONTAINERS	VOCs No HSCL	VOCs MCL	RCRA 8	TPH 8015/8270/8082	COMMENTS
S1	5/18/00 1320		X		X		01	5	2	1	1	1	
E1	/ 1300		X		X		02	5	2	1	1	1	
N1-250	/ 1415		X		X		03	5	2	1	1	1	
N1-E	/ 1425		X		X		04	5	2	1	1	1	
N1-200	/ 1435		X		X		05	5	2	1	1	1	
N1-D	/ 1440		X		X		06	5	2	1	1	1	
N1-C	/ 1450		X		X		07	5	2	1	1	1	
N1-150	/ 1445		X		X		08	5	2	1	1	1	
N1-B	/ 1505		X		X		09	5	2	1	1	1	
N1-100	5/18/00 / 1500		X		X		10	5	2	1	1	1	
	/												
	/												

TSF#	RELINQUISHED BY	DATE/TIME	ACCEPTED BY	DATE/TIME
1	Joshua B Holden	5/18/00 1830	Bunnie Rivers	5/18/00 1830
2		/		/
3				/

ADDITIONAL REMARKS: Det Limits Must meet RIDEC Residential Cleanup Criteria

COOLER TEMP: 3°C

1600

WHITE: LABORATORY COPY YELLOW: REPORT COPY PINK: CLIENT'S COPY

MITKEM CORPORATION

May 31, 2000

Foster Wheeler Environmental Corp.
42 Defense Highway, Pier One
Middletown, RI 02842
Attn: Mr. Josh Holden

RECEIVED
JUN - 5 2000

RE: Client Project: 242-5 SUMP, 5/18 Samples
Lab Project #: 70741

Dear Mr. Holden:

Enclosed please find the data report of the required analyses for the samples associated with the above referenced project. If you have any questions regarding this report, please call me.

We appreciate your business.

Sincerely,

Edward A. Lawler
Laboratory Operations Manager

175 Metro Center Boulevard • Warwick, Rhode Island 02886-1755
(401) 732-3400 • Fax (401) 732-3499 • email: mitkem@mitkem.com

MITKEM CORPORATION

Client: Foster Wheeler Environmental Corp.

Client Project: 242-5 SUMP, 5/18 Samples

Lab Project: 70741

Date samples received: 5/18/00

RECEIVED
JUN - 5 2000

Project Narrative

This data report includes the analysis results for ten (10) soil samples that were received from Foster Wheeler Environmental Corp. on May 18, 2000. Analyses were performed per specification in the Chain of Custody form. For reference, a copy of the Mitkem Sample Log-In form is included for cross-referencing the client sample ID and laboratory sample ID.

All of the analyses were performed according to method specifications.

The common volatile organic laboratory contaminants acetone and methylene chloride were detected in a method blank associated with these samples. Where either of these compounds are detected in a sample associated with this blank their values are flagged with a "B" to indicate potential laboratory contamination.

The PCB analysis for sample N1-150 was performed twice due to unusually low surrogate standard recovery in the initial analysis. The recovery of the surrogate standards was in the normal range in the reanalysis. Results for both analyses are included in the report.

Results for arsenic are reported to the laboratory method detection limit to achieve project objectives. The reporting limit for selenium is elevated due to sample matrix interference.

No other unusual occurrences were noted during sample analysis.

This data report has been reviewed and is authorized for release as evidenced by the signature below.

Edward A. Lawler
Laboratory Operations Manager

Data Flag/Qualifiers:

J This flag indicates an estimated value due to either
- the compound was detected at below the Reporting Limit, or
- estimated concentration for Tentatively Identified Compound

B For organic analyses, this flag indicates the analyte was also detected in the associated Method Blank. . The B flag has an alternative meaning for CLP-type metals analyses, indicating a "trace" concentration below the normal reporting limit and above the detection limit.

D This flag indicates the analyte concentration was obtained from a diluted analysis

E This flag indicates the analyte concentration exceeded the Calibration Range

P This flag is used for Pesticides/PCB/Herbicide analyte when there is a greater than 40% difference for detected concentration between the two GC columns used for Primary and Confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The lower of the two values is reported in the Analysis Report.

U Not Detected. This compound was analyzed-for but not detected. Reporting limit is the value listed.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S1

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741001

Sample wt/vol: 9.1 (g/mL) G Lab File ID: V6A4475

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: not dec. 25 Date Analyzed: 05/24/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	4	U
74-87-3	Chloromethane	4	U
75-01-4	Vinyl Chloride	4	U
74-83-9	Bromomethane	4	U
75-00-3	Chloroethane	4	U
75-69-4	Trichlorofluoromethane	4	U
75-35-4	1,1-Dichloroethene	4	U
67-64-1	Acetone	55	B
74-88-4	Iodomethane	4	U
75-15-0	Carbon Disulfide	4	U
75-09-2	Methylene Chloride	4	U
156-60-5	trans-1,2-Dichloroethene	4	U
1634-04-4	Methyl tert-butyl ether	4	U
75-34-3	1,1-Dichloroethane	4	U
108-05-4	Vinyl acetate	4	U
78-93-3	2-Butanone	8	
156-59-2	cis-1,2-Dichloroethene	4	U
590-20-7	2,2-Dichloropropane	4	U
74-97-5	Bromochloromethane	4	U
67-66-3	Chloroform	4	U
71-55-6	1,1,1-Trichloroethane	4	U
563-58-6	1,1-Dichloropropene	4	U
56-23-5	Carbon Tetrachloride	4	U
107-06-2	1,2-Dichloroethane	4	U
71-43-2	Benzene	4	U
79-01-6	Trichloroethene	4	U
78-87-5	1,2-Dichloropropane	4	U
74-95-3	Dibromomethane	4	U
75-27-4	Bromodichloromethane	4	U
110-75-8	2-Chloroethyl vinyl ether	4	U
10061-01-5	cis-1,3-Dichloropropene	4	U
108-10-1	4-Methyl-2-pentanone	4	U
108-88-3	Toluene	4	U
10061-02-6	trans-1,3-Dichloropropene	4	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S1

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741001

Sample wt/vol: 9.1 (g/mL) G Lab File ID: V6A4475

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: not dec. 25 Date Analyzed: 05/24/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-00-5	1,1,2-Trichloroethane	4	U
142-28-9	1,3-Dichloropropane	4	U
127-18-4	Tetrachloroethene	6	
591-78-6	2-Hexanone	4	U
124-48-1	Dibromochloromethane	4	U
106-93-4	1,2-Dibromoethane	4	U
108-90-7	Chlorobenzene	4	U
630-20-6	1,1,1,2-Tetrachloroethane	4	U
100-41-4	Ethylbenzene	4	U
1330-20-7	Xylene (Total)	4	U
100-42-5	Styrene	4	U
75-25-2	Bromoform	4	U
98-82-8	Isopropylbenzene	4	U
79-34-5	1,1,2,2-Tetrachloroethane	4	U
108-86-1	Bromobenzene	4	U
96-18-4	1,2,3-Trichloropropane	4	U
103-65-1	n-Propylbenzene	4	U
95-49-8	2-Chlorotoluene	4	U
108-67-8	1,3,5-Trimethylbenzene	4	U
106-43-4	4-Chlorotoluene	4	U
98-06-6	tert-Butylbenzene	4	U
95-63-6	1,2,4-Trimethylbenzene	4	U
135-98-8	sec-Butylbenzene	4	U
99-87-6	4-Isopropyltoluene	4	U
541-73-1	1,3-Dichlorobenzene	4	U
106-46-7	1,4-Dichlorobenzene	4	U
104-51-8	n-Butylbenzene	4	U
95-50-1	1,2-Dichlorobenzene	4	U
96-12-8	1,2-Dibromo-3-chloropropane	4	U
120-82-1	1,2,4-Trichlorobenzene	4	U
87-68-3	Hexachlorobutadiene	4	U
91-20-3	Naphthalene	4	U
87-61-6	1,2,3-Trichlorobenzene	4	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E1

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741002

Sample wt/vol: 8.4 (g/mL) G Lab File ID: V6A4476

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: not dec. 17 Date Analyzed: 05/24/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	4	U
74-87-3	Chloromethane	4	U
75-01-4	Vinyl Chloride	4	U
74-83-9	Bromomethane	4	U
75-00-3	Chloroethane	4	U
75-69-4	Trichlorofluoromethane	4	U
75-35-4	1,1-Dichloroethene	4	U
67-64-1	Acetone	46	B
74-88-4	Iodomethane	4	U
75-15-0	Carbon Disulfide	4	U
75-09-2	Methylene Chloride	1	JB
156-60-5	trans-1,2-Dichloroethene	4	U
1634-04-4	Methyl tert-butyl ether	4	U
75-34-3	1,1-Dichloroethane	4	U
108-05-4	Vinyl acetate	4	U
78-93-3	2-Butanone	4	U
156-59-2	cis-1,2-Dichloroethene	4	U
590-20-7	2,2-Dichloropropane	4	U
74-97-5	Bromochloromethane	4	U
67-66-3	Chloroform	4	U
71-55-6	1,1,1-Trichloroethane	4	U
563-58-6	1,1-Dichloropropene	4	U
56-23-5	Carbon Tetrachloride	4	U
107-06-2	1,2-Dichloroethane	4	U
71-43-2	Benzene	4	U
79-01-6	Trichloroethene	4	U
78-87-5	1,2-Dichloropropane	4	U
74-95-3	Dibromomethane	4	U
75-27-4	Bromodichloromethane	4	U
110-75-8	2-Chloroethyl vinyl ether	4	U
10061-01-5	cis-1,3-Dichloropropene	4	U
108-10-1	4-Methyl-2-pentanone	4	U
108-88-3	Toluene	2	J
10061-02-6	trans-1,3-Dichloropropene	4	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E1

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741002

Sample wt/vol: 8.4 (g/mL) G Lab File ID: V6A4476

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: not dec. 17 Date Analyzed: 05/24/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-00-5	1,1,2-Trichloroethane	4	U
142-28-9	1,3-Dichloropropane	4	U
127-18-4	Tetrachloroethene	2	J
591-78-6	2-Hexanone	4	U
124-48-1	Dibromochloromethane	4	U
106-93-4	1,2-Dibromoethane	4	U
108-90-7	Chlorobenzene	4	U
630-20-6	1,1,1,2-Tetrachloroethane	4	U
100-41-4	Ethylbenzene	4	U
1330-20-7	Xylene (Total)	4	U
100-42-5	Styrene	4	U
75-25-2	Bromoform	4	U
98-82-8	Isopropylbenzene	4	U
79-34-5	1,1,2,2-Tetrachloroethane	4	U
108-86-1	Bromobenzene	4	U
96-18-4	1,2,3-Trichloropropane	4	U
103-65-1	n-Propylbenzene	4	U
95-49-8	2-Chlorotoluene	4	U
108-67-8	1,3,5-Trimethylbenzene	4	U
106-43-4	4-Chlorotoluene	4	U
98-06-6	tert-Butylbenzene	4	U
95-63-6	1,2,4-Trimethylbenzene	4	U
135-98-8	sec-Butylbenzene	4	U
99-87-6	4-Isopropyltoluene	4	U
541-73-1	1,3-Dichlorobenzene	4	U
106-46-7	1,4-Dichlorobenzene	4	U
104-51-8	n-Butylbenzene	4	U
95-50-1	1,2-Dichlorobenzene	4	U
96-12-8	1,2-Dibromo-3-chloropropane	4	U
120-82-1	1,2,4-Trichlorobenzene	4	U
87-68-3	Hexachlorobutadiene	4	U
91-20-3	Naphthalene	4	U
87-61-6	1,2,3-Trichlorobenzene	4	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-250

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741003

Sample wt/vol: 10.4 (g/mL) G Lab File ID: V6A4477

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: not dec. 14 Date Analyzed: 05/24/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	3	U
74-87-3	Chloromethane	3	U
75-01-4	Vinyl Chloride	3	U
74-83-9	Bromomethane	3	U
75-00-3	Chloroethane	3	U
75-69-4	Trichlorofluoromethane	3	U
75-35-4	1,1-Dichloroethene	3	U
67-64-1	Acetone	110	B
74-88-4	Iodomethane	3	U
75-15-0	Carbon Disulfide	3	U
75-09-2	Methylene Chloride	3	U
156-60-5	trans-1,2-Dichloroethene	3	U
1634-04-4	Methyl tert-butyl ether	3	U
75-34-3	1,1-Dichloroethane	3	U
108-05-4	Vinyl acetate	3	U
78-93-3	2-Butanone	29	
156-59-2	cis-1,2-Dichloroethene	3	U
590-20-7	2,2-Dichloropropane	3	U
74-97-5	Bromochloromethane	3	U
67-66-3	Chloroform	3	U
71-55-6	1,1,1-Trichloroethane	3	U
563-58-6	1,1-Dichloropropene	3	U
56-23-5	Carbon Tetrachloride	3	U
107-06-2	1,2-Dichloroethane	3	U
71-43-2	Benzene	3	U
79-01-6	Trichloroethene	3	U
78-87-5	1,2-Dichloropropane	3	U
74-95-3	Dibromomethane	3	U
75-27-4	Bromodichloromethane	3	U
110-75-8	2-Chloroethyl vinyl ether	3	U
10061-01-5	cis-1,3-Dichloropropene	3	U
108-10-1	4-Methyl-2-pentanone	3	U
108-88-3	Toluene	3	U
10061-02-6	trans-1,3-Dichloropropene	3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-250

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741003

Sample wt/vol: 10.4 (g/mL) G Lab File ID: V6A4477

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: not dec. 14 Date Analyzed: 05/24/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-00-5	1,1,2-Trichloroethane	3	U
142-28-9	1,3-Dichloropropane	3	U
127-18-4	Tetrachloroethene	3	U
591-78-6	2-Hexanone	3	U
124-48-1	Dibromochloromethane	3	U
106-93-4	1,2-Dibromoethane	3	U
108-90-7	Chlorobenzene	3	U
630-20-6	1,1,1,2-Tetrachloroethane	3	U
100-41-4	Ethylbenzene	3	U
1330-20-7	Xylene (Total)	3	U
100-42-5	Styrene	3	U
75-25-2	Bromoform	3	U
98-82-8	Isopropylbenzene	3	U
79-34-5	1,1,2,2-Tetrachloroethane	3	U
108-86-1	Bromobenzene	3	U
96-18-4	1,2,3-Trichloropropane	3	U
103-65-1	n-Propylbenzene	3	U
95-49-8	2-Chlorotoluene	3	U
108-67-8	1,3,5-Trimethylbenzene	3	U
106-43-4	4-Chlorotoluene	3	U
98-06-6	tert-Butylbenzene	3	U
95-63-6	1,2,4-Trimethylbenzene	3	U
135-98-8	sec-Butylbenzene	3	U
99-87-6	4-Isopropyltoluene	3	U
541-73-1	1,3-Dichlorobenzene	3	U
106-46-7	1,4-Dichlorobenzene	3	U
104-51-8	n-Butylbenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	3	U
120-82-1	1,2,4-Trichlorobenzene	3	U
87-68-3	Hexachlorobutadiene	3	U
91-20-3	Naphthalene	3	U
87-61-6	1,2,3-Trichlorobenzene	3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-E

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741004

Sample wt/vol: 9.8 (g/mL) G Lab File ID: V6A4478

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: not dec. 14 Date Analyzed: 05/24/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	3	U
74-87-3	Chloromethane	3	U
75-01-4	Vinyl Chloride	3	U
74-83-9	Bromomethane	3	U
75-00-3	Chloroethane	3	U
75-69-4	Trichlorofluoromethane	3	U
75-35-4	1,1-Dichloroethene	3	U
67-64-1	Acetone	13	B
74-88-4	Iodomethane	3	U
75-15-0	Carbon Disulfide	6	
75-09-2	Methylene Chloride	1	JB
156-60-5	trans-1,2-Dichloroethene	3	U
1634-04-4	Methyl tert-butyl ether	3	U
75-34-3	1,1-Dichloroethane	3	U
108-05-4	Vinyl acetate	3	U
78-93-3	2-Butanone	4	
156-59-2	cis-1,2-Dichloroethene	3	U
590-20-7	2,2-Dichloropropane	3	U
74-97-5	Bromochloromethane	3	U
67-66-3	Chloroform	3	U
71-55-6	1,1,1-Trichloroethane	3	U
563-58-6	1,1-Dichloropropene	3	U
56-23-5	Carbon Tetrachloride	3	U
107-06-2	1,2-Dichloroethane	3	U
71-43-2	Benzene	3	U
79-01-6	Trichloroethene	3	U
78-87-5	1,2-Dichloropropane	3	U
74-95-3	Dibromomethane	3	U
75-27-4	Bromodichloromethane	3	U
110-75-8	2-Chloroethyl vinyl ether	3	U
10061-01-5	cis-1,3-Dichloropropene	3	U
108-10-1	4-Methyl-2-pentanone	3	U
108-88-3	Toluene	3	U
10061-02-6	trans-1,3-Dichloropropene	3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-E

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741004

Sample wt/vol: 9.8 (g/mL) G Lab File ID: V6A4478

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: not dec. 14 Date Analyzed: 05/24/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-00-5	1,1,2-Trichloroethane	3	U
142-28-9	1,3-Dichloropropane	3	U
127-18-4	Tetrachloroethene	3	U
591-78-6	2-Hexanone	3	U
124-48-1	Dibromochloromethane	3	U
106-93-4	1,2-Dibromoethane	3	U
108-90-7	Chlorobenzene	3	U
630-20-6	1,1,1,2-Tetrachloroethane	3	U
100-41-4	Ethylbenzene	3	U
1330-20-7	Xylene (Total)	3	U
100-42-5	Styrene	3	U
75-25-2	Bromoform	3	U
98-82-8	Isopropylbenzene	3	U
79-34-5	1,1,2,2-Tetrachloroethane	3	U
108-86-1	Bromobenzene	3	U
96-18-4	1,2,3-Trichloropropane	3	U
103-65-1	n-Propylbenzene	3	U
95-49-8	2-Chlorotoluene	3	U
108-67-8	1,3,5-Trimethylbenzene	3	U
106-43-4	4-Chlorotoluene	3	U
98-06-6	tert-Butylbenzene	3	U
95-63-6	1,2,4-Trimethylbenzene	3	U
135-98-8	sec-Butylbenzene	3	U
99-87-6	4-Isopropyltoluene	3	U
541-73-1	1,3-Dichlorobenzene	3	U
106-46-7	1,4-Dichlorobenzene	3	U
104-51-8	n-Butylbenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	3	U
120-82-1	1,2,4-Trichlorobenzene	3	U
87-68-3	Hexachlorobutadiene	3	U
91-20-3	Naphthalene	3	U
87-61-6	1,2,3-Trichlorobenzene	3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-200

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741005

Sample wt/vol: 9.7 (g/mL) G Lab File ID: V6A4479

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: not dec. 22 Date Analyzed: 05/24/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	3	U
74-87-3	Chloromethane	3	U
75-01-4	Vinyl Chloride	3	U
74-83-9	Bromomethane	3	U
75-00-3	Chloroethane	3	U
75-69-4	Trichlorofluoromethane	3	U
75-35-4	1,1-Dichloroethene	3	U
67-64-1	Acetone	24	B
74-88-4	Iodomethane	3	U
75-15-0	Carbon Disulfide	3	U
75-09-2	Methylene Chloride	3	U
156-60-5	trans-1,2-Dichloroethene	3	U
1634-04-4	Methyl tert-butyl ether	3	U
75-34-3	1,1-Dichloroethane	3	U
108-05-4	Vinyl acetate	3	U
78-93-3	2-Butanone	6	
156-59-2	cis-1,2-Dichloroethene	3	U
590-20-7	2,2-Dichloropropane	3	U
74-97-5	Bromochloromethane	3	U
67-66-3	Chloroform	3	U
71-55-6	1,1,1-Trichloroethane	3	U
563-58-6	1,1-Dichloropropene	3	U
56-23-5	Carbon Tetrachloride	3	U
107-06-2	1,2-Dichloroethane	3	U
71-43-2	Benzene	3	U
79-01-6	Trichloroethene	3	U
78-87-5	1,2-Dichloropropane	3	U
74-95-3	Dibromomethane	3	U
75-27-4	Bromodichloromethane	3	U
110-75-8	2-Chloroethyl vinyl ether	3	U
10061-01-5	cis-1,3-Dichloropropene	3	U
108-10-1	4-Methyl-2-pentanone	3	U
108-88-3	Toluene	3	U
10061-02-6	trans-1,3-Dichloropropene	3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-200

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741005

Sample wt/vol: 9.7 (g/mL) G Lab File ID: V6A4479

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: not dec. 22 Date Analyzed: 05/24/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-00-5	1,1,2-Trichloroethane	3	U
142-28-9	1,3-Dichloropropane	3	U
127-18-4	Tetrachloroethene	3	U
591-78-6	2-Hexanone	3	U
124-48-1	Dibromochloromethane	3	U
106-93-4	1,2-Dibromoethane	3	U
108-90-7	Chlorobenzene	3	U
630-20-6	1,1,1,2-Tetrachloroethane	3	U
100-41-4	Ethylbenzene	3	U
1330-20-7	Xylene (Total)	3	U
100-42-5	Styrene	3	U
75-25-2	Bromoform	3	U
98-82-8	Isopropylbenzene	3	U
79-34-5	1,1,2,2-Tetrachloroethane	3	U
108-86-1	Bromobenzene	3	U
96-18-4	1,2,3-Trichloropropane	3	U
103-65-1	n-Propylbenzene	3	U
95-49-8	2-Chlorotoluene	3	U
108-67-8	1,3,5-Trimethylbenzene	3	U
106-43-4	4-Chlorotoluene	3	U
98-06-6	tert-Butylbenzene	3	U
95-63-6	1,2,4-Trimethylbenzene	3	U
135-98-8	sec-Butylbenzene	3	U
99-87-6	4-Isopropyltoluene	3	U
541-73-1	1,3-Dichlorobenzene	3	U
106-46-7	1,4-Dichlorobenzene	3	U
104-51-8	n-Butylbenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	3	U
120-82-1	1,2,4-Trichlorobenzene	3	U
87-68-3	Hexachlorobutadiene	3	U
91-20-3	Naphthalene	3	U
87-61-6	1,2,3-Trichlorobenzene	3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-D

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741006

Sample wt/vol: 10.4 (g/mL) G Lab File ID: V6A4480

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: not dec. 15 Date Analyzed: 05/24/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	3	U
74-87-3	Chloromethane	3	U
75-01-4	Vinyl Chloride	3	U
74-83-9	Bromomethane	3	U
75-00-3	Chloroethane	3	U
75-69-4	Trichlorofluoromethane	3	U
75-35-4	1,1-Dichloroethene	3	U
67-64-1	Acetone	14	B
74-88-4	Iodomethane	3	U
75-15-0	Carbon Disulfide	3	U
75-09-2	Methylene Chloride	3	U
156-60-5	trans-1,2-Dichloroethene	3	U
1634-04-4	Methyl tert-butyl ether	3	U
75-34-3	1,1-Dichloroethane	3	U
108-05-4	Vinyl acetate	3	U
78-93-3	2-Butanone	3	U
156-59-2	cis-1,2-Dichloroethene	3	U
590-20-7	2,2-Dichloropropane	3	U
74-97-5	Bromochloromethane	3	U
67-66-3	Chloroform	3	U
71-55-6	1,1,1-Trichloroethane	3	U
563-58-6	1,1-Dichloropropene	3	U
56-23-5	Carbon Tetrachloride	3	U
107-06-2	1,2-Dichloroethane	3	U
71-43-2	Benzene	3	U
79-01-6	Trichloroethene	3	U
78-87-5	1,2-Dichloropropane	3	U
74-95-3	Dibromomethane	3	U
75-27-4	Bromodichloromethane	3	U
110-75-8	2-Chloroethyl vinyl ether	3	U
10061-01-5	cis-1,3-Dichloropropene	3	U
108-10-1	4-Methyl-2-pentanone	3	U
108-88-3	Toluene	3	U
10061-02-6	trans-1,3-Dichloropropene	3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-D

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741006

Sample wt/vol: 10.4 (g/mL) G Lab File ID: V6A4480

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: not dec. 15 Date Analyzed: 05/24/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-00-5	1,1,2-Trichloroethane	3	U
142-28-9	1,3-Dichloropropane	3	U
127-18-4	Tetrachloroethene	3	U
591-78-6	2-Hexanone	3	U
124-48-1	Dibromochloromethane	3	U
106-93-4	1,2-Dibromoethane	3	U
108-90-7	Chlorobenzene	3	U
630-20-6	1,1,1,2-Tetrachloroethane	3	U
100-41-4	Ethylbenzene	3	U
1330-20-7	Xylene (Total)	3	U
100-42-5	Styrene	3	U
75-25-2	Bromoform	3	U
98-82-8	Isopropylbenzene	3	U
79-34-5	1,1,2,2-Tetrachloroethane	3	U
108-86-1	Bromobenzene	3	U
96-18-4	1,2,3-Trichloropropane	3	U
103-65-1	n-Propylbenzene	3	U
95-49-8	2-Chlorotoluene	3	U
108-67-8	1,3,5-Trimethylbenzene	3	U
106-43-4	4-Chlorotoluene	3	U
98-06-6	tert-Butylbenzene	3	U
95-63-6	1,2,4-Trimethylbenzene	3	U
135-98-8	sec-Butylbenzene	3	U
99-87-6	4-Isopropyltoluene	3	U
541-73-1	1,3-Dichlorobenzene	3	U
106-46-7	1,4-Dichlorobenzene	3	U
104-51-8	n-Butylbenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	3	U
120-82-1	1,2,4-Trichlorobenzene	3	U
87-68-3	Hexachlorobutadiene	3	U
91-20-3	Naphthalene	3	U
87-61-6	1,2,3-Trichlorobenzene	3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-C

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741007

Sample wt/vol: 9.6 (g/mL) G Lab File ID: V6A4481

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: not dec. 15 Date Analyzed: 05/24/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	3	U
74-87-3	Chloromethane	3	U
75-01-4	Vinyl Chloride	3	U
74-83-9	Bromomethane	3	U
75-00-3	Chloroethane	3	U
75-69-4	Trichlorofluoromethane	3	U
75-35-4	1,1-Dichloroethene	3	U
67-64-1	Acetone	15	B
74-88-4	Iodomethane	3	U
75-15-0	Carbon Disulfide	3	U
75-09-2	Methylene Chloride	3	U
156-60-5	trans-1,2-Dichloroethene	3	U
1634-04-4	Methyl tert-butyl ether	3	U
75-34-3	1,1-Dichloroethane	3	U
108-05-4	Vinyl acetate	3	U
78-93-3	2-Butanone	3	U
156-59-2	cis-1,2-Dichloroethene	3	U
590-20-7	2,2-Dichloropropane	3	U
74-97-5	Bromochloromethane	3	U
67-66-3	Chloroform	3	U
71-55-6	1,1,1-Trichloroethane	3	U
563-58-6	1,1-Dichloropropene	3	U
56-23-5	Carbon Tetrachloride	3	U
107-06-2	1,2-Dichloroethane	3	U
71-43-2	Benzene	3	U
79-01-6	Trichloroethene	3	U
78-87-5	1,2-Dichloropropane	3	U
74-95-3	Dibromomethane	3	U
75-27-4	Bromodichloromethane	3	U
110-75-8	2-Chloroethyl vinyl ether	3	U
10061-01-5	cis-1,3-Dichloropropene	3	U
108-10-1	4-Methyl-2-pentanone	3	U
108-88-3	Toluene	3	U
10061-02-6	trans-1,3-Dichloropropene	3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-C

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741007

Sample wt/vol: 9.6 (g/mL) G Lab File ID: V6A4481

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: not dec. 15 Date Analyzed: 05/24/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-00-5	1,1,2-Trichloroethane	3	U
142-28-9	1,3-Dichloropropane	3	U
127-18-4	Tetrachloroethene	3	U
591-78-6	2-Hexanone	3	U
124-48-1	Dibromochloromethane	3	U
106-93-4	1,2-Dibromoethane	3	U
108-90-7	Chlorobenzene	3	U
630-20-6	1,1,1,2-Tetrachloroethane	3	U
100-41-4	Ethylbenzene	3	U
1330-20-7	Xylene (Total)	3	U
100-42-5	Styrene	3	U
75-25-2	Bromoform	3	U
98-82-8	Isopropylbenzene	3	U
79-34-5	1,1,2,2-Tetrachloroethane	3	U
108-86-1	Bromobenzene	3	U
96-18-4	1,2,3-Trichloropropane	3	U
103-65-1	n-Propylbenzene	3	U
95-49-8	2-Chlorotoluene	3	U
108-67-8	1,3,5-Trimethylbenzene	3	U
106-43-4	4-Chlorotoluene	3	U
98-06-6	tert-Butylbenzene	3	U
95-63-6	1,2,4-Trimethylbenzene	3	U
135-98-8	sec-Butylbenzene	3	U
99-87-6	4-Isopropyltoluene	3	U
541-73-1	1,3-Dichlorobenzene	3	U
106-46-7	1,4-Dichlorobenzene	3	U
104-51-8	n-Butylbenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	3	U
120-82-1	1,2,4-Trichlorobenzene	3	U
87-68-3	Hexachlorobutadiene	3	U
91-20-3	Naphthalene	3	U
87-61-6	1,2,3-Trichlorobenzene	3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-150

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741008

Sample wt/vol: 9.3 (g/mL) G Lab File ID: V6A4482

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: not dec. 17 Date Analyzed: 05/24/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	3	U
74-87-3	Chloromethane	3	U
75-01-4	Vinyl Chloride	3	U
74-83-9	Bromomethane	3	U
75-00-3	Chloroethane	3	U
75-69-4	Trichlorofluoromethane	3	U
75-35-4	1,1-Dichloroethene	3	U
67-64-1	Acetone	26	B
74-88-4	Iodomethane	3	U
75-15-0	Carbon Disulfide	3	U
75-09-2	Methylene Chloride	3	U
156-60-5	trans-1,2-Dichloroethene	3	U
1634-04-4	Methyl tert-butyl ether	3	U
75-34-3	1,1-Dichloroethane	3	U
108-05-4	Vinyl acetate	3	U
78-93-3	2-Butanone	3	U
156-59-2	cis-1,2-Dichloroethene	3	U
590-20-7	2,2-Dichloropropane	3	U
74-97-5	Bromochloromethane	3	U
67-66-3	Chloroform	3	U
71-55-6	1,1,1-Trichloroethane	3	U
563-58-6	1,1-Dichloropropene	3	U
56-23-5	Carbon Tetrachloride	3	U
107-06-2	1,2-Dichloroethane	3	U
71-43-2	Benzene	3	U
79-01-6	Trichloroethene	3	U
78-87-5	1,2-Dichloropropane	3	U
74-95-3	Dibromomethane	3	U
75-27-4	Bromodichloromethane	3	U
110-75-8	2-Chloroethyl vinyl ether	3	U
10061-01-5	cis-1,3-Dichloropropene	3	U
108-10-1	4-Methyl-2-pentanone	3	U
108-88-3	Toluene	3	U
10061-02-6	trans-1,3-Dichloropropene	3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-150

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741008

Sample wt/vol: 9.3 (g/mL) G Lab File ID: V6A4482

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: not dec. 17 Date Analyzed: 05/24/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-00-5	1,1,2-Trichloroethane	3	U
142-28-9	1,3-Dichloropropane	3	U
127-18-4	Tetrachloroethene	3	U
591-78-6	2-Hexanone	3	U
124-48-1	Dibromochloromethane	3	U
106-93-4	1,2-Dibromoethane	3	U
108-90-7	Chlorobenzene	3	U
630-20-6	1,1,1,2-Tetrachloroethane	3	U
100-41-4	Ethylbenzene	3	U
1330-20-7	Xylene (Total)	3	U
100-42-5	Styrene	3	U
75-25-2	Bromoform	3	U
98-82-8	Isopropylbenzene	3	U
79-34-5	1,1,2,2-Tetrachloroethane	3	U
108-86-1	Bromobenzene	3	U
96-18-4	1,2,3-Trichloropropane	3	U
103-65-1	n-Propylbenzene	3	U
95-49-8	2-Chlorotoluene	3	U
108-67-8	1,3,5-Trimethylbenzene	3	U
106-43-4	4-Chlorotoluene	3	U
98-06-6	tert-Butylbenzene	3	U
95-63-6	1,2,4-Trimethylbenzene	3	U
135-98-8	sec-Butylbenzene	3	U
99-87-6	4-Isopropyltoluene	3	U
541-73-1	1,3-Dichlorobenzene	3	U
106-46-7	1,4-Dichlorobenzene	3	U
104-51-8	n-Butylbenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	3	U
120-82-1	1,2,4-Trichlorobenzene	3	U
87-68-3	Hexachlorobutadiene	3	U
91-20-3	Naphthalene	3	U
87-61-6	1,2,3-Trichlorobenzene	3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-B

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741009

Sample wt/vol: 10.1 (g/mL) G Lab File ID: V6A4483

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: not dec. 16 Date Analyzed: 05/24/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	3	U
74-87-3	Chloromethane	3	U
75-01-4	Vinyl Chloride	3	U
74-83-9	Bromomethane	3	U
75-00-3	Chloroethane	3	U
75-69-4	Trichlorofluoromethane	3	U
75-35-4	1,1-Dichloroethene	3	U
67-64-1	Acetone	22	B
74-88-4	Iodomethane	3	U
75-15-0	Carbon Disulfide	3	U
75-09-2	Methylene Chloride	3	U
156-60-5	trans-1,2-Dichloroethene	3	U
1634-04-4	Methyl tert-butyl ether	3	U
75-34-3	1,1-Dichloroethane	3	U
108-05-4	Vinyl acetate	3	U
78-93-3	2-Butanone	7	
156-59-2	cis-1,2-Dichloroethene	3	U
590-20-7	2,2-Dichloropropane	3	U
74-97-5	Bromochloromethane	3	U
67-66-3	Chloroform	3	U
71-55-6	1,1,1-Trichloroethane	3	U
563-58-6	1,1-Dichloropropene	3	U
56-23-5	Carbon Tetrachloride	3	U
107-06-2	1,2-Dichloroethane	3	U
71-43-2	Benzene	3	U
79-01-6	Trichloroethene	3	U
78-87-5	1,2-Dichloropropane	3	U
74-95-3	Dibromomethane	3	U
75-27-4	Bromodichloromethane	3	U
110-75-8	2-Chloroethyl vinyl ether	3	U
10061-01-5	cis-1,3-Dichloropropene	3	U
108-10-1	4-Methyl-2-pentanone	3	U
108-88-3	Toluene	3	U
10061-02-6	trans-1,3-Dichloropropene	3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-B

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741009

Sample wt/vol: 10.1 (g/mL) G Lab File ID: V6A4483

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: not dec. 16 Date Analyzed: 05/24/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-00-5	1,1,2-Trichloroethane	3	U
142-28-9	1,3-Dichloropropane	3	U
127-18-4	Tetrachloroethene	3	U
591-78-6	2-Hexanone	3	U
124-48-1	Dibromochloromethane	3	U
106-93-4	1,2-Dibromoethane	3	U
108-90-7	Chlorobenzene	3	U
630-20-6	1,1,1,2-Tetrachloroethane	3	U
100-41-4	Ethylbenzene	3	U
1330-20-7	Xylene (Total)	3	U
100-42-5	Styrene	3	U
75-25-2	Bromoform	3	U
98-82-8	Isopropylbenzene	3	U
79-34-5	1,1,2,2-Tetrachloroethane	3	U
108-86-1	Bromobenzene	3	U
96-18-4	1,2,3-Trichloropropane	3	U
103-65-1	n-Propylbenzene	3	U
95-49-8	2-Chlorotoluene	3	U
108-67-8	1,3,5-Trimethylbenzene	3	U
106-43-4	4-Chlorotoluene	3	U
98-06-6	tert-Butylbenzene	3	U
95-63-6	1,2,4-Trimethylbenzene	3	U
135-98-8	sec-Butylbenzene	3	U
99-87-6	4-Isopropyltoluene	3	U
541-73-1	1,3-Dichlorobenzene	3	U
106-46-7	1,4-Dichlorobenzene	3	U
104-51-8	n-Butylbenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	3	U
120-82-1	1,2,4-Trichlorobenzene	3	U
87-68-3	Hexachlorobutadiene	3	U
91-20-3	Naphthalene	6	
87-61-6	1,2,3-Trichlorobenzene	3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-100

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741010

Sample wt/vol: 10.0 (g/mL) G Lab File ID: V6A4484

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: not dec. 16 Date Analyzed: 05/24/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	3	U
74-87-3	Chloromethane	3	U
75-01-4	Vinyl Chloride	3	U
74-83-9	Bromomethane	3	U
75-00-3	Chloroethane	3	U
75-69-4	Trichlorofluoromethane	3	U
75-35-4	1,1-Dichloroethene	3	U
67-64-1	Acetone	52	B
74-88-4	Iodomethane	3	U
75-15-0	Carbon Disulfide	3	U
75-09-2	Methylene Chloride	3	U
156-60-5	trans-1,2-Dichloroethene	3	U
1634-04-4	Methyl tert-butyl ether	3	U
75-34-3	1,1-Dichloroethane	3	U
108-05-4	Vinyl acetate	3	U
78-93-3	2-Butanone	14	
156-59-2	cis-1,2-Dichloroethene	3	U
590-20-7	2,2-Dichloropropane	3	U
74-97-5	Bromochloromethane	3	U
67-66-3	Chloroform	3	U
71-55-6	1,1,1-Trichloroethane	3	U
563-58-6	1,1-Dichloropropene	3	U
56-23-5	Carbon Tetrachloride	3	U
107-06-2	1,2-Dichloroethane	3	U
71-43-2	Benzene	3	U
79-01-6	Trichloroethene	3	U
78-87-5	1,2-Dichloropropane	3	U
74-95-3	Dibromomethane	3	U
75-27-4	Bromodichloromethane	3	U
110-75-8	2-Chloroethyl vinyl ether	3	U
10061-01-5	cis-1,3-Dichloropropene	3	U
108-10-1	4-Methyl-2-pentanone	3	U
108-88-3	Toluene	3	U
10061-02-6	trans-1,3-Dichloropropene	3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-100

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741010

Sample wt/vol: 10.0 (g/mL) G Lab File ID: V6A4484

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: not dec. 16 Date Analyzed: 05/24/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-00-5	1,1,2-Trichloroethane	3	U
142-28-9	1,3-Dichloropropane	3	U
127-18-4	Tetrachloroethene	3	U
591-78-6	2-Hexanone	3	U
124-48-1	Dibromochloromethane	3	U
106-93-4	1,2-Dibromoethane	3	U
108-90-7	Chlorobenzene	3	U
630-20-6	1,1,1,2-Tetrachloroethane	3	U
100-41-4	Ethylbenzene	3	U
1330-20-7	Xylene (Total)	3	U
100-42-5	Styrene	3	U
75-25-2	Bromoform	3	U
98-82-8	Isopropylbenzene	3	U
79-34-5	1,1,2,2-Tetrachloroethane	3	U
108-86-1	Bromobenzene	3	U
96-18-4	1,2,3-Trichloropropane	3	U
103-65-1	n-Propylbenzene	3	U
95-49-8	2-Chlorotoluene	3	U
108-67-8	1,3,5-Trimethylbenzene	3	U
106-43-4	4-Chlorotoluene	3	U
98-06-6	tert-Butylbenzene	3	U
95-63-6	1,2,4-Trimethylbenzene	3	U
135-98-8	sec-Butylbenzene	3	U
99-87-6	4-Isopropyltoluene	1	J
541-73-1	1,3-Dichlorobenzene	3	U
106-46-7	1,4-Dichlorobenzene	3	U
104-51-8	n-Butylbenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	3	U
120-82-1	1,2,4-Trichlorobenzene	3	U
87-68-3	Hexachlorobutadiene	3	U
91-20-3	Naphthalene	3	U
87-61-6	1,2,3-Trichlorobenzene	3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK6R

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: V6B0524A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V6A4472

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 05/24/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (mL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	5	U
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	11	
74-88-4	Iodomethane	5	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	4	J
156-60-5	trans-1,2-Dichloroethene	5	U
1634-04-4	Methyl tert-butyl ether	5	U
75-34-3	1,1-Dichloroethane	5	U
108-05-4	Vinyl acetate	5	U
78-93-3	2-Butanone	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
590-20-7	2,2-Dichloropropane	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
563-58-6	1,1-Dichloropropene	5	U
56-23-5	Carbon Tetrachloride	5	U
107-06-2	1,2-Dichloroethane	5	U
71-43-2	Benzene	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
110-75-8	2-Chloroethyl vinyl ether	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK6R

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: V6B0524A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V6A4472

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 05/24/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (mL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-00-5	1,1,2-Trichloroethane	5	U
142-28-9	1,3-Dichloropropane	5	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	5	U
108-90-7	Chlorobenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (Total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
98-82-8	Isopropylbenzene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-86-1	Bromobenzene	5	U
96-18-4	1,2,3-Trichloropropane	5	U
103-65-1	n-Propylbenzene	5	U
95-49-8	2-Chlorotoluene	5	U
108-67-8	1,3,5-Trimethylbenzene	5	U
106-43-4	4-Chlorotoluene	5	U
98-06-6	tert-Butylbenzene	5	U
95-63-6	1,2,4-Trimethylbenzene	5	U
135-98-8	sec-Butylbenzene	5	U
99-87-6	4-Isopropyltoluene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
104-51-8	n-Butylbenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
87-68-3	Hexachlorobutadiene	5	U
91-20-3	Naphthalene	5	U
87-61-6	1,2,3-Trichlorobenzene	5	U

2B
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Level: (low/med) LOW

	EPA SAMPLE NO.	SMC1 #	SMC2 (DCE) #	SMC3 (TOL) #	OTHER (BFB) #	TOT OUT
01	VBLK6R	111	103	105	102	0
02	VBLK6RLCS	118	115	109	110	0
03	S1	111	106	106	97	0
04	E1	117	111	103	89	0
05	N1-250	115	115	103	101	0
06	N1-E	117	108	104	104	0
07	N1-200	123	110	107	103	0
08	N1-D	114	109	105	109	0
09	N1-C	117	116	105	111	0
10	N1-150	113	114	102	101	0
11	N1-B	115	114	103	103	0
12	N1-100	116	101	102	97	0
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		QC LIMITS
SMC1	= Dibromofluoromethane	(76-133)
SMC2 (DCE)	= 1,2-Dichloroethane-d4	(72-134)
SMC3 (TOL)	= Toluene-d8	(71-115)
OTHER (BFB)	= Bromofluorobenzene	(49-146)

Column to be used to flag recovery values

* Values outside of contract required QC limits

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix Spike - Sample No.: VBLK6R Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	50	0.0	47	94	28-162
Chloromethane	50	0.0	54	108	40-146
Vinyl Chloride	50	0.0	50	100	52-145
Bromomethane	50	0.0	60	120	34-154
Chloroethane	50	0.0	60	120	52-145
Trichlorofluoromethane	50	0.0	63	126	50-151
1,1-Dichloroethene	50	0.0	50	100	58-142
Acetone	50	11	64	106	12-171
Iodomethane	50	0.0	56	112	54-155
Carbon Disulfide	50	0.0	50	100	51-147
Methylene Chloride	50	4	50	92	53-141
trans-1,2-Dichloroethen	50	0.0	52	104	58-140
Methyl tert-butyl ether	50	0.0	36	72	56-144
1,1-Dichloroethane	50	0.0	56	112	60-139
Vinyl acetate	50	0.0	60	120	52-146
2-Butanone	50	0.0	62	124	33-164
cis-1,2-Dichloroethene	50	0.0	53	106	62-140
2,2-Dichloropropane	50	0.0	55	110	58-140
Bromochloromethane	50	0.0	58	116	61-141
Chloroform	50	0.0	56	112	60-140
1,1,1-Trichloroethane	50	0.0	62	124	60-142
1,1-Dichloropropene	50	0.0	52	104	63-141
Carbon Tetrachloride	50	0.0	63	126	60-143
1,2-Dichloroethane	50	0.0	64	128	57-144
Benzene	50	0.0	53	106	62-140
Trichloroethene	50	0.0	54	108	63-136
1,2-Dichloropropane	50	0.0	55	110	62-140
Dibromomethane	50	0.0	63	126	60-144

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix Spike - Sample No.: VBLK6R Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Bromodichloromethane	50	0.0	60	120	60-142
2-Chloroethyl vinyl eth	50	0.0	0.0	0*	48-157
cis-1,3-Dichloropropene	50	0.0	57	114	62-140
4-Methyl-2-pentanone	50	0.0	64	128	44-162
Toluene	50	0.0	52	104	62-141
trans-1,3-Dichloroprope	50	0.0	61	122	60-143
1,1,2-Trichloroethane	50	0.0	57	114	60-144
1,3-Dichloropropane	50	0.0	56	112	58-142
Tetrachloroethene	50	0.0	50	100	59-140
2-Hexanone	50	0.0	61	122	33-171
Dibromochloromethane	50	0.0	62	124	60-141
1,2-Dibromoethane	50	0.0	59	118	58-144
Chlorobenzene	50	0.0	52	104	61-140
1,1,1,2-Tetrachloroetha	50	0.0	56	112	61-139
Ethylbenzene	50	0.0	52	104	61-139
Xylene (Total)	150	0.0	150	100	61-141
Styrene	50	0.0	53	106	62-141
Bromoform	50	0.0	63	126	56-147
Isopropylbenzene	50	0.0	55	110	59-142
1,1,2,2-Tetrachloroetha	50	0.0	53	106	60-149
Bromobenzene	50	0.0	53	106	58-138
1,2,3-Trichloropropane	50	0.0	58	116	50-148
n-Propylbenzene	50	0.0	49	98	57-141
2-Chlorotoluene	50	0.0	50	100	58-140
1,3,5-Trimethylbenzene	50	0.0	52	104	58-141
4-Chlorotoluene	50	0.0	48	96	58-138
tert-Butylbenzene	50	0.0	52	104	57-142
1,2,4-Trimethylbenzene	50	0.0	51	102	58-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix Spike - Sample No.: VBLK6R Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
sec-Butylbenzene	50	0.0	51	102	55-143
4-Isopropyltoluene	50	0.0	52	104	56-142
1,3-Dichlorobenzene	50	0.0	50	100	59-138
1,4-Dichlorobenzene	50	0.0	51	102	59-138
n-Butylbenzene	50	0.0	52	104	55-143
1,2-Dichlorobenzene	50	0.0	50	100	59-139
1,2-Dibromo-3-chloropro	50	0.0	60	120	37-159
1,2,4-Trichlorobenzene	50	0.0	47	94	52-143
Hexachlorobutadiene	50	0.0	52	104	47-146
Naphthalene	50	0.0	49	98	42-153
1,2,3-Trichlorobenzene	50	0.0	48	96	50-144

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 1 out of 67 outside limits

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK6R

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Lab File ID: V6A4472 Lab Sample ID: V6B0524A

Date Analyzed: 05/24/00 Time Analyzed: 1012

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

Instrument ID: V6

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VBLK6RLCS	V6L0524A	V6A4473	1044
02	S1	70741001	V6A4475	1151
03	E1	70741002	V6A4476	1219
04	N1-250	70741003	V6A4477	1248
05	N1-E	70741004	V6A4478	1316
06	N1-200	70741005	V6A4479	1345
07	N1-D	70741006	V6A4480	1414
08	N1-C	70741007	V6A4481	1443
09	N1-150	70741008	V6A4482	1511
10	N1-B	70741009	V6A4483	1546
11	N1-100	70741010	V6A4484	1615
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COMMENTS:

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S1

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741001

Sample wt/vol: 35.7 (g/mL) G Lab File ID: S1B5625

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 25 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/27/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	370	U
111-44-4	bis(2-Chloroethyl)Ether	370	U
95-57-8	2-Chlorophenol	370	U
541-73-1	1,3-Dichlorobenzene	370	U
106-46-7	1,4-Dichlorobenzene	370	U
95-50-1	1,2-Dichlorobenzene	370	U
95-48-7	2-Methylphenol	370	U
108-60-1	2,2'-oxybis(1-Chloropropane)	370	U
106-44-5	4-Methylphenol	370	U
621-64-7	N-Nitroso-di-n-propylamine	370	U
67-72-1	Hexachloroethane	370	U
98-95-3	Nitrobenzene	370	U
78-59-1	Isophorone	370	U
88-75-5	2-Nitrophenol	370	U
105-67-9	2,4-Dimethylphenol	370	U
120-83-2	2,4-Dichlorophenol	370	U
120-82-1	1,2,4-Trichlorobenzene	370	U
91-20-3	Naphthalene	370	U
106-47-8	4-Chloroaniline	370	U
87-68-3	Hexachlorobutadiene	370	U
111-91-1	bis(2-Chloroethoxy)methane	370	U
59-50-7	4-Chloro-3-Methylphenol	370	U
91-57-6	2-Methylnaphthalene	370	U
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	370	U
95-95-4	2,4,5-Trichlorophenol	750	U
91-58-7	2-Chloronaphthalene	370	U
88-74-4	2-Nitroaniline	750	U
131-11-3	Dimethylphthalate	370	U
208-96-8	Acenaphthylene	370	U
606-20-2	2,6-Dinitrotoluene	370	U
99-09-2	3-Nitroaniline	750	U
83-32-9	Acenaphthene	370	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S1

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741001

Sample wt/vol: 35.7 (g/mL) G Lab File ID: S1B5625

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 25 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/27/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	750	U
100-02-7	4-Nitrophenol	750	U
132-64-9	Dibenzofuran	370	U
121-14-2	2,4-Dinitrotoluene	370	U
84-66-2	Diethylphthalate	370	U
7005-72-3	4-Chlorophenyl-phenylether	370	U
86-73-7	Fluorene	370	U
100-01-6	4-Nitroaniline	750	U
534-52-1	4,6-Dinitro-2-methylphenol	750	U
86-30-6	N-Nitrosodiphenylamine (1)	370	U
101-55-3	4-Bromophenyl-phenylether	370	U
118-74-1	Hexachlorobenzene	370	U
87-86-5	Pentachlorophenol	750	U
85-01-8	Phenanthrene	370	U
120-12-7	Anthracene	370	U
86-74-8	Carbazole	370	U
84-74-2	Di-n-butylphthalate	370	U
206-44-0	Fluoranthene	44	J
129-00-0	Pyrene	39	J
85-68-7	Butylbenzylphthalate	370	U
91-94-1	3,3'-Dichlorobenzidine	370	U
56-55-3	Benzo(a)anthracene	370	U
218-01-9	Chrysene	370	U
117-81-7	bis(2-Ethylhexyl)phthalate	44	J
117-84-0	Di-n-octylphthalate	370	U
205-99-2	Benzo(b)fluoranthene	370	U
207-08-9	Benzo(k)fluoranthene	370	U
50-32-8	Benzo(a)pyrene	370	U
193-39-5	Indeno(1,2,3-cd)pyrene	370	U
53-70-3	Dibenzo(a,h)anthracene	370	U
191-24-2	Benzo(g,h,i)perylene	370	U

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E1

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741002

Sample wt/vol: 35.0 (g/mL) G Lab File ID: S1B5626

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 17 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/27/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)Ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	2,2'-oxybis(1-Chloropropane)	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
59-50-7	4-Chloro-3-Methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	690	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	690	U
131-11-3	Dimethylphthalate	340	U
208-96-8	Acenaphthylene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
99-09-2	3-Nitroaniline	690	U
83-32-9	Acenaphthene	340	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

E1

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741002

Sample wt/vol: 35.0 (g/mL) G Lab File ID: S1B5626

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 17 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/27/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	690	U
100-02-7	4-Nitrophenol	690	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	690	U
534-52-1	4,6-Dinitro-2-methylphenol	690	U
86-30-6	N-Nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	690	U
85-01-8	Phenanthrene	36	J
120-12-7	Anthracene	340	U
86-74-8	Carbazole	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	62	J
129-00-0	Pyrene	58	J
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	340	U
56-55-3	Benzo(a)anthracene	38	J
218-01-9	Chrysene	42	J
117-81-7	bis(2-Ethylhexyl)phthalate	37	J
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo(b)fluoranthene	44	J
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	39	J
193-39-5	Indeno(1,2,3-cd)pyrene	340	U
53-70-3	Dibenzo(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-250

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741003

Sample wt/vol: 35.0 (g/mL) G Lab File ID: S1B5627

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 14 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/27/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)Ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
59-50-7	4-Chloro-3-Methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	670	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	670	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	670	U
83-32-9	Acenaphthene	330	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-250

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741003

Sample wt/vol: 35.0 (g/mL) G Lab File ID: S1B5627

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 14 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/27/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	670	U
100-02-7	4-Nitrophenol	670	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	670	U
534-52-1	4,6-Dinitro-2-methylphenol	670	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	670	U
85-01-8	Phenanthrene	330	
120-12-7	Anthracene	82	J
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	580	
129-00-0	Pyrene	430	
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	280	J
218-01-9	Chrysene	350	
117-81-7	bis(2-Ethylhexyl)phthalate	64	J
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	300	J
207-08-9	Benzo(k)fluoranthene	180	J
50-32-8	Benzo(a)pyrene	230	J
193-39-5	Indeno(1,2,3-cd)pyrene	140	J
53-70-3	Dibenzo(a,h)anthracene	46	J
191-24-2	Benzo(g,h,i)perylene	120	J

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-E

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741004

Sample wt/vol: 35.2 (g/mL) G Lab File ID: S1B5623

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 14 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/27/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)Ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
59-50-7	4-Chloro-3-Methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	660	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	660	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	660	U
83-32-9	Acenaphthene	330	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-E

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741004

Sample wt/vol: 35.2 (g/mL) G Lab File ID: S1B5623

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 14 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/27/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	660	U
100-02-7	4-Nitrophenol	660	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	660	U
534-52-1	4,6-Dinitro-2-methylphenol	660	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	660	U
85-01-8	Phenanthrene	37	J
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	41	J
129-00-0	Pyrene	36	J
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-200

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741005

Sample wt/vol: 35.4 (g/mL) G Lab File ID: S1B5622

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 22 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/26/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)Ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2'-oxybis(1-Chloropropane)	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
111-91-1	bis(2-Chloroethoxy)methane	360	U
59-50-7	4-Chloro-3-Methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	730	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	730	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	730	U
83-32-9	Acenaphthene	360	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-200

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741005

Sample wt/vol: 35.4 (g/mL) G Lab File ID: S1B5622

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 22 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/26/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	730	U
100-02-7	4-Nitrophenol	730	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-01-6	4-Nitroaniline	730	U
534-52-1	4,6-Dinitro-2-methylphenol	730	U
86-30-6	N-Nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	730	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	360	U
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	360	U
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	360	U
218-01-9	Chrysene	360	U
117-81-7	bis(2-Ethylhexyl)phthalate	360	U
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	360	U
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	360	U
193-39-5	Indeno(1,2,3-cd)pyrene	360	U
53-70-3	Dibenzo(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	360	U

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-D

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741006

Sample wt/vol: 35.3 (g/mL) G Lab File ID: S1B5621

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 15 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/26/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)Ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
59-50-7	4-Chloro-3-Methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	670	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	670	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	670	U
83-32-9	Acenaphthene	330	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-D

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741006

Sample wt/vol: 35.3 (g/mL) G Lab File ID: S1B5621

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 15 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/26/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	670	U
100-02-7	4-Nitrophenol	670	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	670	U
534-52-1	4,6-Dinitro-2-methylphenol	670	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	670	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-C

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741007

Sample wt/vol: 35.0 (g/mL) G Lab File ID: S1B5630

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 15 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/27/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)Ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
59-50-7	4-Chloro-3-Methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	680	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	680	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	680	U
83-32-9	Acenaphthene	330	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-C

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741007

Sample wt/vol: 35.0 (g/mL) G Lab File ID: S1B5630

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 15 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/27/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	680	U
100-02-7	4-Nitrophenol	680	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	680	U
534-52-1	4,6-Dinitro-2-methylphenol	680	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	680	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-150

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741008

Sample wt/vol: 35.0 (g/mL) G Lab File ID: S1B5624

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 17 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/27/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)Ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	2,2'-oxybis(1-Chloropropane)	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
59-50-7	4-Chloro-3-Methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	690	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	690	U
131-11-3	Dimethylphthalate	340	U
208-96-8	Acenaphthylene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
99-09-2	3-Nitroaniline	690	U
83-32-9	Acenaphthene	340	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-150

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741008

Sample wt/vol: 35.0 (g/mL) G Lab File ID: S1B5624

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 17 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/27/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	690	U
100-02-7	4-Nitrophenol	690	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	690	U
534-52-1	4,6-Dinitro-2-methylphenol	690	U
86-30-6	N-Nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	690	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
86-74-8	Carbazole	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	81	J
129-00-0	Pyrene	71	J
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	340	U
56-55-3	Benzo(a)anthracene	64	J
218-01-9	Chrysene	82	J
117-81-7	bis(2-Ethylhexyl)phthalate	39	J
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo(b)fluoranthene	63	J
207-08-9	Benzo(k)fluoranthene	42	J
50-32-8	Benzo(a)pyrene	54	J
193-39-5	Indeno(1,2,3-cd)pyrene	340	U
53-70-3	Dibenzo(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-B

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741009

Sample wt/vol: 35.4 (g/mL) G Lab File ID: S1B5628

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 16 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/27/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)Ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
59-50-7	4-Chloro-3-Methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	680	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	680	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	680	U
83-32-9	Acenaphthene	270	J

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-B

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741009

Sample wt/vol: 35.4 (g/mL) G Lab File ID: S1B5628

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 16 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/27/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	680	U
100-02-7	4-Nitrophenol	680	U
132-64-9	Dibenzofuran	460	
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	730	
100-01-6	4-Nitroaniline	680	U
534-52-1	4,6-Dinitro-2-methylphenol	680	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	680	U
85-01-8	Phenanthrene	5200	
120-12-7	Anthracene	490	
86-74-8	Carbazole	84	J
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	4400	
129-00-0	Pyrene	3000	
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	1300	
218-01-9	Chrysene	1300	
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	910	
207-08-9	Benzo(k)fluoranthene	350	
50-32-8	Benzo(a)pyrene	690	
193-39-5	Indeno(1,2,3-cd)pyrene	320	J
53-70-3	Dibenzo(a,h)anthracene	91	J
191-24-2	Benzo(g,h,i)perylene	250	J

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-100

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741010

Sample wt/vol: 35.2 (g/mL) G Lab File ID: S1B5629

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 16 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/27/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)Ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
59-50-7	4-Chloro-3-Methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	680	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	680	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	680	U
83-32-9	Acenaphthene	330	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-100

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741010

Sample wt/vol: 35.2 (g/mL) G Lab File ID: S1B5629

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 16 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/27/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	680	U
100-02-7	4-Nitrophenol	680	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	680	U
534-52-1	4,6-Dinitro-2-methylphenol	680	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	680	U
85-01-8	Phenanthrene	190	J
120-12-7	Anthracene	48	J
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	290	J
129-00-0	Pyrene	260	J
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	140	J
218-01-9	Chrysene	170	J
117-81-7	bis(2-Ethylhexyl)phthalate	53	J
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	170	J
207-08-9	Benzo(k)fluoranthene	84	J
50-32-8	Benzo(a)pyrene	140	J
193-39-5	Indeno(1,2,3-cd)pyrene	66	J
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	56	J

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK1V

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: S0519-BS1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: S1B5618

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/26/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)Ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
59-50-7	4-Chloro-3-Methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	670	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	670	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	670	U
83-32-9	Acenaphthene	330	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK1V

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: S0519-BS1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: S1B5618

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/26/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	670	U
100-02-7	4-Nitrophenol	670	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	670	U
534-52-1	4,6-Dinitro-2-methylphenol	670	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	670	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Level: (low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	S7 (2CP)#	S8 (DCB)#	TOT OUT
01	SBLK1V	76	77	78	72	68	58	68	72	0
02	SBLK1VLCS	73	75	80	73	72	74	70	69	0
03	N1-D	64	66	73	64	62	62	61	60	0
04	N1-200	63	64	73	63	62	68	60	59	0
05	N1-E	61	64	69	62	60	65	60	57	0
06	N1-150	87	91	99	87	87	93	84	80	0
07	S1	72	83	102	76	71	97	72	64	0
08	E1	67	69	73	69	68	64	67	64	0
09	N1-250	63	70	77	67	65	70	64	61	0
10	N1-B	68	69	79	66	66	69	65	63	0
11	N1-100	63	71	81	68	64	69	65	61	0
12	N1-C	60	62	68	61	60	63	59	57	0
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

		QC LIMITS	
S1 (NBZ)	= Nitrobenzene-d5	(36-128)	
S2 (FBP)	= 2-Fluorobiphenyl	(42-123)	
S3 (TPH)	= Terphenyl-d14	(41-132)	
S4 (PHL)	= Phenol-d5	(34-119)	
S5 (2FP)	= 2-Fluorophenol	(22-120)	
S6 (TBP)	= 2,4,6-Tribromophenol	(32-133)	
S7 (2CP)	= 2-Chlorophenol-d4	(35-124)	(advisory)
S8 (DCB)	= 1,2-Dichlorobenzene-d4	(27-131)	(advisory)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix Spike - Sample No.: SBLK1V Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Phenol	1700	0.0	1200	70	38-109
bis(2-Chloroethyl)Ether	1700	0.0	1300	76	26-119
2-Chlorophenol	1700	0.0	1200	70	49-104
1,3-Dichlorobenzene	1700	0.0	1200	70	42- 99
1,4-Dichlorobenzene	1700	0.0	1200	70	43-100
1,2-Dichlorobenzene	1700	0.0	1200	70	47-100
2-Methylphenol	1700	0.0	1200	70	12-128
2,2'-oxybis(1-Chloropro	1700	0.0	1300	76	35-124
4-Methylphenol	1700	0.0	1300	76	1-138
N-Nitroso-di-n-prop.(1)	1700	0.0	1500	88	44-113
Hexachloroethane	1700	0.0	1200	70	43-103
Nitrobenzene	1700	0.0	1300	76	55-103
Isophorone	1700	0.0	1200	70	41-100
2-Nitrophenol	1700	0.0	1200	70	53-104
2,4-Dichlorophenol	1700	0.0	1300	76	28-129
1,2,4-Trichlorobenzene	1700	0.0	1200	70	51-107
Naphthalene	1700	0.0	1200	70	54-104
4-Chloroaniline	1700	0.0	460	27	0- 92
Hexachlorobutadiene	1700	0.0	1200	70	49-110
bis(2-Chloroethoxy)meth	1700	0.0	1300	76	46-111
4-Chloro-3-Methylphenol	1700	0.0	1400	82	0-161
2-Methylnaphthalene	1700	0.0	1200	70	46-116
Hexachlorocyclopentadie	1700	0.0	1100	65	21-137
2,4,6-Trichlorophenol	1700	0.0	1200	70	4-140
2,4,5-Trichlorophenol	1700	0.0	1300	76	3-156
2-Chloronaphthalene	1700	0.0	1200	70	60-107
2-Nitroaniline	1700	0.0	1300	76	50-114
Dimethylphthalate	1700	0.0	1300	76	61-111

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS:

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix Spike - Sample No.: SBLK1V Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Acenaphthylene	1700	0.0	1200	70	61-106
2,6-Dinitrotoluene	1700	0.0	1300	76	54-116
3-Nitroaniline	1700	0.0	810	48	0-126
Acenaphthene	1700	0.0	1300	76	62-107
2,4-Dinitrophenol	1700	0.0	1200	70	31-119
4-Nitrophenol	1700	0.0	1300	76	0-166
Dibenzofuran	1700	0.0	1300	76	63-109
2,4-Dinitrotoluene	1700	0.0	1400	82	58-115
Diethylphthalate	1700	0.0	1400	82	58-116
4-Chlorophenyl-phenylet	1700	0.0	1300	76	60-113
Fluorene	1700	0.0	1300	76	61-112
4-Nitroaniline	1700	0.0	840	49	0-135
4,6-Dinitro-2-methylphe	1700	0.0	1300	76	30-128
N-Nitrosodiphenylamine	1700	0.0	1300	76	0-148
4-Bromophenyl-phenyleth	1700	0.0	1400	82	65-118
Hexachlorobenzene	1700	0.0	1400	82	64-120
Pentachlorophenol	1700	0.0	920	54	0-165
Phenanthrene	1700	0.0	1300	76	66-115
Anthracene	1700	0.0	1300	76	56-144
Carbazole	1700	0.0	1300	76	52-128
Di-n-butylphthalate	1700	0.0	1400	82	69-112
Fluoranthene	1700	0.0	1400	82	65-116
Pyrene	1700	0.0	1400	82	47-138
Butylbenzylphthalate	1700	0.0	1400	82	56-125
3,3'-Dichlorobenzidine	1700	0.0	590	35	0-139
Benzo(a)anthracene	1700	0.0	1300	76	64-116
Chrysene	1700	0.0	1500	88	60-116
bis(2-Ethylhexyl)phthal	1700	0.0	1400	82	55-124

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS:

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix Spike - Sample No.: SBLK1V Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Di-n-octylphthalate	1700	0.0	1400	82	55-133
Benzo(b)fluoranthene	1700	0.0	1300	76	51-128
Benzo(k)fluoranthene	1700	0.0	1600	94	51-139
Benzo(a)pyrene	1700	0.0	1300	76	61-120
Indeno(1,2,3-cd)pyrene	1700	0.0	1400	82	45-123
Dibenzo(a,h)anthracene	1700	0.0	1600	94	46-128
Benzo(g,h,i)perylene	1700	0.0	1500	88	43-128

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 63 outside limits

COMMENTS:

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK1V

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Lab File ID: S1B5618 Lab Sample ID: S0519-BS1

Instrument ID: S1 Date Extracted: 05/19/00

Matrix: (soil/water) SOIL Date Analyzed: 05/26/00

Level:(low/med) LOW Time Analyzed: 2116

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SBLK1VLCS	S0519-LS1	S1B5619	05/26/00
02	N1-D	70741006	S1B5621	05/26/00
03	N1-200	70741005	S1B5622	05/26/00
04	N1-E	70741004	S1B5623	05/27/00
05	N1-150	70741008	S1B5624	05/27/00
06	S1	70741001	S1B5625	05/27/00
07	E1	70741002	S1B5626	05/27/00
08	N1-250	70741003	S1B5627	05/27/00
09	N1-B	70741009	S1B5628	05/27/00
10	N1-100	70741010	S1B5629	05/27/00
11	N1-C	70741007	S1B5630	05/27/00
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

S1

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741001

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3C1052F

% Moisture: 25 decanted: (Y/N) N Date Received: 05/18/00

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 05/19/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/22/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	44	U
11104-28-2	Aroclor-1221	44	U
1114-16-5	Aroclor-1232	44	U
53469-21-9	Aroclor-1242	44	U
12672-29-6	Aroclor-1248	44	U
11097-69-1	Aroclor-1254	44	U
11096-82-5	Aroclor-1260	44	U

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

E1

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741002

Sample wt/vol: 30.6 (g/mL) G Lab File ID: E3C1053F

% Moisture: 17 decanted: (Y/N) N Date Received: 05/18/00

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 05/19/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/22/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
1114-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	39	U

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

N1-250

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741003

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3C1054F

% Moisture: 14 decanted: (Y/N) N Date Received: 05/18/00

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 05/19/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/22/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
1114-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	39	U

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

N1-E

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741004

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E3C1055F

% Moisture: 14 decanted: (Y/N) N Date Received: 05/18/00

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 05/19/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/22/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
1114-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

N1-200

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741005

Sample wt/vol: 30.6 (g/mL) G Lab File ID: E3C1056F

% Moisture: 22 decanted: (Y/N) N Date Received: 05/18/00

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 05/19/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/22/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	42	U
11104-28-2	Aroclor-1221	42	U
1114-16-5	Aroclor-1232	42	U
53469-21-9	Aroclor-1242	42	U
12672-29-6	Aroclor-1248	42	U
11097-69-1	Aroclor-1254	42	U
11096-82-5	Aroclor-1260	42	U

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

N1-D

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741006

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3C1057F

% Moisture: 15 decanted: (Y/N) N Date Received: 05/18/00

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 05/19/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/22/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
1114-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	39	U

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

N1-C

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741007

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E3C1067F

% Moisture: 15 decanted: (Y/N) N Date Received: 05/18/00

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 05/19/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/23/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
1114-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	39	U

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

N1-150

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741008

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E3C1068F

% Moisture: 17 decanted: (Y/N) N Date Received: 05/18/00

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 05/19/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/23/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
1114-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	40	U
11096-82-5	Aroclor-1260	40	U

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

N1-150RE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741008RE

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E3C1124F

% Moisture: 17 decanted: (Y/N) N Date Received: 05/18/00

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:05/24/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/25/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	40	U
11104-28-2------	Aroclor-1221	40	U
1114-16-5-------	Aroclor-1232	40	U
53469-21-9------	Aroclor-1242	40	U
12672-29-6------	Aroclor-1248	40	U
11097-69-1------	Aroclor-1254	40	U
11096-82-5------	Aroclor-1260	40	U

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

N1-B

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741009

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E3C1069F

% Moisture: 16 decanted: (Y/N) N Date Received: 05/18/00

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 05/19/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/23/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	39	U
1114-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	39	U

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

N1-100

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: 70741010

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3C1070F

% Moisture: 16 decanted: (Y/N) N Date Received: 05/18/00

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 05/19/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/23/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	40	U
1114-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	58	P
11096-82-5	Aroclor-1260	40	U

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

BBLK3A

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: B0519-BS1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3C1049F

% Moisture: 0 decanted: (Y/N) N Date Received: _____

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 05/19/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/22/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
1114-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

BBLK01

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix: (soil/water) SOIL Lab Sample ID: B0524-BS1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3C1122F

% Moisture: 0 decanted: (Y/N) N Date Received: _____

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:05/24/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/25/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	33	U
11104-28-2------	Aroclor-1221	33	U
1114-16-5-------	Aroclor-1232	33	U
53469-21-9------	Aroclor-1242	33	U
12672-29-6------	Aroclor-1248	33	U
11097-69-1------	Aroclor-1254	33	U
11096-82-5------	Aroclor-1260	33	U

FORM 2
SOIL PCB SURROGATE RECOVERY

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

GC Column(1): DB-1701 ID: 0.53 (mm) GC Column(2): DB-608 ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	BBLK3A	69	72	99	78			0
02	BBLK3ALCS	73	67	91	70			0
03	S1	84	79	103	79			0
04	E1	83	79	102	79			0
05	N1-250	87	82	103	81			0
06	N1-E	92	86	108	85			0
07	N1-200	79	77	98	77			0
08	N1-D	78	76	99	77			0
09	N1-C	92	89	114	90			0
10	N1-150	7*	8*	12*	9*			4
11	N1-B	80	79	102	78			0
12	N1-100	85	82	100	81			0
13	BBLK01	77	76	82	84			0
14	BBLK01LCS	71	71	75	76			0
15	N1-150RE	78	77	84	88			0
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

ADVISORY
QC LIMITS

S1 (TCX) = Tetrachloro-m-xylene (42-147)
S2 (DCB) = Decachlorobiphenyl (29-155)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

FORM 3
SOIL PCB LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix Spike - Sample No.: BBLK3A

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Aroclor-1016	330	0.00	220	67	62-155
Aroclor-1260	330	0.00	210	64	56-173

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 2 outside limits

COMMENTS: _____

FORM 3
SOIL PCB LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Matrix Spike - Sample No.: BBLK01

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Aroclor-1016	330	0.00	240	73	62-155
Aroclor-1260	330	0.00	230	70	56-173

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 2 outside limits

COMMENTS: _____

FORM 4
PCB METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

BBLK3A

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Lab Sample ID: B0519-BS1 Lab File ID: E3C1049F

Matrix (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SONC

Sulfur Cleanup (Y/N) Y Date Extracted: 05/19/00

Date Analyzed (1): 05/22/00 Date Analyzed (2): 05/22/00

Time Analyzed (1): 1446 Time Analyzed (2): 1446

Instrument ID (1): E3 Instrument ID (2): E3

GC Column (1): DB-1701 ID: 0.53(mm) GC Column (2): DB-608 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	BBLK3ALCS	B0519-LS1	05/22/00	05/22/00
02	S1	70741001	05/22/00	05/22/00
03	E1	70741002	05/22/00	05/22/00
04	N1-250	70741003	05/22/00	05/22/00
05	N1-E	70741004	05/22/00	05/22/00
06	N1-200	70741005	05/22/00	05/22/00
07	N1-D	70741006	05/22/00	05/22/00
08	N1-C	70741007	05/23/00	05/23/00
09	N1-150	70741008	05/23/00	05/23/00
10	N1-B	70741009	05/23/00	05/23/00
11	N1-100	70741010	05/23/00	05/23/00
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS:

FORM 4
PCB METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

BBLK01

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70741

Lab Sample ID: B0524-BS1 Lab File ID: E3C1122F

Matrix (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SONC

Sulfur Cleanup (Y/N) Y Date Extracted: 05/24/00

Date Analyzed (1): 05/25/00 Date Analyzed (2): 05/25/00

Time Analyzed (1): 1614 Time Analyzed (2): 1614

Instrument ID (1): E3 Instrument ID (2): E3

GC Column (1): DB-1701 ID: 0.53(mm) GC Column (2): DB-608 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	BBLK01LCS	B0524-LS1	05/25/00	05/25/00
02	N1-150	70741008RE	05/25/00	05/25/00
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS:

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	S1	Concentration in:	mg/kg, dry weight basis
Lab ID:	70741001	Analysis Date:	5/20/00
Matrix:	Soil, 80% Solid	Analysis Method:	7471A (Mercury) 6010B (Others)

Analyte	Results	Reporting Limit
Arsenic	25	0.4 *
Barium	28	20
Cadmium	2.1	0.5
Chromium	14	2
Lead	15	1
Mercury	ND	0.1
Selenium	ND	3 **
Silver	3	3

QC Batch: 0519PBS

ND = Not Detected

*Reported to MDL.
**Elevated due to sample matrix effects.

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	E1	Concentration in:	mg/kg, dry weight basis
Lab ID:	70741002	Analysis Date:	5/20/00
Matrix:	Soil, 83% Solid	Analysis Method:	7471A (Mercury) 6010B (Others)

Analyte	Results	Reporting Limit
Arsenic	25	0.4 *
Barium	30	20
Cadmium	2.1	0.5
Chromium	15	2
Lead	29	1
Mercury	ND	0.1
Selenium	ND	4 **
Silver	3	3

QC Batch: 0519PBS

ND = Not Detected

*Reported to MDL.
**Elevated due to sample matrix effects.

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	N1-250	Concentration in:	mg/kg, dry weight basis
Lab ID:	70741003	Analysis Date:	5/20/00
Matrix:	Soil, 86% Solid	Analysis Method:	7471A (Mercury) 6010B (Others)

Analyte	Results	Reporting Limit
Arsenic	11	0.4 *
Barium	24	20
Cadmium	1.7	0.5
Chromium	13	2
Lead	14	1
Mercury	ND	0.1
Selenium	ND	3 **
Silver	ND	3

QC Batch: 0519PBS

ND = Not Detected

*Reported to MDL.
**Elevated due to sample matrix effects.

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	N1-E	Concentration in:	mg/kg, dry weight basis
Lab ID:	70741004	Analysis Date:	5/20/00
Matrix:	Soil, 88% Solid	Analysis Method:	7471A (Mercury) 6010B (Others)

Analyte	Results	Reporting Limit
Arsenic	21	0.4 *
Barium	23	20
Cadmium	2.4	0.5
Chromium	16	2
Lead	45	1
Mercury	ND	0.1
Selenium	ND	5 **
Silver	4	3

QC Batch: 0519PBS

ND = Not Detected

*Reported to MDL.
**Elevated due to sample matrix effects.

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	N1-200	Concentration in:	mg/kg, dry weight basis
Lab ID:	70741005	Analysis Date:	5/20/00
Matrix:	Soil, 86% Solid	Analysis Method:	7471A (Mercury) 6010B (Others)

Analyte	Results	Reporting Limit
Arsenic	20	0.4 *
Barium	26	20
Cadmium	2.0	0.5
Chromium	15	2
Lead	11	1
Mercury	ND	0.1
Selenium	ND	3 **
Silver	3	3

QC Batch: 0519PBS

ND = Not Detected

*Reported to MDL.
**Elevated due to sample matrix effects.

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	N1-D	Concentration in:	mg/kg, dry weight basis
Lab ID:	70741006	Analysis Date:	5/20/00
Matrix:	Soil, 80% Solid	Analysis Method:	7471A (Mercury) 6010B (Others)

Analyte	Results	Reporting Limit
Arsenic	16	0.4 *
Barium	23	20
Cadmium	1.9	0.5
Chromium	13	2
Lead	12	1
Mercury	ND	0.1
Selenium	ND	5 **
Silver	3	3

QC Batch: 0519PBS

ND = Not Detected

*Reported to MDL.

**Elevated due to sample matrix effects.

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	N1-C	Concentration in:	mg/kg, dry weight basis
Lab ID:	70741007	Analysis Date:	5/20/00
Matrix:	Soil, 87% Solid	Analysis Method:	7471A (Mercury) 6010B (Others)

Analyte	Results	Reporting Limit
Arsenic	20	0.4 *
Barium	20	20
Cadmium	1.9	0.5
Chromium	14	2
Lead	11	1
Mercury	ND	0.1
Selenium	ND	3 **
Silver	3	3

QC Batch: 0519PBS

ND = Not Detected

*Reported to MDL.
**Elevated due to sample matrix effects.

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	N1-150	Concentration in:	mg/kg, dry weight basis
Lab ID:	70741008	Analysis Date:	5/20/00
Matrix:	Soil, 83% Solid	Analysis Method:	7471A (Mercury) 6010B (Others)

Analyte	Results	Reporting Limit
Arsenic	18	0.4 *
Barium	29	20
Cadmium	1.7	0.5
Chromium	14	2
Lead	14	1
Mercury	ND	0.1
Selenium	ND	3 **
Silver	ND	3

QC Batch: 0519PBS

ND = Not Detected

*Reported to MDL.
**Elevated due to sample matrix effects.

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	N1-B	Concentration in:	mg/kg, dry weight basis
Lab ID:	70741009	Analysis Date:	5/20/00
Matrix:	Soil, 85% Solid	Analysis Method:	7471A (Mercury) 6010B (Others)

Analyte	Results	Reporting Limit
Arsenic	27	0.4 *
Barium	24	20
Cadmium	1.9	0.5
Chromium	13	2
Lead	12	1
Mercury	ND	0.1
Selenium	ND	3 **
Silver	3	3

QC Batch: 0519PBS

ND = Not Detected

*Reported to MDL.

**Elevated due to sample matrix effects.

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	N1-100	Concentration in:	mg/kg, dry weight basis
Lab ID:	70741010	Analysis Date:	5/20/00
Matrix:	Soil, 84% Solid	Analysis Method:	7471A (Mercury) 6010B (Others)

Analyte	Results	Reporting Limit
Arsenic	15	0.4 *
Barium	35	20
Cadmium	1.5	0.5
Chromium	12	2
Lead	20	1
Mercury	ND	0.1
Selenium	ND	4 **
Silver	ND	3

QC Batch: 0519PBS

ND = Not Detected

*Reported to MDL.
**Elevated due to sample matrix effects.

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Prep Blank, 0519PBS

Concentration in: mg/kg
Analysis Date: 5/20/00
Analysis Method: 7471A (Mercury)
6010B (Others)

Analyte	Results	Reporting Limit
Arsenic	ND	0.4 *
Barium	ND	20
Cadmium	ND	0.5
Chromium	ND	2
Lead	ND	1
Mercury	ND	0.1
Selenium	ND	2
Silver	ND	3

QC Batch: 0519PBS

ND = Not Detected

*Reported to MDL.

70741-PB

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:		Concentration in:	mg/kg
Lab ID:	Lab Control Sample, 0519LCSS	Analysis Date:	5/20/00
		Analysis Method:	7471A (Mercury) 6010B (Others)

Analyte	% Recovery
Arsenic	95
Barium	95
Cadmium	96
Chromium	96
Lead	93
Mercury	113
Selenium	89
Silver	94

QC Batch: 0519PBS

MITKEM CORPORATION

Analysis Report: Total Petroleum Hydrocarbons

Client: Foster Wheeler Environmental Corp.
Analysis: Method 8100M / 8015M
Matrix: Soil

Concentration in: mg/kg, dry weight basis

Lab ID	Client ID	Result	Reporting Limit	% Solid	p-Terphenyl Surrogate Recovery %	Analysis Date
70741001	S1	ND	18	75	67	5/23/00
70741002	E1	ND	16	83	75	5/23/00
70741003	N1-250	ND	15	86	76	5/23/00
70741004	N1-E	ND	15	86	73	5/23/00
70741005	N1-200	ND	17	78	73	5/23/00
70741006	N1-D	ND	15	85	75	5/23/00
70741007	N1-C	ND	16	85	73	5/23/00
70741008	N1-150	ND	16	83	67	5/23/00
70741009	N1-B	21	16	84	74	5/23/00
70741010	N1-100	ND	16	84	75	5/23/00
QA/QC						
Method Blank						
F0519-BS1		ND	13		70	5/20/00
Lab Control Sample (% Recovery)						
F0519-LS1		94			74	5/20/00

ND = Not Detected

The samples were quantitated using diesel fuel as standard.

MITKEM CORPORATION

Lab Workorder **70741** **R0**

Client: **Foster Wheeler Environmental**
Lab Workorder ID: **242-5 SUMP**
Client Proj ID: **Bldg. 42**
Client PO #: **026697**
Project / Profile Name: **Middletown, RI**
Date Due: **05/25/00**
Customer Service: **EAL**
Del Req'd: **Level 2 (1 copy)**
Completed?: Yes
Profile Notes: **Must meet RIDEM DEC Residential Rept Limits. (not for waste char sample)**

Logged In By: SU
Reviewed By:

Date Opened: **05/19/00 10:24**
Date Closed: **05/19/00 11:00**

Project Status: **WP**

Lab ID	Client ID	Matrix	Type	Analysis Code	Collected	Received	Due	Notes
70741001	S1	S	SAMPLE	8082S 8100S TPH 8260S 8270S DRY WEIGHT RCRA8S	05/18/00 13:20	05/18/00	05/25/00	
70741002	E1	S	SAMPLE	8082S 8100S TPH 8260S 8270S DRY WEIGHT RCRA8S	05/18/00 13:00	05/18/00	05/25/00	
70741003	N1-250	S	SAMPLE	8082S 8100S TPH 8260S 8270S DRY WEIGHT RCRA8S	05/18/00 14:15	05/18/00	05/25/00	
70741004	N1-E	S	SAMPLE	8082S 8100S TPH 8260S 8270S DRY WEIGHT RCRA8S	05/18/00 14:25	05/18/00	05/25/00	
70741005	N1-200	S	SAMPLE	8082S 8100S TPH 8260S	05/18/00 14:35	05/18/00	05/25/00	

008

MITKEM CORPORATION

05/19/00 11:00 AM

Original

Lab Workorder #: **70741**

Lab ID	Client ID	Matrix	Type	Analysis Code	Collected	Received	Due	Notes
70741005	N1-200	S	SAMPLE	8270S DRY WEIGHT RCRA8S				
70741006	N1-D ✓	S	SAMPLE	8082S 8100S TPH 8260S 8270S DRY WEIGHT RCRA8S	05/18/00 14:40	05/18/00	05/25/00	
70741007	N1-C ✓	S	SAMPLE	8082S 8100S TPH 8260S 8270S DRY WEIGHT RCRA8S	05/18/00 14:50	05/18/00	05/25/00	
70741008	N1-150 ✓	S	SAMPLE	8082S 8100S TPH 8260S 8270S DRY WEIGHT RCRA8S	05/18/00 14:45	05/18/00	05/25/00	
70741009	N1-B ✓	S	SAMPLE	8082S 8100S TPH 8260S 8270S DRY WEIGHT RCRA8S	05/18/00 15:05	05/18/00	05/25/00	
70741010	N1-100 ✓	S	SAMPLE	8082S 8100S TPH 8260S 8270S DRY WEIGHT RCRA8S	05/18/00 15:00	05/18/00	05/25/00	

6800

MITKEM CORPORATION

INVOICE GOES TO:

Accounts Payable
Foster Wheeler Environmental
P.O. Box 4530
Middletown, RI, 02842

REPORT GOES TO:

Josh Holden
Foster Wheeler Environmental
42 Defense Highway
Peir One
Middletown, RI, 02842
W : 401-845-6929
F : 401-845-4169

0090

MITKEM CORPORATION
Sample Condition Form

Page ____ of ____

Received By: NU | Reviewed By: SK | Date: 5/19/00 | MITKEM Project #: 70741

Client Project: SH2-5 · SUMO | Client: FOSTER WHEELER

Condition:

1) Custody Seal(s) Present / Absent
Coolers / Bottles
Intact / Broken

2) Custody Seal Number(s) N/A

3) Chain-of-Custody Present / Absent

4) Cooler Temperature 3°C
Coolant Condition ICE

5) Airbill(s)
Airbill Number(s)

6) Sample Bottles Intact
Broken
Leaking

7) Date Received 5/18/00

8) Time Received 1830

Lab Sample ID	Preservation (pH) HNO_3	H_2SO_4	HCl	NaOH	VOA Matrix	Comments/Remarks/ Corrective Action*
70741001					M/NA	
70741002					M/NA	
70741003					M/NA	
70741004					M/NA	
70741005					M/NA	
70741006					M/NA	
70741007					M/NA	
70741008					M/NA	
70741009					M/NA	
70741010					M/NA	

VOA Matrix Key:

US = Unpreserved Soil
UA = Unpreserved Aqueous
B = Both MeOH & $NaHSO_4$
Na = $NaHSO_4$
M = MeOH
E = Encore
H = HCl

* See Sample Notification Form yes / no

Last Page of Data Report

MITKEM CORPORATION
175 Metro Center Boulevard
Warwick, Rhode Island 02886-1755
(401) 732-3400 • Fax (401) 732-3499
email: mitkem@mitkem.com

CHAIN-OF-CUSTODY RECORD

REPORT TO		INVOICE TO		
COMPANY Foster Wheeler	PHONE 683-5259	COMPANY Foster Wheeler	PHONE	LAB PROJECT #: 70740
NAME Josh Holder	FAX 5218	NAME	FAX	
ADDRESS 195 Burm Rd		ADDRESS PO Box 4350		TURNAROUND TIME: 48hr
CITY/ST/ZIP		CITY/ST/ZIP Middletown RI 02842		

CLIENT PROJECT NAME: S42-5 Sump
CLIENT PROJECT #: 1254 0060
CLIENT P.O.#:

REQUESTED ANALYSES

SAMPLE IDENTIFICATION	DATE/TIME SAMPLED	COMPOSITE	GRAB	WATER	SOIL	OTHER	LAB ID	# OF CONTAINERS	VOCS	NA+SO4	RCRA 8 *	TPH 8015/8270/8082	VOCS MEOH	WASTE CHAR	COMMENTS
N1-0	5-18-00 1530		X		X		01	4	2	1	1	*			
N1-A	1520		X		X		02	5	2	1	1	1			
N1-50	1510		X		X		03	5	2	1	1	1			
S42-5 WC1	5/18/00 1700	X			X		04	3					3		
	/														
	/														
	/														
	/														
	/														
	/														
	/														
	/														

Small Cooler

TSF#	RELINQUISHED BY	DATE/TIME	ACCEPTED BY	DATE/TIME
1	Joshua B Holder	5/18/00 1830	[illegible signature]	5/18/00 1830
2		/		/
3		/		/

ADDITIONAL REMARKS:
* take VOC for MEOH from 40z

Must meet RIDEM Residential RIDEC Criteria

COOLER TEMP: 3°C

WHITE: LABORATORY COPY YELLOW: REPORT COPY PINK: CLIENT'S COPY

MITKEM CORPORATION

May 25, 2000

Foster Wheeler Environmental Corp.
42 Defense Highway, Pier One
Middletown, RI 02842
Attn: Mr. Josh Holden

RE: Client Project: 242-5 SUMP, 5/18 Samples
Lab Project #: 70740

Dear Mr. Holden:

Enclosed please find the data report of the required analyses for the samples associated with the above referenced project. If you have any questions regarding this report, please call me.

We appreciate your business.

Sincerely,

Edward A. Lawler
Laboratory Operations Manager

175 Metro Center Boulevard • Warwick, Rhode Island 02886-1755
(401) 732-3400 • Fax (401) 732-3499 • email: mitkem@mitkem.com

MITKEM CORPORATION

Client: Foster Wheeler Environmental Corp.

Client Project: 242-5 SUMP, 5/18 Samples

Lab Project: 70740

Date samples received: 5/18/00

Project Narrative

This data report includes the analysis results for four (4) soil samples that were received from Foster Wheeler Environmental Corp. on May 18, 2000. Analyses were performed per specification in the Chain of Custody form. For reference, a copy of the Mitkem Sample Log-In form is included for cross-referencing the client sample ID and laboratory sample ID.

All of the analyses were performed according to method specifications. Results for arsenic are reported to the laboratory method detection limit to achieve project objectives. The reporting limit for selenium is elevated due to sample matrix interference. No other unusual occurrences were noted during sample analysis.

This data report has been reviewed and is authorized for release as evidenced by the signature below.

Edward A. Lawler
Laboratory Operations Manager

Data Flag/Qualifiers:

J This flag indicates an estimated value due to either
- the compound was detected at below the Reporting Limit, or
- estimated concentration for Tentatively Identified Compound

B For organic analyses, this flag indicates the analyte was also detected in the associated Method Blank. The B flag has an alternative meaning for CLP-type metals analyses, indicating a "trace" concentration below the normal reporting limit and above the detection limit.

D This flag indicates the analyte concentration was obtained from a diluted analysis

E This flag indicates the analyte concentration exceeded the Calibration Range

P This flag is used for Pesticides/PCB/Herbicide analyte when there is a greater than 40% difference for detected concentration between the two GC columns used for Primary and Confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The lower of the two values is reported in the Analysis Report.

U Not Detected. This compound was analyzed-for but not detected. Reporting limit is the value listed.

MITKEM CORPORATION

Analysis Report: Total Petroleum Hydrocarbons

Client: Foster Wheeler Environmental
Analysis: Method 8100M / 8015M
Matrix: Soil

Concentration in: mg/kg, dry weight basis

Lab ID	Client ID	Result	Reporting Limit	% Solid	p-Terphenyl Surrogate Recovery %	Analysis Date
70740001	N1-0	ND	15	85	66	5/20/00
70740002	N1-A	15	15	89	70	5/20/00
70740003	N1-50	31	17	78	69	5/20/00
70740004	S42-5 WC1	17	16	83	78	5/20/00

QA/QC

Method Blank				
F0519-BS1	ND	13	70	5/20/00
Lab Control Sample (% Recovery)				
F0519-LS1	94		74	5/20/00

ND = Not Detected

The samples were quantitated using diesel fuel as standard.

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental	Concentration in:	mg/kg, dry weight basis
Client ID:	N1-0	Analysis Date:	5/20/00
Lab ID:	70740001	Analysis Method:	7471A (Mercury)
Matrix:	Soil, 87% Solid		6010B (Others)

Analyte	Results	Reporting Limit
Arsenic	10	0.4 *
Barium	23	20
Cadmium	2.8	0.5
Chromium	22	2
Lead	14	1
Mercury	ND	0.1
Selenium	ND	4 **
Silver	5	3

QC Batch: 0519PBS

ND = Not Detected

*Reported to MDL

**Elevated due to sample matrix effects.

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental	Concentration in:	mg/kg, dry weight basis
Client ID:	N1-A	Analysis Date:	5/20/00
Lab ID:	70740002	Analysis Method:	7471A (Mercury)
Matrix:	Soil, 87% Solid		6010B (Others)

Analyte	Results	Reporting Limit
Arsenic	19	0.4 *
Barium	28	20
Cadmium	1.7	0.5
Chromium	12	2
Lead	13	1
Mercury	ND	0.1
Selenium	ND	3 **
Silver	ND	3

QC Batch: 0519PBS

ND = Not Detected

*Reported to MDL

**Elevated due to sample matrix effects.

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental	Concentration in:	mg/kg, dry weight basis
Client ID:	N1-50	Analysis Date:	5/20/00
Lab ID:	70740003	Analysis Method:	7471A (Mercury)
Matrix:	Soil, 80% Solid		6010B (Others)

Analyte	Results	Reporting Limit
Arsenic	17	0.4 *
Barium	29	20
Cadmium	1.6	0.5
Chromium	12	2
Lead	16	1
Mercury	ND	0.1
Selenium	ND	3 **
Silver	ND	3

QC Batch: 0519PBS

ND = Not Detected

*Reported to MDL

**Elevated due to sample matrix effects.

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental	Concentration in:	mg/kg, dry weight basis
Client ID:	S42-5 WC1	Analysis Date:	5/20/00
Lab ID:	70740004	Analysis Method:	7471A (Mercury)
Matrix:	Soil, 85% Solid		6010B (Others)

Analyte	Results	Reporting Limit
Arsenic	18	2 *
Barium	34	20
Cadmium	1.7	0.5
Chromium	13	2
Lead	33	1
Mercury	ND	0.1
Selenium	ND	3 **
Silver	ND	3

QC Batch: 0519PBS

ND = Not Detected

*Reported to MDL

**Elevated due to sample matrix effects.

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental	Concentration in:	mg/kg
Client ID:		Analysis Date:	5/20/00
Lab ID:	Prep Blank, 0519PBS	Analysis Method:	7471A (Mercury) 6010B (Others)

Analyte	Results	Reporting Limit
Arsenic	ND	0.4 *
Barium	ND	20
Cadmium	ND	0.5
Chromium	ND	2
Lead	ND	1
Mercury	ND	0.1
Selenium	ND	2
Silver	ND	3

QC Batch: 0519PBS

ND = Not Detected

*Reported to MDL

70740-PB

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental
Client ID:
Lab ID: Lab Control Sample, 0519 LCSS

Matrix: Soil
Analysis Date: 5/20/00
Analysis Method: 7471A (Mercury)
6010B (Others)

Analyte	% Recovery
Arsenic	95
Barium	95
Cadmium	96
Chromium	96
Lead	93
Mercury	113
Selenium	89
Silver	94

QC Batch: 0519PBS

70740-LCS

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-0

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: 70740001

Sample wt/vol: 10.3 (g/mL) G Lab File ID: V6A4354

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: not dec. 15 Date Analyzed: 05/21/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	3	U
74-87-3	Chloromethane	3	U
75-01-4	Vinyl Chloride	3	U
74-83-9	Bromomethane	3	U
75-00-3	Chloroethane	3	U
75-69-4	Trichlorofluoromethane	3	U
75-35-4	1,1-Dichloroethene	3	U
67-64-1	Acetone	7	B
74-88-4	Iodomethane	3	U
75-15-0	Carbon Disulfide	3	U
75-09-2	Methylene Chloride	3	U
156-60-5	trans-1,2-Dichloroethene	3	U
1634-04-4	Methyl tert-butyl ether	3	U
75-34-3	1,1-Dichloroethane	3	U
108-05-4	Vinyl acetate	3	U
78-93-3	2-Butanone	3	U
156-59-2	cis-1,2-Dichloroethene	3	U
590-20-7	2,2-Dichloropropane	3	U
74-97-5	Bromochloromethane	3	U
67-66-3	Chloroform	3	U
71-55-6	1,1,1-Trichloroethane	3	U
563-58-6	1,1-Dichloropropene	3	U
56-23-5	Carbon Tetrachloride	3	U
107-06-2	1,2-Dichloroethane	3	U
71-43-2	Benzene	3	U
79-01-6	Trichloroethene	3	U
78-87-5	1,2-Dichloropropane	3	U
74-95-3	Dibromomethane	3	U
75-27-4	Bromodichloromethane	3	U
110-75-8	2-Chloroethyl vinyl ether	3	U
10061-01-5	cis-1,3-Dichloropropene	3	U
108-10-1	4-Methyl-2-pentanone	3	U
108-88-3	Toluene	3	U
10061-02-6	trans-1,3-Dichloropropene	3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-0

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: 70740001

Sample wt/vol: 10.3 (g/mL) G Lab File ID: V6A4354

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: not dec. 15 Date Analyzed: 05/21/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-00-5	1,1,2-Trichloroethane	3	U
142-28-9	1,3-Dichloropropane	3	U
127-18-4	Tetrachloroethene	1	JB
591-78-6	2-Hexanone	3	U
124-48-1	Dibromochloromethane	3	U
106-93-4	1,2-Dibromoethane	3	U
108-90-7	Chlorobenzene	3	U
630-20-6	1,1,1,2-Tetrachloroethane	3	U
100-41-4	Ethylbenzene	3	U
1330-20-7	Xylene (Total)	3	U
100-42-5	Styrene	3	U
75-25-2	Bromoform	3	U
98-82-8	Isopropylbenzene	3	U
79-34-5	1,1,2,2-Tetrachloroethane	3	U
108-86-1	Bromobenzene	3	U
96-18-4	1,2,3-Trichloropropane	3	U
103-65-1	n-Propylbenzene	3	U
95-49-8	2-Chlorotoluene	3	U
108-67-8	1,3,5-Trimethylbenzene	3	U
106-43-4	4-Chlorotoluene	3	U
98-06-6	tert-Butylbenzene	3	U
95-63-6	1,2,4-Trimethylbenzene	3	U
135-98-8	sec-Butylbenzene	3	U
99-87-6	4-Isopropyltoluene	3	U
541-73-1	1,3-Dichlorobenzene	3	U
106-46-7	1,4-Dichlorobenzene	3	U
104-51-8	n-Butylbenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	3	U
120-82-1	1,2,4-Trichlorobenzene	3	U
87-68-3	Hexachlorobutadiene	3	U
91-20-3	Naphthalene	1	J
87-61-6	1,2,3-Trichlorobenzene	3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-A

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: 70740002

Sample wt/vol: 8.4 (g/mL) G Lab File ID: V6A4355

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: not dec. 11 Date Analyzed: 05/21/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	3	U
74-87-3	Chloromethane	3	U
75-01-4	Vinyl Chloride	3	U
74-83-9	Bromomethane	3	U
75-00-3	Chloroethane	3	U
75-69-4	Trichlorofluoromethane	3	U
75-35-4	1,1-Dichloroethene	3	U
67-64-1	Acetone	23	B
74-88-4	Iodomethane	3	U
75-15-0	Carbon Disulfide	3	U
75-09-2	Methylene Chloride	1	JB
156-60-5	trans-1,2-Dichloroethene	3	U
1634-04-4	Methyl tert-butyl ether	3	U
75-34-3	1,1-Dichloroethane	3	U
108-05-4	Vinyl acetate	3	U
78-93-3	2-Butanone	6	
156-59-2	cis-1,2-Dichloroethene	3	U
590-20-7	2,2-Dichloropropane	3	U
74-97-5	Bromochloromethane	3	U
67-66-3	Chloroform	3	U
71-55-6	1,1,1-Trichloroethane	3	U
563-58-6	1,1-Dichloropropene	3	U
56-23-5	Carbon Tetrachloride	3	U
107-06-2	1,2-Dichloroethane	3	U
71-43-2	Benzene	3	U
79-01-6	Trichloroethene	3	U
78-87-5	1,2-Dichloropropane	3	U
74-95-3	Dibromomethane	3	U
75-27-4	Bromodichloromethane	3	U
110-75-8	2-Chloroethyl vinyl ether	3	U
10061-01-5	cis-1,3-Dichloropropene	3	U
108-10-1	4-Methyl-2-pentanone	3	U
108-88-3	Toluene	3	U
10061-02-6	trans-1,3-Dichloropropene	3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-A

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: 70740002

Sample wt/vol: 8.4 (g/mL) G Lab File ID: V6A4355

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: not dec. 11 Date Analyzed: 05/21/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-00-5	1,1,2-Trichloroethane	3	U
142-28-9	1,3-Dichloropropane	3	U
127-18-4	Tetrachloroethene	1	JB
591-78-6	2-Hexanone	3	U
124-48-1	Dibromochloromethane	3	U
106-93-4	1,2-Dibromoethane	3	U
108-90-7	Chlorobenzene	3	U
630-20-6	1,1,1,2-Tetrachloroethane	3	U
100-41-4	Ethylbenzene	3	U
1330-20-7	Xylene (Total)	3	U
100-42-5	Styrene	3	U
75-25-2	Bromoform	3	U
98-82-8	Isopropylbenzene	3	U
79-34-5	1,1,2,2-Tetrachloroethane	3	U
108-86-1	Bromobenzene	3	U
96-18-4	1,2,3-Trichloropropane	3	U
103-65-1	n-Propylbenzene	3	U
95-49-8	2-Chlorotoluene	3	U
108-67-8	1,3,5-Trimethylbenzene	3	U
106-43-4	4-Chlorotoluene	3	U
98-06-6	tert-Butylbenzene	3	U
95-63-6	1,2,4-Trimethylbenzene	3	U
135-98-8	sec-Butylbenzene	3	U
99-87-6	4-Isopropyltoluene	3	U
541-73-1	1,3-Dichlorobenzene	3	U
106-46-7	1,4-Dichlorobenzene	3	U
104-51-8	n-Butylbenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	3	U
120-82-1	1,2,4-Trichlorobenzene	3	U
87-68-3	Hexachlorobutadiene	3	U
91-20-3	Naphthalene	3	U
87-61-6	1,2,3-Trichlorobenzene	3	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-50

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: 70740003

Sample wt/vol: 8.7 (g/mL) G Lab File ID: V6A4356

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: not dec. 22 Date Analyzed: 05/21/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	4	U
74-87-3	Chloromethane	4	U
75-01-4	Vinyl Chloride	4	U
74-83-9	Bromomethane	4	U
75-00-3	Chloroethane	4	U
75-69-4	Trichlorofluoromethane	4	U
75-35-4	1,1-Dichloroethene	4	U
67-64-1	Acetone	18	B
74-88-4	Iodomethane	4	U
75-15-0	Carbon Disulfide	4	U
75-09-2	Methylene Chloride	4	U
156-60-5	trans-1,2-Dichloroethene	4	U
1634-04-4	Methyl tert-butyl ether	4	U
75-34-3	1,1-Dichloroethane	4	U
108-05-4	Vinyl acetate	4	U
78-93-3	2-Butanone	4	U
156-59-2	cis-1,2-Dichloroethene	4	U
590-20-7	2,2-Dichloropropane	4	U
74-97-5	Bromochloromethane	4	U
67-66-3	Chloroform	4	U
71-55-6	1,1,1-Trichloroethane	4	U
563-58-6	1,1-Dichloropropene	4	U
56-23-5	Carbon Tetrachloride	4	U
107-06-2	1,2-Dichloroethane	4	U
71-43-2	Benzene	4	U
79-01-6	Trichloroethene	4	U
78-87-5	1,2-Dichloropropane	4	U
74-95-3	Dibromomethane	4	U
75-27-4	Bromodichloromethane	4	U
110-75-8	2-Chloroethyl vinyl ether	4	U
10061-01-5	cis-1,3-Dichloropropene	4	U
108-10-1	4-Methyl-2-pentanone	4	U
108-88-3	Toluene	0.9	J
10061-02-6	trans-1,3-Dichloropropene	4	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-50

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: 70740003

Sample wt/vol: 8.7 (g/mL) G Lab File ID: V6A4356

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: not dec. 22 Date Analyzed: 05/21/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-00-5	1,1,2-Trichloroethane	4	U
142-28-9	1,3-Dichloropropane	4	U
127-18-4	Tetrachloroethene	1	JB
591-78-6	2-Hexanone	4	U
124-48-1	Dibromochloromethane	4	U
106-93-4	1,2-Dibromoethane	4	U
108-90-7	Chlorobenzene	4	U
630-20-6	1,1,1,2-Tetrachloroethane	4	U
100-41-4	Ethylbenzene	4	U
1330-20-7	Xylene (Total)	4	U
100-42-5	Styrene	4	U
75-25-2	Bromoform	4	U
98-82-8	Isopropylbenzene	4	U
79-34-5	1,1,2,2-Tetrachloroethane	4	U
108-86-1	Bromobenzene	4	U
96-18-4	1,2,3-Trichloropropane	4	U
103-65-1	n-Propylbenzene	4	U
95-49-8	2-Chlorotoluene	4	U
108-67-8	1,3,5-Trimethylbenzene	4	U
106-43-4	4-Chlorotoluene	4	U
98-06-6	tert-Butylbenzene	4	U
95-63-6	1,2,4-Trimethylbenzene	4	U
135-98-8	sec-Butylbenzene	4	U
99-87-6	4-Isopropyltoluene	4	U
541-73-1	1,3-Dichlorobenzene	4	U
106-46-7	1,4-Dichlorobenzene	4	U
104-51-8	n-Butylbenzene	4	U
95-50-1	1,2-Dichlorobenzene	4	U
96-12-8	1,2-Dibromo-3-chloropropane	4	U
120-82-1	1,2,4-Trichlorobenzene	4	U
87-68-3	Hexachlorobutadiene	4	U
91-20-3	Naphthalene	4	U
87-61-6	1,2,3-Trichlorobenzene	4	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S42-5 WCI

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: 70740004

Sample wt/vol: 5.1 (g/mL) G Lab File ID: V5C1143

Level: (low/med) MED Date Received: 05/18/00

% Moisture: not dec. 17 Date Analyzed: 05/22/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 100.0(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	300	U
74-87-3	Chloromethane	300	U
75-01-4	Vinyl Chloride	300	U
74-83-9	Bromomethane	300	U
75-00-3	Chloroethane	300	U
75-69-4	Trichlorofluoromethane	300	U
75-35-4	1,1-Dichloroethene	300	U
67-64-1	Acetone	200	J
74-88-4	Iodomethane	300	U
75-15-0	Carbon Disulfide	99	J
75-09-2	Methylene Chloride	74	J
156-60-5	trans-1,2-Dichloroethene	300	U
1634-04-4	Methyl tert-butyl ether	300	U
75-34-3	1,1-Dichloroethane	300	U
108-05-4	Vinyl acetate	300	U
156-59-2	cis-1,2-Dichloroethene	300	U
590-20-7	2,2-Dichloropropane	300	U
78-93-3	2-Butanone	300	U
74-97-5	Bromochloromethane	300	U
67-66-3	Chloroform	300	U
71-55-6	1,1,1-Trichloroethane	300	U
563-58-6	1,1-Dichloropropene	300	U
56-23-5	Carbon Tetrachloride	300	U
107-06-2	1,2-Dichloroethane	300	U
71-43-2	Benzene	300	U
79-01-6	Trichloroethene	300	U
78-87-5	1,2-Dichloropropane	300	U
74-95-3	Dibromomethane	300	U
75-27-4	Bromodichloromethane	300	U
110-75-8	2-Chloroethyl vinyl ether	300	U
10061-01-5	cis-1,3-Dichloropropene	300	U
108-10-1	4-Methyl-2-pentanone	300	U
108-88-3	Toluene	300	U
10061-02-6	trans-1,3-Dichloropropene	300	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S42-5 WCI

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: 70740004

Sample wt/vol: 5.1 (g/mL) G Lab File ID: V5C1143

Level: (low/med) MED Date Received: 05/18/00

% Moisture: not dec. 17 Date Analyzed: 05/22/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 100.0(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-00-5	1,1,2-Trichloroethane	300	U
142-28-9	1,3-Dichloropropane	300	U
127-18-4	Tetrachloroethene	300	U
591-78-6	2-Hexanone	300	U
124-48-1	Dibromochloromethane	300	U
106-93-4	1,2-Dibromoethane	300	U
108-90-7	Chlorobenzene	300	U
630-20-6	1,1,1,2-Tetrachloroethane	300	U
100-41-4	Ethylbenzene	300	U
100-42-5	Styrene	300	U
1330-20-7	Xylene (Total)	300	U
75-25-2	Bromoform	300	U
98-82-8	Isopropylbenzene	300	U
79-34-5	1,1,2,2-Tetrachloroethane	300	U
108-86-1	Bromobenzene	300	U
96-18-4	1,2,3-Trichloropropane	300	U
103-65-1	n-Propylbenzene	300	U
95-49-8	2-Chlorotoluene	300	U
108-67-8	1,3,5-Trimethylbenzene	300	U
106-43-4	4-Chlorotoluene	300	U
98-06-6	tert-Butylbenzene	300	U
95-63-6	1,2,4-Trimethylbenzene	300	U
135-98-8	sec-Butylbenzene	300	U
541-73-1	1,3-Dichlorobenzene	300	U
99-87-6	4-Isopropyltoluene	300	U
106-46-7	1,4-Dichlorobenzene	300	U
104-51-8	n-Butylbenzene	300	U
95-50-1	1,2-Dichlorobenzene	300	U
96-12-8	1,2-Dibromo-3-chloropropane	300	U
120-82-1	1,2,4-Trichlorobenzene	300	U
87-68-3	Hexachlorobutadiene	300	U
91-20-3	Naphthalene	300	U
87-61-6	1,2,3-Trichlorobenzene	300	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK4S

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: V5B0522E

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V5C1140C

Level: (low/med) MED Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 05/22/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5 (mL) Soil Aliquot Volume: 100.0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	250	U
74-87-3	Chloromethane	250	U
75-01-4	Vinyl Chloride	250	U
74-83-9	Bromomethane	250	U
75-00-3	Chloroethane	250	U
75-69-4	Trichlorofluoromethane	250	U
75-35-4	1,1-Dichloroethene	250	U
67-64-1	Acetone	250	U
74-88-4	Iodomethane	250	U
75-15-0	Carbon Disulfide	250	U
75-09-2	Methylene Chloride	250	U
156-60-5	trans-1,2-Dichloroethene	250	U
1634-04-4	Methyl tert-butyl ether	250	U
75-34-3	1,1-Dichloroethane	250	U
108-05-4	Vinyl acetate	250	U
156-59-2	cis-1,2-Dichloroethene	250	U
590-20-7	2,2-Dichloropropane	250	U
78-93-3	2-Butanone	250	U
74-97-5	Bromochloromethane	250	U
67-66-3	Chloroform	250	U
71-55-6	1,1,1-Trichloroethane	250	U
563-58-6	1,1-Dichloropropene	250	U
56-23-5	Carbon Tetrachloride	250	U
107-06-2	1,2-Dichloroethane	250	U
71-43-2	Benzene	250	U
79-01-6	Trichloroethene	250	U
78-87-5	1,2-Dichloropropane	250	U
74-95-3	Dibromomethane	250	U
75-27-4	Bromodichloromethane	250	U
110-75-8	2-Chloroethyl vinyl ether	250	U
10061-01-5	cis-1,3-Dichloropropene	250	U
108-10-1	4-Methyl-2-pentanone	250	U
108-88-3	Toluene	250	U
10061-02-6	trans-1,3-Dichloropropene	250	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK4S

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: V5B0522E

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V5C1140C

Level: (low/med) MED Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 05/22/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 100.0(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-00-5	1,1,2-Trichloroethane	250	U
142-28-9	1,3-Dichloropropane	250	U
127-18-4	Tetrachloroethene	250	U
591-78-6	2-Hexanone	250	U
124-48-1	Dibromochloromethane	250	U
106-93-4	1,2-Dibromoethane	250	U
108-90-7	Chlorobenzene	250	U
630-20-6	1,1,1,2-Tetrachloroethane	250	U
100-41-4	Ethylbenzene	250	U
100-42-5	Styrene	250	U
1330-20-7	Xylene (Total)	250	U
75-25-2	Bromoform	250	U
98-82-8	Isopropylbenzene	250	U
79-34-5	1,1,2,2-Tetrachloroethane	250	U
108-86-1	Bromobenzene	250	U
96-18-4	1,2,3-Trichloropropane	250	U
103-65-1	n-Propylbenzene	250	U
95-49-8	2-Chlorotoluene	250	U
108-67-8	1,3,5-Trimethylbenzene	250	U
106-43-4	4-Chlorotoluene	250	U
98-06-6	tert-Butylbenzene	250	U
95-63-6	1,2,4-Trimethylbenzene	250	U
135-98-8	sec-Butylbenzene	250	U
541-73-1	1,3-Dichlorobenzene	250	U
99-87-6	4-Isopropyltoluene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
104-51-8	n-Butylbenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
96-12-8	1,2-Dibromo-3-chloropropane	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
87-68-3	Hexachlorobutadiene	250	U
91-20-3	Naphthalene	250	U
87-61-6	1,2,3-Trichlorobenzene	250	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK6L

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: V6B0521A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V6A4352

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 05/21/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (mL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	5	U
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	4	J
74-88-4	Iodomethane	5	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	2	J
156-60-5	trans-1,2-Dichloroethene	5	U
1634-04-4	Methyl tert-butyl ether	5	U
75-34-3	1,1-Dichloroethane	5	U
108-05-4	Vinyl acetate	5	U
78-93-3	2-Butanone	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
590-20-7	2,2-Dichloropropane	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
563-58-6	1,1-Dichloropropene	5	U
56-23-5	Carbon Tetrachloride	5	U
107-06-2	1,2-Dichloroethane	5	U
71-43-2	Benzene	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
110-75-8	2-Chloroethyl vinyl ether	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK6L

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: V6B0521A

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V6A4352

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 05/21/00

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (mL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-00-5	1,1,2-Trichloroethane	5	U
142-28-9	1,3-Dichloropropane	5	U
127-18-4	Tetrachloroethene	2	J
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	5	U
108-90-7	Chlorobenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (Total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
98-82-8	Isopropylbenzene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-86-1	Bromobenzene	5	U
96-18-4	1,2,3-Trichloropropane	5	U
103-65-1	n-Propylbenzene	5	U
95-49-8	2-Chlorotoluene	5	U
108-67-8	1,3,5-Trimethylbenzene	5	U
106-43-4	4-Chlorotoluene	5	U
98-06-6	tert-Butylbenzene	5	U
95-63-6	1,2,4-Trimethylbenzene	5	U
135-98-8	sec-Butylbenzene	5	U
99-87-6	4-Isopropyltoluene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
104-51-8	n-Butylbenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
87-68-3	Hexachlorobutadiene	5	U
91-20-3	Naphthalene	5	U
87-61-6	1,2,3-Trichlorobenzene	5	U

2B
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Level: (low/med) MED

	EPA SAMPLE NO.	SMC1 #	SMC2 (DCE) #	SMC3 (TOL) #	OTHER (BFB) #	TOT OUT
01	VBLK4S	103	99	104	103	0
02	S42-5 WCI	98	94	106	104	0
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		QC LIMITS
SMC1	= Dibromofluoromethane	(76-133)
SMC2 (DCE)	= 1,2-Dichloroethane-d4	(72-134)
SMC3 (TOL)	= Toluene-d8	(71-115)
OTHER (BFB)	= Bromofluorobenzene	(49-146)

Column to be used to flag recovery values

* Values outside of contract required QC limits

2B
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Level: (low/med) LOW

	EPA SAMPLE NO.	SMC1 #	SMC2 (DCE) #	SMC3 (TOL) #	OTHER (BFB) #	TOT OUT
01	VBLK6L	106	94	105	104	0
02	VBLK6LLCS	113	106	104	110	0
03	N1-0	111	114	104	108	0
04	N1-A	116	110	104	103	0
05	N1-50	114	117	105	101	0
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		QC LIMITS
SMC1	= Dibromofluoromethane	(76-133)
SMC2 (DCE)	= 1,2-Dichloroethane-d4	(72-134)
SMC3 (TOL)	= Toluene-d8	(71-115)
OTHER (BFB)	= Bromofluorobenzene	(49-146)

Column to be used to flag recovery values

* Values outside of contract required QC limits

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix Spike - Sample No.: VBLK5R

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	50	0.0	45	90	17-180
Chloromethane	50	0.0	49	98	54-135
Vinyl Chloride	50	0.0	46	92	63-131
Bromomethane	50	0.0	43	86	58-132
Chloroethane	50	0.0	46	92	69-127
Trichlorofluoromethane	50	0.0	47	94	58-140
1,1-Dichloroethene	50	0.0	47	94	75-122
Acetone	50	5	44	78	33-150
Iodomethane	50	0.0	42	84	67-132
Carbon Disulfide	50	0.0	45	90	57-137
Methylene Chloride	50	0.0	44	88	65-128
trans-1,2-Dichloroethen	50	0.0	53	106	73-125
Methyl tert-butyl ether	50	0.0	55	110	62-136
1,1-Dichloroethane	50	0.0	49	98	75-123
Vinyl acetate	50	0.0	6	12*	62-129
cis-1,2-Dichloroethene	50	0.0	51	102	77-122
2,2-Dichloropropane	50	0.0	47	94	63-132
2-Butanone	50	0.0	52	104	54-136
Bromochloromethane	50	0.0	50	100	78-123
Chloroform	50	0.0	49	98	75-122
1,1,1-Trichloroethane	50	0.0	50	100	74-126
1,1-Dichloropropene	50	0.0	52	104	77-124
Carbon Tetrachloride	50	0.0	49	98	74-127
1,2-Dichloroethane	50	0.0	49	98	76-123
Benzene	50	0.0	51	102	78-121
Trichloroethene	50	0.0	50	100	77-123
1,2-Dichloropropane	50	0.0	49	98	77-122
Dibromomethane	50	0.0	50	100	75-123

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix Spike - Sample No.: VBLK5R

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Bromodichloromethane	50	0.0	48	96	78-121
2-Chloroethyl vinyl eth	50	0.0	40	80	68-129
cis-1,3-Dichloropropene	50	0.0	50	100	77-121
4-Methyl-2-pentanone	50	0.0	57	114	63-133
Toluene	50	0.0	51	102	77-122
trans-1,3-Dichloroprope	50	0.0	49	98	76-123
1,1,2-Trichloroethane	50	0.0	50	100	76-124
1,3-Dichloropropane	50	0.0	51	102	76-122
Tetrachloroethene	50	0.0	46	92	77-121
2-Hexanone	50	0.0	57	114	53-142
Dibromochloromethane	50	0.0	50	100	77-121
1,2-Dibromoethane	50	0.0	52	104	75-122
Chlorobenzene	50	0.0	49	98	77-120
1,1,1,2-Tetrachloroetha	50	0.0	49	98	78-119
Ethylbenzene	50	0.0	52	104	76-120
Styrene	50	0.0	53	106	77-121
Xylene (Total)	150	0.0	150	100	76-121
Bromoform	50	0.0	51	102	73-126
Isopropylbenzene	50	0.0	52	104	73-123
1,1,2,2-Tetrachloroetha	50	0.0	54	108	66-128
Bromobenzene	50	0.0	50	100	75-120
1,2,3-Trichloropropane	50	0.0	50	100	68-124
n-Propylbenzene	50	0.0	51	102	71-123
2-Chlorotoluene	50	0.0	51	102	73-121
1,3,5-Trimethylbenzene	50	0.0	53	106	72-123
4-Chlorotoluene	50	0.0	50	100	74-120
tert-Butylbenzene	50	0.0	55	110	71-123
1,2,4-Trimethylbenzene	50	0.0	56	112	72-122

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix Spike - Sample No.: VBLK5R

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
sec-Butylbenzene	50	0.0	54	108	70-125
1,3-Dichlorobenzene	50	0.0	50	100	74-120
4-Isopropyltoluene	50	0.0	58	116	70-125
1,4-Dichlorobenzene	50	0.0	48	96	75-120
n-Butylbenzene	50	0.0	63	126	67-128
1,2-Dichlorobenzene	50	0.0	50	100	75-119
1,2-Dibromo-3-chloropro	50	0.0	52	104	57-132
1,2,4-Trichlorobenzene	50	0.0	62	124	66-126
Hexachlorobutadiene	50	0.0	56	112	61-133
Naphthalene	50	1	66	130	52-137
1,2,3-Trichlorobenzene	50	0.0	61	122	63-127

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 1 out of 67 outside limits

COMMENTS: _____

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK6L

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Lab File ID: V6A4352 Lab Sample ID: V6B0521A

Date Analyzed: 05/21/00 Time Analyzed: 0955

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

Instrument ID: V6

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VBLK6LLCS	V6L0521A	V6A4353	1024
02	N1-0	70740001	V6A4354	1100
03	N1-A	70740002	V6A4355	1129
04	N1-50	70740003	V6A4356	1157
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COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK4S

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Lab File ID: V5C1140C Lab Sample ID: V5B0522E

Date Analyzed: 05/22/00 Time Analyzed: 1936

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

Instrument ID: V5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	S42-5 WCI	70740004	V5C1143	2105
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COMMENTS:

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-0

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: 70740001

Sample wt/vol: 35.0 (g/mL) G Lab File ID: S3A3180

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 15 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/22/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)Ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-Methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	680	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	680	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	680	U
83-32-9	Acenaphthene	330	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-0

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: 70740001

Sample wt/vol: 35.0 (g/mL) G Lab File ID: S3A3180

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 15 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/22/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	680	U
100-02-7	4-Nitrophenol	680	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	680	U
534-52-1	4,6-Dinitro-2-methylphenol	680	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	680	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	41	J
129-00-0	Pyrene	34	J
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-A

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: 70740002

Sample wt/vol: 35.5 (g/mL) G Lab File ID: S3A3181

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 11 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/22/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	310	U
111-44-4	bis(2-Chloroethyl)Ether	310	U
95-57-8	2-Chlorophenol	310	U
541-73-1	1,3-Dichlorobenzene	310	U
106-46-7	1,4-Dichlorobenzene	310	U
95-50-1	1,2-Dichlorobenzene	310	U
95-48-7	2-Methylphenol	310	U
108-60-1	2,2'-oxybis(1-Chloropropane)	310	U
106-44-5	4-Methylphenol	310	U
621-64-7	N-Nitroso-di-n-propylamine	310	U
67-72-1	Hexachloroethane	310	U
98-95-3	Nitrobenzene	310	U
78-59-1	Isophorone	310	U
88-75-5	2-Nitrophenol	310	U
105-67-9	2,4-Dimethylphenol	310	U
120-83-2	2,4-Dichlorophenol	310	U
120-82-1	1,2,4-Trichlorobenzene	310	U
91-20-3	Naphthalene	310	U
106-47-8	4-Chloroaniline	310	U
111-91-1	bis(2-Chloroethoxy)methane	310	U
87-68-3	Hexachlorobutadiene	310	U
59-50-7	4-Chloro-3-Methylphenol	310	U
91-57-6	2-Methylnaphthalene	310	U
77-47-4	Hexachlorocyclopentadiene	310	U
88-06-2	2,4,6-Trichlorophenol	310	U
95-95-4	2,4,5-Trichlorophenol	640	U
91-58-7	2-Chloronaphthalene	310	U
88-74-4	2-Nitroaniline	640	U
131-11-3	Dimethylphthalate	310	U
208-96-8	Acenaphthylene	310	U
606-20-2	2,6-Dinitrotoluene	310	U
99-09-2	3-Nitroaniline	640	U
83-32-9	Acenaphthene	310	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-A

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: 70740002

Sample wt/vol: 35.5 (g/mL) G Lab File ID: S3A3181

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 11 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/22/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	640	U
100-02-7	4-Nitrophenol	640	U
132-64-9	Dibenzofuran	310	U
121-14-2	2,4-Dinitrotoluene	310	U
84-66-2	Diethylphthalate	310	U
7005-72-3	4-Chlorophenyl-phenylether	310	U
86-73-7	Fluorene	310	U
100-01-6	4-Nitroaniline	640	U
534-52-1	4,6-Dinitro-2-methylphenol	640	U
86-30-6	N-Nitrosodiphenylamine (1)	310	U
101-55-3	4-Bromophenyl-phenylether	310	U
118-74-1	Hexachlorobenzene	310	U
87-86-5	Pentachlorophenol	640	U
85-01-8	Phenanthrene	310	U
120-12-7	Anthracene	310	U
86-74-8	Carbazole	310	U
84-74-2	Di-n-butylphthalate	310	U
206-44-0	Fluoranthene	44	J
129-00-0	Pyrene	38	J
85-68-7	Butylbenzylphthalate	310	U
91-94-1	3,3'-Dichlorobenzidine	310	U
56-55-3	Benzo(a)anthracene	310	U
218-01-9	Chrysene	310	U
117-81-7	bis(2-Ethylhexyl)phthalate	310	U
117-84-0	Di-n-octylphthalate	310	U
205-99-2	Benzo(b)fluoranthene	310	U
207-08-9	Benzo(k)fluoranthene	310	U
50-32-8	Benzo(a)pyrene	310	U
193-39-5	Indeno(1,2,3-cd)pyrene	310	U
53-70-3	Dibenzo(a,h)anthracene	310	U
191-24-2	Benzo(g,h,i)perylene	310	U

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-50

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: 70740003

Sample wt/vol: 35.0 (g/mL) G Lab File ID: S3A3182

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 22 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/22/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)Ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2'-oxybis(1-Chloropropane)	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
111-91-1	bis(2-Chloroethoxy)methane	360	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-Methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	740	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	740	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	740	U
83-32-9	Acenaphthene	46	J

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

N1-50

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: 70740003

Sample wt/vol: 35.0 (g/mL) G Lab File ID: S3A3182

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 22 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/22/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	740	U
100-02-7	4-Nitrophenol	740	U
132-64-9	Dibenzofuran	37	J
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	86	J
100-01-6	4-Nitroaniline	740	U
534-52-1	4,6-Dinitro-2-methylphenol	740	U
86-30-6	N-Nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	740	U
85-01-8	Phenanthrene	290	J
120-12-7	Anthracene	64	J
86-74-8	Carbazole	38	J
84-74-2	Di-n-butylphthalate	360	U
206-44-0	Fluoranthene	300	J
129-00-0	Pyrene	230	J
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	120	J
218-01-9	Chrysene	140	J
117-81-7	bis(2-Ethylhexyl)phthalate	360	U
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	140	J
207-08-9	Benzo(k)fluoranthene	60	J
50-32-8	Benzo(a)pyrene	98	J
193-39-5	Indeno(1,2,3-cd)pyrene	62	J
53-70-3	Dibenzo(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	360	U

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S42-WCI

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: 70740004

Sample wt/vol: 35.4 (g/mL) G Lab File ID: S3A3183

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 17 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/22/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)Ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	2,2'-oxybis(1-Chloropropane)	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-Methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	680	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	680	U
131-11-3	Dimethylphthalate	340	U
208-96-8	Acenaphthylene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
99-09-2	3-Nitroaniline	680	U
83-32-9	Acenaphthene	340	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S42-WCI

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: 70740004

Sample wt/vol: 35.4 (g/mL) G Lab File ID: S3A3183

Level: (low/med) LOW Date Received: 05/18/00

% Moisture: 17 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/22/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	680	U
100-02-7	4-Nitrophenol	680	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	65	J
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	680	U
534-52-1	4,6-Dinitro-2-methylphenol	680	U
86-30-6	N-Nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	680	U
85-01-8	Phenanthrene	170	J
120-12-7	Anthracene	37	J
86-74-8	Carbazole	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	240	J
129-00-0	Pyrene	210	J
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	340	U
56-55-3	Benzo(a)anthracene	99	J
218-01-9	Chrysene	130	J
117-81-7	bis(2-Ethylhexyl)phthalate	36	J
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo(b)fluoranthene	130	J
207-08-9	Benzo(k)fluoranthene	42	J
50-32-8	Benzo(a)pyrene	98	J
193-39-5	Indeno(1,2,3-cd)pyrene	59	J
53-70-3	Dibenzo(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	68	J

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK3R

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: S0519-BS1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: S3A3160

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/19/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)Ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-Methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	670	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	670	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	670	U
83-32-9	Acenaphthene	330	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK3R

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: S0519-BS1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: S3A3160

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N) N Date Extracted: 05/19/00

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/19/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	670	U
100-02-7	4-Nitrophenol	670	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	670	U
534-52-1	4,6-Dinitro-2-methylphenol	670	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	670	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Level: (low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	S7 (2CP)#	S8 (DCB)#	TOT OUT
01	SBLK3R	76	77	78	80	76	85	72	75	0
02	SBLK3RLCS	76	75	78	76	72	100	71	74	0
03	N1-0	74	74	80	74	72	91	70	72	0
04	N1-A	73	75	80	75	73	100	69	72	0
05	N1-50	66	70	76	70	65	97	63	65	0
06	S42-WCI	67	72	76	72	66	91	65	64	0
07										
08										
09										
10										
11										
12										
13										
14										
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17										
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28										
29										
30										

		QC LIMITS	
S1 (NBZ)	= Nitrobenzene-d5	(36-128)	
S2 (FBP)	= 2-Fluorobiphenyl	(42-123)	
S3 (TPH)	= Terphenyl-d14	(41-132)	
S4 (PHL)	= Phenol-d5	(34-119)	
S5 (2FP)	= 2-Fluorophenol	(22-120)	
S6 (TBP)	= 2,4,6-Tribromophenol	(32-133)	
S7 (2CP)	= 2-Chlorophenol-d4	(35-124)	(advisory)
S8 (DCB)	= 1,2-Dichlorobenzene-d4	(27-131)	(advisory)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix Spike - Sample No.: SBLK3R Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Phenol	1700	0.0	1300	76	38-109
bis(2-Chloroethyl)Ether	1700	0.0	1200	70	26-119
2-Chlorophenol	1700	0.0	1300	76	49-104
1,3-Dichlorobenzene	1700	0.0	1200	70	42- 99
1,4-Dichlorobenzene	1700	0.0	1200	70	43-100
1,2-Dichlorobenzene	1700	0.0	1300	76	47-100
2-Methylphenol	1700	0.0	1200	70	12-128
2,2'-oxybis(1-Chloropro	1700	0.0	1400	82	35-124
4-Methylphenol	1700	0.0	1400	82	1-138
N-Nitroso-di-n-prop.(1)	1700	0.0	1300	76	44-113
Hexachloroethane	1700	0.0	1200	70	43-103
Nitrobenzene	1700	0.0	1200	70	55-103
Isophorone	1700	0.0	1300	76	41-100
2-Nitrophenol	1700	0.0	1300	76	53-104
2,4-Dimethylphenol	1700	0.0	1300	76	50-150
2,4-Dichlorophenol	1700	0.0	1400	82	28-129
1,2,4-Trichlorobenzene	1700	0.0	1400	82	51-107
Naphthalene	1700	0.0	1300	76	54-104
4-Chloroaniline	1700	0.0	650	38	0- 92
bis(2-Chloroethoxy)meth	1700	0.0	1300	76	46-111
Hexachlorobutadiene	1700	0.0	1400	82	49-110
4-Chloro-3-Methylphenol	1700	0.0	1400	82	0-161
2-Methylnaphthalene	1700	0.0	1300	76	46-116
Hexachlorocyclopentadie	1700	0.0	1200	70	21-137
2,4,6-Trichlorophenol	1700	0.0	1400	82	4-140
2,4,5-Trichlorophenol	1700	0.0	1200	70	3-156
2-Chloronaphthalene	1700	0.0	1300	76	60-107
2-Nitroaniline	1700	0.0	870	51	50-114

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix Spike - Sample No.: SBLK3R Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Dimethylphthalate	1700	0.0	1300	76	61-111
Acenaphthylene	1700	0.0	1200	70	61-106
2,6-Dinitrotoluene	1700	0.0	1400	82	54-116
3-Nitroaniline	1700	0.0	840	49	0-126
Acenaphthene	1700	0.0	1200	70	62-107
2,4-Dinitrophenol	1700	0.0	1000	59	31-119
4-Nitrophenol	1700	0.0	1100	65	0-166
Dibenzofuran	1700	0.0	1400	82	63-109
2,4-Dinitrotoluene	1700	0.0	1400	82	58-115
Diethylphthalate	1700	0.0	1200	70	58-116
4-Chlorophenyl-phenylet	1700	0.0	1500	88	60-113
Fluorene	1700	0.0	1400	82	61-112
4-Nitroaniline	1700	0.0	970	57	0-135
4,6-Dinitro-2-methylphe	1700	0.0	1200	70	30-128
N-Nitrosodiphenylamine	1700	0.0	1300	76	0-148
4-Bromophenyl-phenyleth	1700	0.0	1400	82	65-118
Hexachlorobenzene	1700	0.0	1500	88	64-120
Pentachlorophenol	1700	0.0	980	58	0-165
Phenanthrene	1700	0.0	1300	76	66-115
Anthracene	1700	0.0	1400	82	56-144
Carbazole	1700	0.0	1300	76	52-128
Di-n-butylphthalate	1700	0.0	1200	70	69-112
Fluoranthene	1700	0.0	1500	88	65-116
Pyrene	1700	0.0	1400	82	47-138
Butylbenzylphthalate	1700	0.0	1100	65	56-125
3,3'-Dichlorobenzidine	1700	0.0	860	50	0-139
Benzo(a)anthracene	1700	0.0	1400	82	64-116
Chrysene	1700	0.0	1400	82	60-116

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix Spike - Sample No.: SBLK3R Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
bis(2-Ethylhexyl)phthal	1700	0.0	1100	65	55-124
Di-n-octylphthalate	1700	0.0	1100	65	55-133
Benzo(b)fluoranthene	1700	0.0	1400	82	51-128
Benzo(k)fluoranthene	1700	0.0	1300	76	51-139
Benzo(a)pyrene	1700	0.0	1300	76	61-120
Indeno(1,2,3-cd)pyrene	1700	0.0	1500	88	45-123
Dibenzo(a,h)anthracene	1700	0.0	1600	94	46-128
Benzo(g,h,i)perylene	1700	0.0	1500	88	43-128

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 64 outside limits

COMMENTS: _____

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK3R

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Lab File ID: S3A3160 Lab Sample ID: S0519-BS1

Instrument ID: S3 Date Extracted: 05/19/00

Matrix: (soil/water) SOIL Date Analyzed: 05/19/00

Level:(low/med) LOW Time Analyzed: 1601

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SBLK3RLCS	S0519-LS1	S3A3161	05/19/00
02	N1-0	70740001	S3A3180	05/22/00
03	N1-A	70740002	S3A3181	05/22/00
04	N1-50	70740003	S3A3182	05/22/00
05	S42-WCI	70740004	S3A3183	05/22/00
06				
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COMMENTS:

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

N1-0

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: 70740001

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E2B9487F

% Moisture: 15 decanted: (Y/N) N Date Received: 05/18/00

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:05/19/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/22/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
1114-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U

FORM I PCB

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

N1-A

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: 70740002

Sample wt/vol: 30.5 (g/mL) G Lab File ID: E2B9488F

% Moisture: 11 decanted: (Y/N) N Date Received: 05/18/00

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:05/19/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/22/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	36	U
1114-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	36	U

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

N1-50

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: 70740003

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E2B9489F

% Moisture: 22 decanted: (Y/N) N Date Received: 05/18/00

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:05/19/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/22/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	42	U
11104-28-2	Aroclor-1221	42	U
1114-16-5	Aroclor-1232	42	U
53469-21-9	Aroclor-1242	42	U
12672-29-6	Aroclor-1248	42	U
11097-69-1	Aroclor-1254	42	U
11096-82-5	Aroclor-1260	42	U

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

S42-5 WC1

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: 70740004

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3C1048F

% Moisture: 17 decanted: (Y/N) N Date Received: 05/18/00

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 05/19/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/22/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	80	U
11104-28-2	Aroclor-1221	80	U
1114-16-5	Aroclor-1232	80	U
53469-21-9	Aroclor-1242	80	U
12672-29-6	Aroclor-1248	80	U
11097-69-1	Aroclor-1254	80	U
11096-82-5	Aroclor-1260	80	U

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

BBLK2A

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: B0519-BS1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E2B9490F

% Moisture: 0 decanted: (Y/N) N Date Received: _____

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:05/19/00

Concentrated Extract Volume: 10000(uL) Date Analyzed: 05/22/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	33	U
11104-28-2------	Aroclor-1221	33	U
1114-16-5-------	Aroclor-1232	33	U
53469-21-9------	Aroclor-1242	33	U
12672-29-6------	Aroclor-1248	33	U
11097-69-1------	Aroclor-1254	33	U
11096-82-5------	Aroclor-1260	33	U

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

BBLK3A

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix: (soil/water) SOIL Lab Sample ID: B0519-BS1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E3C1049F

% Moisture: 0 decanted: (Y/N) N Date Received: _____

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 05/19/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 05/22/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
1114-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U

FORM 2
SOIL PCB SURROGATE RECOVERY

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

GC Column(1): DB-5 ID: 0.53 (mm) GC Column(2): DB-608 ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	N1-0	104	98	108	114			0
02	N1-A	58	60	68	74			0
03	N1-50	91	92	103	112			0
04	BBLK2A	85	92	100	108			0
05	BBLK2ALCS	100	100	108	115			0
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30								

ADVISORY
QC LIMITS

S1 (TCX) = Tetrachloro-m-xylene (42-147)
S2 (DCB) = Decachlorobiphenyl (29-155)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

FORM 2
SOIL PCB SURROGATE RECOVERY

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

GC Column(1): DB-1701 ID: 0.53 (mm) GC Column(2): DB-608 ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	S42-5 WC1	75	75	94	75			0
02	BBLK3A	71	74	100	77			0
03	BBLK3ALCS	75	68	92	72			0
04								
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ADVISORY
QC LIMITS

S1 (TCX) = Tetrachloro-m-xylene (42-147)
S2 (DCB) = Decachlorobiphenyl (29-155)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

FORM 3
SOIL PCB LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix Spike - Sample No.: BBLK3A

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Aroclor-1016	330	0.00	220	67	62-155
Aroclor-1260	330	0.00	210	64	56-173

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 2 outside limits

COMMENTS: _____

FORM 3
SOIL PCB LAB CONTROL SAMPLE

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Matrix Spike - Sample No.: BBLK2A

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Aroclor-1016	330	0.00	310	94	62-155
Aroclor-1260	330	0.00	320	97	56-173

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 2 outside limits

COMMENTS: _____

FORM 4
PCB METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

BBLK3A

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Lab Sample ID: B0519-BS1 Lab File ID: E3C1049F

Matrix (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SONC

Sulfur Cleanup (Y/N) Y Date Extracted: 05/19/00

Date Analyzed (1): 05/22/00 Date Analyzed (2): 05/22/00

Time Analyzed (1): 1446 Time Analyzed (2): 1446

Instrument ID (1): E3 Instrument ID (2): E3

GC Column (1): DB-1701 ID: 0.53(mm) GC Column (2): DB-608 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	S42-5 WC1	70740004	05/22/00	05/22/00
02	BBLK3ALCS	B0519-LS1	05/22/00	05/22/00
03				
04				
05				
06				
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COMMENTS:

FORM IV PCB

FORM 4
PCB METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

BBLK2A

Lab Name: MITKEM CORPORATION Contract:

Lab Code: MITKEM Case No.: SAS No.: SDG No.: 70740

Lab Sample ID: B0519-BS1 Lab File ID: E2B9490F

Matrix (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SONC

Sulfur Cleanup (Y/N) Y Date Extracted: 05/19/00

Date Analyzed (1): 05/22/00 Date Analyzed (2): 05/22/00

Time Analyzed (1): 1346 Time Analyzed (2): 1346

Instrument ID (1): E2 Instrument ID (2): E2

GC Column (1): DB-5 ID: 0.53(mm) GC Column (2): DB-608 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	N1-0	70740001	05/22/00	05/22/00
02	N1-A	70740002	05/22/00	05/22/00
03	N1-50	70740003	05/22/00	05/22/00
04	BBLK2ALCS	B0519-LS1	05/22/00	05/22/00
05				
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COMMENTS:

FORM IV PCB

MITKEM CORPORATION

05/19/00 01:22 PM

Original

Lab Workorder #: **70740**

Lab Workorder **70740** **R0**

Client: **Foster Wheeler Environmental**
Lab Workorder ID: **242-5 SUMP**
Client Proj ID: **Bldg. 42**
Client PO #: **026697**
Project / Profile Name: **Middletown, RI**
Date Due: **05/22/00**
Customer Service: **EAL**
Del Req'd: **Level 2 (1 copy)**
Completed?: Yes
Profile Notes: **Must meet RIDEM DEC Residential Rept Limits. (not for waste char sample)**
Total Price: ~~$0.00~~

Logged In By:

Reviewed By:

Date Opened: **05/19/00 10:23**
Date Closed: **05/19/00 11:36**

Project Status: **WP**

Lab ID	Client ID	Matrix	Type	Analysis Code	Price	Collected	Received	Due	Notes
70740001	N1-0	S	SAMPLE	8082S 8100S TPH 8260S 8270S DRY WEIGHT RCRA8S		05/18/00 15:30	05/18/00	05/22/00	
70740002	N1-A	S	SAMPLE	8082S 8100S TPH 8260S 8270S DRY WEIGHT RCRA8S		05/18/00 15:20	05/18/00	05/22/00	
70740003	N1-50	S	SAMPLE	8082S 8100S TPH 8260S 8270S DRY WEIGHT RCRA8S		05/18/00 15:10	05/18/00	05/22/00	
70740004	242-5 WC1	S	SAMPLE	8082S 8100S TPH 8260S 8270S DRY WEIGHT RCRA8S		05/18/00 17:00	05/18/00	05/22/00	WASTE CHAR.

~~Total Price:~~ ~~$0.00~~

MITKEM CORPORATION

INVOICE GOES TO:

Accounts Payable
Foster Wheeler Environmental
P.O. Box 4530
Middletown, RI, 02842

REPORT GOES TO:

Josh Holden
Foster Wheeler Environmental
42 Defense Highway
Peir One
Middletown, RI, 02842
W : 401-845-6929
F : 401-845-4169

MITKEM CORPORATION
Sample Condition Form

Page____of____

Received By: NK | Reviewed By: SL | Date: 5/19/00 | MITKEM Project #: 70740

Client Project: 542-5 SUMP | Client: FOSTER WHEELER

Condition:

1) Custody Seal(s) Present / Absent
Coolers / Bottles
Intact / Broken

2) Custody Seal Number(s) N/A

3) Chain-of-Custody Present / Absent

4) Cooler Temperature 3°C
Coolant Condition ICE

5) Airbill(s)
Airbill Number(s) /

6) Sample Bottles Intact
Broken
Leaking

7) Date Received 5/18/00

8) Time Received 1830

Lab Sample ID	Preservation (pH) HNO_3	H_2SO_4	HCl	NaOH	VOA Matrix	Comments/Remarks/ Corrective Action*
70740001						
70740002						
70740003						
70740004						

VOA Matrix Key:
US = Unpreserved Soil
UA = Unpreserved Aqueous
B = Both MeOH & $NaHSO_4$
Na = $NaHSO_4$
M = MeOH
E = Encore
H = HCl

* See Sample Notification Form yes / no

Last Page of Data Report

Appendix N

Exploratory Trenching Initial Sample Results Summary and Laboratory Data

FOSTER WHEELER ENVIRONMENTAL CORPORATION
U.S. NAVY NORTHERN DIVISION REMEDIAL ACTION CONTRACT (RAC)
CONTRACT N62472-94-D-0398 DELIVERY ORDER 13 AND 60
DERECKTOR SHIPYARD EXPLORATORY TRENCHING-FORMER DISPOSAL PITS

RIDEM Direct Exposure Criteria --->	Residential	Commercial/ Industrial	DPSOIL01	DPSOIL02	DPSOIL03	DPSOIL04
Volatile Organics						
Benzene	2.5	200.0	-	-	-	-
Bromodichloromethane	10.0	92.0	-	-	-	-
Bromoform	81.0	720.0	-	-	-	-
Bromomethane	0.8	2,900.0	-	-	-	-
Carbon tetrachloride	1.5	44.0	-	-	-	-
Chlorobenzene	210.0	10,000.0	-	-	-	-
Chloroform	1.2	940.0	-	-	-	-
Dibromochloromethane	7.6	68.0	-	-	-	-
1,1-Dichloroethane	920.0	10,000.0	-	-	-	-
1,2-Dichloroethane	0.9	63.0	-	-	-	-
1,1-Dichloroethene	0.2	9.5	-	-	-	-
cis-1,2-Dichloroethene	630.0	10,000.0	-	-	-	-
trans-1,2-Dichloroethene	1,100.0	10,000.0	-	-	-	-
1,2-Dichloropropane	1.9	84.0	-	-	-	-
Ethylbenzene	71.0	10,000.0	-	-	-	-
Isopropyl benzene	27.0	10,000.0	-	-	-	-
Methyl-tert-butyl-ether	390.0	10,000.0	-	-	-	-
Methylene chloride	45.0	760.0	-	-	-	-
Styrene	13.0	190.0	-	-	-	-
1,1,1,2 Tetrachloroethane	2.2	220.0	-	-	-	-
1,1,2,2 Tetrachloroethane	1.3	29.0	-	-	-	-
Toluene	190.0	10,000.0	-	-	-	-
1,1,1-Trichloroethane	540.0	10,000.0	-	-	-	-
1,1,2-Trichloroethane	3.6	100.0	-	-	-	-
Vinyl chloride	0.02	3.00	-	-	-	-
Total Xylenes	110.0	10,000.0	-	-	-	-
Semivolatiles						
Acenaphthene	43.0	10,000.0	0.560	-	-	-
Acenaphthylene	23.0	10,000.0	-	-	-	-
Anthracene	35.0	10,000.0	0.860	-	-	0.056 J
Benzo(a)anthracene	0.9	7.8	1.200	-	-	0.580
Benzo(a)pyrene	0.4	0.8	1.000	-	-	0.560
Benzo(b)fluoranthene	0.9	7.8	1.300	-	-	0.790
Benzo(g,h,I)perylene	0.8	10,000.0	0.400	-	-	0.300 J
Benzo(k)fluoranthene	0.9	78.0	0.650	-	-	0.430
Bis(2-ethylhexyl)phthalate	46.0	410.0	-	0.160 J	-	0.160 J
Bis(2-chloroethyl)ether	0.6	5.2	-	-	-	-
Chrysene	0.4	780.0	1.100	-	-	0.620
Dibenzo(a,h)anthracene	0.4	0.8	0.150 J	-	-	0.099 J
1,2-Dichlorobenzene	510.0	10,000.0	-	-	-	-
1,3-Dichlorobenzene	430.0	10,000.0	-	-	-	-
1,4-Dichlorobenzene	27.0	240.0	-	-	-	-
3,3-Dichlorobenzidine	1.4	13.0	-	-	-	-
Diethyl phthalate	340.0	10,000.0	-	-	-	-
2,4-Dimethyl phenol	1,400.0	10,000.0	-	-	-	-
Dimethyl phthalate	1,900.0	10,000.0	-	-	-	-
2,4-Dinitrophenol	160.0	4,100.0	-	-	-	-
2,4-Dinitrotoluene	0.9	8.4	-	-	-	-
Fluoranthene	20.0	10,000.0	3.000	0.084 J	-	0.740
Fluorene	28.0	10,000.0	0.490	-	-	-
Hexachlorobenzene	0.4	3.6	-	-	-	-
Hexachlorobutadiene	8.2	73.0	-	-	-	-
Hexachloroethane	46.0	410.0	-	-	-	-
Indeno(1,2,3-cd)pyrene	0.9	7.8	0.390 J	-	-	0.290 J
Naphthalene	54.0	10,000.0	0.440	0.077 J	-	-
Pentachlorophenol	5.3	48.0	-	-	-	-
Phenanthrene	40.0	10,000.0	2.500	0.063 J	-	0.200 J
Phenol	6,000.0	10,000.0	-	-	-	-
Pyrene	13.0	10,000.0	2.000	0.058 J	-	0.830
1,2,4-Trichlorobenzene	96.0	10,000.0	-	-	-	-
2,4,6-Trichlorophenol	58.0	520.0	-	-	-	-
TPH (8015M)	500.0	2,500.0	1600	-	-	100

= Exceeds RIDEM Residential Exposure Criteria

J = Estimated value detect below the reporting limit

All results in mg/kg unless otherwise noted

MITKEM CORPORATION

RECEIVED
MAR 03 1999

February 28, 1999

Foster Wheeler Environmental
98 T Defense Highway
Middletown, RI 02842
Attn: Mr. Jon Cary

RE: Client Project #: Derektor Shipyard, NUWC
Lab Project #: 60219

Dear Mr. Cary:

Enclosed please find the data report of the required analyses for the samples associated with the above referenced project. If you have any questions regarding this report, please call me.

We appreciate your business.

Sincerely,

Edward A. Lawler
Laboratory Operations Manager

175 Metro Center Boulevard • Warwick, Rhode Island 02886-1755 • (401) 732-3400 • Fax (401) 732-3499
email: mitkem@worldnet.att.net

MITKEM CORPORATION

Client: Foster Wheeler Environmental Corp.

Client Project: Derektor Shipyard, NUWC

Lab Project: 60219

Date samples received: 2/18/99

Project Narrative

This data report includes the analysis results for five (5) soil samples that were received from Foster Wheeler Environmental Corp. on February 18, 1999. Analyses were performed per specification in the Chain of Custody form. For reference, a copy of the Mitkem Sample Log-In form is included for cross-referencing the client sample ID and laboratory sample ID.

All of the analyses were performed according to method specifications. The values of one pesticide compound in sample MW09TP01 (Mitkem ID 60219002) has greater than a 40% difference between its concentration in the primary and confirmatory analyses. This value is flagged with a "P" on the data sheet. This is typically due to interference from non-target analytes in the samples, causing one value to be unusually high. This also indicates the increased likelihood of false-positive pesticide identification. The lower concentration between the primary and confirmatory concentrations is reported on the data sheet due to the presence of interferences.

No unusual occurrences were noted during sample analysis.

This data report has been reviewed and is authorized for release as evidenced by the signature below.

Edward A. Lawler
Laboratory Operations Manager

Data Flag/Qualifiers:

J This flag indicates an estimated value due to either
- the compound was detected at below the Reporting Limit, or
- estimated concentration for Tentatively Identified Compound

B For organic analyses, this flag indicates the analyte was also detected in the associated Method Blank. The B flag has an alternative meaning for CLP-type metals analyses, indicating a "trace" concentration below the normal reporting limit and above the detection limit.

D This flag indicates the analyte concentration was obtained from a diluted analysis

E This flag indicates the analyte concentration exceeded the Calibration Range

P This flag is used for Pesticides/PCB/Herbicide analyte when there is a greater than 40% difference for detected concentration between the two GC columns used for Primary and Confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is reported in the Analysis Report.

MITKEM CORPORATION

Analysis Report: Total Petroleum Hydrocarbons

Client: Foster Wheeler Environmental Corp.
Analysis: Method 8100M / 8015M
Matrix: Soil

Concentration in: mg/kg, dry weight basis

Lab ID	Client ID	Result	Reporting Limit	% Solid	p-Terphenyl Surrogate Recovery %	Analysis Date
60219001	DPSOIL01	1,600	79	84	64	2/24/99
60219002	MW09TP01	55	15	91	69	2/24/99
60219003	DPSOIL02	ND	15	85	72	2/24/99
60219004	DPSOIL03	ND	14	91	42	2/24/99
60219005	DPSOIL04	100	14	95	84	2/24/99

QA/QC

Method Blank				
F0222-BS1	ND	13	72	2/24/99
Lab Control Sample (% Recovery)				
F0222-LS1	64		55	2/24/99

ND = Not Detected

The samples were quantitated using diesel fuel as standard.

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DPSOIL01
Lab ID: 60219001
Analysis: Method 8260B

Analysis Date: 2/23/99
Matrix: Soil, 84% solids
Concentration in: ug/kg, dry weight basis
Dilution: 10

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	60
Chloromethane	ND	60
Vinyl chloride	ND	60
Bromomethane	ND	60
Chloroethane	ND	60
Trichlorofluoromethane	ND	60
1,1-Dichloroethene	ND	60
Carbon disulfide	ND	60
Iodomethane	ND	60
Acetone	100	60
Methylene chloride	ND	60
trans-1,2-Dichloroethene	ND	60
1,1-Dichloroethane	ND	60
Vinyl acetate	ND	60
2,2-Dichloropropane	ND	60
cis-1,2-Dichloroethene	ND	60
Methyl ethyl ketone	ND	60
Bromochloromethane	ND	60
Chloroform	ND	60
1,1,1-Trichloroethane	ND	60
Carbon tetrachloride	ND	60
1,1-Dichloropropene	ND	60
Benzene	ND	60
1,2-Dichloroethane	ND	60
Trichloroethene	ND	60
1,2-Dichloropropane	ND	60
Dibromomethane	ND	60
Bromodichloromethane	ND	60
2-Chloroethyl vinyl ether	ND	60
cis-1,3-Dichloropropene	ND	60
4-Methyl-2-pentanone	ND	60
Toluene	ND	60

MITKEM CORPORATION

Client ID: DPSOIL01

Lab ID: 60219001

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	60
1,1,2-Trichloroethane	ND	60
Tetrachloroethene	ND	60
1,3-Dichloropropane	ND	60
2-Hexanone	ND	60
Dibromochloromethane	ND	60
1,2-Dibromoethane (EDB)	ND	60
Chlorobenzene	ND	60
1,1,1,2-Tetrachloroethane	ND	60
Ethylbenzene	ND	60
Xylenes, total	ND	60
Styrene	ND	60
Bromoform	ND	60
Isopropylbenzene	ND	60
Bromobenzene	ND	60
1,1,2,2-Tetrachloroethane	ND	60
1,2,3-Trichloropropane	ND	60
n-Propylbenzene	ND	60
2-Chlorotoluene	ND	60
4-Chlorotoluene	ND	60
1,3,5-Trimethylbenzene	ND	60
tert-Butylbenzene	ND	60
1,2,4-Trimethylbenzene	ND	60
sec-Butylbenzene	ND	60
1,3-Dichlorobenzene	ND	60
4-Isopropyltoluene	ND	60
1,4-Dichlorobenzene	ND	60
1,2-Dichlorobenzene	ND	60
n-Butylbenzene	ND	60
1,2-Dibromo-3-chloropropane	ND	60
1,2,4-Trichlorobenzene	ND	60
Hexachlorobutadiene	ND	60
1,2,3-Trichlorobenzene	ND	60
MTBE	ND	60
Naphthalene	ND	60

QC Batch: V5B0223A

Surrogate Recovery:	
1,2-Dichloroethane-d4	91%
Toluene-d8	84%
Bromofluorobenzene	104%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DPSOIL02
Lab ID: 60219003
Analysis: Method 8260B

Analysis Date: 2/23/99
Matrix: Soil, 85% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	6
Chloromethane	ND	6
Vinyl chloride	ND	6
Bromomethane	ND	6
Chloroethane	ND	6
Trichlorofluoromethane	ND	6
1,1-Dichloroethene	ND	6
Carbon disulfide	ND	6
Iodomethane	ND	6
Acetone	7	6
Methylene chloride	ND	6
trans-1,2-Dichloroethene	ND	6
1,1-Dichloroethane	ND	6
Vinyl acetate	ND	6
2,2-Dichloropropane	ND	6
cis-1,2-Dichloroethene	ND	6
Methyl ethyl ketone	ND	6
Bromochloromethane	ND	6
Chloroform	ND	6
1,1,1-Trichloroethane	ND	6
Carbon tetrachloride	ND	6
1,1-Dichloropropene	ND	6
Benzene	ND	6
1,2-Dichloroethane	ND	6
Trichloroethene	ND	6
1,2-Dichloropropane	ND	6
Dibromomethane	ND	6
Bromodichloromethane	ND	6
2-Chloroethyl vinyl ether	ND	6
cis-1,3-Dichloropropene	ND	6
4-Methyl-2-pentanone	ND	6
Toluene	ND	6

MITKEM CORPORATION

Client ID: DPSOIL02 Lab ID: 60219003

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	6
1,1,2-Trichloroethane	ND	6
Tetrachloroethene	ND	6
1,3-Dichloropropane	ND	6
2-Hexanone	ND	6
Dibromochloromethane	ND	6
1,2-Dibromoethane (EDB)	ND	6
Chlorobenzene	ND	6
1,1,1,2-Tetrachloroethane	ND	6
Ethylbenzene	ND	6
Xylenes, total	ND	6
Styrene	ND	6
Bromoform	ND	6
Isopropylbenzene	ND	6
Bromobenzene	ND	6
1,1,2,2-Tetrachloroethane	ND	6
1,2,3-Trichloropropane	ND	6
n-Propylbenzene	ND	6
2-Chlorotoluene	ND	6
4-Chlorotoluene	ND	6
1,3,5-Trimethylbenzene	ND	6
tert-Butylbenzene	ND	6
1,2,4-Trimethylbenzene	ND	6
sec-Butylbenzene	ND	6
1,3-Dichlorobenzene	ND	6
4-Isopropyltoluene	ND	6
1,4-Dichlorobenzene	ND	6
1,2-Dichlorobenzene	ND	6
n-Butylbenzene	ND	6
1,2-Dibromo-3-chloropropane	ND	6
1,2,4-Trichlorobenzene	ND	6
Hexachlorobutadiene	ND	6
1,2,3-Trichlorobenzene	ND	6
MTBE	ND	6
Naphthalene	ND	6

QC Batch: V5B0223A

Surrogate Recovery:	
1,2-Dichloroethane-d4	103%
Toluene-d8	82%
Bromofluorobenzene	138%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DPSOIL03
Lab ID: 60219004
Analysis: Method 8260B

Analysis Date: 2/23/99
Matrix: Soil, 91% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Carbon disulfide	ND	5
Iodomethane	ND	5
Acetone	5	5
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Vinyl acetate	ND	5
2,2-Dichloropropane	ND	5
cis-1,2-Dichloroethene	ND	5
Methyl ethyl ketone	ND	5
Bromochloromethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
1,1-Dichloropropene	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Dibromomethane	ND	5
Bromodichloromethane	ND	5
2-Chloroethyl vinyl ether	ND	5
cis-1,3-Dichloropropene	ND	5
4-Methyl-2-pentanone	ND	5
Toluene	ND	5

MITKEM CORPORATION

Client ID: DPSOIL03

Lab ID: 60219004

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,3-Dichloropropane	ND	5
2-Hexanone	ND	5
Dibromochloromethane	ND	5
1,2-Dibromoethane (EDB)	ND	5
Chlorobenzene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Ethylbenzene	ND	5
Xylenes, total	ND	5
Styrene	ND	5
Bromoform	ND	5
Isopropylbenzene	ND	5
Bromobenzene	ND	5
1,1,2,2-Tetrachloroethane	ND	5
1,2,3-Trichloropropane	ND	5
n-Propylbenzene	ND	5
2-Chlorotoluene	ND	5
4-Chlorotoluene	ND	5
1,3,5-Trimethylbenzene	ND	5
tert-Butylbenzene	ND	5
1,2,4-Trimethylbenzene	ND	5
sec-Butylbenzene	ND	5
1,3-Dichlorobenzene	ND	5
4-Isopropyltoluene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5
n-Butylbenzene	ND	5
1,2-Dibromo-3-chloropropane	ND	5
1,2,4-Trichlorobenzene	ND	5
Hexachlorobutadiene	ND	5
1,2,3-Trichlorobenzene	ND	5
MTBE	ND	5
Naphthalene	ND	5

QC Batch: V5B0223A

Surrogate Recovery:	
1,2-Dichloroethane-d4	93%
Toluene-d8	86%
Bromofluorobenzene	114%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: DPSOIL04
Lab ID: 60219005
Analysis: Method 8260B

Analysis Date: 2/23/99
Matrix: Soil, 95% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Carbon disulfide	ND	5
Iodomethane	ND	5
Acetone	8	5
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Vinyl acetate	ND	5
2,2-Dichloropropane	ND	5
cis-1,2-Dichloroethene	ND	5
Methyl ethyl ketone	ND	5
Bromochloromethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
1,1-Dichloropropene	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Dibromomethane	ND	5
Bromodichloromethane	ND	5
2-Chloroethyl vinyl ether	ND	5
cis-1,3-Dichloropropene	ND	5
4-Methyl-2-pentanone	ND	5
Toluene	ND	5

MITKEM CORPORATION

Client ID: DPSOIL04

Lab ID: 60219005

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,3-Dichloropropane	ND	5
2-Hexanone	ND	5
Dibromochloromethane	ND	5
1,2-Dibromoethane (EDB)	ND	5
Chlorobenzene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Ethylbenzene	ND	5
Xylenes, total	ND	5
Styrene	ND	5
Bromoform	ND	5
Isopropylbenzene	ND	5
Bromobenzene	ND	5
1,1,2,2-Tetrachloroethane	ND	5
1,2,3-Trichloropropane	ND	5
n-Propylbenzene	ND	5
2-Chlorotoluene	ND	5
4-Chlorotoluene	ND	5
1,3,5-Trimethylbenzene	ND	5
tert-Butylbenzene	ND	5
1,2,4-Trimethylbenzene	ND	5
sec-Butylbenzene	ND	5
1,3-Dichlorobenzene	ND	5
4-Isopropyltoluene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5
n-Butylbenzene	ND	5
1,2-Dibromo-3-chloropropane	ND	5
1,2,4-Trichlorobenzene	ND	5
Hexachlorobutadiene	ND	5
1,2,3-Trichlorobenzene	ND	5
MTBE	ND	5
Naphthalene	ND	5

QC Batch: V5B0223A

Surrogate Recovery:	
1,2-Dichloroethane-d4	89%
Toluene-d8	85%
Bromofluorobenzene	115%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, V5B0223A
Analysis: Method 8260B

Analysis Date: 2/23/99
Matrix: Solid
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Carbon disulfide	ND	5
Iodomethane	ND	5
Acetone	ND	5
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Vinyl acetate	ND	5
2,2-Dichloropropane	ND	5
cis-1,2-Dichloroethene	ND	5
Methyl ethyl ketone	ND	5
Bromochloromethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
1,1-Dichloropropene	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Dibromomethane	ND	5
Bromodichloromethane	ND	5
2-Chloroethyl vinyl ether	ND	5
cis-1,3-Dichloropropene	ND	5
4-Methyl-2-pentanone	ND	5
Toluene	ND	5

MITKEM CORPORATION

Client ID:

Lab ID: Method Blank, V5B0223A

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,3-Dichloropropane	ND	5
2-Hexanone	ND	5
Dibromochloromethane	ND	5
1,2-Dibromoethane (EDB)	ND	5
Chlorobenzene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Ethylbenzene	ND	5
Xylenes, total	ND	5
Styrene	ND	5
Bromoform	ND	5
Isopropylbenzene	ND	5
Bromobenzene	ND	5
1,1,2,2-Tetrachloroethane	ND	5
1,2,3-Trichloropropane	ND	5
n-Propylbenzene	ND	5
2-Chlorotoluene	ND	5
4-Chlorotoluene	ND	5
1,3,5-Trimethylbenzene	ND	5
tert-Butylbenzene	ND	5
1,2,4-Trimethylbenzene	ND	5
sec-Butylbenzene	ND	5
1,3-Dichlorobenzene	ND	5
4-Isopropyltoluene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5
n-Butylbenzene	ND	5
1,2-Dibromo-3-chloropropane	ND	5
1,2,4-Trichlorobenzene	ND	5
Hexachlorobutadiene	ND	5
1,2,3-Trichlorobenzene	ND	5
MTBE	ND	5
Naphthalene	ND	5

QC Batch: V5B0223A

Surrogate Recovery:	
1,2-Dichloroethane-d4	91%
Toluene-d8	86%
Bromofluorobenzene	119%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	2/23/99
Client ID:	DPSOIL01	Matrix:	Soil, 84% solids
Lab ID:	60219001	Analysis:	Method 8270C
Dilution:	1	Concentration in:	ug/kg, dry weight basis

Analyte	Results	Reporting Limits
Phenol	ND	390
bis(2-Chloroethyl)ether	ND	390
2-Chlorophenol	ND	390
1,3-Dichlorobenzene	ND	390
1,4-Dichlorobenzene	ND	390
1,2-Dichlorobenzene	ND	390
2-Methylphenol	ND	390
2,2'-oxybis(1-Chloropropane)	ND	390
4-Methylphenol	ND	390
n-Nitroso-di-n-propylamine	ND	390
Hexachloroethane	ND	390
Nitrobenzene	ND	390
Isophorone	ND	390
2-Nitrophenol	ND	390
2,4-Dimethylphenol	ND	390
bis(2-Chloroethoxy)methane	ND	390
2,4-Dichlorophenol	ND	390
1,2,4-Trichlorobenzene	ND	390
Naphthalene	440	390
4-Chloroaniline	ND	390
Hexachlorobutadiene	ND	390
4-Chloro-3-methylphenol	ND	390
2-Methylnaphthalene	120 J	390
Hexachlorocyclopentadiene	ND	390
2,4,6-Trichlorophenol	ND	390
2,4,5-Trichlorophenol	ND	800
2-Chloronaphthalene	ND	390
2-Nitroaniline	ND	800
Dimethylphthalate	ND	390
Acenaphthylene	ND	390
2,6-Dinitrotoluene	ND	390
3-Nitroaniline	ND	800
Acenaphthene	560	390
2,4-Dinitrophenol	ND	800
4-Nitrophenol	ND	800
Dibenzofuran	230 J	390
2,4-Dinitrotoluene	ND	390

MITKEM CORPORATION

Client ID: DPSOIL01 Lab ID: 60219001

Analyte	Results	Reporting Limits
Diethylphthalate	ND	390
Fluorene	490	390
4-Chlorophenyl-phenylether	ND	390
4-Nitroaniline	ND	800
4,6-Dinitro-2-methylphenol	ND	800
n-Nitrosodiphenylamine	ND	390
4-Bromophenyl-phenylether	ND	390
Hexachlorobenzene	ND	390
Pentachlorophenol	ND	800
Phenanthrene	2,500	390
Anthracene	860	390
Di-n-butylphthalate	ND	390
Carbazole	1,000	390
Fluoranthene	3,000	390
Pyrene	2,000	390
Butylbenzylphthalate	ND	390
Benzo(a)anthracene	1,200	390
Chrysene	1,100	390
3,3'-Dichlorobenzidine	ND	390
bis(2-Ethylhexyl)phthalate	ND	390
Di-n-octylphthalate	ND	390
Benzo(b)fluoranthene	1,300	390
Benzo(k)fluoranthene	650	390
Benzo(a)pyrene	1,000	390
Indeno(1,2,3-cd)pyrene	390 J	390
Dibenz(a,h)anthracene	150 J	390
Benzo(g,h,i)perylene	400	390

QC Batch: S0222-BS1

Surrogate Recovery:	
2-Fluorophenol	64%
Phenol-d5	69%
2-Chlorophenol-d4	70%
2,4,6-Tribromophenol	69%
1,2-Dichlorobenzene-d4	75%
Nitrobenzene-d5	70%
2-Fluorobiphenyl	76%
p-Terphenyl-d14	74%

ND = Not detected

017

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	2/23/99
Client ID:	DPSOIL02	Matrix:	Soil, 85% solids
Lab ID:	60219003	Analysis:	Method 8270C
Dilution:	1	Concentration in:	ug/kg, dry weight basis

Analyte	Results	Reporting Limits
Phenol	ND	390
bis(2-Chloroethyl)ether	ND	390
2-Chlorophenol	ND	390
1,3-Dichlorobenzene	ND	390
1,4-Dichlorobenzene	ND	390
1,2-Dichlorobenzene	ND	390
2-Methylphenol	ND	390
2,2'-oxybis(1-Chloropropane)	ND	390
4-Methylphenol	ND	390
n-Nitroso-di-n-propylamine	ND	390
Hexachloroethane	ND	390
Nitrobenzene	ND	390
Isophorone	ND	390
2-Nitrophenol	ND	390
2,4-Dimethylphenol	ND	390
bis(2-Chloroethoxy)methane	ND	390
2,4-Dichlorophenol	ND	390
1,2,4-Trichlorobenzene	ND	390
Naphthalene	77 J	390
4-Chloroaniline	ND	390
Hexachlorobutadiene	ND	390
4-Chloro-3-methylphenol	ND	390
2-Methylnaphthalene	ND	390
Hexachlorocyclopentadiene	ND	390
2,4,6-Trichlorophenol	ND	390
2,4,5-Trichlorophenol	ND	790
2-Chloronaphthalene	ND	390
2-Nitroaniline	ND	790
Dimethylphthalate	ND	390
Acenaphthylene	ND	390
2,6-Dinitrotoluene	ND	390
3-Nitroaniline	ND	790
Acenaphthene	ND	390
2,4-Dinitrophenol	ND	790
4-Nitrophenol	ND	790
Dibenzofuran	ND	390
2,4-Dinitrotoluene	ND	390

MITKEM CORPORATION

Client ID: DPSOIL02

Lab ID: 60219003

Analyte	Results	Reporting Limits
Diethylphthalate	ND	390
Fluorene	ND	390
4-Chlorophenyl-phenylether	ND	390
4-Nitroaniline	ND	790
4,6-Dinitro-2-methylphenol	ND	790
n-Nitrosodiphenylamine	ND	390
4-Bromophenyl-phenylether	ND	390
Hexachlorobenzene	ND	390
Pentachlorophenol	ND	790
Phenanthrene	63 J	390
Anthracene	ND	390
Di-n-butylphthalate	ND	390
Carbazole	ND	390
Fluoranthene	84 J	390
Pyrene	58 J	390
Butylbenzylphthalate	ND	390
Benzo(a)anthracene	ND	390
Chrysene	ND	390
3,3'-Dichlorobenzidine	ND	390
bis(2-Ethylhexyl)phthalate	160 J	390
Di-n-octylphthalate	48 J	390
Benzo(b)fluoranthene	ND	390
Benzo(k)fluoranthene	ND	390
Benzo(a)pyrene	ND	390
Indeno(1,2,3-cd)pyrene	ND	390
Dibenz(a,h)anthracene	ND	390
Benzo(g,h,i)perylene	ND	390

QC Batch: S0222-BS1

Surrogate Recovery:	
2-Fluorophenol	62%
Phenol-d5	67%
2-Chlorophenol-d4	64%
2,4,6-Tribromophenol	74%
1,2-Dichlorobenzene-d4	70%
Nitrobenzene-d5	69%
2-Fluorobiphenyl	52%
p-Terphenyl-d14	36%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	2/23/99
Client ID:	DPSOIL03	Matrix:	Soil, 91% solids
Lab ID:	60219004	Analysis:	Method 8270C
Dilution:	1	Concentration in:	ug/kg, dry weight basis

Analyte	Results	Reporting Limits
Phenol	ND	360
bis(2-Chloroethyl)ether	ND	360
2-Chlorophenol	ND	360
1,3-Dichlorobenzene	ND	360
1,4-Dichlorobenzene	ND	360
1,2-Dichlorobenzene	ND	360
2-Methylphenol	ND	360
2,2'-oxybis(1-Chloropropane)	ND	360
4-Methylphenol	ND	360
n-Nitroso-di-n-propylamine	ND	360
Hexachloroethane	ND	360
Nitrobenzene	ND	360
Isophorone	ND	360
2-Nitrophenol	ND	360
2,4-Dimethylphenol	ND	360
bis(2-Chloroethoxy)methane	ND	360
2,4-Dichlorophenol	ND	360
1,2,4-Trichlorobenzene	ND	360
Naphthalene	ND	360
4-Chloroaniline	ND	360
Hexachlorobutadiene	ND	360
4-Chloro-3-methylphenol	ND	360
2-Methylnaphthalene	ND	360
Hexachlorocyclopentadiene	ND	360
2,4,6-Trichlorophenol	ND	360
2,4,5-Trichlorophenol	ND	740
2-Chloronaphthalene	ND	360
2-Nitroaniline	ND	740
Dimethylphthalate	ND	360
Acenaphthylene	ND	360
2,6-Dinitrotoluene	ND	360
3-Nitroaniline	ND	740
Acenaphthene	ND	360
2,4-Dinitrophenol	ND	740
4-Nitrophenol	ND	740
Dibenzofuran	ND	360
2,4-Dinitrotoluene	ND	360

022

MITKEM CORPORATION

Client ID: DPSOIL03 Lab ID: 60219004

Analyte	Results	Reporting Limits
Diethylphthalate	ND	360
Fluorene	ND	360
4-Chlorophenyl-phenylether	ND	360
4-Nitroaniline	ND	740
4,6-Dinitro-2-methylphenol	ND	740
n-Nitrosodiphenylamine	ND	360
4-Bromophenyl-phenylether	ND	360
Hexachlorobenzene	ND	360
Pentachlorophenol	ND	740
Phenanthrene	ND	360
Anthracene	ND	360
Di-n-butylphthalate	ND	360
Carbazole	ND	360
Fluoranthene	ND	360
Pyrene	ND	360
Butylbenzylphthalate	ND	360
Benzo(a)anthracene	ND	360
Chrysene	ND	360
3,3'-Dichlorobenzidine	ND	360
bis(2-Ethylhexyl)phthalate	ND	360
Di-n-octylphthalate	ND	360
Benzo(b)fluoranthene	ND	360
Benzo(k)fluoranthene	ND	360
Benzo(a)pyrene	ND	360
Indeno(1,2,3-cd)pyrene	ND	360
Dibenz(a,h)anthracene	ND	360
Benzo(g,h,i)perylene	ND	360

QC Batch: S0222-BS1

Surrogate Recovery:	
2-Fluorophenol	68%
Phenol-d5	71%
2-Chlorophenol-d4	74%
2,4,6-Tribromophenol	76%
1,2-Dichlorobenzene-d4	73%
Nitrobenzene-d5	74%
2-Fluorobiphenyl	74%
p-Terphenyl-d14	77%

ND = Not detected

023

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	2/23/99
Client ID:	DPSOIL04	Matrix:	Soil, 95% solids
Lab ID:	60219005	Analysis:	Method 8270C
Dilution:	1	Concentration in:	ug/kg, dry weight basis

Analyte	Results	Reporting Limits
Phenol	ND	350
bis(2-Chloroethyl)ether	ND	350
2-Chlorophenol	ND	350
1,3-Dichlorobenzene	ND	350
1,4-Dichlorobenzene	ND	350
1,2-Dichlorobenzene	ND	350
2-Methylphenol	ND	350
2,2'-oxybis(1-Chloropropane)	ND	350
4-Methylphenol	ND	350
n-Nitroso-di-n-propylamine	ND	350
Hexachloroethane	ND	350
Nitrobenzene	ND	350
Isophorone	ND	350
2-Nitrophenol	ND	350
2,4-Dimethylphenol	ND	350
bis(2-Chloroethoxy)methane	ND	350
2,4-Dichlorophenol	ND	350
1,2,4-Trichlorobenzene	ND	350
Naphthalene	ND	350
4-Chloroaniline	ND	350
Hexachlorobutadiene	ND	350
4-Chloro-3-methylphenol	ND	350
2-Methylnaphthalene	ND	350
Hexachlorocyclopentadiene	ND	350
2,4,6-Trichlorophenol	ND	350
2,4,5-Trichlorophenol	ND	710
2-Chloronaphthalene	ND	350
2-Nitroaniline	ND	710
Dimethylphthalate	ND	350
Acenaphthylene	ND	350
2,6-Dinitrotoluene	ND	350
3-Nitroaniline	ND	710
Acenaphthene	ND	350
2,4-Dinitrophenol	ND	710
4-Nitrophenol	ND	710
Dibenzofuran	ND	350
2,4-Dinitrotoluene	ND	350

024

MITKEM CORPORATION

Client ID: DPSOIL04 Lab ID: 60219005

Analyte	Results	Reporting Limits
Diethylphthalate	ND	350
Fluorene	ND	350
4-Chlorophenyl-phenylether	ND	350
4-Nitroaniline	ND	710
4,6-Dinitro-2-methylphenol	ND	710
n-Nitrosodiphenylamine	ND	350
4-Bromophenyl-phenylether	ND	350
Hexachlorobenzene	ND	350
Pentachlorophenol	ND	710
Phenanthrene	200 J	350
Anthracene	56 J	350
Di-n-butylphthalate	ND	350
Carbazole	84 J	350
Fluoranthene	740	350
Pyrene	830	350
Butylbenzylphthalate	ND	350
Benzo(a)anthracene	580	350
Chrysene	620	350
3,3'-Dichlorobenzidine	ND	350
bis(2-Ethylhexyl)phthalate	160 J	350
Di-n-octylphthalate	ND	350
Benzo(b)fluoranthene	790	350
Benzo(k)fluoranthene	430	350
Benzo(a)pyrene	560	350
Indeno(1,2,3-cd)pyrene	290 J	350
Dibenz(a,h)anthracene	99 J	350
Benzo(g,h,i)perylene	300 J	350

QC Batch: S0222-BS1

Surrogate Recovery:	
2-Fluorophenol	70%
Phenol-d5	74%
2-Chlorophenol-d4	74%
2,4,6-Tribromophenol	74%
1,2-Dichlorobenzene-d4	74%
Nitrobenzene-d5	76%
2-Fluorobiphenyl	79%
p-Terphenyl-d14	76%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	2/23/99
Client ID:		Matrix:	Solid
Lab ID:	Method Blank, S0222-BS1	Analysis:	Method 8270C
Dilution:	1	Concentration in:	ug/kg

Analyte	Results	Reporting Limits
Phenol	ND	330
bis(2-Chloroethyl)ether	ND	330
2-Chlorophenol	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
1,2-Dichlorobenzene	ND	330
2-Methylphenol	ND	330
2,2'-oxybis(1-Chloropropane)	ND	330
4-Methylphenol	ND	330
n-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
2-Nitrophenol	ND	330
2,4-Dimethylphenol	ND	330
bis(2-Chloroethoxy)methane	ND	330
2,4-Dichlorophenol	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	330
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
4-Chloro-3-methylphenol	ND	330
2-Methylnaphthalene	ND	330
Hexachlorocyclopentadiene	ND	330
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	670
2-Chloronaphthalene	ND	330
2-Nitroaniline	ND	670
Dimethylphthalate	ND	330
Acenaphthylene	ND	330
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	670
Acenaphthene	ND	330
2,4-Dinitrophenol	ND	670
4-Nitrophenol	ND	670
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330

026

60219-MB

MITKEM CORPORATION

Client ID: Lab ID: Method Blank, S0222-BS1

Analyte	Results	Reporting Limits
Diethylphthalate	ND	330
Fluorene	ND	330
4-Chlorophenyl-phenylether	ND	330
4-Nitroaniline	ND	670
4,6-Dinitro-2-methylphenol	ND	670
n-Nitrosodiphenylamine	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Pentachlorophenol	ND	670
Phenanthrene	ND	330
Anthracene	ND	330
Di-n-butylphthalate	ND	330
Carbazole	ND	330
Fluoranthene	ND	330
Pyrene	ND	330
Butylbenzylphthalate	ND	330
Benzo(a)anthracene	ND	330
Chrysene	ND	330
3,3'-Dichlorobenzidine	ND	330
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	330
Benzo(k)fluoranthene	ND	330
Benzo(a)pyrene	ND	330
Indeno(1,2,3-cd)pyrene	ND	330
Dibenz(a,h)anthracene	ND	330
Benzo(g,h,i)perylene	ND	330

QC Batch: S0222-BS1

Surrogate Recovery:	
2-Fluorophenol	67%
Phenol-d5	70%
2-Chlorophenol-d4	70%
2,4,6-Tribromophenol	71%
1,2-Dichlorobenzene-d4	70%
Nitrobenzene-d5	70%
2-Fluorobiphenyl	68%
p-Terphenyl-d14	72%

ND = Not detected

027

Data File: \Organic\SVOA\S1.i\990223.B\S1A7384.D
Report Date: 24-Feb-1999 09:18

Thru-Put Systems, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: S0222-LS1
Level: LOW
Data Type: MS DATA
SpikeList File: LCS_8270_SL.spk
Sublist File: all.sub
Method File: \Organic\SVOA\S1.i\990223.B\s1_8270C.m
Misc Info: ,,,2

Client SDG:
Fraction: SV
Client Smp ID: SBLK1FLCS
Operator: RC
SampleType: LCS
Quant Type: ISTD

LCS

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
7 bis(2-Chloroethyl)	1700	1300	77.57	26-119
6 Phenol	1700	1300	76.78	38-109
9 2-Chlorophenol	1700	1300	79.53	49-104
10 1,3-Dichlorobenzen	1700	1200	71.58	42-99
12 1,4-Dichlorobenzen	1700	1200	72.92	43-100
14 1,2-Dichlorobenzen	1700	1300	75.99	47-100
16 2-Methylphenol	1700	1300	79.76	12-128
17 2,2'-oxybis(1-Chlo	1700	1200	71.70	35-124
19 4-Methylphenol	1700	1400	81.08	1-138
18 N-Nitroso-di-n-pro	1700	1400	84.74	44-113
20 Hexachloroethane	1700	1200	74.48	43-103
22 Nitrobenzene	1700	1300	77.82	55-103
23 Isophorone	1700	1000	62.27	41-100
24 2-Nitrophenol	1700	1300	79.48	53-104
25 2,4-Dimethyphenol	1700	1300	79.88	0-166
26 bis(2-Chloroethoxy	1700	1300	80.31	46-111
28 2,4-Dichlorophenol	1700	1300	79.78	28-129
29 1,2,4-Trichloroben	1700	1300	76.98	51-107
31 Naphthalene	1700	1300	77.91	54-104
32 4-Chloroaniline	1700	480	28.54	0-92
33 Hexachlorobutadien	1700	1300	79.20	49-110
34 4-Chloro-3-Methylp	1700	1400	84.84	0-161
35 2-Methylnaphthalen	1700	1300	77.84	46-116
36 Hexachlorocyclopen	1700	1000	60.16	21-137
37 2,4,6-Trichlorophe	1700	1200	75.11	4-140
38 2,4,5-Trichlorophe	1700	1400	82.74	3-156
40 2-Chloronaphthalen	1700	1400	81.27	60-107
41 2-Nitroaniline	1700	1300	78.25	50-114
42 Dimethylphthalate	1700	1400	85.05	61-111
43 2,6-Dinitrotoluene	1700	1400	82.13	54-116
44 Acenaphthylene	1700	1300	78.51	61-106
45 3-Nitroaniline	1700	2000	117.03	0-126
47 Acenaphthene	1700	1300	79.53	62-107

Data File: \Organic\SVOA\S1.i\990223.B\S1A7384.D
Report Date: 24-Feb-1999 09:18

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
48 2,4-Dinitrophenol	1700	900	54.18	31-119
50 4-Nitrophenol	1700	1500	91.31	0-166
51 2,4-Dinitrotoluene	1700	1400	85.82	58-115
49 Dibenzofuran	1700	1300	78.19	63-109
52 Diethylphthalate	1700	1400	86.91	58-116
53 Fluorene	1700	1400	83.29	61-112
54 4-Chlorophenyl-phe	1700	1400	85.50	60-113
55 4-Nitroaniline	1700	2200	131.04	0-135
56 4,6-Dinitro-2-meth	1700	1200	71.60	30-128
57 N-Nitrosodiphenyla	1700	1400	87.11	0-148
59 4-Bromophenyl-phen	1700	1300	78.06	65-118
60 Hexachlorobenzene	1700	1300	77.87	64-120
61 Pentachlorophenol	1700	1300	76.59	0-165
63 Phenanthrene	1700	1300	78.99	66-115
64 Anthracene	1700	1300	80.90	56-144
65 Carbazole	1700	3400	202.47*	52-128
66 Di-n-butylphthalat	1700	1500	88.52	69-112
67 Fluoranthene	1700	1400	84.76	65-116
68 Pyrene	1700	1300	76.88	47-138
70 Butylbenzylphthala	1700	1300	78.05	56-125
73 3,3'-Dichlorobenzi	1700	1000	61.60	0-139
71 Benzo(a)anthracene	1700	1400	82.16	64-116
74 Chrysene	1700	1400	81.16	60-116
75 bis(2-Ethylhexyl)p	1700	1300	80.87	55-124
76 Di-n-octylphthalat	1700	1100	67.12	55-133
77 Benzo(b)fluoranthe	1700	1100	67.36	51-128
78 Benzo(k)fluoranthe	1700	1500	90.01	51-139
79 Benzo(a)pyrene	1700	1200	75.11	61-120
81 Indeno(1,2,3-cd)py	1700	1500	92.73	45-123
82 Dibenzo(a,h)anthra	1700	1500	92.25	46-128
83 Benzo(g,h,i)peryle	1700	1600	95.37	43-128

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 3 2-Fluorophenol	2500	1800	70.49	13-129
$ 4 Phenol-d5	2500	1900	75.36	27-126
$ 8 2-Chlorophenol-d4	2500	1900	74.75	26-134
$ 13 1,2-Dichlorobenzen	1700	1200	73.04	18-140
$ 21 Nitrobenzene-d5	1700	1300	75.70	29-134
$ 39 2-Fluorobiphenyl	1700	1200	74.52	37-124
$ 58 2,4,6-Tribromophen	2500	1900	76.10	23-144
$ 69 Terphenyl-d14	1700	1300	76.32	36-140

MITKEM CORPORATION

Lab Workorder **60219** R0

Logged In By: KeB

Reviewed By:

Client: **Foster Wheeler Environmental**
Workorder ID: **Derektor Shipyard/DO13**
Client Project **Tank Farm 5**
Client PO #: **014952 / 015207**
Project / Profile Name: **Bldgs 6 and 179, NUWC**
Date Due: **02/23/99**
Customer Service: **EAL**
Del Req'd: **Level 2 (1 copy)**
Completed?:

Date Opened: **02/19/99 11:02**
Date Closed: **02/19/99 16:11**

Project Status: **WP**

Lab ID	Client ID	Matrix	Analysis Code	Collected	Received	Due	Notes
60219001	DPSOIL01	S	8100S 8260S 8270S DRY WEIGHT	02/17/99 08:25	02/18/99	02/23/99	
60219002	MW09TP01	S	8081S 8082S 8100S 8260S 8270S DRY WEIGHT TALMETS	02/17/99 10:31	02/18/99	02/23/99	
60219003	DPSOIL02	S	8100S 8260S 8270S DRY WEIGHT	02/17/99 11:45	02/18/99	02/23/99	
60219004	DPSOIL03	S	8100S 8260S 8270S DRY WEIGHT	02/17/99 15:15	02/18/99	02/23/99	
60219005	DPSOIL04	S	8100S 8260S 8270S DRY WEIGHT	02/17/99 16:00	02/18/99	02/23/99	

MITKEM CORPORATION

Lab Workorder #: **60219**

040

INVOICE GOES TO:

Ellie Federico
Foster Wheeler Environmental
98 T Defense Highway
Middletown, RI, 02842
W: 842-6940
F : 842-6970

REPORT GOES TO:

Andrew Prophete
Foster Wheeler Environmental
98 T Defense Highway
Middletown, RI, 02842
W: (401)842-6940
F : (401)842-6970

MITKEM CORPORATION
175 Metro Center Boulevard
Warwick, Rhode Island 02886-1755
(401) 732-3400 • Fax (401) 732-3499
email: mitkem@worldnet.att.net

CHAIN-OF-CUSTODY RECORD

REPORT TO		INVOICE TO		
COMPANY Foster Wheeler	PHONE 842-6940	COMPANY	PHONE	LAB PROJECT #: 60219
NAME Andrew Prophete	FAX 842-6970	NAME	FAX	
ADDRESS 98 Defense Hwy		ADDRESS		TURNAROUND TIME:
CITY/ST/ZIP Middletown RI 02842		CITY/ST/ZIP		4 72hr

CLIENT PROJECT NAME:	CLIENT PROJECT #:	CLIENT P.O.#:
Derektor Shipyard	D013	

REQUESTED ANALYSES

SAMPLE IDENTIFICATION	DATE/TIME SAMPLED	COMPOSITE	GRAB	WATER	SOIL	OTHER	LAB ID	# OF CONTAINERS	VOC 8260 (MeOH)	SVOC 8270	TPH 8015	TAL 23 metals	PCB 8082	Pesticides 8081							COMMENTS
	/																				
DP S01L01	2/17/99 825				X		-01	5	X	X	X										
MW09TP01	2/17/99 10:31				X		-02	6	X	X	X	X	X	X							
DPS01L02	2/17/99 11:45				X		-03	5	X	X	X										
DPS01L03	2/17/99 15:15				X		-04	5	X	X	X										
DPS01L04	2/17/99 16:00				X		-05	5	X	X	X										
	/																				
	/																				
	/																				
	/																				
	/																				
	/																				

TSF#	RELINQUISHED BY	DATE/TIME	ACCEPTED BY	DATE/TIME
1	Andrew Prophete	2/17/99	Karl Garola	2/18/99
2		/	James Healey	2/18/99 11:45
3		/		/

ADDITIONAL REMARKS:

COOLER TEMP: <4°C

WHITE: LABORATORY COPY YELLOW: REPORT COPY PINK: CLIENT'S COPY

MITKEM CORPORATION
Sample Condition Form

Received By: JJH	Reviewed By:	Date: 2/18/99	MITKEM Project: 60219
Client Project: DeRetto's Hyppard		Client: Foster Wheeler	

Condition:		Sample ID Lab	Sample ID Client	Preservation (pH) HNO_3	H_2SO_4	HCl	NaOH	Comments/Remarks/ Corrective Action*
		01	DPSoiL 01					
1) Custody Seal(s)	Present/Absent	02	MW09TP01					
	Coolers/Bottles	03	DPSoiL 02					
	Intact/Broken	04	03					
		05	04					
2) Custody Seal Number(s)	/							
3) Chain-of-Custody	Present/Absent							
4) Cooler Temperature	3°C							
Coolant Condition								
5) Airbill(s)	Present/Absent							
Airbill Number(s)	/							
6) Sample Bottles	Intact							
	Broken							
	Leaking							
7) Date Received	2/18/99							
8) Time Received	11:45							
9) Project Due Date	72 HRS (3DAYS)							

* See Sample Condition Notification/Corrective Action Form yes / no JJH 2/19/99 NO JJH

Last Page of Data Report

Appendix O

Exploratory Trenching Hot Spot Removal Sample Results Summary and Laboratory Data

FOSTER WHEELER ENVIRONMENTAL CORPORATION
U.S. NAVY NORTHERN DIVISION REMEDIAL ACTION CONTRACT (RAC)
CONTRACT N62472-94-D-0398 DELIVERY ORDER 13 AND 60
DERECKTOR SHIPYARD EXPLORATORY TRENCHING-FORMER DISPOSAL PITS-HOT SPOT REMOVAL

RIDEM Direct Exposure Criteria --->	Residential	Commercial/ Industrial	East Side Wall	North Wall	Bottom	South Wall	West Side Wall	Stock Pile
Volatile Organics								
Benzene	2.5	200.0	n	n	n	n	n	-
Bromodichloromethane	10.0	92.0	n	n	n	n	n	-
Bromoform	81.0	720.0	n	n	n	n	n	-
Bromomethane	0.8	2,900.0	n	n	n	n	n	-
Carbon tetrachloride	1.5	44.0	n	n	n	n	n	-
Chlorobenzene	210.0	10,000.0	n	n	n	n	n	-
Chloroform	1.2	940.0	n	n	n	n	n	-
Dibromochloromethane	7.6	68.0	n	n	n	n	n	-
1,1-Dichloroethane	920.0	10,000.0	n	n	n	n	n	-
1,2-Dichloroethane	0.9	63.0	n	n	n	n	n	-
1,1-Dichloroethene	0.2	9.5	n	n	n	n	n	-
cis-1,2-Dichloroethene	630.0	10,000.0	n	n	n	n	n	-
trans-1,2-Dichloroethene	1,100.0	10,000.0	n	n	n	n	n	-
1,2-Dichloropropane	1.9	84.0	n	n	n	n	n	-
Ethylbenzene	71.0	10,000.0	n	n	n	n	n	-
Isopropyl benzene	27.0	10,000.0	n	n	n	n	n	-
Methyl-tert-butyl-ether	390.0	10,000.0	n	n	n	n	n	-
Methylene chloride	45.0	760.0	n	n	n	n	n	-
Styrene	13.0	190.0	n	n	n	n	n	-
1,1,1,2 Tetrachloroethane	2.2	220.0	n	n	n	n	n	-
1,1,2,2 Tetrachloroethane	1.3	29.0	n	n	n	n	n	-
Toluene	190.0	10,000.0	n	n	n	n	n	-
1,1,1-Trichloroethane	540.0	10,000.0	n	n	n	n	n	-
1,1,2-Trichloroethane	3.6	100.0	n	n	n	n	n	-
Vinyl chloride	0.02	3.00	n	n	n	n	n	-
Total Xylenes	110.0	10,000.0	n	n	n	n	n	-
Semivolatiles								
Acenaphthene	43.0	10,000.0	n	n	n	n	n	-
Acenaphthylene	23.0	10,000.0	n	n	n	n	n	-
Anthracene	35.0	10,000.0	n	n	n	n	n	-
Benzo(a)anthracene	0.9	7.8	n	n	n	n	n	-
Benzo(a)pyrene	0.4	0.8	n	n	n	n	n	-
Benzo(b)fluoranthene	0.9	7.8	n	n	n	n	n	-
Benzo(g,h,I)perylene	0.8	10,000.0	n	n	n	n	n	-
Benzo(k)fluoranthene	0.9	78.0	n	n	n	n	n	-
Bis(2-ethylhexyl)phthalate	46.0	410.0	n	n	n	n	n	-
Bis(2-chloroethyl)ether	0.6	5.2	n	n	n	n	n	-
Chrysene	0.4	780.0	n	n	n	n	n	-
Dibenzo(a,h)anthracene	0.4	0.8	n	n	n	n	n	-
1,2-Dichlorobenzene	510.0	10,000.0	n	n	n	n	n	-
1,3-Dichlorobenzene	430.0	10,000.0	n	n	n	n	n	-
1,4-Dichlorobenzene	27.0	240.0	n	n	n	n	n	-
3,3-Dichlorobenzidine	1.4	13.0	n	n	n	n	n	-
Diethyl phthalate	340.0	10,000.0	n	n	n	n	n	-
2,4-Dimethyl phenol	1,400.0	10,000.0	n	n	n	n	n	-
Dimethyl phthalate	1,900.0	10,000.0	n	n	n	n	n	-
2,4-Dinitrophenol	160.0	4,100.0	n	n	n	n	n	-
2,4-Dinitrotoluene	0.9	8.4	n	n	n	n	n	-
Fluoranthene	20.0	10,000.0	n	n	n	n	n	-
Fluorene	28.0	10,000.0	n	n	n	n	n	-
Hexachlorobenzene	0.4	3.6	n	n	n	n	n	-
Hexachlorobutadiene	8.2	73.0	n	n	n	n	n	-
Hexachloroethane	46.0	410.0	n	n	n	n	n	-
Indeno(1,2,3-cd)pyrene	0.9	7.8	n	n	n	n	n	-
Naphthalene	54.0	10,000.0	n	n	n	n	n	-
Pentachlorophenol	5.3	48.0	n	n	n	n	n	-
Phenanthrene	40.0	10,000.0	n	n	n	n	n	-
Phenol	6,000.0	10,000.0	n	n	n	n	n	-
Pyrene	13.0	10,000.0	n	n	n	n	n	0.700
1,2,4-Trichlorobenzene	96.0	10,000.0	n	n	n	n	n	-
2,4,6-Trichlorophenol	58.0	520.0	n	n	n	n	n	-
Inorganics								
Arsenic	1.7	3.8	n	n	n	n	n	18.8
Barium	5,500.0	10,000.0	n	n	n	n	n	11.9
Cadmium	39.0	1,000.0	n	n	n	n	n	2.14
Chromium III	1,400.0	10,000.0	n	n	n	n	n	n
Chromium VI	390.0	10,000.0	n	n	n	n	n	n
Chromium (Total)	na	na	n	n	n	n	n	17.6
Lead	150.0	500.0	n	n	n	n	n	17.8
Mercury	23.0	610.0	n	n	n	n	n	-
Selenium	390.0	10,000.0	n	n	n	n	n	-
Silver	200.0	10,000.0	n	n	n	n	n	-
TPH (8015B)	500.0	2,500.0	8.2	13	6.7	15	10	26

= Exceeds RIDEM Residential Exposure Criteria

- = Non-Detect Result

n = Not Analyzed

na = Not Applicable

All results in mg/kg unless otherwise noted

R.I. Analytical

Specialists in Environmental Services

FACSIMILE TRANSMITTAL FORM

TO: Jon Cary

Foster Wheeler

FROM:

DATE: 8/24/99 FAX #: 683-5218

NUMBER OF PAGES:

==========

COMMENTS:

7639

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Note: This message is intended only for the use of the individual or entity named above, and may contain information that is privileged, confidential, and exempt from disclosure by the applicable law. If you are not the intended recipient this message, please notify us by telephone.

R.I. Analytical

Specialists in Environmental Services

CERTIFICATE OF ANALYSIS

Foster Wheeler
Attn: Mr. Jon Cary
Allen Harbor Landfill
151 Marine Road
North Kingston, RI 02852

Date Received: 8/17/99
Date Reported: 8/24/99
P.O. #: C013
Work Order #: 9908-07639

DESCRIPTION: BUILDING 42-TPH REMOVAL PROJECT# C013

Subject sample(s) has/have been analyzed by our laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies. The specific methodologies are listed in the methods column of the Certificate Of Analysis.

If you have any questions regarding this work, or if we may be of further assistance, please contact us.

Approved by:

James E. Mich
Vice President

Michael J. Hobin
Quality Control Coordinator

enc: Chain of Custody

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler
Date Received: 8/17/99
Work Order # 9908-07639

Approved by: _____
R.I. Analytical

Sample #: 001
SAMPLE DESCRIPTION: EAST SIDE WALL GRAB 8/17/99 @1230

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
TPH GC						
C6-C9	<12	12	mg/kg dry	SW846 8015B	8/22/99 0:39	JRN
C9-C24	8.2	4.0	mg/kg dry	SW846 8015B	8/22/99 0:39	JRN
C24-C36	<20	20	mg/kg dry	SW846 8015B	8/22/99 0:39	JRN

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler
Date Received: 8/17/99
Work Order # 9908-07639

Approved by: R.I. Analytical

Sample #: 002
SAMPLE DESCRIPTION: NORTH WALL GRAB 8/17/99 @1245

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
TPH GC						
C6-C9	<12	12	mg/kg dry	SW846 8015B	8/22/99 1:20	JRN
C9-C24	13	4.1	mg/kg dry	SW846 8015B	8/22/99 1:20	JRN
C24-C36	<20	20	mg/kg dry	SW846 8015B	8/22/99 1:20	JRN

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler
Date Received: 8/17/99
Work Order # 9908-07639

Approved by: _____
R.I. Analytical

Sample #: 003
SAMPLE DESCRIPTION: BOTTOM GRAB 8/17/99 @1255

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
TPH GC						
C6-C9	<12	12	mg/kg dry	SW846 8015B	8/22/99 2:02	JRN
C9-C24	6.7	4.0	mg/kg dry	SW846 8015B	8/22/99 2:02	JRN
C24-C36	<20	20	mg/kg dry	SW846 8015B	8/22/99 2:02	JRN

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler
Date Received: 8/17/99
Work Order # 9908-07639

Approved by: R.I. Analytical

Sample #: 004
SAMPLE DESCRIPTION: SOUTH WALL GRAB 8/17/99 @1300

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
TPH GC						
C6-C9	<13	13	mg/kg dry	SW846 8015B	8/22/99 2:43	JRN
C9-C24	15	4.4	mg/kg dry	SW846 8015B	8/22/99 2:43	JRN
C24-C36	<22	22	mg/kg dry	SW846 8015B	8/22/99 2:43	JRN

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler
Date Received: 8/17/99
Work Order # 9908-07639

Approved by: R.I. Analytical

Sample #: 005
SAMPLE DESCRIPTION: WEST SIDE WALL GRAB 8/17/99 @1305

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
TPH GC						
C6-C9	<16	16	mg/kg dry	SW846 8015B	8/22/99 3:25	JRN
C9-C24	10	5.4	mg/kg dry	SW846 8015B	8/22/99 3:25	JRN
C24-C36	<27	27	mg/kg dry	SW846 8015B	8/22/99 3:25	JRN

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler
Date Received: 8/17/99
Work Order # 9908-07639

Approved by: _____
R.I. Analytical

Sample #: 006
SAMPLE DESCRIPTION: STOCKPILE COMPOSITE 8/17/99

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
TPH GC/FID	26	4.0	mg/kg dry	SW846 8100M	8/22/99 4:06	JRN

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler
Date Received: 8/17/99
Work Order # 9908-07639

Approved by: R.I. Analytical

Sample #: 007
SAMPLE DESCRIPTION: STOCKPILE COMPOSITE 8/17/99

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME		ANALYST
PCB							
Arochlor-1016	<0.1	0.1	mg/kg dry	SW-846 8080	8/23/99	16:30	LGF
Arochlor-1221	<0.1	0.1	mg/kg dry	SW-846 8080	8/23/99	16:30	LGF
Arochlor-1232	<0.1	0.1	mg/kg dry	SW-846 8080	8/23/99	16:30	LGF
Arochlor-1242	<0.1	0.1	mg/kg dry	SW-846 8080	8/23/99	16:30	LGF
Arochlor-1248	<0.1	0.1	mg/kg dry	SW-846 8080	8/23/99	16:30	LGF
Arochlor-1254	<0.1	0.1	mg/kg dry	SW-846 8080	8/23/99	16:30	LGF
Arochlor-1260	<0.1	0.1	mg/kg dry	SW-846 8080	8/23/99	16:30	LGF
SURROGATE			RANGE	SW-846 8080	8/23/99	16:30	LGF
Decachlorobiphenyl	90		60-140%	SW-846 8080	8/23/99	16:30	LGF

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler
Date Received: 8/17/99
Work Order # 9908-07639

Approved by: R.I. Analytical

Sample #: 008
SAMPLE DESCRIPTION: STOCKPILE COMPOSITE 8/17/99

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME		ANALYST
Volatile Organic Compounds							
Benzene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
Bromobenzene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
Bromochloromethane	<0.4	0.4	mg/kg	SW-846 8260	8/21/99	0:50	RAM
Bromodichloromethane	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
Bromoform	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
Bromomethane	<1.0	1.0	mg/kg	SW-846 8260	8/21/99	0:50	RAM
n-Butylbenzene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
sec-Butylbenzene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
tert-Butylbenzene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
Carbon Tetrachloride	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
Chlorobenzene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
Chloroethane	<0.5	0.5	mg/kg	SW-846 8260	8/21/99	0:50	RAM
Chloroform	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
Chloromethane	<0.5	0.5	mg/kg	SW-846 8260	8/21/99	0:50	RAM
2-Chlorotoluene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
4-Chlorotoluene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
Dibromochloromethane	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
1,2-Dibromo-3-Chloropropane	<0.4	0.4	mg/kg	SW-846 8260	8/21/99	0:50	RAM
1,2-Dibromoethane(EDB)	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
Dibromomethane	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
1,2-Dichlorobenzene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
1,3-Dichlorobenzene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
1,4-Dichlorobenzene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
Dichlorodifluoromethane	<0.5	0.5	mg/kg	SW-846 8260	8/21/99	0:50	RAM
1,1-Dichloroethane	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
1,2-Dichloroethane	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
1,1-Dichloroethene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
cis-1,2-Dichloroethene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
trans-1,2-Dichloroethene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
1,2-Dichloropropane	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
1,3-Dichloropropane	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
2,2-Dichloropropane	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
1,1-Dichloropropene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
Ethylbenzene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
Hexachlorobutadiene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
Isopropylbenzene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
p-Isopropyltoluene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
Methylene Chloride	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler
Date Received: 8/17/99
Work Order # 9908-07639

Approved by: R.I. Analytical

Sample #: 008

STOCKPILE COMPOSITE 8/17/99

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME		ANALYST
Naphthalene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
n-Propylbenzene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
Styrene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
1,1,1,2-Tetrachloroethane	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
1,1,2,2-Tetrachloroethane	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
Tetrachloroethene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
Toluene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
1,2,3-Trichlorobenzene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
1,2,4-Trichlorobenzene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
1,1,1-Trichloroethane	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
1,1,2-Trichloroethane	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
Trichloroethene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
Trichlorofluoromethane	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
1,2,3-Trichloropropane	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
1,2,4-Trimethylbenzene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
1,3,5-Trimethylbenzene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
Vinyl Chloride	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
o-Xylene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
m&p-Xylene	<0.2	0.2	mg/kg	SW-846 8260	8/21/99	0:50	RAM
MTBE	<0.4	0.4	mg/kg	SW-846 8260	8/21/99	0:50	RAM
SURROGATES			RANGE	SW-846 8260	8/21/99	0:50	RAM
Dibromofluoromethane	108		80-120%	SW-846 8260	8/21/99	0:50	RAM
Toluene-d8	94		81-117%	SW-846 8260	8/21/99	0:50	RAM
4-Bromofluorobenzene	109		74-121%	SW-846 8260	8/21/99	0:50	RAM
1,2 Dichloroethane-d4	93		80-120%	SW-846 8260	8/21/99	0:50	RAM

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler
Date Received: 8/17/99
Work Order # 9908-07639

Approved by: R.I. Analytical

Sample #: 009
SAMPLE DESCRIPTION: STOCKPILE COMPOSITE 8/17/99

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME		ANALYST
SEMI-VOLATILE ORGANIC COMPOUNDS							
Acenaphthene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Acenaphthylene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Anthracene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Benzidine	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Benzo(a)anthracene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Benzo(b)fluoranthene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Benzo(k)fluoranthene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Benzo(g,h,i)perylene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Benzo(a)pyrene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Bis(2-chloroethyl)ether	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Bis(2-Chloroethoxy)methane	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
bis(2-chloroisopropyl)ether	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Bis(2-ethylhexyl)phthalate	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
4-Bromophenyl phenyl ether	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Butylbenzyl phthalate	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
2-Chloronaphthalene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
4-Chlorophenyl phenyl ether	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Chrysene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Dibenzo(a,h)anthracene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
1,2-Dichlorobenzene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
1,3-Dichlorobenzene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
1,4-Dichlorobenzene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
3,3'-Dichlorobenzidine	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Diethyl phthalate	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Dimethyl phthalate	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
2,4-Dinitrotoluene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
2,6-Dinitrotoluene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Di-n-octyl phthalate	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
1,2-Diphenylhydrazine	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Fluoranthene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Fluorene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Hexachlorobenzene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Hexachlorobutadiene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Hexachlorocyclopentadiene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Hexachloroethane	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Indeno(1,2,3-cd)pyrene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Isophorone	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Naphthalene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler
Date Received: 8/17/99
Work Order # 9908-07639

Approved by: _____
R.I. Analytical

Sample #: 009

STOCKPILE COMPOSITE 8/17/99

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME		ANALYST
Nitrobenzene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
N-nitrosodimethylamine	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
N-nitrosodiphenylamine	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
N-nitrosodi-n-propylamine	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Phenanthrene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Pyrene	0.7	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
1,2,4-Trichlorobenzene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
4-Chloro-3-methylphenol	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
2-Chlorophenol	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
2,4-Dichlorophenol	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
2,4-Dimethylphenol	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
2-Methyl-4,6-dinitrophenol	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
2,4-Dinitrophenol	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
2-Nitrophenol	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
4-Nitrophenol	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Pentachlorophenol	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
Phenol	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
2,4,6-Trichlorophenol	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	15:43	JAH
SURROGATES			RANGE	SW-846 8270	8/23/99	15:43	JAH
Phenol-d5	62		24-113%	SW-846 8270	8/23/99	15:43	JAH
2-Fluorophenol	42		25-121%	SW-846 8270	8/23/99	15:43	JAH
2,4,6-Tribromophenol	89		19-122%	SW-846 8270	8/23/99	15:43	JAH
Nitrobenzene-d5	84		23-120%	SW-846 8270	8/23/99	15:43	JAH
2-Fluorobiphenyl	77		30-115%	SW-846 8270	8/23/99	15:43	JAH
P-Terphenyl-d14	98		18-137%	SW-846 8270	8/23/99	15:43	JAH

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler
Date Received: 8/17/99
Work Order # 9908-07639

Approved by: _____
R.I. Analytical

Sample #: 010
SAMPLE DESCRIPTION: STOCKPILE COMPOSITE 8/17/99

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME	ANALYST
TOTAL METALS						
ARSENIC	18.8	5.95	mg/kg dry	SW-846 6010	8/18/99 14:35	RGM
BARIUM	11.9	0.30	mg/kg dry	SW-846 6010	8/18/99 14:35	RGM
CADMIUM	2.14	0.30	mg/kg dry	SW-846 6010	8/18/99 14:35	RGM
CHROMIUM	17.6	1.78	mg/kg dry	SW-846 6010	8/18/99 14:35	RGM
LEAD	17.8	2.38	mg/kg dry	SW-846 6010	8/18/99 14:35	RGM
MERCURY	<0.25	0.25	mg/kg dry	SW-846 7471A	8/20/99 10:13	RJC
SELENIUM	<11.9	11.9	mg/kg dry	SW-846 6010	8/18/99 14:35	RGM
SILVER	<1.19	1.19	mg/kg dry	SW-846 6010	8/18/99 14:35	RGM

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler
Date Received: 8/17/99
Work Order # 9908-07639

Approved by:
R.I. Analytical

Sample #: 011
SAMPLE DESCRIPTION: PREP BLANK

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME		ANALYST
TPH GC/FID	<4.0	4.0	mg/kg dry	SW846 8100M	8/21/99	18:26	JRN
TPH GC							
C6-C9	<12	12	mg/kg dry	SW846 8015B	8/21/99	18:26	JRN
C9-C24	<4.0	4.0	mg/kg dry	SW846 8015B	8/21/99	18:26	JRN
C24-C36	<20	20	mg/kg dry	SW846 8015B	8/21/99	18:26	JRN
Volatile Organic Compounds							
Benzene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
Bromobenzene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
Bromochloromethane	<0.4	0.4	mg/kg	SW-846 8260	8/23/99	18:04	RAM
Bromodichloromethane	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
Bromoform	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
Bromomethane	<1.0	1.0	mg/kg	SW-846 8260	8/23/99	18:04	RAM
n-Butylbenzene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
sec-Butylbenzene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
tert-Butylbenzene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
Carbon Tetrachloride	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
Chlorobenzene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
Chloroethane	<0.5	0.5	mg/kg	SW-846 8260	8/23/99	18:04	RAM
Chloroform	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
Chloromethane	<0.5	0.5	mg/kg	SW-846 8260	8/23/99	18:04	RAM
2-Chlorotoluene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
4-Chlorotoluene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
Dibromochloromethane	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
1,2-Dibromo-3-Chloropropane	<0.4	0.4	mg/kg	SW-846 8260	8/23/99	18:04	RAM
1,2-Dibromoethane(EDB)	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
Dibromomethane	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
1,2-Dichlorobenzene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
1,3-Dichlorobenzene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
1,4-Dichlorobenzene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
Dichlorodifluoromethane	<0.5	0.5	mg/kg	SW-846 8260	8/23/99	18:04	RAM
1,1-Dichloroethane	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
1,2-Dichloroethane	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
1,1-Dichloroethene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
cis-1,2-Dichloroethene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
trans-1,2-Dichloroethene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
1,2-Dichloropropane	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
1,3-Dichloropropane	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
2,2-Dichloropropane	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler
Date Received: 8/17/99
Work Order # 9908-07639

Approved by: R.I. Analytical

Sample #: 011

PREP BLANK

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME		ANALYST
1,1-Dichloropropene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
Ethylbenzene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
Hexachlorobutadiene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
Isopropylbenzene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
p-Isopropyltoluene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
Methylene Chloride	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
Naphthalene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
n-Propylbenzene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
Styrene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
1,1,1,2-Tetrachloroethane	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
1,1,2,2-Tetrachloroethane	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
Tetrachloroethene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
Toluene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
1,2,3-Trichlorobenzene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
1,2,4-Trichlorobenzene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
1,1,1-Trichloroethane	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
1,1,2-Trichloroethane	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
Trichloroethene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
Trichlorofluoromethane	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
1,2,3-Trichloropropane	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
1,2,4-Trimethylbenzene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
1,3,5-Trimethylbenzene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
Vinyl Chloride	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
o-Xylene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
m&p-Xylene	<0.2	0.2	mg/kg	SW-846 8260	8/23/99	18:04	RAM
MTBE	<0.4	0.4	mg/kg	SW-846 8260	8/23/99	18:04	RAM
SURROGATES			RANGE	SW-846 8260	8/23/99	18:04	RAM
Dibromofluoromethane	105		80-120%	SW-846 8260	8/23/99	18:04	RAM
Toluene-d8	108		81-117%	SW-846 8260	8/23/99	18:04	RAM
4-Bromofluorobenzene	110		74-121%	SW-846 8260	8/23/99	18:04	RAM
1,2 Dichloroethane-d4	88		80-120%	SW-846 8260	8/23/99	18:04	RAM
SEMI-VOLATILE ORGANIC COMPOUNDS							
Acenaphthene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Acenaphthylene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Anthracene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Benzidine	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Benzo(a)anthracene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Benzo(b)fluoranthene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Benzo(k)fluoranthene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler
Date Received: 8/17/99
Work Order # 9908-07639

Approved by:
R.I. Analytical

Sample #: 011

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PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME		ANALYST
Benzo(g,h,i)perylene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Benzo(a)pyrene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Bis(2-chloroethyl)ether	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Bis(2-Chloroethoxy)methane	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
bis(2-chloroisopropyl)ether	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Bis(2-ethylhexyl)phthalate	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
4-Bromophenyl phenyl ether	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Butylbenzyl phthalate	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
2-Chloronaphthalene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
4-Chlorophenyl phenyl ether	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Chrysene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Dibenzo(a,h)anthracene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
1,2-Dichlorobenzene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
1,3-Dichlorobenzene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
1,4-Dichlorobenzene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
3,3'-Dichlorobenzidine	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Diethyl phthalate	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Dimethyl phthalate	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
2,4-Dinitrotoluene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
2,6-Dinitrotoluene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Di-n-octyl phthalate	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
1,2-Diphenylhydrazine	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Fluoranthene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Fluorene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Hexachlorobenzene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Hexachlorobutadiene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Hexachlorocyclopentadiene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Hexachloroethane	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Indeno(1,2,3-cd)pyrene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Isophorone	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Naphthalene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Nitrobenzene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
N-nitrosodimethylamine	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
N-nitrosodiphenylamine	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
N-nitrosodi-n-propylamine	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Phenanthrene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Pyrene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
1,2,4-Trichlorobenzene	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
4-Chloro-3-methylphenol	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
2-Chlorophenol	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

Foster Wheeler
Date Received: 8/17/99
Work Order # 9908-07639

Approved by: R.I. Analytical

Sample #: 011

PREP BLANK

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	ANALYZED DATE/TIME		ANALYST
2,4-Dichlorophenol	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
2,4-Dimethylphenol	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
2-Methyl-4,6-dinitrophenol	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
2,4-Dinitrophenol	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
2-Nitrophenol	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
4-Nitrophenol	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Pentachlorophenol	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
Phenol	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
2,4,6-Trichlorophenol	<0.4	0.4	mg/kg dry	SW-846 8270	8/23/99	13:01	JAH
SURROGATES			RANGE	SW-846 8270	8/23/99	13:01	JAH
Phenol-d5	37		24-113%	SW-846 8270	8/23/99	13:01	JAH
2-Fluorophenol	28		25-121%	SW-846 8270	8/23/99	13:01	JAH
2,4,6-Tribromophenol	26		19-122%	SW-846 8270	8/23/99	13:01	JAH
Nitrobenzene-d5	46		23-120%	SW-846 8270	8/23/99	13:01	JAH
2-Fluorobiphenyl	38		30-115%	SW-846 8270	8/23/99	13:01	JAH
P-Terphenyl-d14	65		18-137%	SW-846 8270	8/23/99	13:01	JAH
TOTAL METALS							
ARSENIC	<5	5	mg/kg dry	SW-846 6010	8/18/99	14:22	RGM
BARIUM	<0.3	0.3	mg/kg dry	SW-846 6010	8/18/99	14:22	RGM
CADMIUM	<0.3	0.3	mg/kg dry	SW-846 6010	8/18/99	14:22	RGM
CHROMIUM	<2	2	mg/kg dry	SW-846 6010	8/18/99	14:22	RGM
LEAD	<2	2	mg/kg dry	SW-846 6010	8/18/99	14:22	RGM
MERCURY	<0.25	0.25	mg/kg dry	SW-846 7471A	8/20/99	10:13	RJC
SELENIUM	<10	10	mg/kg dry	SW-846 6010	8/18/99	14:22	RGM
SILVER	<1	1	mg/kg dry	SW-846 6010	8/18/99	14:22	RGM

White Copy Original (Accompanies Samples) | Yellow Copy – Collector | Pink Copy – Customer's Copy

08/24/99 14:14 FAX 401 738 1970 R.I. Analytical

R.I. Analytical Laboratories, Inc.

41 Illinois Avenue
Warwick, RI 02888
Phone: (401) 737-8500
Fax: (401) 738-1970

950 Boylston Street, Unit 102
Newton Highlands, MA 02461
Phone: (617) 965-5133
Fax: (617) 965-5624

CHAIN OF CUSTODY RECORD

Page 1 of 1

Container Type Codes:	Preservative Codes:	Matrix Codes:
P=Plastic AG=Amber Glass	NP=Non preserved S=Sulfuric	GW=Groundwater S=Soil
G=Glass St=Sterile	I=Cooled 4°C H=HCL	WW=Wastewater Sl=Sludge
V=Vial	N=Nitric SH=NaOH	DW=Drinking water A=Air
O=Other (describe)	M=Methanol SB=NaHSO4	O=Other (describe) B=Bulk/Solid

Date Collected	Time Collected	Sample ID	G=Grab C=Comp.	Containers # + (code)	Preservative (code)	Matrix (code)	8015 Analysis Request
8/17/99	1230	East side wall	G	1 AG	I	S	TPH 8015
8/17/99	1245	North Wall	G	1 AG	↓	↓	↓
8/17/99	1255	Bottom	G	1 AG	↓	↓	↓
8/17/99	1300	South wall	G	1 AG	↓	↓	↓
8/17/99	1305	West Side wall	G	1 AG	I	S	TPH 8015
8/17/99	1310	Stockpile	C				VOC 8260 / SVOC 8270 / ~~RCRA 8~~ / PCB / 8100

Client Information

Company Name: Foster Wheeler / Bill to:
Address: 195 Burma Rd / 151 Marine Rd
City / State / Zip: Portsmouth RI 02871 / N. Kingstown RI 02852
Phone: 683-5259 Fax: 683-5218
Contact: Jon Cary

Project Information

Project Name / Location: Building 42 - TPH Removal
P.O. Number / Project Number: C013
Project Manager / Report To: Jon Cary
Sampled by:
Reference Proposal:

Relinquished by:	Date	Time	Received by:	Date	Time
Tricia Hancock	8/17/99	15:45	[signature]	8/17/99	15:45
			[signature]	8/17/99	1830

Turn Around Time:
- ☐ Normal
- ☒ 5 business days Surcharges may apply
- ☐ Rush _____ (business days)

Project Comments:

RIAL USE ONLY:
- ☐ Pick-Up Only
- ☐ RIAL Sampled
- ☐ Shipped on Ice

RIAL W.O. # 7639 7644

Appendix P

Test Pit (7 Feet South of MW-09) Sample Results Summary and Laboratory Data

FOSTER WHEELER ENVIRONMENTAL CORPORATION
U.S. NAVY NORTHERN DIVISION REMEDIAL ACTION CONTRACT (RAC)
CONTRACT N62472-94-D-0398 DELIVERY ORDER 13 AND 60

DERECKTOR SHIPYARD TEST PIT (7 FEET SOUTH OF MW-9) SAMPLE RESULT

RIDEM Direct Exposure Criteria -->	Residential	Commercial/ Industrial	MW09TP01
Volatile Organics			
Benzene	2.5	200.0	-
Bromodichloromethane	10.0	92.0	-
Bromoform	81.0	720.0	-
Bromomethane	0.8	2,900.0	-
Carbon tetrachloride	1.5	44.0	-
Chlorobenzene	210.0	10,000.0	-
Chloroform	1.2	940.0	-
Dibromochloromethane	7.6	68.0	-
1,1-Dichloroethane	920.0	10,000.0	-
1,2-Dichloroethane	0.9	63.0	-
1,1-Dichloroethene	0.2	9.5	-
cis-1,2-Dichloroethene	630.0	10,000.0	-
trans-1,2-Dichloroethene	1,100.0	10,000.0	-
1,2-Dichloropropane	1.9	84.0	-
Ethylbenzene	71.0	10,000.0	-
Isopropyl benzene	27.0	10,000.0	-
Methyl-tert-butyl-ether	390.0	10,000.0	-
Methylene chloride	45.0	760.0	-
Styrene	13.0	190.0	-
1,1,1,2 Tetrachloroethane	2.2	220.0	-
1,1,2,2 Tetrachloroethane	1.3	29.0	-
Toluene	190.0	10,000.0	-
1,1,1-Trichloroethane	540.0	10,000.0	-
1,1,2-Trichloroethane	3.6	100.0	-
Vinyl chloride	0.02	3.00	-
Total Xylenes	110.0	10,000.0	-
Semivolatiles			
Acenaphthene	43.0	10,000.0	-
Acenaphthylene	23.0	10,000.0	-
Anthracene	35.0	10,000.0	-
Benzo(a)anthracene	0.9	7.8	0.110 J
Benzo(a)pyrene	0.4	0.8	0.100 J
Benzo(b)fluoranthene	0.9	7.8	0.140 J
Benzo(g,h,I)perylene	0.8	10,000.0	0.048 J
Benzo(k)fluoranthene	0.9	78.0	0.076 J
Bis(2-ethylhexyl)phthalate	46.0	410.0	3.000
Bis(2-chloroethyl)ether	0.6	5.2	-
Chrysene	0.4	780.0	0.120 J
Dibenzo(a,h)anthracene	0.4	0.8	-
1,2-Dichlorobenzene	510.0	10,000.0	-
1,3-Dichlorobenzene	430.0	10,000.0	-
1,4-Dichlorobenzene	27.0	240.0	-
3,3-Dichlorobenzidine	1.4	13.0	-
Diethyl phthalate	340.0	10,000.0	-
2,4-Dimethyl phenol	1,400.0	10,000.0	-
Dimethyl phthalate	1,900.0	10,000.0	-
2,4-Dinitrophenol	160.0	4,100.0	-
2,4-Dinitrotoluene	0.9	8.4	-
Fluoranthene	20.0	10,000.0	0.180 J
Fluorene	28.0	10,000.0	-
Hexachlorobenzene	0.4	3.6	-
Hexachlorobutadiene	8.2	73.0	-
Hexachloroethane	46.0	410.0	-
Indeno(1,2,3-cd)pyrene	0.9	7.8	0.048 J
Naphthalene	54.0	10,000.0	-
Pentachlorophenol	5.3	48.0	-
Phenanthrene	40.0	10,000.0	0.070 J
Phenol	6,000.0	10,000.0	-
Pyrene	13.0	10,000.0	0.160 J
1,2,4-Trichlorobenzene	96.0	10,000.0	-
2,4,6-Trichlorophenol	58.0	520.0	-
Pesticides/PCBs			
Chlordane	0.5	4.4	-
Dieldrin	0.04	0.40	-
Polychlorinated biphenyls	10.0	10.0	-
Inorganics			
Arsenic	1.7	3.8	13.0
Barium	5,500.0	10,000.0	180.0
Cadmium	39.0	1,000.0	13.0
Chromium III	1,400.0	10,000.0	n
Chromium VI	390.0	10,000.0	n
Chromium (Total)	na	na	130.0
Lead	150.0	500.0	63.0
Mercury	23.0	610.0	-
Selenium	390.0	10,000.0	3.0
Silver	200.0	10,000.0	-
TPH (8015M)	500.0	2,500.0	55

= Exceeds RIDEM Residential Exposure Criteria

- = Non-Detect Result

n = Not Analyzed

na = Not Applicable

All results in mg/kg unless otherwise noted

MITKEM CORPORATION

Analysis Report: Volatile Organic Compounds

Client: Foster Wheeler Environmental Corp.
Client ID: MW09TP01
Lab ID: 60219002
Analysis: Method 8260B

Analysis Date: 2/23/99
Matrix: Soil, 91% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Dichlorodifluoromethane	ND	5
Chloromethane	ND	5
Vinyl chloride	ND	5
Bromomethane	ND	5
Chloroethane	ND	5
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Carbon disulfide	ND	5
Iodomethane	ND	5
Acetone	7	5
Methylene chloride	ND	5
trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Vinyl acetate	ND	5
2,2-Dichloropropane	ND	5
cis-1,2-Dichloroethene	ND	5
Methyl ethyl ketone	ND	5
Bromochloromethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon tetrachloride	ND	5
1,1-Dichloropropene	ND	5
Benzene	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Dibromomethane	ND	5
Bromodichloromethane	ND	5
2-Chloroethyl vinyl ether	ND	5
cis-1,3-Dichloropropene	ND	5
4-Methyl-2-pentanone	ND	5
Toluene	ND	5

MITKEM CORPORATION

Client ID: MW09TP01

Lab ID: 60219002

Analyte	Results	Reporting Limits
trans-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,3-Dichloropropane	ND	5
2-Hexanone	ND	5
Dibromochloromethane	ND	5
1,2-Dibromoethane (EDB)	ND	5
Chlorobenzene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Ethylbenzene	ND	5
Xylenes, total	ND	5
Styrene	ND	5
Bromoform	ND	5
Isopropylbenzene	ND	5
Bromobenzene	ND	5
1,1,2,2-Tetrachloroethane	ND	5
1,2,3-Trichloropropane	ND	5
n-Propylbenzene	ND	5
2-Chlorotoluene	ND	5
4-Chlorotoluene	ND	5
1,3,5-Trimethylbenzene	ND	5
tert-Butylbenzene	ND	5
1,2,4-Trimethylbenzene	ND	5
sec-Butylbenzene	ND	5
1,3-Dichlorobenzene	ND	5
4-Isopropyltoluene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5
n-Butylbenzene	ND	5
1,2-Dibromo-3-chloropropane	ND	5
1,2,4-Trichlorobenzene	ND	5
Hexachlorobutadiene	ND	5
1,2,3-Trichlorobenzene	ND	5
MTBE	ND	5
Naphthalene	ND	5

QC Batch: V5B0223A

Surrogate Recovery:	
1,2-Dichloroethane-d4	95%
Toluene-d8	81%
Bromofluorobenzene	119%

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Semivolatile Organic Compounds

Client:	Foster Wheeler Environmental Corp.	Analysis Date:	2/23/99
Client ID:	MW09TP01	Matrix:	Soil, 91% solids
Lab ID:	60219002	Analysis:	Method 8270C
Dilution:	1	Concentration in:	ug/kg, dry weight basis

Analyte	Results	Reporting Limits
Phenol	ND	360
bis(2-Chloroethyl)ether	ND	360
2-Chlorophenol	ND	360
1,3-Dichlorobenzene	ND	360
1,4-Dichlorobenzene	ND	360
1,2-Dichlorobenzene	ND	360
2-Methylphenol	ND	360
2,2'-oxybis(1-Chloropropane)	ND	360
4-Methylphenol	ND	360
n-Nitroso-di-n-propylamine	ND	360
Hexachloroethane	ND	360
Nitrobenzene	ND	360
Isophorone	ND	360
2-Nitrophenol	ND	360
2,4-Dimethylphenol	ND	360
bis(2-Chloroethoxy)methane	ND	360
2,4-Dichlorophenol	ND	360
1,2,4-Trichlorobenzene	ND	360
Naphthalene	ND	360
4-Chloroaniline	ND	360
Hexachlorobutadiene	ND	360
4-Chloro-3-methylphenol	ND	360
2-Methylnaphthalene	ND	360
Hexachlorocyclopentadiene	ND	360
2,4,6-Trichlorophenol	ND	360
2,4,5-Trichlorophenol	ND	740
2-Chloronaphthalene	ND	360
2-Nitroaniline	ND	740
Dimethylphthalate	ND	360
Acenaphthylene	ND	360
2,6-Dinitrotoluene	ND	360
3-Nitroaniline	ND	740
Acenaphthene	ND	360
2,4-Dinitrophenol	ND	740
4-Nitrophenol	ND	740
Dibenzofuran	ND	360
2,4-Dinitrotoluene	ND	360

018

MITKEM CORPORATION

Client ID: MW09TP01 Lab ID: 60219002

Analyte	Results	Reporting Limits
Diethylphthalate	ND	360
Fluorene	ND	360
4-Chlorophenyl-phenylether	ND	360
4-Nitroaniline	ND	740
4,6-Dinitro-2-methylphenol	ND	740
n-Nitrosodiphenylamine	ND	360
4-Bromophenyl-phenylether	ND	360
Hexachlorobenzene	ND	360
Pentachlorophenol	ND	740
Phenanthrene	70 J	360
Anthracene	ND	360
Di-n-butylphthalate	47 J	360
Carbazole	ND	360
Fluoranthene	180 J	360
Pyrene	160 J	360
Butylbenzylphthalate	ND	360
Benzo(a)anthracene	110 J	360
Chrysene	120 J	360
3,3'-Dichlorobenzidine	ND	360
bis(2-Ethylhexyl)phthalate	3,000	360
Di-n-octylphthalate	370	360
Benzo(b)fluoranthene	140 J	360
Benzo(k)fluoranthene	76 J	360
Benzo(a)pyrene	100 J	360
Indeno(1,2,3-cd)pyrene	48 J	360
Dibenz(a,h)anthracene	ND	360
Benzo(g,h,i)perylene	48 J	360

QC Batch: S0222-BS1

Surrogate Recovery:	
2-Fluorophenol	71%
Phenol-d5	76%
2-Chlorophenol-d4	76%
2,4,6-Tribromophenol	79%
1,2-Dichlorobenzene-d4	77%
Nitrobenzene-d5	80%
2-Fluorobiphenyl	82%
p-Terphenyl-d14	81%

ND = Not detected

019

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Client: Foster Wheeler Environmental Corp.
Client ID: MW09TP01
Lab ID: 60219002
Analysis: Method 8081A

Analysis Date: 2/25/99
Matrix: Soil, 91% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Endrin ketone	ND	3.6
alpha-BHC	ND	1.8
gamma-BHC (Lindane)	ND	1.8
Heptachlor	ND	1.8
Aldrin	ND	1.8
beta-BHC	ND	1.8
delta-BHC	ND	1.8
Heptachlor epoxide	ND	1.8
Endosulfan I	ND	1.8
4,4'-DDE	ND	3.6
Dieldrin	ND	3.6
Endrin	ND	3.6
4,4'-DDD	ND	3.6
Endosulfan II	ND	3.6
4,4'-DDT	4.3 P	3.6
Endrin aldehyde	ND	3.6
Methoxychlor	ND	18
Endosulfan sulfate	ND	3.6
Chlordane (technical)	ND	180
Toxaphene	ND	91
alpha-chlordane	ND	1.8
gamma-chlordane	ND	1.8

QC Batch: P0224-BS1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	95%
Decachlorobiphenyl	89%

ND = Not detected

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, P0224-BS1
Analysis: Method 8081A

Analysis Date: 2/25/99
Matrix: Solid
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Endrin ketone	ND	3.4
alpha-BHC	ND	1.7
gamma-BHC (Lindane)	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
beta-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
4,4'-DDE	ND	3.4
Dieldrin	ND	3.4
Endrin	ND	3.4
4,4'-DDD	ND	3.4
Endosulfan II	ND	3.4
4,4'-DDT	ND	3.4
Endrin aldehyde	ND	3.4
Methoxychlor	ND	17
Endosulfan sulfate	ND	3.4
Chlordane (technical)	ND	85
Toxaphene	ND	170
alpha-chlordane	ND	1.7
gamma-chlordane	ND	1.7

QC Batch: P0224-BS1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	95%
Decachlorobiphenyl	89%

ND = Not detected

60219-MB

MITKEM CORPORATION

Analysis Report: Organochlorine Pesticides

Lab Control Summary

Client: Foster Wheeler Environmental Corp.
Lab ID for Blank Spike: P0224-LCS1
Analysis: Method 8081A

Matrix: Solid
Analysis Date for Blank Spike: 2/25/99

Analyte	% Recovery
gamma-BHC (Lindane)	84
Heptachlor	98
Aldrin	94
Dieldrin	90
Endrin	96
4,4'-DDT	87

QC Batch: P0224-BS1

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID: MW09TP01
Lab ID: 60219002
Analysis: Method 8082

Analysis Date: 2/25/99
Matrix: Soil, 91% solids
Concentration in: ug/kg, dry weight basis
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	36
Aroclor-1221	ND	36
Aroclor-1232	ND	36
Aroclor-1242	ND	36
Aroclor-1248	ND	36
Aroclor-1254	ND	36
Aroclor-1260	ND	36

QC Batch: P0224-BS1

Surrogate Recovery:	
2,4,5,6-Tetrachloro-m-xylene	49%
Decachlorobiphenyl	46%

ND=Not Detected

033
60219002

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCB)

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Method Blank, P0224-BS1
Analysis: Method 8082

Analysis Date: 2/25/99
Matrix: Solid
Concentration in: ug/kg
Dilution: 1

Analyte	Results	Reporting Limits
Aroclor-1016	ND	33
Aroclor-1221	ND	33
Aroclor-1232	ND	33
Aroclor-1242	ND	33
Aroclor-1248	ND	33
Aroclor-1254	ND	33
Aroclor-1260	ND	33

QC Batch: P0224-BS1

Surrogate Recovery:

2,4,5,6-Tetrachloro-m-xylene	95%
Decachlorobiphenyl	89%

ND=Not Detected

034

60219-MB

MITKEM CORPORATION

Analysis Report: Polychlorinated Biphenyls (PCBs)

Lab Control Summary

Client: Foster Wheeler Environmental Corp.
Lab ID for Blank Spike: B0224-LS1
Analysis: Method 8082

Matrix: Solid
Analysis Date for Blank Spike: 2/25/99

Analyte	% Recovery
Aroclor 1016	93
Aroclor 1260	92

QC Batch: P0224-BS1

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:	MW09TP01	Concentration in:	mg/kg, dry weight basis
Lab ID:	60219002	Analysis Date:	2/22/99
Matrix:	Soil, 88% solid	Analysis Method:	7471A (Mercury) 6010A (Others)

Analyte	Results	Reporting Limit
Aluminum	7,500	30
Antimony	ND	3
Arsenic	13	1
Barium	180	20
Beryllium	ND	0.5
Cadmium	13	0.5
Calcium	2,200	80
Chromium	130	2
Cobalt	11	5
Copper	430	3
Iron	59,000	30
Lead	63	1
Magnesium	2,000	50
Manganese	760	5
Mercury	ND	0.3
Nickel	97	5
Potassium	460	30
Selenium	3	2
Silver	ND	3
Sodium	6,200	100
Thallium	ND	1
Vanadium	23	5
Zinc	7,200	5

QC Batch: 0220PBS

ND = Not Detected

MITKEM CORPORATION

Analysis Report: Total Metals

Client: Foster Wheeler Environmental Corp.
Client ID:
Lab ID: Prep Blank, 0220PBS

Concentration in: mg/kg
Analysis Date: 2/22/99
Analysis Method: 7471A (Mercury)
6010A (Others)

Analyte	Results	Reporting Limit
Aluminum	ND	30
Antimony	ND	3
Arsenic	ND	1
Barium	ND	20
Beryllium	ND	0.5
Cadmium	ND	0.5
Calcium	ND	80
Chromium	ND	2
Cobalt	ND	5
Copper	ND	3
Iron	ND	30
Lead	ND	1
Magnesium	ND	50
Manganese	ND	5
Mercury	ND	0.3
Nickel	ND	5
Potassium	ND	30
Selenium	ND	2
Silver	ND	3
Sodium	ND	100
Thallium	ND	1
Vanadium	ND	5
Zinc	ND	5

QC Batch: 0220PBS

ND = Not Detected

60219-MB

MITKEM CORPORATION

Analysis Report: Total Metals

Client:	Foster Wheeler Environmental Corp.		
Client ID:			
Lab ID:	Lab Control Sample, 0220LCSS	Analysis Date:	2/22/99
Matrix:	Soil	Analysis Method:	7471A (Mercury) 6010A (Others)

Analyte	% Recovery
Aluminum	102
Antimony	103
Arsenic	104
Barium	100
Beryllium	102
Cadmium	94
Calcium	101
Chromium	104
Cobalt	103
Copper	101
Iron	104
Lead	106
Magnesium	103
Manganese	104
Mercury	99
Nickel	103
Potassium	93
Selenium	101
Silver	104
Sodium	98
Thallium	104
Vanadium	104
Zinc	101

QC Batch: 0220PBS

Appendix Q

Field Notes

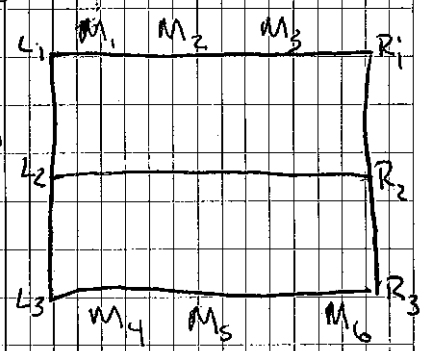
32) H&S DO13 Sump Pit 42 5-20-98

WEATHER: Clear warm

OVA 128 FW 173

All reading at soil surface

TIME	READING	LOCATION
0730	Ø	M3-R1
0745	Ø	M3-R1
0800	Ø	L1-M1
0815	Ø	L1-M1
0830	Ø	L2-M1
0845	Ø	L2-M4
0900	Ø	L1-M1
0915	Ø	L2-M2
0930	Ø	L2-M2
0945	Ø	L3-M4
1000	Ø	L3-M4
1015	Ø	M5
1030	Ø	R3-M6



MEETING WITH RODEM PAUL KULPA JON CARY MARK GONDIA (FWGOC) AT 1210 TO INSPECT EXCAVATION. MUST TAKE 4 WALL SAMPLES AND 1 FLOOR SAMPLE 3 HEAD SPACE SAMPLES PER WALL TO DETERMINE LOCATION OF WALL SAMPLE. 4 HEAD SPACE SAMPLES ON FLOOR TO DETERMINE FLOOR SAMPLE LOCATION

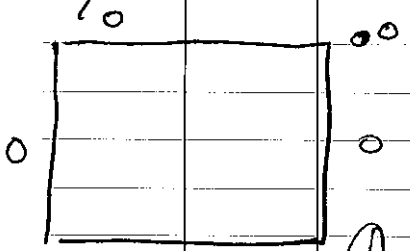
33) H&S D013 Sump Pit 42 5-20-98

WEATHER Clear WARM

OVA 128 FW173

All READING AT Soil

PAUL KULPA ALSO WANTS SAMPLES TAKEN FROM The Surface Soil FROM AROUND TO EXTERIOR OF The EXCAVATION AREA. This HAS TO BE Cleared By NORTH DIV.



PROPOSED. O SAMPLES ON OUTSIDE OF EXCAVATION.

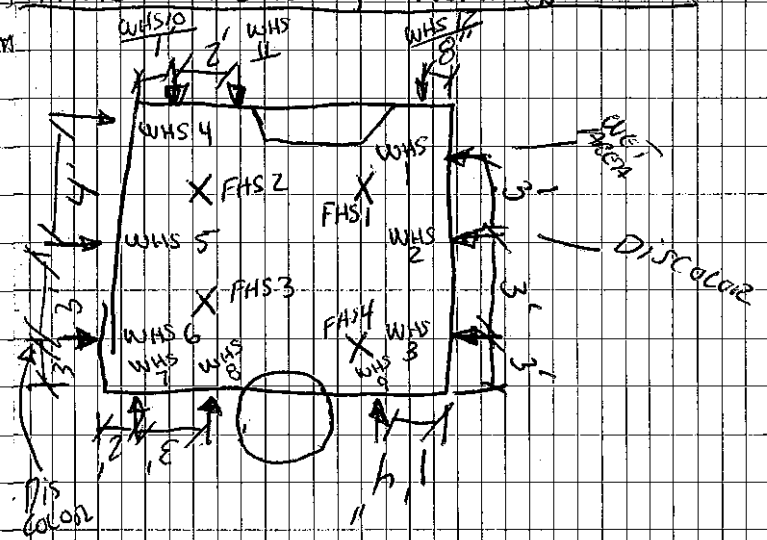
34) H&S D013 Sump Pit 42 5-21-98

WEATHER CLEAR WARM

OVA 128 FW173

All READINGS HEAD SPACE UNLESS OTHERWISE NOTED.

TIME	READING	HEAD SPACE #



WHS - WALL HEAD SPACE

FHS - FLOOR HEAD SPACE

START ~~1002~~ MAG 1102

Complete HEAD SPACE WALLS 1115

START AT 1116 FOR FLOOR HEAD SPACE

Complete FLOOR HEAD SPACE 1123

35) HS D013 Sump PIT 42 5-21

Weather: Sunny warm

OVA 128 FW 173

All Readings In Jar Head Space

TIME	Reading	Sample #
11:45	Ø	WHS 1
	Ø	WHS 2
	Ø	WHS 3
	Ø	WHS 4
	Ø	WHS 5
	Ø	WHS 6
	Ø	WHS 7
	Ø	WHS 8
	Ø	WHS 9
	Ø	WHS 10
	Ø	WHS 11
	Ø	WHS 12
11:50	Ø	FHS 1 BACKGROUND-2
11:51	Ø	FHS 2
11:52	Ø	FHS 3
11:53	Ø	FHS 4

NOTE FHS 1-4 HAD A READING Above Background.

FLOOR SAMPLE 1 ~~WHS~~ Sump 42-Floor-1 WAS pulled FROM FHS 1 Which WAS UNDER Drain TO Sump

36) H/S D013 SUMP PIT 42 5-21-98

WEATHER: Clear, warm

OVA 128 FW 173

SUMP 42 WALL 1 WILL BE TAKEN ALONG NORTH WALL AT WHS 1 This IS IN THE AREA OF THE DEPRESSION NOTED BY PAUL KULPA.

SUMP 42 WALL 2 WILL BE TAKEN IN THE AREA WHS 12 FOR THE SAME REASON.

WALL SAMPLE SUMP 42 WALL 3 WAS ~~THAT WAS~~ TAKEN FROM THE SOUTH WALL 3 FEET FROM THE ~~EAST~~ EAST WALL

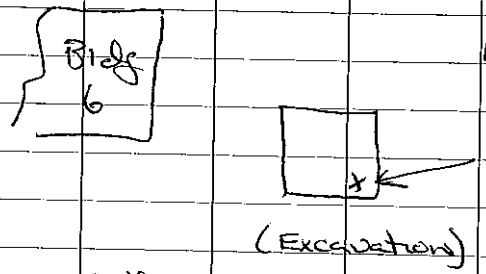
WALL SAMPLE 4 SUMP 42 WALL 4 WAS TAKEN FROM THE EAST WALL ON THE SOUTH SIDE OF THE FLOOR SUPPORT COLUMN.

All SAMPLES ON ICE WAITING TO BE SHIPPED

6/2/98 LEGEND: PCB = POLYCHLORINATED BIPHENYL
FT = FIELD TEST

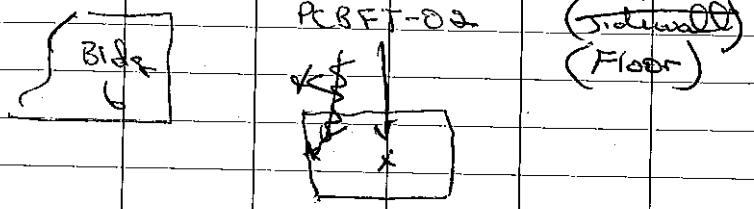
37) D013 PCB Soil Removal
SOIL TESTING

8:48 PCB soil sample taken from floor of excavation



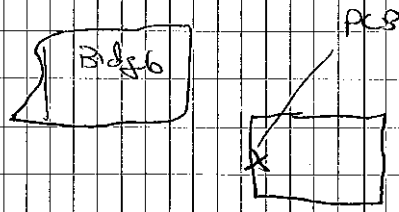
Soil was tested test kit
PCBFT-01 CLOR-N-SOIL Purple color indicated a less than 50ppm PCB Concentration in Soils
TEST KIT Disposal Ampule NOAED Mercury immobilized

11:15 Soil Test CLOR-N-SOIL



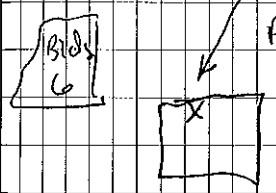
38) PCBFT-02 indicates over 50 ppm Solution appears yellowish
more Soil is Removed from front Sidewall of excavation

2:10 PCB FT-03
Soil Sample



Soil removed to Asphault
Sample taken indicates less than 50 ppm (purple)

39 PCBFT-04



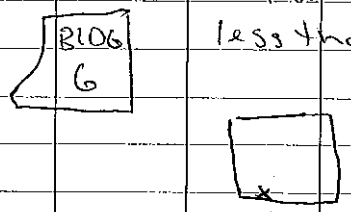
PCB FT-04 Solution appears (yellowish)

More Soil Removed

39

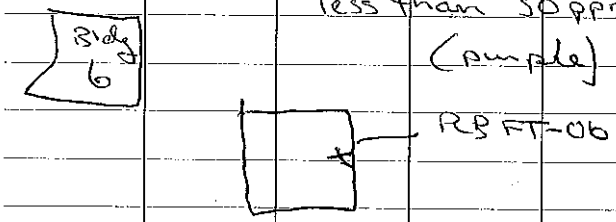
2:30 PCB FT-05

Test indicated less than 50 ppm (pinkish)



2:47 PCBFT-06

Test indicated less than 50 ppm (purple)



302 PCBFT-~~VC~~ 07

upon completion of additional Soil Removal PCBFT-07 was taken at the same location as PCBFT-02.

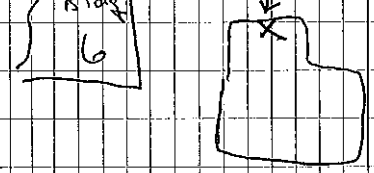
PCBFT-07 indicated less than 50 ppm (pinkish)

40

317 PCBFT-08

upon completion of the soil removal driven by a greater than 50 ppm PCBFT-04 PCBFT-08 was taken and indicated color in between pinkish less than 50 ppm and yellow over 50 ppm more soil removed

404 PCBFT 09

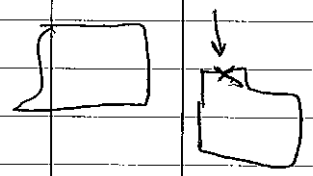


PCBFT-09 indicated color between pinkish less than 50ppm and yellow over 50ppm more soil will be removed.

41.

6/3/98

8:15 PCBFT10

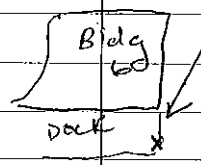


Add. Soil was removed from PCBFT-09 BCBFT10 is a sample from sidewall of the area upon completion of soil removal

PCBFT-10 indicated (pink)

less than 50

8:40 PCB FT 11 Migration Pathway



Sample taken from wash dock edge of Asphalt

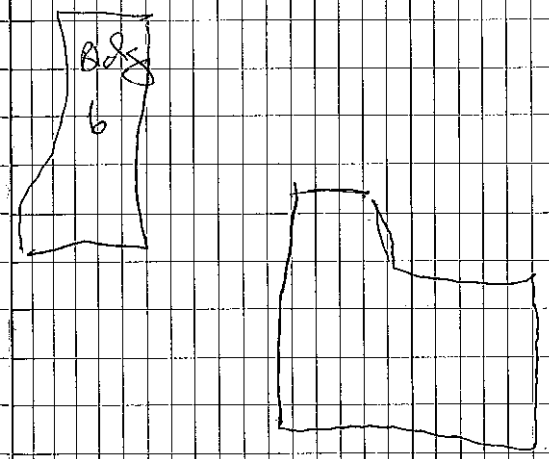
PCBFT 11 indicated (pink)

less than 50

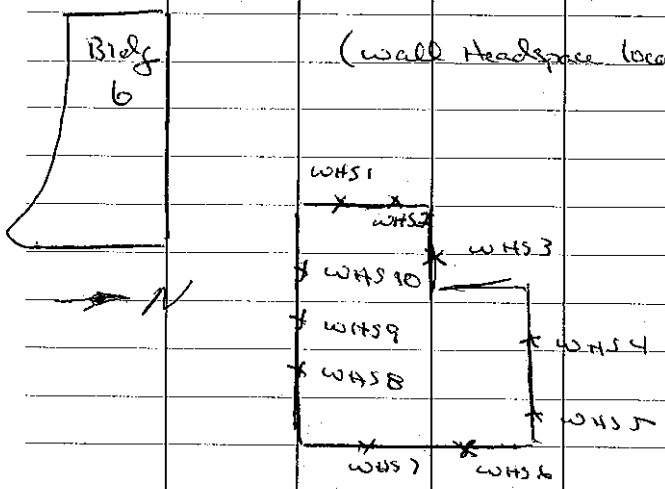
42

weather PCloudy / Windy 70°

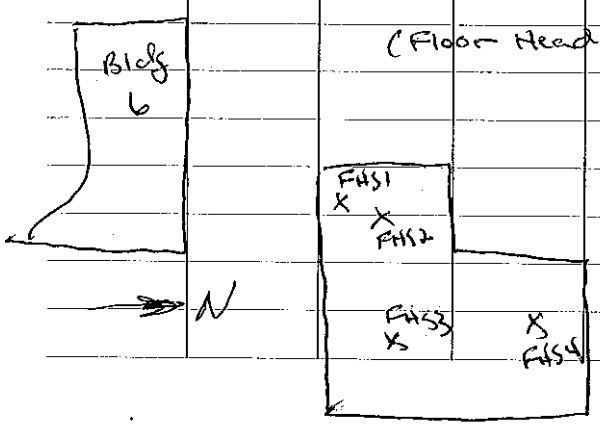
OVA 12.8 FW 173



FID Headspace location



Field screen indicated no FID Readings JAR Headspace locations were evenly spaced



Floor Headspace Samples
Samples 1 - 3 were placed where additional soils were removed 4 was placed randomly

6-3-98 (LIGHT OVERCAST, 70 °F, WINDY w/NW)

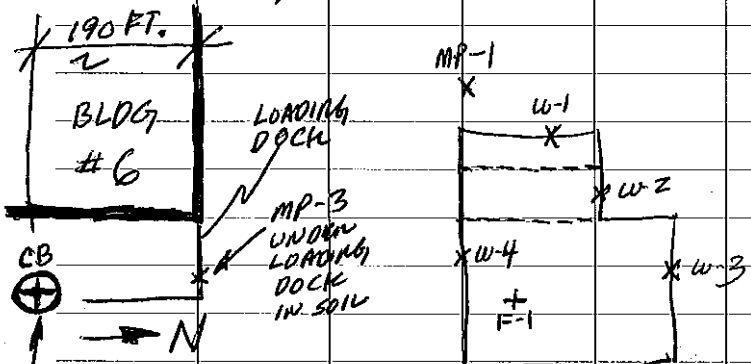
TIME	READING	Sample #
2:14	0	WHS 1
2:14	0	WHS 2
2:14	0	WHS 3
2:15	0	WHS 4
2:15	0	WHS 5
2:16	0	WHS 6
2:16	0	WHS 7
2:22	0	WHS 8
2:23	0	WHS 9
2:23	0	WHS 10
2:23	0	FHS 1
2:24	0	FHS 2 (CALIB FID PEGGED)
2:24	2 PPM	FHS 3
2:24	0	FHS 4

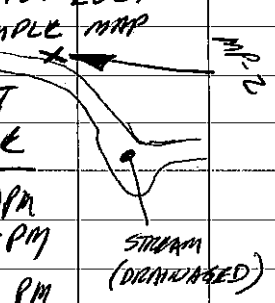
Headspace Sample 15 minutes
heat truck defroster

CONFIRMATORY SAMPLES TAKEN ON 6-3-98 STARTING @ 3:25 PM / FINISHED @ 4:15PM

(2) JARS (1/2 PINTS)

(2) VIALS, 1 WITH MEOH SOLUTION





CONFIRMATORY SAMPLE NO'S.	START TIME
TP14 W-1	3:30PM
-2	3:35PM
-3	3:40 PM
-4	3:45 PM
F-1	3:25PM
MP-1	3:55 PM
-2	4:00 PM
-3	4:05 PM
-4	4:12 PM

SAMPLE NUMBER LEGEND: W = WALL, F = FLOOR, MP = MIGRATORY PATH

Tank Farm 5

11/23/98 HTS Log D013

530 A. Prophete on site to prep sampling & monitoring equipment for TP14 Test pit excavation.

0630 Daily HTS Briefing.

0830 A. Prophete and Jeff Little at TP14 site to prep rolloffs w/ liner.

0845 N. Johnson on site and removes silt fencing from original excavation.

0900 Billy Lira on site w/ CAT 416C backhoe and moves Rolloff # NVRU 200546 ~~adjacent~~ (cap) adjacent to Eastern edge of additional excavation. A. Prophete finish deconing sampling equipment (trowels, buckets) & setting up decon area. Note: Bob Kravinscu visited AOC and was given explanation of work to be performed by me.

0930 Start excavation on

eastern edge.

0945 Eastern edge of excavation down 2 ft bgs. Intersects wetlands and dry stream channel. G Water infiltration in excavation. Soils saturated at 2 ft bgs. Fissile shale throughout

0955 Headspace samples HS1 – HS3 taken from walls ~~and~~ of new excavation. Soil type: Brown-black ~~silty clay~~ clayey silt trace sand, some roots + stems, wet. No odor noted, possible black staining.

1046 Headspace sample HS-4. Saturated soils.

1130 Complete Clor-N-soil PCB Screening Kit test on HS1 and HS4. Both samples indicate PCB less than 50 ppm in soils.

1300 Complete Clor-N-soil PCB test on HS3. Sample indicates PCB > 50 ppm in soils. Sample EAETP14-W1 collected from HS3 location. Visible staining

Air Monitoring Table

Time	OVA (BZ)	OVA (floor)	OVA (wall)	Comments
0930	0.0	—	—	Background = 0.0
0945	NAB	NAB	NAB	NAB = Not above
1000	NAB	NAB	NAB	background
1015	NAB	NAB	NAB	
1030	NAB	NAB	NAB	
1045	NAB	NAB	NAB	

Air Monitoring Table
Headspace Screening

Time	OVA(BZ)	Headspace jars	Comments
1030	0.0	HS1 - 0.0 ppm	
		HS2 - 0.0 ppm	
		HS3 - 3.0 ppm	-- Black Staining In soils (possible)
1046	0.0	HS4 - 0.0 ppm	
		HS5 - 0.0 ppm	
		HS6 - 1.0 ppm	
		HS9 - 2.0 ppm	

noted. Sample collected for VOC 8260, SVOC 8270, TPH 8015, TPH 418.1, RCRA 8 metals, PCB / Pest 8080.

1417 Complete Clor N Soil PCB Test on HS-6 and HS-9, possible staining noted. OVA = 1-2 ppm HS-6 Sample indicates PCB > 50 ppm in soils. HS-9 reveals ~~not~~ < 50 ppm PCB in soil location. Start rolloff # NVRU200566

1420 Stop excavating. Approx. 75 ft west of old excavation. Location is an electric cable ~~appr~~ 3 inches in diameter traversing N-S at 4 ft depth.

1423 Jon Cary and Roger Beauregard on site to investigate. NETC Utilities Person on site to investigate. Informed FWENC personnel

that power line is abandoned and comes from off-base. May contain dielectric fluid (oil) for cooling so do not break!

1425 Collect sample EAETP14-W3 for parameters listed on pg —

1435 HS-5 tested w/ Chor-n-soil PCB Test. Reveal < 50 ppm PCB. Note: GWater infiltration in bottom of New excavation at 4ft bgs. Eastern additional excavation completely full w/ water (2ft depth). 12 inch diameter pipe sections made of concrete (abandoned) and possibly sewer line throughout excavation. Fissile shale encountered at 1ft bgs and continues below ~~2ft depth~~.

1450 Sample EAETP14-F1 collected from floor of new excavation, approx 5ft west of old F1 location.

1520 EAETP14-W2 collected 4ft south of asphalt boundary on eastern portion of new excavation

Tank Farms

11/24/98 HTS Log D013

0615 Discuss HTS Briefing + Craft Assignments.

0630 Daily Briefing. Topic: reiterate Proper doning off and on PPE while in Bldg 6 / TP14. Deconing equipment on plastic liner.

0700 A. Prophete, J. Little, B. Lima at Bldg 6 / TP14 excavation site. A. Prophete to resample at flagged locations and collect methanol VOA w/ 15 gms soil.

0730 Eastern 22ft of new excavation location down 2ft bgs. Adjacent to wetlands and encompassing migratory pathway (stream channel). This entire portion is covered w/ 2ft of gw infiltration. See photo #2; roll #9. Thirty yd^3 of fresh backfill deposited in this portion yesterday has stopped water infiltration into western portions of excavation. Runoff is channeled along wetlands

Air Monitoring Table

Time	OVA(BZ)	OVA(HS)	OVA(Floor)	OVA(walls)
0745	0.0ppm	HS6 = 0.25ppm	0.0	
0815	0.0 ppm	HS 4 = 1.0 ppm	0.0	
0825		HS9 = .5 ppm		noticeable odor 0.0
0845		HS10 = .75		0.0
0910		HS11 = .60	0.0	
0915		HS8 = .50		
935		HS 3 = 0.0		
1325		HS13 = 0.0		
1330		HS12 = .20		
1350		HS14 = 5.0		
1400		HS15 = 0.0		
1430		HS 17 =		
1435		HS16 = 0.0		
1500		HS18 =		

edge towards catch basin approximately 300ft south of excavation location. Hay bails used to stop sediment from leaving wetlands area.

0745 Collect sample EAETP14 F1 from floor of new excavation area down to 4ft bgs. CLOR-N- Soil reveals >50 ppm PCB despite no odor or staining noted. Soils exhibit Brown-Black mf sand and fissile shale pieces from ~~floor~~ top of bedrock strata, little sit & clay, ~~and~~ timbers + roots from removed trees. Will attempt to go deeper once complete view of excavation and roll off availability has been determined. See air monitoring Table + COC for spl parameters

0800 Billy Lima removes portion of backfill material to expose floor

of excavation, 2ft bgs on
eastern portion of excavation.
Water infiltration immediately
from surrounding pool.
0815 Soil/Sludge sample EAETP14F2
collected from edge of clean fill
and floor of excavation.
Soils saturated. Clor-N-Soil
reveals < 50 ppm for PCB.
0820 Screening west wall of
center excavation down to 4ft
bgs. OVA Peaks from 0 to 4 PPM.
0825 Sample EAETP14W3 collected
along wall 3-6in below floor
of excavation. Clor-N-Soil reveals
< 50 ppm.
0845 Sample EAETP14W4 collected
2-3ft south of old W1/TP14
locations. Gray to brown ~~clayey~~ mf sand
~~silt~~ clayey silt, some gravels and
pieces of shale. Collected 3-6in
~~below ground surface below~~ 11/24/98
~~2ft bgs.~~ below existing grade (2ft bgs)
~~0910~~ Collect sample EAETP14F3 (HS11)
0910

No detection w/ OVA but
slight possible staining noted
in soils / bedrock. No odor.
0915 Collect sample EAETP14W5 (HS8)
from southern wall of deep
excavation adjacent to asphalt
roadway. Sample collected
4ft bgs. Noticeable odor
and possible staining in shale.
OVA - no detect in surrounding area
0935 Collect sample EAETP14W1 (HS3)
Due to water height, 2ft above
floor of excavation, taken from
wall 6in - 1ft bgs. Soils
saturated, ~~of brown sand~~,
~~little silt and clay w/ clay gray~~
~~clay fonsets~~ clay and silt, little
brown to black of sand, roots
and other organic material.
Collected along migratory
pathway in stream channel.
1010 Awaiting rolloffs to continue
excavation. Rolloffs NVRU
200566 and 200546 filled.

Laborers sweeping site and cleaning-off rolloffs prior to staging. A. Prophete to return to Tank Farm 5 to resupply for additional sampling.

1130 Rolloffs NVRU 200292 and 200256 dropped off by Rain-for-rent. Rolloff 200256 has 3-6 in of water in its bottom and must be pumped into drums prior to use.

1325 Collect sample EAETP14F4/(HS13) from floor of western portion of additional excavation @ 2ft bgs. No odor, no detect w/ OVA. No visible staining. Brown of sand, little silt and pieces of timber, roots some gravels.

1330 Collect sample EAETP14W6/(HS12) from northern wall of new excavation @ 3-6 in below floor. Depth of excavation = 2ft bgs. Clor-N-Soil reveals <50 ppm PCB

1350 Collect sample EAETP14W7/(HS14) from southern portion of west wall of excavation adjacent to asphalt driveway. Collected 3-6 inches below depth of excavation. Clor-N-Soil < 50 ppm PCB.

1400 Collect sample EAETP14-W8/(HS15) from west wall of western extent of excavation. Clor-N-Soil < 50 ppm PCB. No visible staining, odor or OVA detect.

1435 Collect sample EAETP14-W9/(HS16) from NE corner of 6'x6' excavation, around NE corner of Bldg #6 Dock. Concrete pier for stair case is center point of 6'x6' excavation. Depth = 1ft bgs. Noticeable odor, possible staining. Gray/black sand, trace clay, some gravels.

1430 Collected EAETP14-W10/(HS17) from SW corner of excavation.

sample collected at 1.25 to 1.5 ft bgs. Clor-N-soil < 50 ppm.

1500 Collect EAE TP14-F5 from floor adjacent to concrete pier. approximately 1ft east of former MP3/TP14 location.

1515 A. Prophete and N. Johnson prep samples + COC for 16:00 Pickup by Mitkem Corp. Trip Blank also included w/ VOA samples.

1615 At tank Farm 5 to hand over samples + COC to courier.

~~Nathan Reynolds~~ James Heaven from Mitkem accepts samples - 2 coolers w/ bottleware for VOC 8260 w/ MeOH, SVOC 8270, TPH 8015 and TPH 418.1, RCRA 8 metals, PCB/Pesticides 8080.

1645 Return to Bldg 6 location to close-up exclusion zone, clean site and label Rolloffs w/ Haz labels.

1750 Depart Bldg 6 TP14 site for Tank Farm 5.

Tank Farm 5

11/25/98 H+S Log D013

0530 A. Prophete on site to prep equipment for days sampling operations at Bldg 6/TP14.

0630 Daily Briefing + H+S Briefing Topic.

0715 Prep equipment for air monitoring and sample collection. Cal. Date OVA 128 #FW. See cal logs.

0800 At Bldg #6/TP14. Flag locations of previous sample locations and build burm for runoff from wetlands. Billy Lima to finish loading third rolloff w/ structural debris, pipes, timbers, old fencing and trees + limbs.

0930 Laborers N. Johnson and J. Little clean up site and rolloffs.

1000 A. Prophete preps PCB wipe (Dexil) Kit to collect samples from CAT 416C Back hoe.

1025 A. Prophete washes hoe and Shovel w/ 5 gallon spring waters and Alconox ~~was~~ detergent. Rinse off blades w/ 5 gallon waters and allow to air dry.

1100 Collect 4 shovel samples and 2 hoe samples w/ wipes from Dexil WT-100-KT Kit for PCB. Logged as stated on COC.

12:30 Discuss days events w/ Jon Cary. Decision made to continue center excavation down an additional 2 ft bg below current grade (4 ft bgs) and South an additional 1-2 ft to get out of contaminant zone.

1300 J. Cambria assists J. Little to pump percolation water from roll off # 200 292 into 2- 55 gal drums

1330 Billy Lima excavates 4 ft deep excavation down to 6 ft bgs and extends southward 1.5 ft. Excavation slopes 1-1 from west and east walls into floor. ~~Fissile~~ bedrock shale at 4.5 ft bgs. bedrock continues on all sides below 6 ft depth of excavation. GWater infiltration from bottom of 6 ft excavation. Noticeable staining in shale and odor. Slight oily residue on gloves.

1400 Collect sample EAETP14-F1A from ~~center~~ floor of new excavation. OVA = 5-10 ppm, Peak at 25 ppm

1500 Collect sample EAETP14-W3A from ~~South~~ southern wall of new excavation near base. OVA - 5-10 ppm.

1520 Deliver samples + Trip Blank to Tank Farm 5 for Pick up.

Tank Farm 5 / Bldg 179

11/25/98 HTS Log D013

15:50 Nathan Reynolds from Mitkem picks up samples + COC.

17:00 N. Johnson and J. Little return from Bldg 6/TP14 from closing excavations w/ visible fencing and barricades

17:30 A. Prophete discusses next week activities w/ Jon Cary. A. Prophete To call Severn Trent Labs to arrange for Encore Samplers and sample collection on Wednesday 12/2/98.

Andrew Prophete

Andrew Prophete 11/25/98

Tank Farm 5/Bldg 6 (1)

1/19/99 HtS/Sampling Log D013

0600 A. Prophete and Jon Cary on site. Prep equipment for days activities and sampling load 15 gallon eye wash (cleaned and filled 1/15/99), first aid, tyvek, OB, LWG and outer/inner nitriles.

0630 Daily HtS Briefing and Assignments. Topic: Watch for patches of ice and stay out of excavation (Ez). Decon equipment that comes in contact w/ contaminated soils. PPE worn in area must be removed and disposed of in CRZ. Poly sheeting will act as CRZ for decon and sampling purposes.

0730 At Bldg 6 / GP 14 excavation. Gen chemical 6,000 gal capacity waste carrier pumping water (gw infiltration and storm water) from center - deep excavation into

Andrew Prophete 1/19/99

1/19/99 HTS / Sampling Log DOB

truck tank. Two (2) inch dia. pump w/ float placed in 55 gal drum at top of swale to pump / divert gw directly into drainage basin. Berm in place to prevent surface waters from entering main excavation via drainage swale.

0815 Joe Cambra (Laborer) and Jim Melchior (Laborer) at pier on DS4 to lay liner for soils containment

0850 Billy Lima (operator) loading soils w/ Komatsu from south end of sump pit area into SULLBRO 10 wheel dump truck (18 yd^3) capacity. Depth bgs (asphalt) = 2 ft.

0915 Top of shale exposed. Black/Brown staining throughout floor. No odor, No hits w/ OVA – NAB No staining in walls of excavation adjacent to

Andrew Boghetto 1/19/99

1/19/99 HTS / Sampling Log DOB

tracks (10 ft west of tracks).

0920 Start collecting jar headspace samples. Using Century OVA 128 – FW# 00173 Serial # A 42083. See page 4 and figure

0950 No odors in excavation BZ. FID (OVA) in BZ = NAB. Floor of excavation exhibits patches of discoloration. Shale is severely fractured and weathered. Stained areas do not exhibit greasy or oily feel to touch w/ gloved hand.

1040 Paul Jamison, NETC, fills out waste manifest for Ben Glenn Tanker. Tanker filled w/ 3800 Gal

1106 Filling SULLBRO w/ 7th load of soils from NE Portion of grid Adj to railroad tracks.

Andrew Boghetto 1/19/99

(4) Tank Farm 5/D013

1/19/99 HS/Sampling log D013
11:15 Headspace screening and Collecting samples for Envirogard Immunoassay PCB Test.

Time	Id	OVA(BZ)	OVA(HS)	Comments
920	HS1	0.0	.5	NAB = 0.0
	HS2		.25	
	HS3		.25	
	HS4		.5	
	HS5		0.0	
	HS6		0.0	
	HS7		1.25	
	HS8		2.50	
	HS9		1.5	
	HS10		5.0	
	HS11		0.0	
	HS12		0.0	
	HS13		1.50	
	HS14		.25	
1306	HS15		0.0	
	HS16		0.0	
	HS17		—	OVA malfunction
	HS18		—	
	HS19		—	

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Tank Farm 5/Bldg 6 (5)

1/19/99 HS Sampling Log D013

Time	Id	OVA(BZ)	OVA(HS)	Comments
	HS20			
	HS21			
	HS22			
	HS23			
	HS24			

1300 Excavating SW portion of grid. Top of shale encountered at 3ft bgs. Gwater infiltration through west excavation wall and floor filling portion of grid.

1425 Repositioning Kobelco to excavate NW portion of grid. Already 2ft bgs excavating down to 3ft bgs.

1520 Stop excavation above known location of 6" dia electric cable (traversing N-S approximately 14ft east of western edge of excavation). Cable disconnected

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Possible PCB dielectric fluid still w/in cable.
1530 Excavation mostly dry except for SW portion, center section of original TP-14 and sump pit. Gradual infiltration of GW throughout these sections. All HS locations flagged w/ yellow metal shaft ~~stake~~ @ pin flags and marked w/ HS#, and date. See figure for details of layout.
1600 Excavating soils around footing of Bldg 6 dock w/ hand shovels so as not to diminish structural integrity of pier. Excavated soils black to dark brown sand, some gravels (rounded), trace cobbles. Residual odor, no detection w/ OVA. Depth of excavation ≈ 2.5ft bgs sloping down from walls of excavation to pier.

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1615 Site cleanup, barricading, and soils pile covering at DS4.
1700 Prep equipment for PCB Immunodassay Kit. Using Strategic Diagnostic Inc. Sample Extraction Kit ~~Fo~~ @ w/ 100% Methanol extraction solution for use with SDI Enviroguard PCB in Soil Test Kit # 70208/70220. Enviroguard soil field lab, + above kits furnished by Strategic Diagnostic Inc. 128 Sand Drive, Newark, DE 19713 USA phone (302) 4566789.
1745 Setting up workstation as described on page 9, Step 7 and 8 of PCB in Soil Test Kit 70208/70220. Arranged and labelled antibody coated test tubes, Negative control, 10ppm standard for 1

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Tank Farm 5 / Bldg 6

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Aroclor 1260 (5 ppm standard for Aroclor 1248), Enzyme Conjugate, Substrate and Stop solution and repeater pipette, displacement pipette and tips.

1900 Start sample extraction. Test Acculab Pocket Pro 150-B weighing scale and photometer w/ DI water.

100g weight = 99.9g on scale

① weigh canoe and extract and weigh 10g of soil from each HS jar / location:

Canoe S1 = HS1 = 2.7g
Soil = 10.1g

1907 canoe S2 = HS2 = 2.5g
soil = 10.1g

1911 canoe S3 = HS3 = 2.6
soil = 10.1g

1915 canoe S4 = HS6 = 2.5
soil = 10.0g

Place soils ≈ 10g into Extraction jars (# 3000104) and label for respective sample

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Tank Farm 5 / Bldg 6

1/19/99 HTS Log / Sampling Log DOB

1920 Canoe S5 = HS8 = 2.6
soils wet / damp. Soil = 10.0g

1926 Canoe S6 = HS11 = 2.7
Soil = 10.0g

1930 Canoe S7 = HS10 = 2.6
Soil = 10.0g wet, drying

1940 canoe S8 = HS13 = 2.7
soil = 10.1g

1944 Canoe S9 = HS14 = 2.5
soils = 10.1 (wet soils, drying on hot plate)

1949 Canoe S10 = HS15 = 2.7
soils = 9.9 = wet, drying on plate

1953 Canoe S11 = HS20 = 2.7
Soils = 10.0

1955 Canoe S12 = HS21 = 2.5
Soils = 10.0

1958 Canoe S13 = HS19
soils = 10.1

2001 Canoe S14 = HS22 = 2.6
Soils = 10.0

2003 Canoe S15 = HS24
Soils = 10.0 wet, drying on plate

Samples S7, S9, S10, S15

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(10) Tank Farm 5 / Bldg 6

1/19/99 HTS / Sampling Log D013

drying on hot plate to evaporate moisture.

2010 Pouring 10ml 100% Methanol SDI # 1005104 (solvent ampoule) into extraction jars w/ samples and shaking for 1 min.

2039 Retrieve dried samples and weigh ≈10 gm into extraction jar. Pour 10ml solvent ampoule and shake for 1 min.

2100 Using PCB calibrator Aroclor 1248-5ppm = Aroclor 1260-10ppm which is RIDEM Residential Standard.

2110 Extract liquid layer from top of each extraction jar and place ~~all for~~ at least 1/2 bulb capacity into filtration barrel. Place plunger into each barrel and filter sample. Place filtered assembly into foam rack and proceed w/ Enviroguard

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Tank Farm 5 / Bldg 6 (11)

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PCB in Soil Test Kit 70208 / 70220.

2130 Start w/ Step 2 on page 10 of PCB Test Kit User Guide / instructions to Run the PCB Test.

① Using 12.5 ml Repeater Tip "CON" dispense 500ul (2X setting) into each test tube.

② Using yellow pipette tip w/ positive displacement pipette to dispense 25ul of NC, 10ppm standard and sample reagents into appropriate test tubes.

③ Shake and let incubate 15min

④ Empty tubes and rinse w/ DI water 4X

⑤ Dispense 500ul (2 setting) of "SUB" w/ 12.5 ml Repeater Tip into each tube

2223 ⑥ Set for 5 minutes. NC indicates blue color and

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(12)

Tank Farm 5 / Bldg 6

1/19/99 H2S/Sampling Log

other tubes turning blue.
See chart below:

NC — Darker Blue
10PPM — Neutral Blue
S1 — D
S2 — D
S3 — D
S4 — D
S5 — Same
S6 — D
S7 — Lighter
S8 — L
S9 — D
S10 — D
S11 — D
S12 — D
S13 — D
S14 — D
S15 — D

D indicates darker than 10 ppm Standard < PCB
L indicates lighter = > PCB

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Tank Farm 5 / Bldg 6 (13)

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0 Dispense 800 ml using 12.5 ml pipette labeled "STOP" into each tube. All tubes immediately change yellow. Read How to Interpret Results Page 13 Step 1.

22:42 Insert blank tube w/ 1 ml "Stop" solution into left well of photometer and each sample into right well for ~~analytical~~ digital interpretation of Optical Density.

Sample	OD	
NC:	2.73	
10ppm Standard:	1.45	
S1:	2.43	
S2:	2.39	
S3	2.73	
S4	2.55	
S5	1.16	2nd 1.15
S6	2.51	
S7	.97	2nd .97

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(14)

HTS / Sampling Log

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Sample	OD	
S8	1.07	2nd 1.06
S9	1.45	2nd 1.44
S10	2.69	
S11	2.66	
S12	2.43	
S13	2.26	
S14	2.22	
S15	2.25	

Test reveals that sample locations for S5, S7, S8 and S9 = to or exceed 10 ppm standard and MDEM Residential Criteria.

2300 Depart site.

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Tank Farm 5/Bldg 6 (15)

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0630 HTS Briefing / Assignments

Topic: Watch frost condition on liner, slippery. Splash shield required when pressure washing. Fill sand bags to 30lb weight max so comfortable to move and place. USE work gloves and wear Saranex tyvek, OB, outer nitrites, splash shield, HH when washing / cleaning operations, clean up HTS area and bag debris to minimize fall hazard.

0730 General chemical tanker on site to pump water from center portion of original TP14 grid. No pumping needed. Excavating more soils from areas indicating contamination as per previous days PCB Test

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Tank Farm 5 / Bldg 6

1/20/99 HTS log / Sampling log "D013"

results. Berm soil to be removed and an additional area to be excavated down to 3ft bgs in the NE ~~part~~ quadrant where PCBs > 10 ppm.

0800 Remove assumed contaminated portion of berm. Approximately 18 yd³ removed and placed via dump truck in containment on DSY.

0838 Collect HS samples HS25 from HS 8 flat location, HS 26 and 27 from HS 10 and 14 wall locations at base of berm and HS 28 from center of footing at Bldg 6 tract dock where previous sampling revealed PCB contamination. HS25, collected from 6.5ft x 9ft grid excavated down an additional 1ft bgs for a total of 3ft bgs. Shale appears a light to dark grey, little staining, more competent.

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900 At TP8 WTS building to conduct Enviroguard PCB Test Kit as described on pgs 7-14 in this log book.

939 Canoe S16 = HS25 = 9.5 gm
Soils = 10.1 gm

944 Canoe S17 = HS26 = 2.7
Soils = 10.1

948 Canoe S18 = HS27 = 2.7
Soils = 10.0

952 Canoe S19 = HS28
Soils = 10.0

954 Place 100% methanol in 10ml extraction jars w/ sample and shake for 1 min

1001 Put 4 cons in respective vials

1011 put .25 ml NC, 10 ppm, S16, 17, 18, 19 into vials

1041 Introduce "SUB". Wait for 5 min
NC - D
10 ppm - Neutral blue
S16 - D S19 - D
S17 - ~~D~~ L
S18 - ~~D~~ L

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1050 Photometer

NC = 1.92

10 ppm = 1.07

S16 = 1.82

S17 = 0.63

S18 = 0.82

S19 = 1.41

1222 Remove remainder of bermed soils and underlying surface to "clean" shale. Prepare to collect 8 confirmatory samples and resample in areas S17 and S18.

1300 Collect Sample B6S-1 from HS1 location (wall)

1330 collect Sample B6S-2 from HS5 location (wall)

1348 Collect sample B6S-3 from HS25 location

1420 Collect sample B6S-4 from HS19

1445 Collect sample B6S-5 from bottom of berm between HS14 and HS10. HS29 and HS30

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Tank Farm 5/Bldg 6

D013 HTS/Sampling Log 1/20/99

collected to conduct PCB Test at HS26 and HS27 locations

1520 Collect sample B6S-6 from HS28 location (pier at Bldg 6 Dock).

Two truck loads of soils removed from excavation (Berm and additional area in NE portion) = 36 yd³.

Bermed soils replaced w/ approximately 18-18 yd³ of clean backfill from

1602 At Tank Farm 5, WTS Bldg to run PCB tests.

1611 Canoe S20 = B61 = 2.5 gm

Soils 10.1 gm

1614 Canoe S21 = B6S-2 = 1.7 gm

soils = 10.1

1617 Canoe S22 = B6S-3 = 1.5 gm

soils = 10.0

1621 Canoe S23 = B6S-4 = 1.5

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Soils = 10.1

16:26 Canoe S24 = B6-S5 = 1.6

Soils = 10.0

16:27 Canoe S25 = B6-S6 = 1.7

Soils = 10.1

1631 Canoe S26 = ~~B6~~ HS-29 S7 = 1.6

Soils = 10.0

1644 Canoe S27 = HS-30 = 1.6

Soils = 10.0

1728 Finish adding NC, 10ppm, S20-S27 25 ul to each tube

1807 After addition of "SuB":

NC — D
10ppm — neutral
S20 — D
S21 — D
S22 — D
S23 — D
S24 — D
S25 — D
S26 — D
S27 — D

1820 Photometer

NC - 2.07

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10ppm — 1.20
S20 — 1.97
S21 — 2.01
S22 — 2.01
S23 — 1.73
S24 — 1.91
S25 — 2.16
S26 — 1.66
S27 — 1.27

1900 Prep samples B6-S1 through B6-S6 on COC for pickup by MitKem Courier.

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22

Tank Farm 5 / Bldg 6

1/22/99 HTS/Sampling log D013

0630 HTS Briefing / Assignments.
Topic: Use of razor knife or other cutting tools to cut away from person and always wear cut resistant gloves. Inspect all tools and discard ~~and~~ notify ~~broken~~ Admin of broken tools. Fall and trip hazard when maintaining erosion fencing at Bldg 179.

0730 Start excavation in center section of original EAETP14. dimensions of excavation = 12' x 14' x 5.5 ft bgs. Water infiltration from NE portion of new excavation and old deep excavation (5.5 ft bgs) being pumped into Gen Chemical tanker VAC Truck. Approximately 3500 Gallons pumped into tank and taken of site for disposal.

0750 Deep excavation in EAETP14 excavated down to 6.5 ft bgs.

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Tank Farm 5 / Bldg 6 23

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Shale color is light grey to darker grey. No visual staining or odor. OVA in BZ = 0.0 (NAB). Six inch diameter power (electric) cable traversing ~~excavation~~ below excavation from beyond northern extent of TP14 ~~and~~ to Southern extent of property. Informed previously by NAVY personnel that it is inactive and may contain PCB dielectric fluid. Cable visible from western edge of deep excavation at approximately 5.5-6 ft bgs. Backhoe instructed to stay away from cable. Stop Cease operations. See figure 1B for depths of excavation areas.

820 Collect HS-31, 32 and test. HS-31 from floor of deep excavation and

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HS-32 from wall of deep excavation approximately 5ft bgs. TEST is of 3/8" minor backfill material for berm in order to verify no cross-contamination.

0829 Start PCB Soils Extraction Process. See pages 7-14.

Canoe ~~B657~~ HS31 = 2.4 gm ~~HS~~

Soils = 10.1 gm

0837 Canoe HS32 = 2.5 gm

Soils = 10 gm

0844 Canoe TEST = 2.6 gm

Soils = 10 gm

0955 "SVB" added to tubes.

NC — D

10ppm — Neutral

HS31 — D

HS32 — D

TEST — D

959 Photometer

NC — 1.36

10 — .79

@B6 HS31 — 1.01

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HS32 — 1.17

TEST — 1.32

1000 Collect sample B657 from wall of excavation (deep) 5-6ft bgs, 3ft into shale bedrock and below depth of 6" Power cable.

1025 Collect B658 from floor of deep excavation = 6.5ft bgs.

1100 Instruct CRAFT to clean area in WTS and store equipment in designated areas. Conduct site inspection of clean-up activities B6 and TF5 WTS. Craft busy deconing equipment at B6, Barricading area and Soil erosion support at B779. Will inform J. Carey of site restoration/clean-up needs.

1330 Discuss Detection tables w/

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(26) Tarrk Farm 5 / Bldg 6

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Roger Beauregard

1410 Preps OVA 128 FW00173 S/N A42083 for Repair.

1430 Nathan Reynolds, MetKem Courier, on site for 36 excavation samples. 6 samples collected 1/20/99 and 2 samples 1/21/99. 72 hr turnaround for VOC 8260 (MeOH); TPH 8015 / 418.1, SVOC 8270, PCB 8082, Pesticides 8081, RCRA 8 metals.

1530 Depart site. Minimal cleanup accomplished in WTS. Will note on project Inspection checklists.

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Tank Farm 5 / Bldg 42 (38)

2/16/99 HTS / Sampling Log D013

0630 A. Prophete and Son Cary Conduct HTS and assignment briefing: Topic: Misc. Investigation activities at DS4. Utilities marked out, use caution + spotter when digging, stay away from excavated soils, FID to screen for up-grade PPE possibility. level D until further notice

0715 Mob equipment to DS4, North of Bldg 42.

0750 Start installing soil erosion control / silt fencing west and downgradient of proposed excavation (exploratory Trench) Location. Will inquire w/ State Reps as to need of installing silt fencing adjacent to roadway or upgradient of Trench location.

B. Lima, operator, removing 0-2in of top soil to install

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(36) Tank Farm S/ Bldg 42

2/16/99 HTS Sampling Log D013

fencing.

0815 A. Prophete on call w/ HAZCO concerning inoperable OVA 128 FW00042 unit. Regulator appears to have malfunctioned. Unable to repair on site.
of Hazco ~~to~~ will have courier bring new unit from NJ office by end of business today

0820 Appraised J, Cary of situation. Erosion control measures will be installed today at Bldg 42 S42-5 and Test Pit (MW09) Locations. Will collect samples from these locations as specified in work plan.

1040 Finish silt fence installation at DS4 - Bldg 42 location.

1100 At Bldg 6 to re-install high visible fencing and barricades around excavation. Two inch

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dia pump placed in sump pit drum to divert runoff. Due to inactive pump, center of berm washed out and infiltration in NE portion of excavation.

1120 Attempting to operate pump. Checking electric in Bldg 6.

1145 Pump inoperable. Removing from service and calling RS Rental for repair.

1215 Inspect Bldg 6 excavation fence and barricade.

1300 At DS4, MW09 location. Installing silt fence ~~at~~ ~~Dep~~ around proposed excavation location. Silt fence at 7' south, 10' ~~Not~~ West and down-gradient.

1340 Collect sample TPS04-01 from Transformer Pad South

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HTS Sampling Log

2/16/99 Tank Farm 5 / Bldg 42 DOB

of Pier 1. Surface asphalt, gravels and concrete removed from soil surface. Hand auger down to 1ft bgs and soils homogenized in Stainless Steel bowl for and placed in 2- 4oz Amber jars for PCB 8082.

Soil is mf black sand, trace brick frag, gritty, loose and moist. No odor or staining noted.

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Tank Farm 5 / Bldg 42

2/16/99 HTS / Sampling Log DOB

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Tank Farm S/ DS4

2/17/99 H+S / Sampling Log DOB

0630 H+S and Assignment Briefing Topic Exploratory Trench and Test Pit MW09. No entry in trenches or test pit. Soils (All) will be placed on Poly. PPE if necessary.

0715 At DS4 North of Bldg 42 to commence exploratory trenches. Calibrate Century OVA 128 Hanco # 3600 and MSA passport # FW00181 (See diagram next page)

0718 Start excavating soils from western extent of proposed trench. Approximately 5-6ft bgs. Moist soils from gw infiltration. Screen w/ OVA – 120ppm overlying soils = 0-30ppm, not sustained. @ 8ft bgs free water. Stop excavating downward. Will limit to 6ft bgs.

0825 Sample DPS01L01 collected from western extent for VOC 8260, SVOC 8270 and TPH 8015.

0830 @ 15 ft from western edge @ 6ft bgs

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Tank Farm S / DS4

2/17/99 H+S / Sampling Log DOB

OVA in soils = .4ppm
OVA in BZ = 0.0 ppm
no staining or odor.

0904 @ 58ft from western edge @ 5-6ft bgs. Screen patch of moist soils. OVA = 4ppm OVA in BZ = 0.0 ppm No odors or staining.

0953 @ 78ft from western edge @ 6-7ft bgs. Screen patch of soils. OVA-NAB

1004 Rich Goltlieb, DEM, on site

1017 Start excavating test pit at MW09 location. Reddish soils at 6"-1ft bgs. No odor, OVA = NAB. Will collect sample of soils

1031 Collect sample MW09TP01

1056 Excavation closed and filled in. Final depth 1.5 ft bgs. Soils at 1.5ft bgs is gritty black/brown sand, some

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Tank Farms / DSY

2/17/99 HTS Log / Sampling Log DOB

1115 Start excavating trench #2 at Bldg 42, north side. Soils extracted @ 6ft bgs, 5ft north of primary trench = 1ppm. No odor or staining noted. Trench #2 is ⊥ to primary trench at 20ft east of western edge. Soils from trench placed on poly sheeting

1136 Trench #2 @ 10ft North of primary trench and 6ft bgs. Soils in bucket = 5ppm. No visible staining or odor.

1145 Screen bucket of excavator. Black soils reading 200 ppm. No odor in area. Collect sample DPSOIL02 for VOC, SVOC, TPH

1305 Trench no. 2 @ 6ft bgs. soils exhibiting black lenses or staining. no odor, OVA = 20 ppm.

1312 Trench No. 2 @ 5ft bgs and 45ft North of primary trench junction. Bedding sand material

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at 3ft bgs. 1/2" dia Seepage (Drainage) pipe (plastic) broken and removed. OVA on reddish sand = 4 ppm.

1324 Trench No. 2 @ 6ft bgs. Red brown mf sand, some gravels, pieces of wood, rebar, trace cobbles. OVA = .4 ppm, In background = NAB. Trench @ 60ft north of primary trench and 3ft wide

1335 Trench No. 2 @ 6-7ft bgs. dark brown-black mf sand, some gravels and concrete pieces (fill material). Slight odor from bucket. Soils screened w/ OVA = 70-100 ppm. collected in HS jar and heated. OVA in jar = 85 ppm

1356 Finish excavating trench No 2. Depth = 6-7ft bgs. length = 70ft.

1405 Start excavating Trench #3, ⊥ to primary trench and 20ft east of trench #2. @ 8ft North of primary trench junction

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Tank Farm 5/DSY

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plastic 1/2" dia pipe broken at 2ft bgs. Surrounding soils and bedding sand tested w/ OVA = 20 ppm, not sustained. Plastic pipe ~~trending~~ traversing east - west.

1428 @ 15ft North of primary trench, 6ft bgs, soils in bucket have slight odor. OVA = 70ppm.

1435 @ 25ft North of primary trench, 3ft bgs, soils in bucket = 20 ppm. No odor, no staining. Many ~~pieces of~~ large concrete and rock pieces.

1441 @ 30-40ft North of primary trench 2ft bgs, red bricks and brick fragments. Soils in vicinity = 10 ppm w/OVA

1452 @ 53ft North of primary trench 2-3ft bgs, Concrete slab or footing left in place.

1512 @ 70ft North of primary trench. @ 68ft North, 5ft bgs,

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soils emitting slight odor. OVA in bucket soils = 100+ ppm

1515 Collect sample DPSOIL03 from above location for TPH, VOC and SVOC.

1540 Screen soils at east end of primary trench w/ OVA 128. Soil piles exhibit no staining or odors. OVA in soils = NAD. ~~Excavator~~ Backhoe starting to push soils back into excavation, from western extent.

1600 Collect sample DPSOIL04 from ~~old~~ soils excavated from eastern portion of primary trench @ 6-7ft bgs.

1630 Finish filling excavation, start grading w/ backhoe. Site cleanup and restoration

1700 Depart site

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Tank Farm 5 / DS4

2/18/99 HTS Log D013

0630 Daily HTS and Assignment Briefing - Topic: speed and Mulch trench and Test Pit. Wear rain gear, be careful of slippery conditions.

0730 Complete Building 179 Closeout, Closure Reports and DS4 Closeout Report.

1000 Clean and package MSA passport FW# 00181 to return to HAZCO. Return OVA 128 ~~FW~~ 1015 HAZCO Loaner #3600 to HAZCO. FEDEX to pickup today.

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Tank Farm 5 / DS4

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Disposal pit trenches

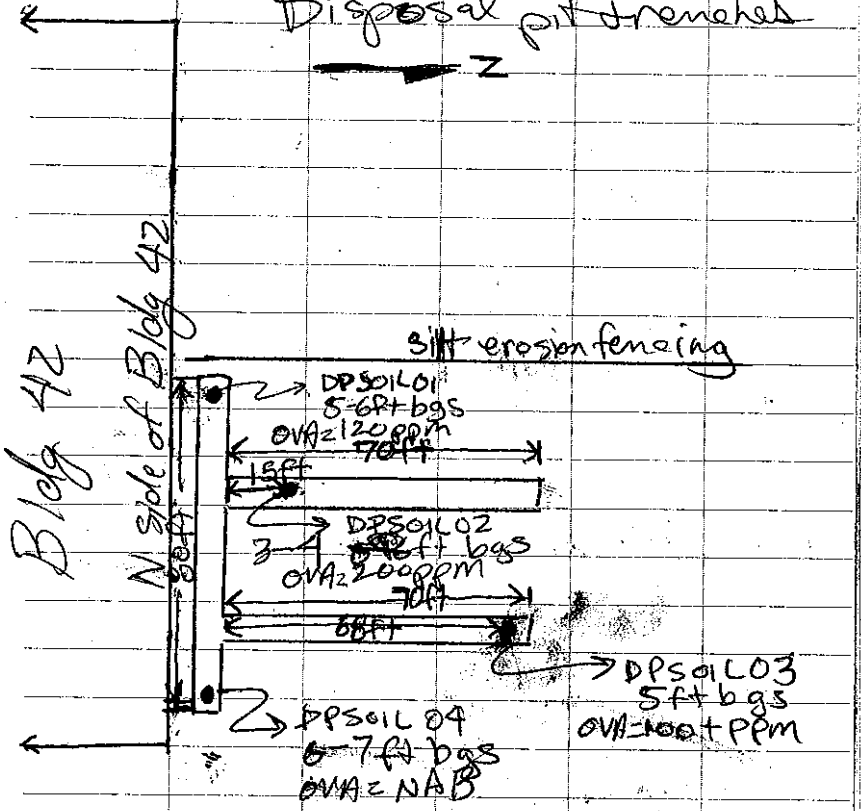

Figure 1

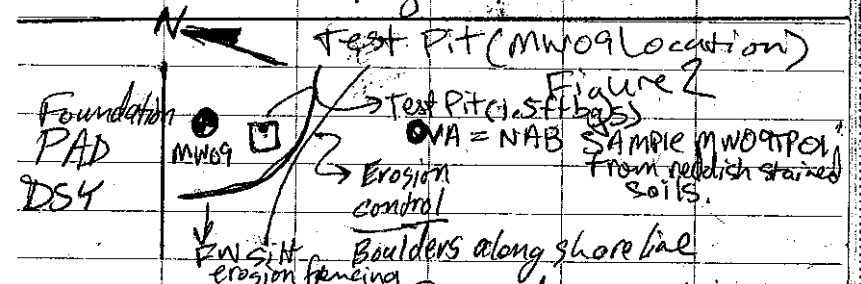

Figure 2

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Tank Farm 5 / DSY

2/19/99 HTS / Sampling Log D013

0630 HTS and Assignment Briefing. Topic: Utilities identified but use caution since looking for unknown pipes. Slippery conditions from cold conditions

0700 At proposed location S42-5 preparing to excavate soils adjacent to sump and expose the 4 walls. Will install erosion control around sump excavation.

0710 At S42-5, east wall of sump. Soils excavated to 1ft bgs. cf dark brown to ~~black~~ gray sand w/ black sand and gravels, little clay.

0730 At S42-5, east wall of sump. Soils excavated to 4ft bgs. mf dark brown sand and gravel, GW infiltration or sump water leaching into excavation.

0740 Start excavating soils on South wall of sump.

0750 exposed 4" cast iron pipe traversing east-west with PVC elbow going

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Tank Farm 5 / DSY

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trending down into bottom chamber. Call Jon Cary to appraise on situation

0810 Open metal lid (cover) over concrete sump chamber. Water in chamber.

DTW = 30 inches

0815 DTW = 30.375 inches

0829 Start excavating soils from N side of sump. Water entering excavation from eastern portion. Awaiting pump installation prior to continuing excavation.

0835 DTW in sump = 36 inches

0930 Start pumping water from sump into drums.

0940 Filled 4-55 gal drums. DTW = 41 inches.

0955 Start filling 8 additional drums. DTW = 46 inches

1015 exposing 4" dia cast iron pipe from sump chamber to exposed PVC pipe disconnected

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Tank Farm 5 / DSY

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Air Monitoring log

Time	OVA (B)	OVA (

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Tank Farm 5 / DSY

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from roof drain.

1030 Continue excavating soils on N end of excavation. Seepage from other portion of excavation. Infiltration may not be gw but leakage from w/in sump chamber. Purging 650 gallons into 12-55 gall drums reduced water column in chamber by 16 inches only.

1100 Start excavating soils from ~~DSP~~ western wall of sump to expose proposed piping going into building.

1130 Excavation of W side down to 3-4 ft bgs. Cut two 2" dia conduits w/ electrical wires w/in. Contacted office, awaiting Roger Beauregard to arrive on-site.

1145 Wiring determined to be dead. Continue excavation

Andrew Propheto 2/19/99

Tank Farm 8 / DSY

2/19/99 At S / Sampling Log D013

1300 Jon Cary instructs to stop excavation. Do not expose top of tank below sump entrance. Close off excavation w/ visible fencing, silt fencing down gradient and to the north, and erect containment for 12-55 gal drums w/ liner and hay bails.

1325 Depart site for main trailer at TF 8 support zone. Discuss future events w/ Jon Cary.

1700 Depart site.

Andrew Prophetto 2/19/99

Tank Farm 8 / DSY / Bldg 6

2/22/99 HTS / Sampling Log D013

0630 HTS and assignment briefing. Topic: Site restoration Bldg 6. Collect samples.

0710 Dal OVA 128 FW#

0730 At Bldg 6 at SW portion of excavation. ~~Excavator~~ Backhoe grading crushed stone across open excavation.

1000 Grading 3/8" minus across excavation stone and rebuilding slope along eastern border. Rebuilding berm in drainage swale to prevent runoff from entering main excavation. Redirection of swale will begin in spring when blacktop is placed.

1100 Five cu-yds of soils and asphalt removed from SW portion, former B6-S4 location. Sample B6-S4 W4B collected from wall at 1.5-2 ft bgs for Benzo(a)pyrene.

1230 At 3-100 cu-yd piles on DSY

Tank Farm 5 / Bldg 6

2/22/99 HTS Log/Sampling Log D013

foundation to sample for Waste Characterization.

Note: Finish compacting crushed stone w/ RS Rental Compactor. PSI to perform Field Compaction Test on 3/8" stone.

1300 Collect Sample B6-WC-01 from pile #1, Southern pile with Stainless steel hand auger. VOC 8260 taken directly from auger and preserved in MeOH. SVOC 8270, PCB 8082, Pesticides 8081, RCRA 8 Metals 8010, TPH 8015, IRC and Paintfilter ~~composites~~ Samples collected from Stainless Steel bowl composited from 5 locations in pile.

1325 Collect sample B6-WC-02 from pile #2 for same analytes as above.

1420 Collect Sample B6-WC-03 from pile #3 for same analytes

Andrew Prophete 2/22/99

Tank Farm 5 / Bldg 6

2/22/99 HTS Log / Sampling Log D013

as above.

1500 Close auger holes in poly cover sheeting w/ Duct Tape.

1540 At Tank Farm 5. Samples to be picked up by Mitkem Courier in the morning.

Andrew Prophete 2/22/99

Tank Farm 8

2/23/99 H+S / Sampling Log D013

0630 H+S and Assignment Briefing
Topic: Continue Backfill
Bldg 6 excavation

0700 Craft ~~toolbox~~ inventory
equipment, tools, supplies
in WTS Building and
flammable conex Box.

0750 J. Cambra at Bldg 6 w/
plate compactor to pack
3/8" minus stone. PSI
Inc. Technician, Peter
Previk on site to test
Compaction of backfill.

0830 A. Prophete at B42-sumppit
S42-1. Water from 12-drums
pumped back into sump
chamber. Collect one(1)
aqueous sample from
chamber for mean detection
Limits (MDL) to discharge
water to environment.

Andrew Prophete 2/22/99

Tank Farm 8

2/23/99 H+S / Sampling Log D013

1000 Back to Bldg 6 to
inspect compaction tests
Technician states results
reveal 90% ~~75%~~ 1015 compaction
in various areas. Continuing
to plate compact areas
which did not surpass 95%

1400 Finish compaction test
in Parking Area Bldg 6 and
20' east of ~~previous~~ test #1 location 1400
All areas passed minimum
Compaction specs 95.1 –
95.6 % compacted.
See Report # 448-90015-2
dated 2/23/99.

Tank Farm 8

2/24/99 HTS Log/ D013

0630 HTS Briefing and Assignment.
Topic: Backfill Settled areas at Tank Farm 8. Watch Soft spots for trailers. Stay clear of rollover zone.

0710 Start dumping trailers on tanks that subsided. Some tanks and pump house settled to 2ft bgs. Saturated from heavy rains and runoff. Spotter must watch and make sure trailers on level ground prior to dumping backfill.

0830 A. Prophet inspects TFS operations (HTS Building cleanup and inventory).

Andrew Prophet 2/24/99

Appendix R

Total Petroleum Hydrocarbons (TPH) Test Method 8015M

MITKEM CORPORATION

"Environmental Testing For The New Millennium"

175 Metro Center Boulevard
Warwick, Rhode Island 02886-1755
Phone: (401)-732-3400 Fax: (401)-732-3499
Email: mitkem@mitkem.com

Faxed twice 1/29 = No Answer
Called 1/29 - No Answer
Faxed 1/30 - No Answer
Attempting previously

FACSIMILE COVER SHEET

TO: ~~Andrew Prophete~~ John Kerry **FROM:** Ed Lawler

COMPANY: Foster Wheeler **DATE:** ~~1/29/01~~ 4/11

FAX NUMBER: ~~215-752-0650~~ 845-4169 **NUMBER OF PAGES:** 3 *(Including cover sheet)*

REFERENCE: TPH Questions.

COMMENTS: Attached is a write-up describing the 8015/8100 and 8015 TPH methods. Let me know if you need any more information.

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Petroleum Hydrocarbon Analysis

Extractable Petroleum Hydrocarbons **Analysis Method: 8015M/8100M**

This method, known as Total Petroleum Hydrocarbons (TPH/GC) measures petroleum hydrocarbons that can be extracted from a soil or water sample with solvent. The method uses the solvent extraction/concentration/gas chromatography-flame ionization detection option of SW-846 Method 8015. The test is similar to Method 8100 with the exception that total hydrocarbon material is reported rather than individual chemical compounds. Mitkem uses the terminology Method 8015M/8100M to differentiate this test from the test for volatile petroleum hydrocarbons or GRO, which uses other options available in Method 8015.

Petroleum hydrocarbon material is separated from the sample matrix by solvent extraction. The solvent is concentrated using evaporation and injected into a gas chromatograph equipped with flame ionization detectors. The hydrocarbon peaks are integrated, and their total concentration is calculated. Instrumental response is calibrated using standards of diesel fuel equivalent to 0.4 to 50 mg/L (ppm). A diesel fuel laboratory control sample is extracted and analyzed with each batch as an additional quality control measure.

This test is sensitive to the full range of hydrocarbon fuels, from gasoline to #6 fuel oil and heavier weight material, up to approximately C36. The test will underestimate the concentration of gasoline however, due to loss during the concentration step of the analysis. The same test can be used to report Diesel Range Organics (DRO) where material from approximately C10 to C28 are reported. Hydrocarbons with higher boiling points than C28 are not reported when DRO is requested (but are reported when TPH is requested).

The test detects a similar range of chemicals to the semivolatile organic analysis Method 8270, but unlike the GC/MS method is not used to identify specific chemical compounds.

An option with this test is to identify the hydrocarbon fuels or other products detected in a sample by comparison of the pattern of resolved and unresolved peaks to that of known fuel or product standards. The patterns of resolved and unresolved peaks in each sample are compared to those of known products. Evaporative and/or biological weathering can complicate product identification. Results are compared to a library of standards of known petroleum products obtained from commercial analytical standard sources. The following petroleum products are included in the library of standards:
Fuel oils #1, #2, #3, #4, #5, #6, kerosene, mineral spirits, turpentine, paint thinner, jet fuels JP-4 and JP-5, gasoline, aviation gasoline, lubricating oil, motor oil, hydraulic oil,

transmission oil, coal tar, creosote. These samples and standards have been analyzed under identical conditions. The internal standard peak, 5a-androstane, added to each sample, standard and blank, is used as an aid in product identification. The retention time of this peak is used to match chromatograms analyzed at different times, or on different instruments.

Volatile Petroleum Hydrocarbons **Analysis Method: 8015M**

This method, also known as Gasoline Range Organics or GRO, measures the volatile portion of any petroleum product in a soil or water sample. The method uses the purge and trap/Gas Chromatography with Flame Ionization Detection option of EPA SW-846 Method 8015.

In this method the volatile hydrocarbons are purged from the sample by bubbling with an inert gas, and concentrated on an adsorbent trap. The trap is heated and back-flushed into a gas chromatograph where the components are separated and detected with a flame ionization detector. The method is similar to Method 8260, except individual chemical compounds are not reported; rather all peaks in the range of gasoline are integrated, and a total concentration is calculated. The analytical system is calibrated using standards of gasoline diluted in methanol. The calibrated range of the instrument is from 0.5 to 2 mg/L. More concentrated samples can be analyzed with dilution. Results are reported as Gasoline Range Organics. Water samples are preserved with HCl, soil samples can be preserved with methanol (at elevated reporting limits) or unpreserved.

This analysis will detect gasoline, and the lighter fractions of other light hydrocarbon fuels, but will underestimate the concentrations of those fuels with higher boiling points than gasoline.