EPA Region 5 Records Ctr.
346230

# AFTER-ACTION PCB REMOVAL REPORT
# FOR THE
# MAHONINGSIDE POWER PLANT SITE
# WARREN, TRUMBULL COUNTY, OHIO
# SITE ID: B5P4
# TDD: S05-0012-004

**April 15, 2001**

**Prepared for:**

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
**Emergency Response Branch**
**77 West Jackson Boulevard**
**Chicago, Illinois 60604**

Prepared by:_____ Date: _____
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Reviewed and
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# I. SUMMARY OF EVENTS

## A. Site Conditions and Background

1. Initial Situation: The Mahoningside Power Plant, hereafter referred to as the "site", is located at 650 Summit Street in Warren, Trumbull County, Ohio. The geographical coordinates for the site are latitude 41°14'37.5" north and longitude 80°49'42.8" west. The Site Location Map (Figure 1) illustrates the geographic location of the site with respect to the surrounding area. The site is located in a mixed residential, industrial, and commercial area. The site is bordered to the south by Summit Road. A railroad line is located to the north of the site. The west portion of the site is bound by Tod Avenue, and adjacent to the east of the site is the Mahoning River and then Mahoning Avenue. There is a school within one mile of the site (to the south). Approximately one half mile to the southeast of the site is City Hall, and there is a city park less than 1/4 mile to the south. The Site Features Map (Figure 2) provides a detailed illustration of the site.

The former Mahoningside Power Plant operated as an electric-producing facility for the city. Since 1995, the City of Warren (City) has worked to redevelop this property. In 1997, the City received a Phase II environmental site assessment report that was generated by an environmental contractor retained by the City. As part of the assessment, thirty (30) soil borings were conducted to a depth of up to 12 feet below ground surface (bgs). The laboratory analysis of the samples selected from this assessment did not indicate a threat of hazardous materials above known action levels at the site.

Based on the information the City obtained through that investigation, a general demolition and debris removal project was initiated by a private contractor hired by the City. During the course of the project, asbestos containing materials were found to be part of the fill at the site. Near the end of the demolition project, routine sampling revealed that polychlorinated biphenyls (PCBs) were located in the basement of the demolished power plant building and the extent of the contamination was unknown. Additional sampling was conducted by the contractor to further determine potentially contaminated areas in the basement. The samples were sent to an independent laboratory for analysis of PCB concentrations. Results from this sampling event revealed that PCB aroclor 1260 was present at the site in concentrations as high as 147,000 milligrams per kilogram (mg/kg). For the purposes of this report, mg/kg will be referred to as parts per million (ppm). The City continued to conduct demolition work at the site as well as initiating the removal, stabilizing, and on-site storage of PCB contaminated materials. Due to

Quadrangle Location

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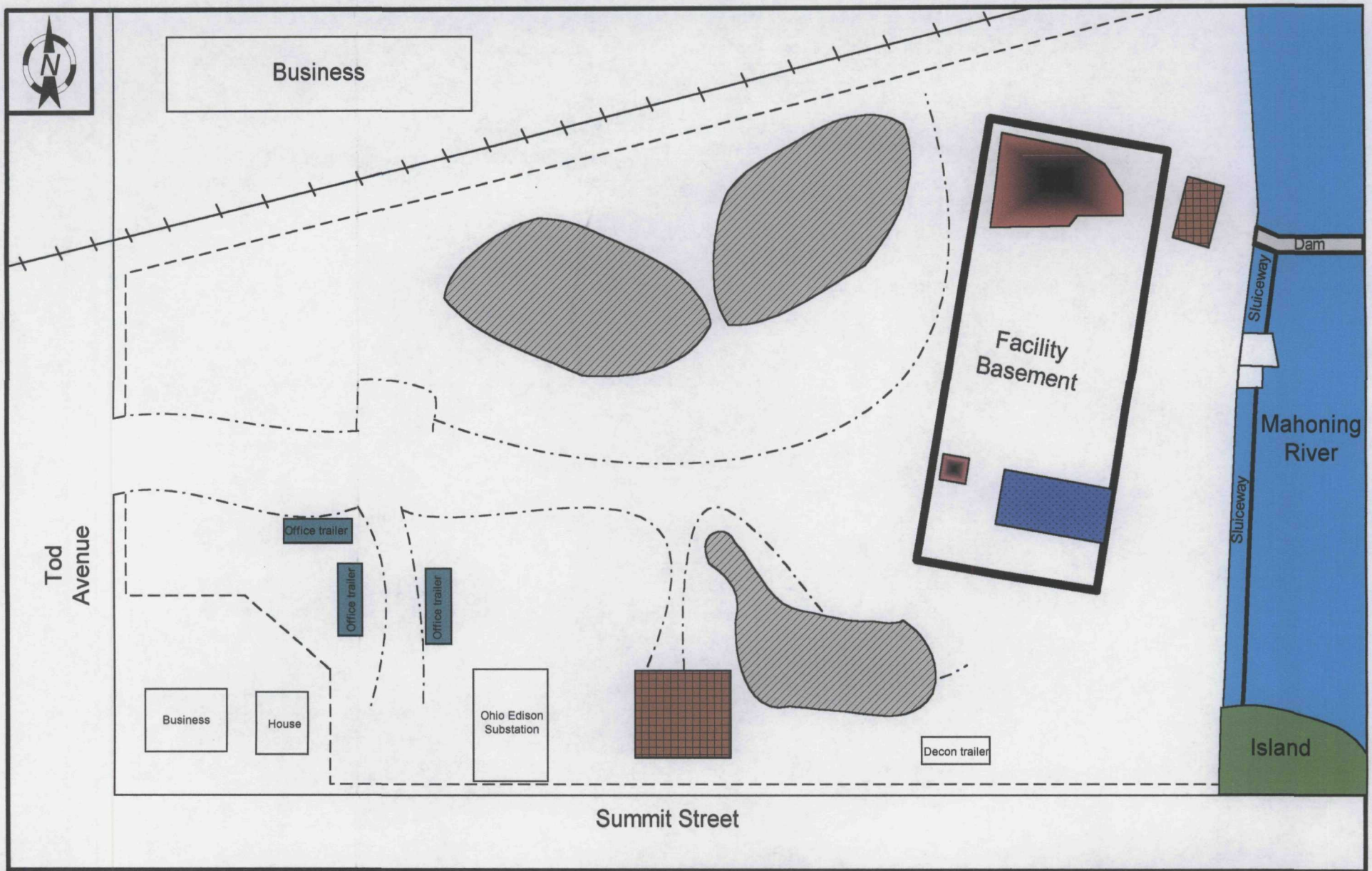
Roy F. Weston, Inc.
Region 5 - Superfund Technical Assessment and Response Team
7123 Pearl Road, Suite 101
Middleburg Heights, Ohio 44130

| | |
|---|---|
| TITLE: Site Location Map | FIGURE: 1 |
| SITE: Mahoningside Power Plant | SCALE: 1:24,0000 |
| CITY: Warren STATE: Ohio | TDD: 0012-004 |
| SOURCE: Maptech Terrain Navigator Computer Software of USGS Topomaps | Date: 10-17-00 |




## Legend

- Railroad
- Fenceline
- Access road
- Debris piles
- Excavation areas
- Water treatment
- Building

Roy F. Weston, Inc.
7123 Pearl Road, Suite 101
Middleburg Heights, Ohio

Superfund Technical Assistance and Response Team
Region V

| | |
|---|---|
| TITLE: Site Features Map | |
| SITE: Mahoningside Power Plant Site | |
| TDD: 0012-004 | FIGURE: 2 |
| CITY: Warren ST: OH | SCALE: None |
| SOURCE: Roy F. Weston | DATE: 2001 |

this additional work the City's funding sources were exhausted before the project could be completed.

2. Location of Hazardous Substance: The primary source points of contamination during the demolition and removal phase of the cleanup at the Mahoningside Site appeared to be in the lines, sumps, and pits in the basement structure of the demolished power plant building. The City's contractor used pressure washing technologies to clean the lines, pits, and sumps. The collected solid materials from this activity were placed into roll-off boxes. The roll-off boxes were then staged at the site in anticipation of future disposal. The water associated with these activities was treated on-site through a temporary activated carbon water treatment system. Approximately five gallons of elemental mercury-containing sediment was found and removed from a sluiceway adjacent to the site at the edge of the Mahoning River (see Figure 2). Initial samples collected from the river sediments near a discharge line which exited the Mahoningside Site revealed PCBs to be present in concentrations as high as 224 ppm.

3. Cause of the release or discharge: The cause of the release of PCBs at the Mahoningside Site remains under investigation.

**B. U.S. EPA Response**

On July 21, 2000, the City requested assistance from the United States Environmental Protection Agency (U.S. EPA) to address the remaining PCB-related contamination at the site. In early August, U.S. EPA took over de-watering and water treatment actions at the site. U.S. EPA authorized funding in September of 2000 to clean-up known PCB contaminated materials on site and to address the entire site, including the subsurface, for contamination. U.S. EPA mobilized the Emergency and Rapid Response Services (ERRS) contractor and the Superfund Technical Assessment and Response (START) contractor on October 10, 2000, to complete removal activities started by the City.

**C. Planned Sampling Activities**

1. River Assessment: Based on historical data of the site, U. S. EPA determined that the Mahoningside Site posed a potential PCB release threat to the Mahoning River. The Mahoning River is directly adjacent to the site (see Figure 1). During historical use at the power plant, water was diverted from the river for plant operations and then discharged through a 42-inch pipe back into the river. Data from sampling conducted by the City's contractor and a survey of the Mahoning River sediments by the U.S. Army Corps of Engineers suggests that there is some PCB contamination in the area adjacent to and within one mile downstream of the site. Based

on this information, U.S. EPA tasked the START contractor to plan and conduct sediment sampling of an approximate one-mile stretch of the Mahoning River adjacent to and downstream of the site.

**2.** PCB Extent of Contamination Assessment: To delineate areas of the site where PCB contamination existed and to determine the PCB concentrations, an extent of contamination survey was planned and conducted. The sampling activities included surficial samples of solid materials from the sumps, lines, and pits in the basement and subsurface samples collected using a drill rig. The analytical and screening results obtained were then used to determine what areas at the site needed to be excavated.

**D. PCB Removal Activities**

The following is a brief description of the removal activities performed at the direction of the U.S. EPA. A more detailed discussion is presented in the sections that follow.

**1.** Structural Cleaning: Pressure washing of lines, pits, and sumps in the now open power plant building basement occurred several times through the course of the project. The water and solids cleaned out of the lines were collected and separated. The water was pumped, treated, and discharged and the solids were mixed with kiln dust and/or fly ash for solidification. The solid material was then staged in roll-off boxes for subsequent off-site disposal.

**2.** River Sediment Removal: One area of the river, near the 42-inch discharge pipe, contained PCB contaminated sediments at significant levels. The sediments of this area were removed and stabilized for off-site disposal. Clean sand from a certified off-site source was placed into the excavation area.

**3.** Facility Soils and Shale Removal: Excavation activities of on-site soils commenced after estimating the extent of contamination. An on-site verification level that was consistant with guidance for maximum PCB contamination levels in the Toxic Substances Control Act (TSCA) was established. Throughout the course of the excavation activities, field screening for PCBs was conducted using Chlor-n-Soil™ field test kits to determine when confirmation samples would be collected. Several rounds of sampling were conducted before all designated excavation areas were determined to be less than the on-site verification level.

## II. RIVER ASSESSMENT AND SEDIMENT REMOVAL ACTIONS

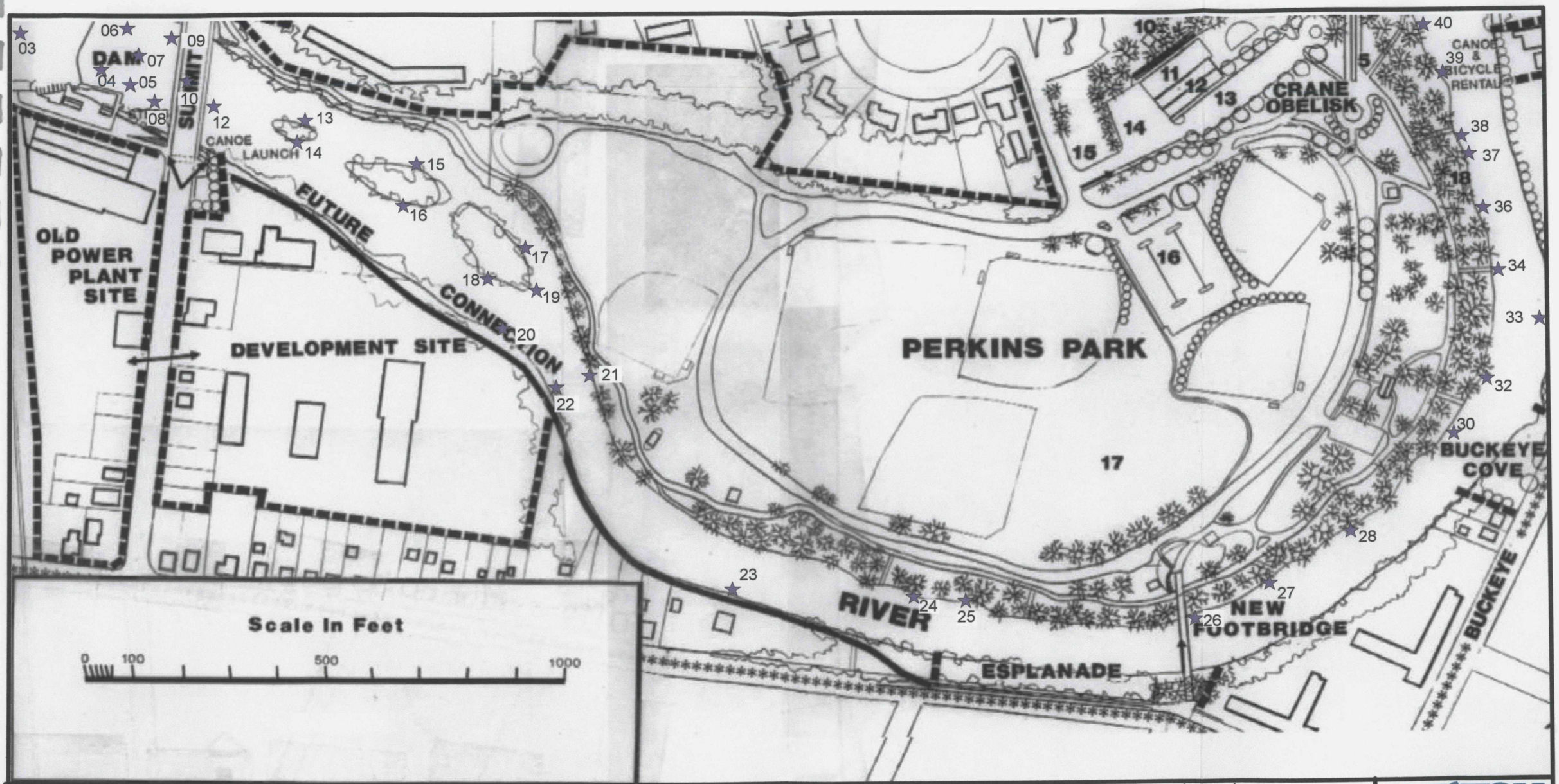
### A. Mahoning River Assessment

To determine if appreciable levels of PCBs had migrated from the Mahoningside Site into the Mahoning River, a sampling event of the sediments in an approximate one-mile stretch of the river was planned and executed. The START contractor coordinated with Ohio EPA to conduct reconnaissance and sediment sampling in the proposed sample areas.

Prior to the commencement of the river sediment sampling activities, a sampling plan was generated and approved by U.S. EPA. Forty (40) locations were proposed as sample collection points. In order to further delineate where samples would be collected, START diagramed the section of river to be sampled and divided it into three sections. These were labeled as the Near Dam Area, Perkins Park Island Area, and Main Channel Area. START identified locations in all three areas where sediment was available for sampling.

On November 2, 2000, START and Ohio EPA representatives conducted a reconnaissance of the proposed sampling area. The reconnaissance revealed that the majority of the main channel section of the river was either composed of bedrock or sand and gravel containing very little collectable sediments. The river in this area is shallow and the current is fast which minimizes sediment deposition. In order to identify areas where samples of the river sediment could be collected, START and Ohio EPA representatives utilized an Ohio EPA boat to navigate the river. River depth and bottom composition were estimated using a length of aluminum conduit. Areas near the shoreline on each side of the river were identified as having material that could be sampled. These areas were documented so that they could be re-located during the sampling event.

Sediment sampling was performed on November 15, 2000, at MR-40, which was the most downstream sample collection point. The sediments were collected using stainless steel scoops/spoons and were thoroughly mixed in aluminum pans prior to being placed into 4-ounce sample jars with lids. Sediment sample collection continued in the upstream direction until sample location MR-04 was reached (Figure 3). However, at MR-35, the material previously identified to be collected for sample analysis (two weeks earlier) had been washed out and only hard shale remained. For this reason, no sample was collected from this location. In all there were four sample locations which did not hold sufficient material for sampling (MR-35, MR-31, MR-29, and MR-11) and are not included on Figure 3.




MR-01 : NS
MR-02 : 0.27/0.066
MR-03 : ND
MR-04 : 0.064
MR-05 : 1.9
MR-06 : 0.048
MR-07 : ND

MR-08 : 0.79
MR-09 : 0.083
MR-10 : 0.13
MR-11 : NS
MR-12 : 0.58
MR-13 : 0.090
MR-14 : 0.44[A]/0.62[B]
MR-15 : 0.35[A]/0.43[B]

MR-16 : 0.23[A]/0.22
MR-17 : 1.0
MR-18 : 0.11
MR-19 : 0.37[A]/0.54[B]
MR-20 : 1.3
MR-21 : 0.27
MR-22 : 3.8/1.2

MR-23 : 0.17[A]/0.44
MR-24 : 8.4
MR-25 : 0.037
MR-26 : 0.14
MR-27 : 0.22
MR-28 : 1.4[A]/0.83[A]
MR-29 : NS
MR-30 : 0.15

MR-31 : NS
MR-32 : 1.4
MR-33 : 0.19[C]/0.14
MR-34 : 1.8
MR-35 : NS
MR-36 : 1.5
MR-37 : 0.31
MR-38 : 5.2

MR-39 : 2.1
MR-40 : 1.4/6.3

NOTE: Sample MR-02 was north of MR-03 approximately 200 feet and is not graphically represented on this map.

Legend

# Aroclor 1260
#[A] Aroclor 1248
#[B] Aroclor 1254
#[C] Aroclor 1242
ND = Non Detect
NS = Not Sampled

NOTE: Sample results are reported in milligrams/kilogram. Sample IDs which have two same-coloured results on the same line represent duplicate samples.

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River sediment sampling locations and results map

Figure 3

Three upriver sediment samples were collected on November 16, 2000. These samples (MR-01, MR-02, and MR-03) were collected to be used as a reference for any potential upriver PCB releases which may have occurred in the past. Sample MR-02 was analyzed and found to contain 0.27 ppm PCB aroclor 1260.

START and the Ohio EPA representatives were able to collect samples from 36 of the 40 proposed locations during the river sediment sampling period. One sample, adjacent to the 42-inch discharge pipe from the site, had been collected prior to the river assessment work and was analyzed for PCB content (labeled as PRE-SED in Table 1).

All samples were properly labeled and shipped to an independent laboratory for analysis. The analysis revealed that PCB levels in this approximate one-mile section of the Mahoning River ranged from non-detect to 8.4 ppm PCB aroclor 1260. In addition to PCB aroclor 1260, aroclors 1242, 1248, and 1254 were also identified to be present at low levels in several of the samples.

To further identify the extent of contamination in the area near the 42-inch discharge pipe, U.S. EPA directed START to collect nine (9) additional samples from this area on January 23, 2001. These samples were given the sample designations MR-42-001 through MR-42-009 and were processed in the same manner as the other sediment samples. START delivered these samples to Severn Trent Laboratories, Inc., located in North Canton, Ohio, for PCB analysis. Analytical results of these samples revealed that PCBs were present in the sediments near the 42-inch pipe ranging from 280 ppm to 6,550 ppm. The physical structure of the river bottom in this area seems to be a rough bowl shaped-depression which acts to retain the PCB contaminated sediments resulting in a build-up of concentration. At the eastern edge of this area, a sand bar is present approximately one foot below the surface of the water. Sample MR-08 (0.79 ppm PCBs) was collected approximately 15 feet from sample MR-42-008 (350 ppm PCBs) but the two locations were separated by this sandbar. This would indicate that the PCBs either have washed out of the main channel area or, more likely, have been for the most part trapped within this depression area.

Table 1 - River Assessment PCB Analytical Results

PCB ANALYTICAL RESULTS FOR MAHONINGSIDE POWER PLANT SITE

WARREN, TRUMBULL COUNTY, OHIO

Date Collected: 11-15-00 through 11-16-00

| | | Analyte Concentration (mg/kg) | | | | |
|---|---|---|---|---|---|---|
| Sample ID | Date | Aroclor-1242 | Aroclor-1248 | Aroclor-1254 | Aroclor-1260 | Flag |
| Sediment Samples from Mahoning River | | | | | | |
| MR-40-A | 11-15-00 | ND | ND | ND | 1.4 | D |
| MR-40-B | 11-15-00 | ND | ND | ND | 6.3 | D |
| MR-39 | 11-15-00 | ND | ND | ND | 2.1 | D |
| MR-38 | 11-15-00 | ND | ND | ND | 5.2 | D |
| MR-37 | 11-15-00 | ND | ND | ND | 0.31 | D |
| MR-36 | 11-15-00 | ND | ND | ND | 1.5 | D |
| MR-34 | 11-15-00 | ND | ND | ND | 1.8 | D |
| MR-33 | 11-15-00 | 0.19 | ND | ND | 0.14 | |
| MR-32 | 11-15-00 | ND | ND | ND | 1.4 | D |
| MR-30 | 11-15-00 | ND | ND | ND | 0.15 | |
| MR-28-A | 11-15-00 | ND | 1.4 | ND | ND | |
| MR-28-B | 11-15-00 | ND | 0.83 | ND | ND | |
| MR-27 | 11-15-00 | ND | ND | ND | 0.22 | D |
| MR-26 | 11-15-00 | ND | ND | ND | 0.14 | |
| MR-25 | 11-15-00 | ND | ND | ND | 0.037 | J |

Table 1 - River Assessment PCB Analytical Results

PCB ANALYTICAL RESULTS FOR MAHONINGSIDE POWER PLANT SITE

WARREN, TRUMBULL COUNTY, OHIO

Date Collected: 11-15-00 through 11-16-00

| | | Analyte Concentration (mg/kg) | | | | |
|---|---|---|---|---|---|---|
| Sample ID | Date | Aroclor-1242 | Aroclor-1248 | Aroclor-1254 | Aroclor-1260 | Flag |
| MR-24 | 11-15-00 | ND | ND | ND | 8.4 | D |
| MR-23 | 11-15-00 | ND | 0.17 | ND | 0.44 | |
| MR-22-A | 11-15-00 | ND | ND | ND | 3.8 | D |
| MR-22-B | 11-15-00 | ND | ND | ND | 1.2 | |
| MR-21 | 11-15-00 | ND | ND | ND | 0.27 | |
| MR-20 | 11-15-00 | ND | ND | ND | 1.3 | D |
| MR-19 | 11-15-00 | ND | 0.37 | 0.54 | ND | |
| MR-18 | 11-15-00 | ND | ND | ND | 0.11 | |
| MR-17 | 11-15-00 | ND | ND | ND | 1.0 | |
| MR-16 | 11-15-00 | ND | 0.23 | ND | 0.22 | |
| MR-15 | 11-15-00 | ND | 0.35 | 0.43 | ND | |
| MR-14 | 11-15-00 | ND | 0.44 | 0.62 | ND | |
| MR-13 | 11-15-00 | ND | ND | ND | 0.090 | |
| MR-12 | 11-15-00 | ND | ND | ND | 0.58 | |
| MR-10 | 11-15-00 | ND | ND | ND | 0.13 | |
| MR-09 | 11-15-00 | ND | ND | ND | 0.083 | |

Table 1 - River Assessment PCB Analytical Results

PCB ANALYTICAL RESULTS FOR MAHONINGSIDE POWER PLANT SITE

WARREN, TRUMBULL COUNTY, OHIO

Date Collected: 11-15-00 through 11-16-00

| | | Analyte Concentration (mg/kg) | | | | |
|---|---|---|---|---|---|---|
| Sample ID | Date | Aroclor-1242 | Aroclor-1248 | Aroclor-1254 | Aroclor-1260 | Flag |
| MR-08 | 11-15-00 | ND | ND | ND | 0.79 | |
| MR-07 | 11-15-00 | ND | ND | ND | ND | |
| MR-06 | 11-15-00 | ND | ND | ND | 0.048 | J |
| MR-05 | 11-15-00 | ND | ND | ND | 1.9 | |
| MR-04 | 11-15-00 | ND | ND | ND | 0.064 | J |
| MR-03 | 11-16-00 | ND | ND | ND | ND | |
| MR-02-A | 11-16-00 | ND | ND | ND | 0.066 | J |
| MR-02-B | 11-16-00 | ND | ND | 0.27 | ND | |
| MR-42-001 | 1-23-01 | ND | ND | ND | 2,000.0 | |
| MR-42-002 | 1-23-01 | ND | ND | ND | 850.0 | |
| MR-42-003 | 1-23-01 | ND | ND | ND | 690 .0 | |
| MR-42-004 | 1-23-01 | ND | ND | ND | 960 .0 | |
| MR-42-005 | 1-23-01 | ND | ND | ND | 28 .0 | |
| MR-42-006 | 1-23-01 | ND | ND | ND | 120.0 | |
| MR-42-007 | 1-23-01 | ND | ND | ND | 910.0 | |
| MR-42-008 | 1-23-01 | ND | ND | ND | 35 .0 | |

Table 1 - River Assessment PCB Analytical Results

PCB ANALYTICAL RESULTS FOR MAHONINGSIDE POWER PLANT SITE

WARREN, TRUMBULL COUNTY, OHIO

Date Collected: 11-15-00 through 11-16-00

| | | Analyte Concentration (mg/kg) | | | | |
|---|---|---|---|---|---|---|
| Sample ID | Date | Aroclor-1242 | Aroclor-1248 | Aroclor-1254 | Aroclor-1260 | Flag |
| MR-42-009 | 1-23-01 | ND | ND | ND | 300.0 | |
| PRE-SED | 10-24-00 | ND | ND | ND | 6,550 | ND |

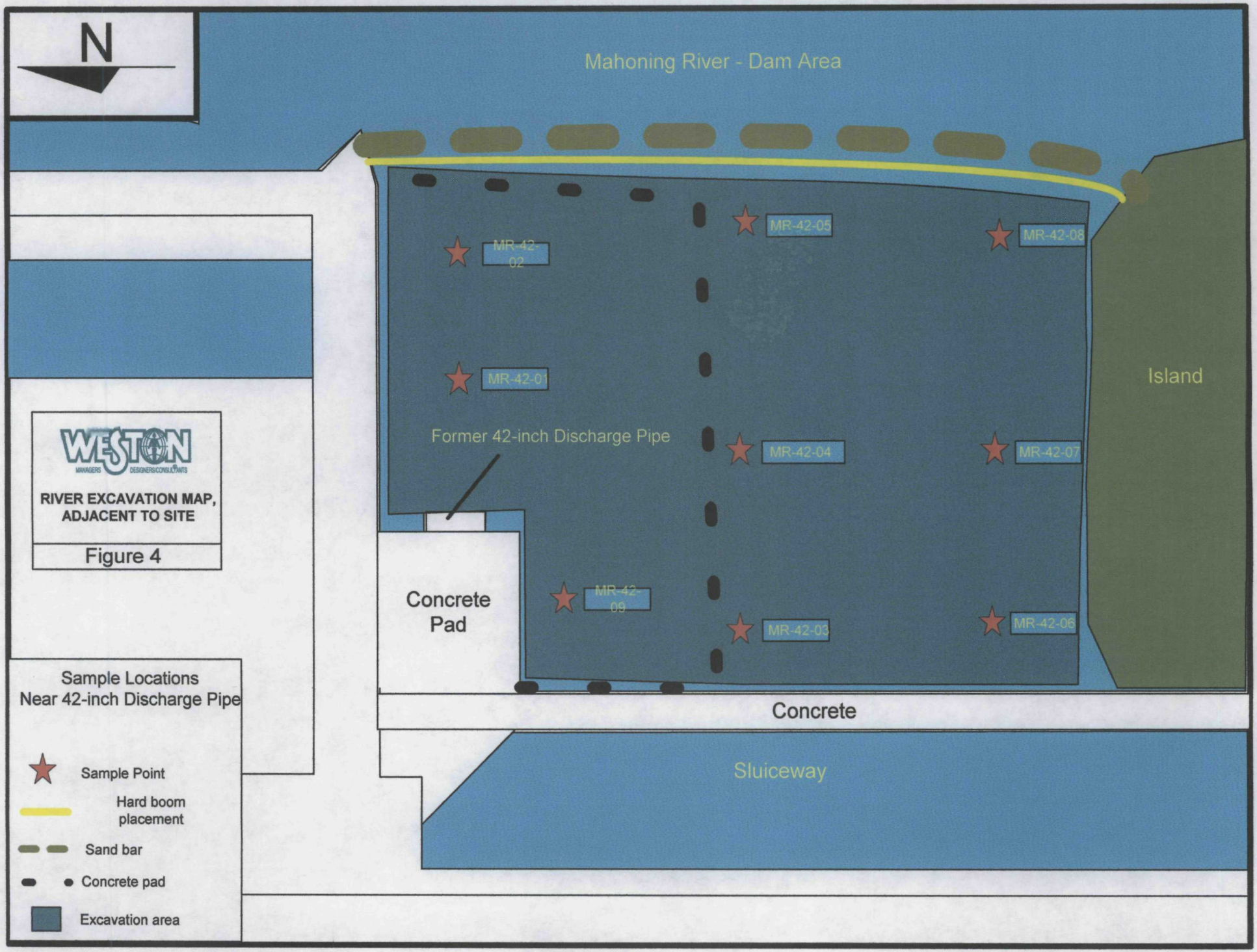
Key:

ND = Non-detect.

J = estimated value.

D = sample was diluted for analysis.

Source: Samples MR-01 through MR-40 were analyzed by ECC Laboratories in Cincinnati, Ohio. Samples MR-42-001 through MR-42-009 were analyzed at Severn Trent Laboratory, Inc., in North Canton, Ohio.


N
Mahoning River - Dam Area
MR-42-02
MR-42-05
MR-42-08
MR-42-01
Island
Former 42-inch Discharge Pipe
MR-42-04
MR-42-07
Concrete Pad
MR-42-09
MR-42-03
MR-42-06
Concrete
Sluiceway
WESTON
MANAGERS DESIGNERS/CONSULTANTS
RIVER EXCAVATION MAP, ADJACENT TO SITE
Figure 4
Sample Locations Near 42-inch Discharge Pipe
Sample Point
Hard boom placement
Sand bar
Concrete pad
Excavation area

### B. PCB Contaminated River Sediment Removal

Based on the analytical results obtained from the sediment sampling events, the determination was made that the sediments in the depression area near the former 42-inch discharge pipe contained significant PCB concentrations and needed to be removed (Figure 4). The removed material would be stabilized and included with the other PCB contaminated material that was being staged for subsequent transport to an off-site TSCA approved landfill for disposal.

The sediment removal work was conducted on February 13, 2001. A long reach excavator was lowered via crane onto an existing small island that was designated as the south border of the excavation area. Hard boom was deployed over the sandbar on the east edge of the excavation area to keep disturbed sediments from washing out of the excavation area. The long-reach excavator was used to direct-load to a dump truck. The excavated material was solidified with kiln dust and added to the PCB waste stockpile.

Approximately 80 cubic yards of PCB contaminated material was removed from this area. During the excavation, it was revealed that the river bottom on the north half of the excavation area, the location of the highest PCB results, was concrete with approximately one foot of sediment and other solid material covering it. This area was repeatedly scraped by the long-reach excavator to ensure all the material was removed. The southern half of the area was excavated to several feet below the original river bottom level. Field screening of the remaining sediments was then conducted by START in the south half of the excavation area. Field screening results indicated that PCB levels of the remaining sediments were below 50 ppm.

### C. Restoration

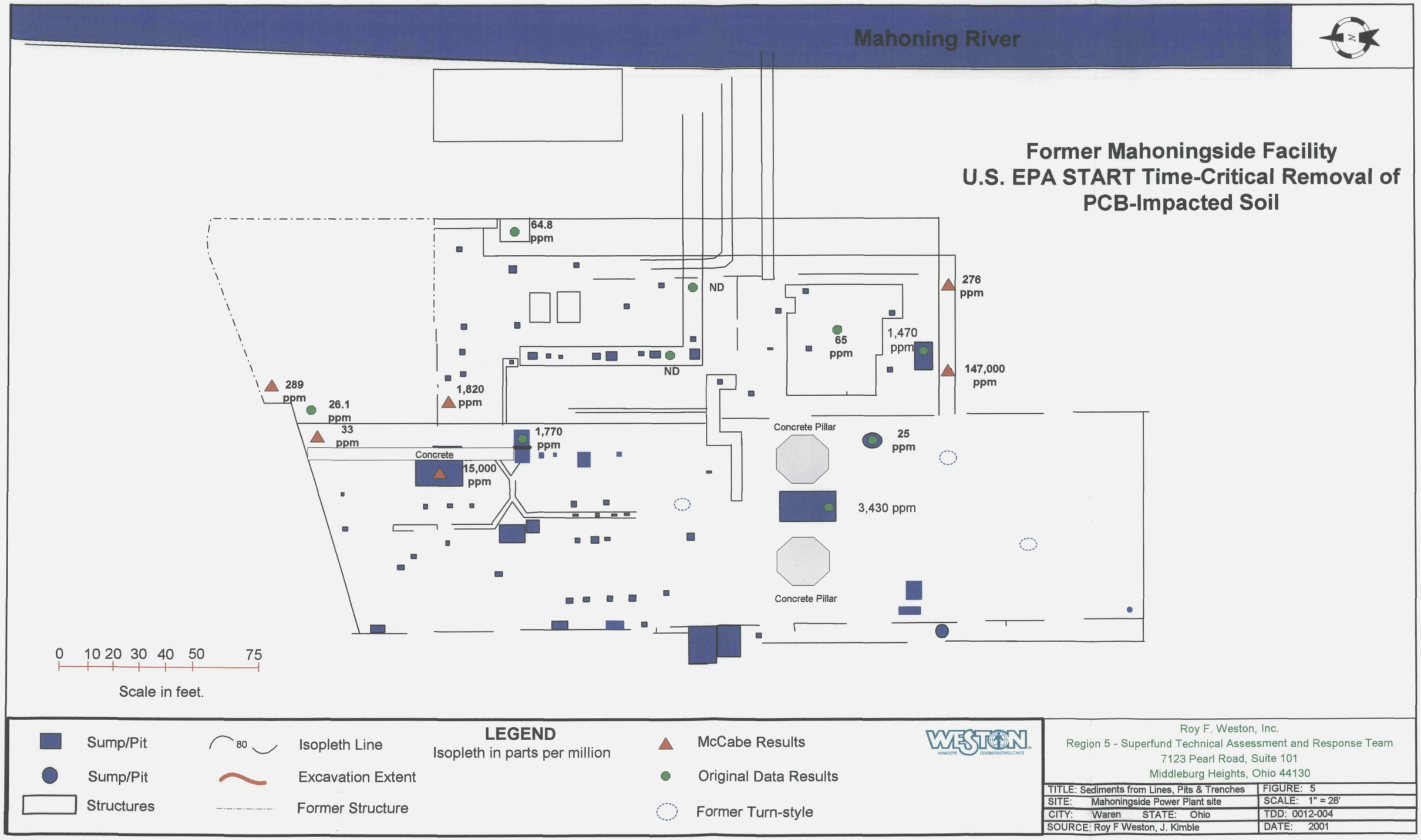
To restore the excavated area, approximately 80 cubic yards of clean sand was delivered to the site and placed into the area. The boom was removed from the area at this time as well.

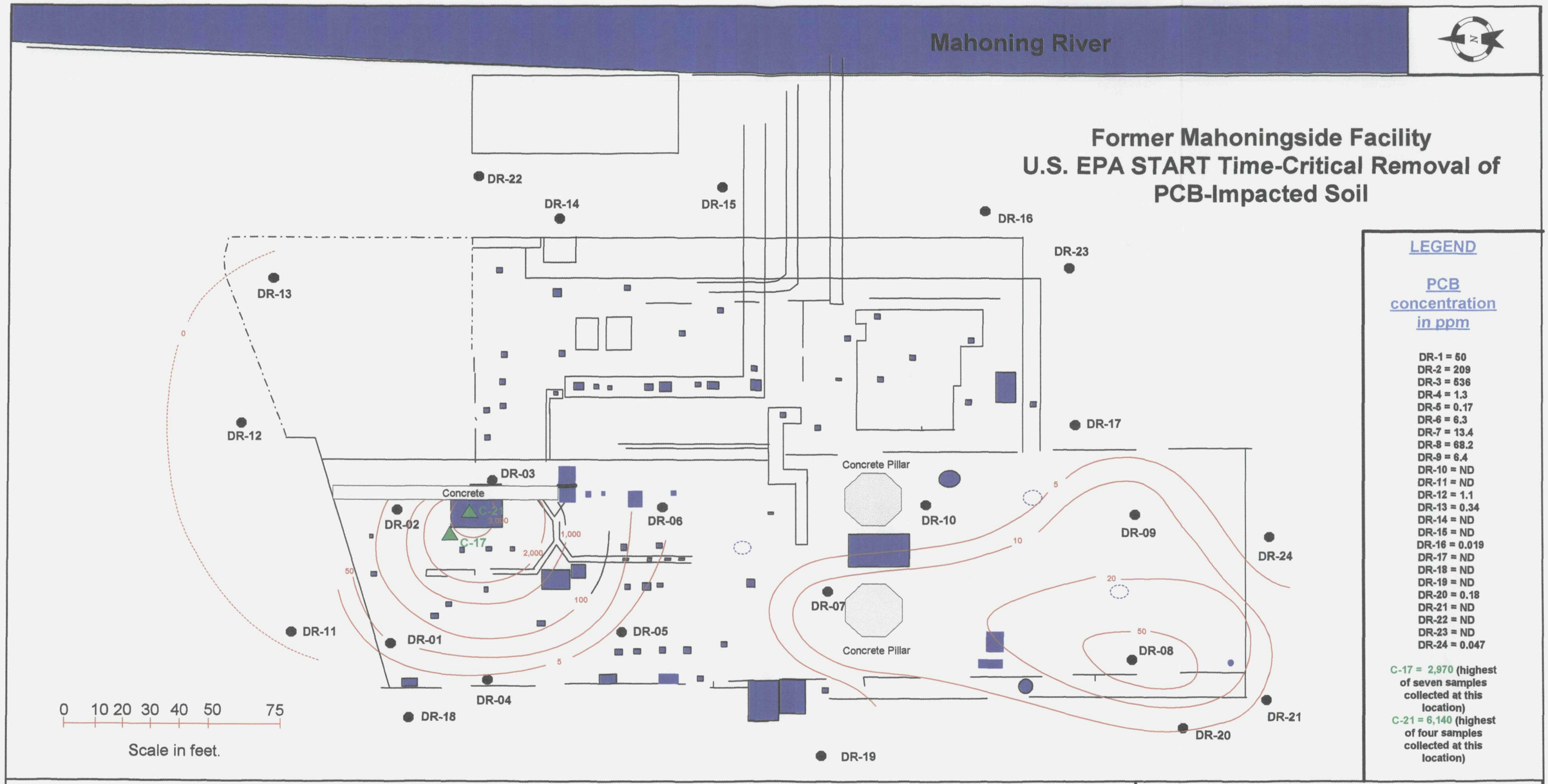
## III. EXTENT OF ON-SITE CONTAMINATION SURVEY

### A. Sumps, Pits, and Lines

Prior to determining the extent of on-site contamination associated with sumps, pits, and lines in the power plant facility basement structure, several rounds of pressure washing activities to remove any solids and/or trace oils left in these areas were conducted. The water and solids were collected during this activity. The collected water was treated through an on-site waste water treatment system, and the solids were stabilized and added to the existing PCB waste stockpiled for off-site disposal. Sampling was conducted after these activities and the collected samples were field screened to determine PCB

concentrations. Those samples which showed PCB levels above 50 ppm through field screening techniques were sent to an independent laboratory for PCB analysis (Table 2). Analytical results from several of the samples collected from beneath the former floor of selected sumps revealed significant levels of PCB contamination in the shale layer below the concrete flooring of this basement structure (Figure 5). To better determine the extent of subsurface PCB contamination, core drilling in and around the facility basement was scheduled. Figure 6 shows the sample results from the core drilling samples, which are considered part of the extent of contamination survey. Iso-concentric contour lines have been drawn to estimate the distribution of PCB contamination as revealed by PCB analysis of the core samples submitted to the laboratory.


Mahoning River
Former Mahoningside Facility
U.S. EPA START Time-Critical Removal of
PCB-Impacted Soil
64.8 ppm
ND
ND
276 ppm
65 ppm
1,470 ppm
147,000 ppm
289 ppm
26.1 ppm
1,820 ppm
33 ppm
1,770 ppm
Concrete
15,000 ppm
Concrete Pillar
25 ppm
3,430 ppm
Concrete Pillar
0 10 20 30 40 50 75
Scale in feet.
LEGEND
Isopleth in parts per million
Sump/Pit
Sump/Pit
Structures
80
Isopleth Line
Excavation Extent
Former Structure
McCabe Results
Original Data Results
Former Turn-style
WESTON
Roy F. Weston, Inc.
Region 5 - Superfund Technical Assessment and Response Team
7123 Pearl Road, Suite 101
Middleburg Heights, Ohio 44130
TITLE: Sediments from Lines, Pits & Trenches
FIGURE: 5
SITE: Mahoningside Power Plant site
SCALE: 1" = 28'
CITY: Waren STATE: Ohio
TDD: 0012-004
SOURCE: Roy F Weston, J. Kimble
DATE: 2001




Roy F. Weston, Inc.
Region 5 - Superfund Technical Assessment and Response Team
7123 Pearl Road, Suite 101
Middleburg Heights, Ohio 44130

| | |
|---|---|
| TITLE: Subsurface Investigations Map | FIGURE: 6 |
| SITE: Mahoningside Power Plant site | SCALE: 1" = 28' |
| CITY: Waren STATE: Ohio | TDD: 0012-004 |
| SOURCE: Roy F Weston, J. Kimble | DATE: 2001 |

Table 2 - PCB Analytical Results of Sediments in Pits, Lines, and Sumps

PCB ANALYTICAL RESULTS FOR MAHONINGSIDE POWER PLANT SITE

WARREN, TRUMBULL COUNTY, OHIO

Date: Various

| Sample ID | Date | Analyte Concentration (mg/kg) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Aroclor 1016 | Aroclor 1221 | Aroclor 1232 | Aroclor 1242 | Aroclor 1248 | Aroclor 1254 | Aroclor 1260 | Flag |
| Soil Samples From the Facility Pits and Sumps | | | | | | | | | |
| TR-1012 | 10-12-00 | ND | ND | ND | ND | ND | ND | 26.1 | D |
| C14-1012 | 10-12-00 | ND | ND | ND | ND | ND | ND | 1770 | D |
| C17-L-1012 | 10-12-00 | ND | ND | ND | ND | ND | ND | 683 | D |
| C17-H-1012 | 10-12-00 | ND | ND | ND | ND | ND | ND | 1250 | D |
| D2-1012 | 10-12-00 | ND | ND | ND | ND | ND | ND | 1470 | D |
| C2-1012 | 10-12-00 | ND | ND | ND | ND | ND | ND | 3,430 | D |
| C17-E-01 | 10-23-00 | ND | ND | ND | ND | ND | ND | 2,250 | D,B |
| C17-W-01 | 10-23-00 | ND | ND | ND | ND | ND | ND | 661 | D,B |
| C17-B-01 | 10-23-00 | ND | ND | ND | ND | ND | ND | 1890 | D,B |
| C17-N-01 | 10-23-00 | ND | ND | ND | ND | ND | ND | 2,970 | D,B |
| C21-E-01 | 10-23-00 | ND | ND | ND | ND | ND | ND | 4,660 | D,B |
| C21-B-01 | 10-23-00 | ND | ND | ND | ND | ND | ND | 3,060 | D,B |
| C21-N-01 | 10-23-00 | ND | ND | ND | ND | ND | ND | 585 | D,B |
| C21-S-01 | 10-23-00 | ND | ND | ND | ND | ND | ND | 6,140 | D,B |

Table 2 - PCB Analytical Results of Sediments in Pits, Lines, and Sumps

PCB ANALYTICAL RESULTS FOR MAHONINGSIDE POWER PLANT SITE

WARREN, TRUMBULL COUNTY, OHIO

Date: Various

| | | Analyte Concentration (mg/kg) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sample ID | Date | Aroclor 1016 | Aroclor 1221 | Aroclor 1232 | Aroclor 1242 | Aroclor 1248 | Aroclor 1254 | Aroclor 1260 | Flag |
| L42-01 | 10-23-00 | ND | ND | ND | ND | ND | ND | 68.6 | D,B |

Key:

ND = Non-detect.

Mg/kg = milligram per kilogram.

**B. Drilling and Core Sampling**

The drilling and core sampling activities originally conducted for the City under the Phase II assessment were insufficient to determine if PCBs had spread outside the perimeter of the basement wall structure because the maximum depth drilled during that assessment was only 12 feet bgs. This left the bottom of the drill hole at least 8 feet higher in elevation than the potential bgs area of PCB contamination (directly under the concrete basement floor). It was not anticipated that the PCB contamination would migrate up in the soil column. In order to most completely define the extent of contamination at the site, it was determined that drill locations should not be limited to just the basement area. Due to the potential for PCBs to migrate in the subsurface, drilling points were also proposed at numerous locations around the perimeter and outside the boundary of the open basement structure. These locations were selected as sample locations to reasonably address potential subsurface migration of PCB contamination beyond the border of the basement structure.

Twenty-four (24) drill sample locations, 10 within the basement structure and 14 around its perimeter, were planned and demarcated by U.S. EPA. Determining factors utilized by U.S. EPA to select locations included, but were not limited to; the ability to maneuver the drill rig into position, known locations of contamination, suspected areas of contamination, safety of drill rig placement, and physical observations of the site.

On November 27, 2001, the drilling operations commenced. ERRS subcontractor, Summit Drilling, Inc. (Summit), initiated activities in the basement structure of the site. From November 27 to November 29, 2001, Summit conducted the drilling of the 10 basement sampling locations. In each hole, after auguring through the concrete, the soils and soft shale, ranging from one to five feet in thickness, was augured until refusal. The cuttings collected from auguring activities were split between the top ½ and bottom ½ of the augur section. These cuttings were prepared separately as samples for each drill hole and sent to an independent laboratory for PCB analysis. Once refusal occurred, the remaining section of material to be extracted from the location was cored. The first four holes were cored to a depth of 9 to 22 feet below the concrete layer. While drilling these first four holes, different water table elevations were encountered with an artesian layer encountered at roughly 13.5 feet bgs. This artesian condition was difficult to seal with bentonite and continued to release water to the basement through the drill holes for several days after the boring was completed. The hard shale rock cores retained from the coring activities were also processed and split into definitive sections for sample collection. A sample of the hard shale was selected from drill point DR-08 and sent to an independant laboratory for analysis. Logs of the drill cores were recorded to determine depth to the suspected bgs level of possible PCB contamination based on observations in the basement area. These logs are located in Attachment A.

The auguring, coring, and sampling of the 14 perimeter drill locations (DR-11 through DR-24) was conducted from December 1 through 6, 2000. These locations were drilled to a minimum depth of 25 feet bgs, since the basement concrete floor was 20 feet below the ground surface in the majority of the site. PCB analytical results indicated that concentration of PCBs that migrated outside of the basement wall perimeter was limited and well below TSCA allowable levels for PCBs for industrial properties. All results of the drilling activities are presented in Table 3.

Table 3 - Subsurface Assessment PCB Analytical Results

PCB ANALYTICAL RESULTS FOR MAHONINGSIDE POWER PLANT SITE

WARREN, TRUMBULL COUNTY, OHIO

Date Collected: 11-15-00 through 11-16-00

| | | Analyte Concentration (mg/kg) | | | | |
|---|---|---|---|---|---|---|
| Sample ID | Date | Aroclor-1242 | Aroclor-1248 | Aroclor-1254 | Aroclor-1260 | Flag |
| Solid Samples from Drilling Activities | | | | | | |
| 1A-DR | 11-27-00 | ND | ND | ND | ND | U |
| 1B-DR | 11-27-00 | ND | ND | ND | ND | U |
| 1FS-DR | 11-27-00 | ND | ND | ND | 50.0 | U |
| 1CORE-DR | 11-27-00 | ND | ND | ND | 0.12 | |
| 2A-DR | 11-28-00 | ND | ND | ND | 209 | D |
| 2B-DR | 11-28-00 | ND | ND | ND | 2.1 | D |
| 2FS-DR | 11-28-00 | ND | ND | ND | 261 | D |
| 3A-DR | 11-28-00 | ND | ND | ND | 536 | D |
| 3B-DR | 11-28-00 | ND | ND | ND | 1.4 | |
| 4A-DR | 11-28-00 | ND | ND | ND | 1.3 | |
| 4B-DR | 11-28-00 | ND | ND | ND | ND | U |
| 5A-DR | 11-28-00 | ND | ND | ND | 0.17 | |
| 5B-DR | 11-28-00 | ND | ND | ND | ND | U |
| 6A-DR | 11-29-00 | ND | ND | ND | 6.3 | D |
| 6B-DR | 11-29-00 | ND | ND | ND | 0.65 | |

Table 3 - Subsurface Assessment PCB Analytical Results

PCB ANALYTICAL RESULTS FOR MAHONINGSIDE POWER PLANT SITE

WARREN, TRUMBULL COUNTY, OHIO

Date Collected: 11-15-00 through 11-16-00

| | | Analyte Concentration (mg/kg) | | | | |
|---|---|---|---|---|---|---|
| Sample ID | Date | Aroclor-1242 | Aroclor-1248 | Aroclor-1254 | Aroclor-1260 | Flag |
| 7A-DR | 11-29-00 | ND | ND | ND | 13.4 | D |
| 7B-DR | 11-29-00 | ND | ND | ND | 0.45 | |
| 8A-DR | 11-29-00 | ND | ND | ND | 68.2 | D |
| 8B-DR | 11-29-00 | ND | ND | ND | 0.25 | |
| 8CORE-DR | 11-29-00 | ND | ND | ND | 0.29 | |
| 9A-DR | 11-29-00 | ND | ND | ND | 2.7 | D |
| 9B-DR | 11-29-00 | ND | ND | ND | 6.4 | D |
| 10A-DR | 11-29-00 | ND | ND | ND | ND | U |
| 10B-DR | 11-29-00 | ND | ND | ND | ND | U |
| 11B-DR | 11-29-00 | ND | ND | ND | ND | U |
| 11D-DR | 11-29-00 | ND | ND | ND | ND | U |
| 12A-DR | 12-01-00 | ND | ND | ND | 1.1 | |
| 12C-DR | 12-01-00 | ND | ND | ND | ND | U |
| 13A-DR | 12-01-00 | ND | ND | ND | 0.34 | |
| 13B-DR | 12-01-00 | ND | ND | ND | ND | U |
| 14A-DR | 12-03-00 | ND | ND | ND | ND | U |
| 14B-DR | 12-03-00 | ND | ND | ND | ND | U |

Table 3 - Subsurface Assessment PCB Analytical Results

PCB ANALYTICAL RESULTS FOR MAHONINGSIDE POWER PLANT SITE

WARREN, TRUMBULL COUNTY, OHIO

Date Collected: 11-15-00 through 11-16-00

| | | Analyte Concentration (mg/kg) | | | | |
|---|---|---|---|---|---|---|
| Sample ID | Date | Aroclor-1242 | Aroclor-1248 | Aroclor-1254 | Aroclor-1260 | Flag |
| 15A-DR | 12-04-00 | ND | ND | ND | ND | U |
| 15B-DR | 12-04-00 | ND | ND | ND | ND | U |
| 16A-DR | 12-04-00 | ND | ND | ND | 0.019 | J |
| 16B-DR | 12-04-00 | ND | ND | ND | ND | U |
| 17A-DR | 12-04-00 | ND | ND | ND | ND | U |
| 17B-DR | 12-04-00 | ND | ND | ND | ND | U |
| 17C-DR | 12-04-00 | ND | ND | ND | ND | U |
| 18A-DR | 12-04-00 | ND | ND | ND | ND | U |
| 18C-DR | 12-04-00 | ND | ND | ND | ND | U |
| 18E-DR | 12-04-00 | ND | ND | ND | ND | U |
| 19A-DR | 12-05-00 | ND | ND | ND | ND | U |
| 19B-DR | 12-05-00 | ND | ND | ND | ND | U |
| 20B-DR | 12-05-00 | ND | ND | ND | 0.18 | |
| 20C-DR | 12-05-00 | ND | ND | ND | ND | U |
| 21A-DR | 12-05-00 | ND | ND | ND | ND | U |
| 21B-DR | 12-05-00 | ND | ND | ND | ND | U |
| 22B-DR | 12-05-00 | ND | ND | ND | ND | U |

| | | | | | | |
|---|---|---|---|---|---|---|
| 22C-DR | 12-05-00 | ND | ND | ND | ND | U |
| 23A-DR | 12-05-00 | ND | ND | ND | ND | U |
| 23B-DR | 12-05-00 | ND | ND | ND | ND | U |
| 23C-DR | 12-05-00 | ND | ND | ND | ND | U |
| 24A-DR | 12-06-00 | ND | ND | ND | 0.047 | J |
| 24C-DR | 12-06-00 | ND | ND | ND | 0.018 | J |
| 24E-DR | 12-05-00 | ND | ND | ND | 0.025 | J |

Key:

U = Below method detection limit.

J = Estimated value.

D = Sample was diluted.

ND = Non Detect.

Source: Samples were analyzed at ECC Laboratory in Cincinnati, Ohio.

### C. Summary of Findings

Based on the analytical results received from these activities, it was determined that the major PCB contaminated areas at the Mahoningside Site had been identified. A plan was established to excavate, stabilize, and dispose of PCB contaminated material from these areas until confirmatory sampling proved that the TSCA approved cleanup level of less than 50 ppm PCB was achieved.

## IV. EXCAVATION AND COMPLETION OF PCB CLEANUP GOALS

### A. Concrete Removal

Based on PCB analytical results of the drill core samples, the north portion of the basement floor (approximately 110' by 55') and a small area (approximately 10' by 10') in the southwest corner of the basement were designated as excavation areas for removal of PCB contaminated soils and shale (Figure 7).

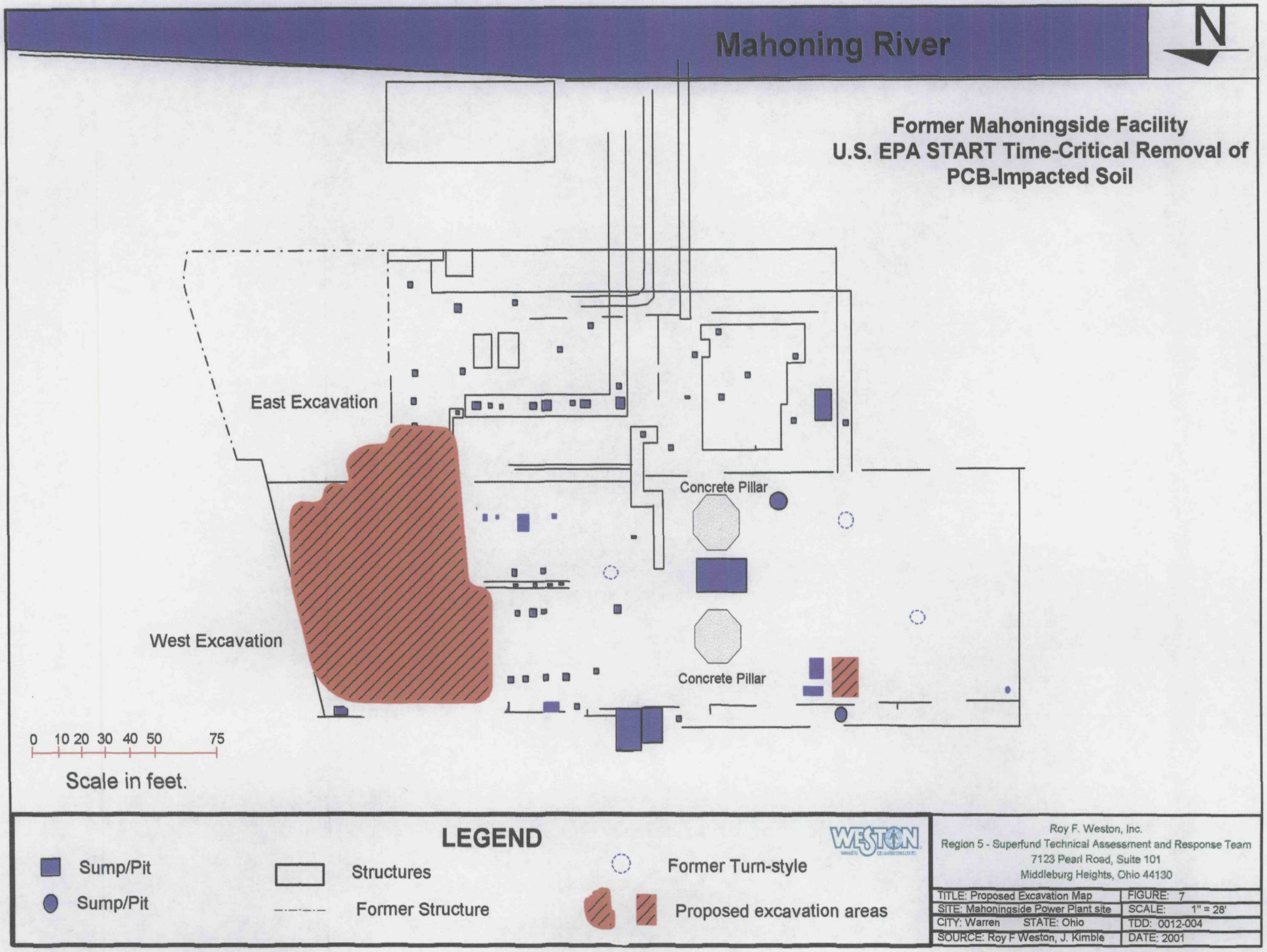
On January 10, 2001, the excavation activities were initiated with concrete removal from the floor of the facility by using a concrete saw and a Hoe-Ram attachment on an excavator. Large pieces of concrete were removed from this area and power-washed to remove any visible contamination. These decontaminated large pieces were set aside to be used as fill material for backfilling of the excavation areas.

### B. Excavation

The removal of the concrete overburden was completed and removal of the subsurface PCB contaminated material was initiated on January 16, 2001. The contaminated material consisted of soils, gravel and sand, and loose shale for the initial subsurface layer which varied from one to five feet in thickness and overlaid the hard shale bedrock. To remove the excavated material, a dump truck was driven into the basement by way of the access ramp on the southwest corner of the facility basement. The truck was then loaded with PCB contaminated material by an excavator. To avoid tracking the contaminated material out of the basement, the wheels of the dump truck were decontaminated with a pressure-washer before the truck exited the contamination zone. The excavated material was then staged on a polyethylene liner and solidified with kiln dust.

After every foot of excavation, START collected samples that were to be field screened with a CLOR-N-SOIL® PCB screening kit. The purpose of the field screening was to determine the extent of the contamination so that excess material would not be removed. The soil screening kits indicated whether the sampled portion was greater than 50 ppm of PCB. Once the field screening indicated that the exposed layer was less than 50 ppm, PCB confirmation samples were collected and sent for analysis at an independent laboratory.

During the excavation activities, a large subsurface area of concrete was encountered at an excavation depth of approximately 3 feet below the concrete surface. This was used as a demarcation point that divided the east and west excavation areas. Field screening indicated that the PCB concentration was greater than 50 ppm on the western half of the excavation pit and appeared to be less than 50 ppm on the eastern half. A 3 foot deep trench was excavated in


Mahoning River
N
Former Mahoningside Facility
U.S. EPA START Time-Critical Removal of
PCB-Impacted Soil
East Excavation
West Excavation
Concrete Pillar
Concrete Pillar
0 10 20 30 40 50 75
Scale in feet.
LEGEND
Sump/Pit
Sump/Pit
Structures
Former Structure
Former Turn-style
Proposed excavation areas
WESTON
Roy F. Weston, Inc.
Region 5 - Superfund Technical Assessment and Response Team
7123 Pearl Road, Suite 101
Middleburg Heights, Ohio 44130
TITLE: Proposed Excavation Map
FIGURE: 7
SITE: Mahoningside Power Plant site
SCALE: 1" = 28'
CITY: Warren STATE: Ohio
TDD: 0012-004
SOURCE: Roy F Weston, J. Kimble
DATE: 2001

the west side excavation area and samples were collected at one foot intervals for field screening. Field screening indicated that approximately one additional foot of material should be removed before confirmation samples were collected.

Two confirmatory samples from the excavation floor (one each from the east and west side) were collected and sent for analysis after the additional layer of shale was removed. In addition, two samples from the sidewalls (both from the east wall of the east excavation area) were collected and sent for analysis. Sample results from the east side of the pit (0.15 ppm PCBs) indicated that the east floor was below the verification clean-up level. Sample results from the west floor (59.5 ppm) indicated that additional removal was necessary. The two sidewall samples were greater than 50 ppm and it was decided to extend the excavation pit until all the side walls were at concrete facings where possible.

An additional one foot layer of soil/shale was removed from the bottom of the west side of the excavation pit. A smooth edge bucket was placed on the excavator to scrape the floor and sidewalls. The sidewalls were extended as far as practical on the north side (until the building wall became visually unstable) and the other areas were scraped either to concrete or until field screening indicated less than 50 ppm PCB concentration.

**C. Confirmation Sampling**

1. Initial Confirmation Sampling

A site-specific PCB confirmation sampling plan based on TSCA guidance was prepared. Samples were to be collected every 1.5 meters and there would be no more than nine samples per composite. The U.S. EPA TSCA Removal Action Level for PCB contamination at this site was set at 50 ppm. Since the sample grid included 9 points per composite sample, the analytical results to be determined as meeting the site clean up goal was determined to be at or less than 5.5 ppm for each composite sample.

On January 24, 2001, sampling points were marked off in 1.5 meter intervals and composite areas were identified. On January 25, 2001 START began to sample the excavation pit. Pre-cleaned spud bars were used to manually break the shale in order to collect the samples. After all points in one composite group were collected, the sample was homogenized by first using a hammer to break the large pieces of shale (aluminum foil was used over the material to prevent cross contamination). After all large pieces were broken up, the sample was mixed thoroughly and placed into the appropriate jar. A different aluminum pan and scoop was used for each composite group and all reusable equipment was cleaned and rinsed before use on a new composite group to avoid cross contamination. From January 25 to January 26, 2001, START collected a total of 10 composite samples from the west side of the excavation pit and 4 composite samples were collected from the east side of the excavation pit. In addition, seven sidewall composite samples were collected at regular intervals around the excavation pit in either a 4, 5 or 6 point composite (depending on

the size of the composite area). All samples were sent to Severn Trent Laboratories, Canton, Ohio, on January 26, 2001 for analysis. Refer to Table 4 for sample results.

The sample results showed that the east side of the excavation floor area, the sidewalls and composite points 1 and 2 were clean. Additional removal was needed on the rest of the west side of the excavation area.

**Table 4 - Initial Confirmation Sample Results**
**Mahoningside Power Plant Site**
**Warren, Trumbull County Ohio**
**Jan 23 to 26, 2001**

| MP-CS-## =Excavation Floor Samples | | MP-SW-## = Sidewall Samples | |
|---|---|---|---|
| **Sample Number** | **Concentration (PCB ppm)** | **Sample Number** | **Concentration (PCB ppm)** |
| MP-CS-001 | 1.7 | MP-CS-012 | 2.2 |
| MP-CS-002 | 4.8 | MP-CS-013 | 0.6 |
| MP-CS-003 | 18.0 | MP-CS-014 | 0.075 |
| MP-CS-004 | 9.5 | MP-SW-003 | 0.33 |
| MP-CS-005 | 57.0 | MP-SW-004 | 0.32 |
| MP-CS-006 | 57.0 | MP-SW-005 | 1.9 |
| MP-CS-007 | 41.0 | MP-SW-006 | 0.093 |
| MP-CS-008 | 29.0 | MP-SW-007 | 6.1 |
| MP-CS-009 | 160.0 | MP-SW-008 | 2.6 |
| MP-CS-010 | 160.0 | MP-SW-009 | 0.54 |
| MP-CS-011 | 0.1 | | |

Key:

ppm = part per million

Highlighted results indicate composite samples which exceed the TSCA allowable level and these areas are therefore Subject to additional excavation and confirmation sampling.

Source: Sample analysis for PCBs was performed at Severn Trent Laboratories, Inc., in North Canton, Ohio

2. Additional Excavation

Additional shale was excavated from the west excavation area bottom and the extent of the additional excavation was determined by the analytical results of the confirmation sampling. Areas which were identified as having higher concentrations of PCBs were excavated to a deeper level than those showing borderline results. The deepest areas, CS-009 and CS-010, were excavated to an approximate depth of six feet below the original concrete floor.

3. Final Confirmation Sampling

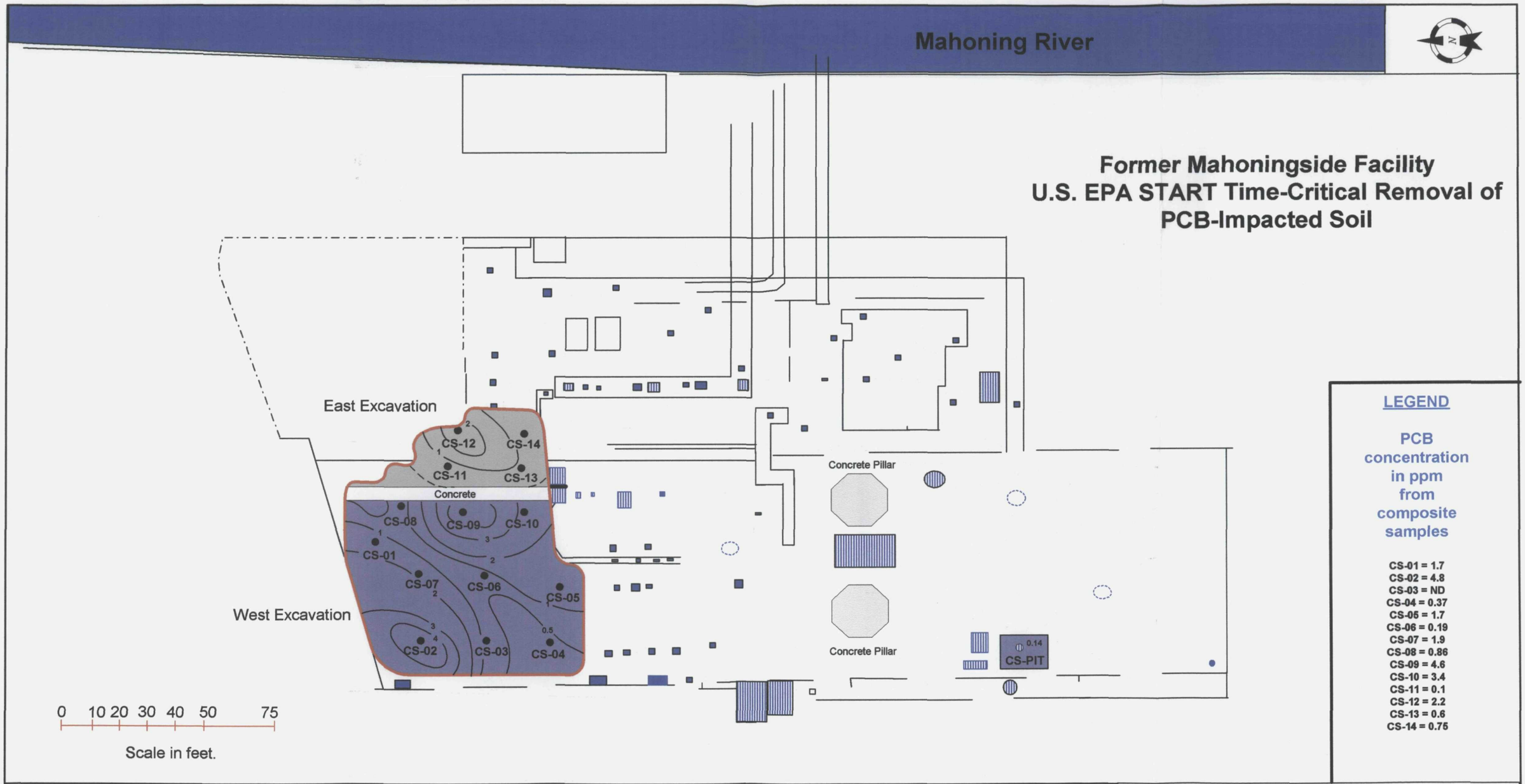
On February 7, 2001 START re-gridded the floor of the pit to coincide with the original confirmation sample grid locations. On February 7 and February 8, 2001, eight samples were collected from the bottom of the excavation pit. At this depth of the excavation the ground was solid shale bedrock, therefore, an electric hammer drill was utilized to collect the composite samples. All samples were processed in the same manner as those collected during the first round of confirmation sampling. In addition to the excavation pit on the north side of the basement, the area in the southwest corner was excavated (approximately 10 foot by 10 foot area) and a confirmation sample was collected. A pile of soil that was scraped from the bottom of the floor was also sampled and submitted for PCB analysis to determine if the material could be use as fill material. All samples were sent to Severn Trent Laboratories, Inc., located in North Canton, Ohio, for PCB analysis. Refer to Table 5 and Figure 8 for sample results and locations.

**Table 5 - Final Confirmation Sample Results**
**Mahoningside Power Plant Site**
**Warren, Trumbull County Ohio**
**February 7 to 8, 2001**

| Sample Number | Concentration (PCB ppm) | Sample Number | Concentration (PCB ppm) |
|---|---|---|---|
| MP-CS2-003 | Non Detect | MP-CS2-009 | 4.6 |
| MP-CS2-004 | 0.37 | MP-CS2-010 | 3.4 |
| MP-CS2-005 | 1.70 | MP-CS-PIT | 0.14 |
| MP-CS2-006 | 0.19 | MP-PILE | 6.0 |
| MP-CS2-007 | 1.90 | | |
| MP-CS2-008 | 0.86 | | |

Key: ppm = part per million.

Source: Sample analysis for PCBs was performed at Severn Trent Laboratories, Inc., in North Canton, Ohio.




## LEGEND

- Sump/Pit Field Screened less than 50 ppm PCBs
- Sump/Pit with no material for sample collection
- 80 Isopleth Line
- Structures
- Isopleth Interval equals 20 parts per million
- Excavation Extent
- Former Structure
- Former Turn-style

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| | |
|---|---|
| TITLE: PCB Results from Feb 7 to Feb 8, 01 | FIGURE: 8 |
| SITE: Mahoningside Power Plant site | SCALE: 1" = 28' |
| CITY: Waren STATE: Ohio | TDD: 0012-004 |
| SOURCE: Roy F Weston, J. Kimble | DATE: 2001 |

The results indicated that excavation of all material with PCB contamination above the guideline limit was complete. A total of approximately 1,770 tons of PCB contaminated material was removed from the ground. The size of the excavation measured approximately 70feet x 55feet x 6feet on the west side, approximately 35 feet x 35 feet x 4feet on the east side of the northern excavation area and approximately 10feet x 10feet x 6 feet from the small excavation in the southwest corner of the basement. After the final confirmation sample results were received, the excavations were cleared for backfilling operations.

4. Backfilling

Backfilling activities for all excavations, the open pit and sumps, and floor trenches within the originally identified areas of contamination were began on February 20, 2001, and were completed on February 22, 2001. Fill material consisted of the washed concrete previously removed and sand that was delivered to site as fill material. An excavator and a bobcat-loader were used to push the backfill material into the excavation areas. Pits, lines, and sumps which had been cleaned during the course of the project were also backfilled at this time.

**D. Pits, Lines, and Sumps Summary**

The substructure of pits, lines, and sumps in the known areas of contamination at the Site were decontaminated four times throughout the course of the PCB remediation. The decontamination process, as previously stated, consisted of pressure washing the substructure and removing the loose material/wash-water with a vacuum truck. The water collected was processed through the on-site water treatment system and the loose materials were added to the PCB waste material for off-site disposal. After each of the four phases of decontamination, any remaining material in these areas was collected for field screening and/or PCB analysis at an off-site laboratory. After the final decontamination, all areas were either free from any appreciable amount of material to collect, or the material remaining was of sufficient volume to only conduct a field screening for PCBs. All field screening results after the final decontamination were below 50 ppm.

## IV. CONCLUSIONS

**A. Remaining PCBs**

PCB concentrations have been identified, through confirmation sampling, to still be present at the site. All known grossly PCB contaminated material identified during the course of the work at this site have been excavated, stabilized, removed from site, and disposed of at an off-site TSCA approved landfill. The remaining concentrations of PCBs identified at the site are below the on-site PCB clean-up level (50 ppm), and are also below the TSCA removal level for industrial properties. No other sources of PCBs were identified at the site.

**B. Expectations of PCB Off-site Migration**

Based on the extensive surface and subsurface investigations to determine PCB contamination at the site, the final data suggests that no appreciable off-site migration of PCB is expected to occur. Subsurface sampling on the perimeter of the former power plant at bgs depths which would intersect known contamination layers, the PCB source removal, and the lithologic profile suggests that any small pockets of remaining PCBs within the basement area of the former power plant would not be expected to pose a significant threat of off-site migration. The only known prior off-site PCB migration, through the afore mentioned 42-inch line, has been remediated.

**C. Final Summary and Conclusion**

U.S. EPA has conducted removal activities to mitigate the threat of known PCB contamination which was documented at the site. Additional investigative activities by U.S. EPA identified PCB source contamination which was excavated, stabilized, and transported to an off-site landfill in accordance all TSCA regulations. Approximately 1,770 tons of PCB contaminated material were removed from the site and disposed of at CWM-Chemical Services LLC Landfill located in Model City, New York, during the course of the removal activities. Based on all investigative actions at the site, no PCB contamination which is above the 50 ppm clean-up level for industrial properties remains at the site. Any potential PCB off-site migration is therefore not expected to occur in appreciable levels.

# APPENDIX A

# BORING LOGS

## Note on boring log interpretations:

The following boring logs were utilized to determine depth to the shale layer and possible contamination only. These are general field interpretations and have not been technically reviewed.

# BORING LOG



Client: US EPA
Site Name: Mahoningside Power Plant Site
Project Number: 0012-004
Drilling Co. Summit
Logged By: Kimble

Elev:
Northing:
Easting:
Depth to water: 5 ft
Total boring depth: 24 feet

Date: 11/27/00
Drill Method: auger/core
Site Type: boring

| Sample Interval (Ft) | | Recovery | Depth | Graphic Column | Color | Lithologic Description |
|---|---|---|---|---|---|---|
| 0 | | 8" | 8" | | Grey | Concrete - facility floor. |
| | | | | | | Intermixed gravels and fine grained sands, some possible fill. Mostly black to dark grey, some red in layers. Phases to clay and soft shale at 46" to 48" BGS. |
| | 4 | 2 | 4 | | lt. grey | soft shale - wet - phases from clay to this layer |
| 5 | | | | | | |
| | | | 6 | | lt. grey | Shale - hard - light grey - moist |
| | | | | | | |
| | 4 | 4 | 8 | | dark grey | Shale - hard shale - horizontal fractures- diagonal fracture at approximately 8.5 feet below concrete |
| | | | | | | |
| 10 | | | | | | |
| | | | | | | |
| | 4 | 4 | 12 | | dark grey | Shale-hard. A lot of water in the hole. |
| | | | | | | |
| | | | | | | |
| 15 | | | | | | |
| | 4 | 4 | 16 | | dark grey | shale - hard - fractures horizontally in the core |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| 20 | 4 | 4 | 20 | | dark grey | shale - hard |
| | | | | | | |
| | | | 22 | | dark grey | hard- large amount of quarts grains - sandstone |
| | | | | | | |
| | 4 | 4 | 23'8" | | dark grey | End core. |

# BORING LOG



Client: US EPA
Site Name: Mahoningside Power Plant Site
Project Number: 0012-004
Drilling Co.: Summit
Logged By: Kimble

Elev:
Northing:
Easting:
Depth to water: 5 ft
Total boring depth: 10 feet

Date: 11/28/00
Drill Method: auger/core
Site Type: boring

| Sample Interval (Ft) | | Recovery | Depth | Graphic Column | Color | Lithologic Description |
|---|---|---|---|---|---|---|
| 0 | | 8" | 8" | | Black to Brown | Concrete - facility floor - 8 inches. Soils/gravel directly under concrete. Back - cinder-like uniform grains, some larger pebbles intermixed in the deeper portion |
| | | 1.5 | 2.2 | | Grey | Shale - soft - grey - stop split spoon and begin coring |
| | | | 3.6 | | Grey | Shale - hard - grey |
| 5 | | | | | | |
| | 4 | 3.5 | 6 | | | Water noted in hole. Core recovery, top layer very moist - soft shale which is clay-like |
| 10 | 4 | 4 | 10 | | Grey | End of core - shale all 4 feet. |
| 15 | | | | | | |
| 20 | | | | | | |

# BORING LOG



| | | |
|---|---|---|
| Client: US EPA | Elev: | Date: 11/28/00 |
| Site Name: Mahoningside Power Plant Site | Northing: | |
| Project Number: 0012-004 | Easting: | |
| Drilling Co : Summit | Depth to water: 5 ft | Drill Method: auger/core |
| Logged By: Kimble | Total boring depth: 13 feet | Site Type: boring |

| Sample Interval (Ft) | | Recovery | Depth | Graphic Column | Color | Lithologic Description |
|---|---|---|---|---|---|---|
| 0 | | 8" | 8" | | Grey | Concrete - facility floor. |
| | | 6" | 20" | | | 4-6" of soil after concrete then at 1 foot below concrete soft shale was encountered - moist. Begin coring. |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| 5 | 4 | 3 | 5 | | Grey | Core was soft shale top 8", phasing to hard shale layer. Water was encountered at hole bottom. Hard shale core breaks horizontally. Periodic breaks may be fractures. |
| | | | | | | |
| | | | | | | |
| | | | | | | Hard shale with periodic breaks (fractures) in the core. Diagonal fracture at 7.5 feet bgs in shale. Artesian of water out of the hole is noted. |
| | 4 | 4 | 9 | | Grey | |
| 10 | | | | | | |
| | | | | | | |
| | | | | | | |
| | 4 | 4 | 13 | | Grey | Same hard shale layer - end coring. |
| | | | | | | |
| 15 | | | | | | |
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| 20 | | | | | | |
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# BORING LOG



Client: US EPA
Site Name: Mahoningside Power Plant Site
Project Number: 0012-004
Drilling Co.: Summit
Logged By: Kimble

Elev:
Northing:
Easting:
Depth to water: 4 ft
Total boring depth: 11.5 feet

Date: 11/28/00
Drill Method: auger/core
Site Type: boring

| Sample Interval (Ft) | | Recovery | Depth | Graphic Column | Color | Lithologic Description |
|---|---|---|---|---|---|---|
| 0 | | 4" | 4" | | Grey | Concrete - facility floor. |
| | | | | | Black to Brown | 4' 6" of sands and gravel. A small amount of silty material was present. Oil was present right under the concrete. |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | 4 | 3 | 4.5' | | | |
| 5 | | | | | grey | Soft shale - moist - light grey color |
| | | | | | | |
| | | | | | | |
| | 4 | 3.5 | 8.5 | | Grey | Soft shale first 8 inches, phase to hard shale, darker grey. Periodic breaks were present in the core. |
| | | | | | | |
| 10 | | | | | | |
| | 4 | 3 | 11.5 | | Grey | End of core run. 7 foot core run total. Grey shale, hard, the last 3 feet of the run. |
| | | | | | | |
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| 15 | | | | | | |
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| 20 | | | | | | |
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# BORING LOG



Client: US EPA
Site Name: Mahoningside Power Plant Site
Project Number: 0012-004
Drilling Co.: Summit
Logged By Kimble

Elev:
Northing:
Easting:
Depth to water: 2.5 ft
Total boring depth: 12 feet

Date: 11/28/00
Drill Method: auger/core
Site Type: boring

| Sample Interval (Ft) | | Recovery | Depth | Graphic Column | Color | Lithologic Description |
|---|---|---|---|---|---|---|
| 0 | | 1' | 1' | | Grey | Concrete - facility floor. |
| | | | 1' 6" | | Black/Brown | Soils and gravel. |
| | | | 1'6" | | Light grey | Begin soft shale layer. (Water saturated, clay-like) |
| | | | | | | |
| | | 4 | 4.5 | | Light grey | 3.5 feet of soft shale. Phases to hard shale. |
| 5 | | | | | Grey | Hard shale |
| | | | | | | |
| | | | | | | |
| | 4 | 3.5 | 8 | | Grey | Hard shale, soft shale at top of core. |
| | | | | | | |
| 10 | | | | | | |
| | | | | | | |
| | 4 | 4 | 12 | | Grey | Hard shale. End of core run |
| | | | | | | |
| | | | | | | |
| 15 | | | | | | |
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| 20 | | | | | | |
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# BORING LOG



Client: US EPA
Site Name: Mahoningside Power Plant Site
Project Number: 0012-004
Drilling Co. Summit
Logged By B. Ring

Elev:
Northing:
Easting:
Depth to water: 5 ft
Total boring depth: 13 feet

Date: 11/29/00
Drill Method: auger/core
Site Type: boring

| Sample Interval (Ft) | | Recovery | Depth | Graphic Column | Color | Lithologic Description |
|---|---|---|---|---|---|---|
| 0 | | | 2" | | Grey | Concrete - 2 inch thickness, Begin gritty soil, gravel. May be fill. Cinder-like with some non-homogeneous associated gravel. Pushed spoon to 4 feet, 18" retention. |
| | 4 | | 4' | | Grey | Begin soft shale layer - wet |
| 5 | 1 | | 5' | | Grey | Hard shale encountered. Begin coring. Water noted in hole at 6'. |
| | | | | | | 45° fracture at 8.5' below concrete. |
| | 4 | | 9' | | | |
| 10 | | | | | | Hard shale continued. |
| | | | | | | End core at 13 feet below concrete. |
| | 4 | | 13 | | | |
| 15 | | | | | | |
| 20 | | | | | | |

# BORING LOG



Client: US EPA
Site Name: Mahoningside Power Plant Site
Project Number: 0012-004
Drilling Co.: Summit
*Logged By: B. Ring*

Elev:
Northing:
Easting:
Depth to water: 10ft
*Total boring depth: 13 feet*

Date: 11/29/00
Drill Method: auger/core
*Site Type: boring*

| Sample Interval (Ft) | | Recovery | Depth | Graphic Column | Color | Lithologic Description |
|---|---|---|---|---|---|---|
| 0 | | | | | Brown to grey | No cement was present. The loose material (sand, gravel, possible fill) was collected by hand for this depth. |
| | 2 | | 2' | | | |
| | | | | | Grey | Soft shale layer. Fairly wet. |
| | | | | | | |
| | | | | | | |
| 5 | 3 | 16" | 5 | | Grey | Hard shale layer. |
| | | | | | | |
| | | | | | | Periodic horizontal fractures in the retained core. |
| | | | 8.5 | | Grey | No 45° fracture seen in this hole. |
| | 4 | 4 | | | | |
| 10 | | | | | Grey | Standing water in borehole at 10'. |
| | | | | | | |
| | | | | | | |
| | 4 | 4 | 13' | | grey | Hard shale. Stop boring. |
| | | | | | | |
| 15 | | | | | | |
| | | | | | | |
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| 20 | | | | | | |
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# BORING LOG



Client: US EPA
Site Name: Mahoningside Power Plant Site
Project Number: 0012-004
Drilling Co.: Summit
Logged By: B. Ring

Elev:
Northing:
Easting:
Depth to water: 10 feet
Total boring depth: 14 feet

Date: 11/29/00
Drill Method: auger/core
Site Type: boring

| Sample Interval (Ft) | | Recovery | Depth | Graphic Column | Color | Lithologic Description |
|---|---|---|---|---|---|---|
| 0 | | | | | Dark grey to brown | No concrete present. Possible fill with sands and gravel. Some dark grey shale (soft-claylike) observed. |
| | | | | | | |
| | | | | | | |
| | | 16" | 3 | | | |
| | | | 4 | | Medium grey | Soft shale. Moist. |
| 5 | | 16' | 5'11" | | | Hard shale at ~ 6'. |
| | | | 6 | | Grey | Hard shale layer. Coring begins. |
| | | | | | | |
| | | | | | | |
| | | | | | | Continued hard grey shale, periodic horizontal breaks. |
| 10 | | 3.5 | 10 | | | ~ 10' water in hole. |
| | | | | | | |
| | | | | | | |
| | | | | | | Continued shale. |
| | | 3.5 | 14 | | | End of core at 14'. No 45° fracture seen in this hole. |
| 15 | | | | | | |
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| 20 | | | | | | |
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# BORING LOG



Client: US EPA
Site Name: Mahoningside Power Plant Site
Project Number: 0012-004
Drilling Co.: Summit
Logged By: B. Ring

Elev:
Northing:
Easting:
Depth to water: ~10 feet
Total boring depth: 13.5 feet

Date: 11/29/00
Drill Method: auger/core
Site Type: boring

| Sample Interval (Ft) | | Recovery | Depth | Graphic Column | Color | Lithologic Description |
|---|---|---|---|---|---|---|
| 0 | | 0 | 6" | | grey | Aggregate overburden to 6". |
| | | | 7" | | dark grey | Soft shales to 3'. |
| | 2.5 | 20" | 3' | | | |
| | | | 3' | | grey | Soft shale with noticeable iron deposits. |
| | 1.5 | 12" | 4.5 | | grey | End of soft shale. |
| 5 | | | 5 | | grey | Hard shale, begin coring. |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | 4 | 3 | 9.5 | | Grey | Hard shale continued. |
| 10 | | | | | | ~ 10' water in hole. |
| | | | | | | |
| | | | | | | |
| | 4 | 2'7" | 13.5 | | | End of core. Shale to bottom. |
| | | | | | | |
| 15 | | | | | | |
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| 20 | | | | | | |
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# BORING LOG



Client: US EPA
Site Name: Mahoningside Power Plant Site
Project Number: 0012-004
Drilling Co.: Summit
Logged By: B. Ring

Elev:
Northing:
Easting:
Depth to water: 5 feet
Total boring depth: 14.5 feet

Date: 11/30/00
Drill Method: auger/core
Site Type: boring

| Sample Interval (Ft) | | Recovery | Depth | Graphic Column | Color | Lithologic Description |
|---|---|---|---|---|---|---|
| 0 | | | 6" | | grey | Concrete to 6". Under concrete, begin sand, soil, gravel. |
| | | | | | light grey to brown | Sand, gravel, some iron deposits, some shale pieces. |
| | | | | | | |
| | | | | | | |
| | 3 | 18" | 3.5' | | grey | @ 3.5' to 5 ', soft grey shale is water saturated. |
| 5 | | | | | | Water present in hole. At 5.5', hard shale encountered. |
| | 2 | 20" | 5.5 | | grey | Hard shale, begin coring. |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | *Hard shale continues. Many breaks in shale horizontally.* |
| 10 | 4 | 4 | 10 | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | 4 | 4 | 14.5 | | Grey | Hard shale. End coring. |
| 15 | | | | | | |
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| 20 | | | | | | |
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# BORING LOG



Client: US EPA
Site Name: Mahoningside Power Plant Site
Project Number: 0012-004
Drilling Co.: Summit
Logged By: B. Ring

Elev:
Northing:
Easting:
Depth to water: 19 feet
Total boring depth: 26.5 feet

Date: 11/30/00
Drill Method: auger/core
Site Type: boring

| Sample Interval (Ft) | | Recovery | Depth | Graphic Column | Color | Lithologic Description |
|---|---|---|---|---|---|---|
| 0 | | | | | Varied | From 0' to 17', the material encountered appears to fill mixed with some potential native sands and gravels. The material renged from black to brown to tan with some erratic fill inclusions (red bricks etc..) No samples collected from this layer. |
| 5 | | | | | | |
| 10 | | | | | | |
| 15 | | | | | | |
| | | | | | Brown | At 17', a sand layer was encountered . |
| | | | 17 | | Brown | 4" of apparently native sand, then clay to 19'. |
| | 2' | 4" | 19 | | | |
| | | | 19 | | Brown to black | Brown to black sandy clay with some associated gravel. First spoon for the pushed. Water is present in the retained material in the spoon. |
| 20 | | | | | | |
| | 2' | 1' | 21 | | | |
| | | | 22 | | Brown to grey | Sandy clay phasing to clay and shale at 24'. Less water than the 19' to 21' layer. |
| | 2' | 8" | 24 | | | |
| | | | 24 | | Light grey | Mostly clay at top layer, then phases to all soft to medium soft clay clay at the bottom of the hole. Spoon refusal on the hard clay at 26.5'. Bottom portion of the shale core is dry. |
| | 2.5 | 2' | 26.5 | | | |

# BORING LOG



Client: US EPA
Site Name: Mahoningside Power Plant Site
Project Number: 0012-004
Drilling Co : Summit
Logged By: B. Ring

Elev:
Northing:
Easting:
Depth to water: 19 feet
Total boring depth: 24.5 feet

Date: 12/01/00
Drill Method: auger/core
Site Type: boring

| Sample Interval (Ft) | | Recovery | Depth | Graphic Column | Color | Lithologic Description |
|---|---|---|---|---|---|---|
| 0 | | | | | Varied | From 0' to 17', the material encountered appears to fill mixed with some potential native sands and gravels. The material renged from black to brown to tan with some erratic fill inclusions (red bricks etc..) No samples collected from this layer. |
| 5 | | | | | | |
| 10 | | | | | | |
| 15 | | | | | | |
| | | | | | Brown | At 17', a clay layer was encountered . |
| | | | 17 | | Brown | Moist brown clay to 20'. |
| 20 | | | 20 | | Brown to grey | Begin spoon push. Moist clay at top layer and phases to a sand layer with some shale pieces. No water was present in the shale. |
| | 2 | 18" | 22 | | | |
| | | | 23 | | Light grey | Soft shale with some sand. |
| | 1' | 1' | 24 | | | |
| | 6" | 4" | 24.6 | | Light | Soft shale for 6", then spoon refusal on hard shale. Shale was dry. |

# BORING LOG



Client: US EPA
Site Name Mahoningside Power Plant Site
Project Number: 0012-004
Drilling Co.: Summit
Logged By: B. Ring

Elev:
Northing:
Easting:
Depth to water: NA
Total boring depth: 22.5 feet

Date: 12/01/00
Drill Method: auger/core
Site Type: boring

| Sample Interval (Ft) | | Recovery | Depth | Graphic Column | Color | Lithologic Description |
|---|---|---|---|---|---|---|
| 0 | | | | | Varied | From 0' to 19', the material encountered appears to fill mixed with some potential native sands and gravels. No samples collected from this layer. |
| 5 | | | | | | |
| 10 | | | | | | At ~ 10', a chuck of granite was encountered and pushed through. |
| 15 | | | | | | |
| | | | | | | At 19', a clay layer was encountered . Moist brown clay to 20'. |
| | | | 19 | | Brown | Clay layer to 20'. |
| 20 | | | 20 | | Brown to grey | Begin spoon push. Cobbles and soft shale present. Spoon pushed to 22'. |
| | 2 | 3" | | | | |
| | 6" | 2" | 22 | | Light grey | Spoon refusal at 22.5' at hard shale. |

# BORING LOG



Client: US EPA
Site Name: Mahoningside Power Plant Site
Project Number: 0012-004
Drilling Co : Summit
Logged By: B. Ring

Elev:
Northing:
Easting:
Depth to water: NA
Total boring depth: 21 feet

Date: 12/04/00
Drill Method: auger/core
Site Type: boring

| Sample Interval (Ft) | | Recovery | Depth | Graphic Column | Color | Lithologic Description |
|---|---|---|---|---|---|---|
| 0 | | | | | Brown | 0-4" soil. From 4' to 19', No cuttings were raised to the surface. |
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| 15 | | | | | | |
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| | | | | | | |
| | | | 19 | | | 4" concrete, then a mix of shale, and sandy clay to refusal at 21'". Clay was moist. |
| 20 | | | | | | |
| | | | 21 | | | Refusal at hard shale for spoon at 21'. |
| | | | | | | |
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# BORING LOG



Client: US EPA
Site Name Mahoningside Power Plant Site
Project Number: 0012-004
Drilling Co.: Summit
Logged By: B. Ring

Elev:
Northing:
Easting:
Depth to water: 22 feet
Total boring depth: 23 feet

Date: 12/04/00
Drill Method: auger/core
Site Type: boring

| Sample Interval (Ft) | | Recovery | Depth | Graphic Column | Color | Lithologic Description |
|---|---|---|---|---|---|---|
| 0 | | | | | Grey to brown | Top 1' was concrete. |
| | | | 1 | | NA | 1' to 2' was void space. |
| | | | 2 | | Brown | Fill material with some clay and sand. |
| | | | | | | |
| | | | | | | |
| 5 | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | 9 | | Grey | Concrete was hit from 9' to 10.5' |
| 10 | | | | | | |
| | | | 10.5 | | Brown | Fill material with some clay and sand. |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| 15 | | | | | | |
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| | | | | | | |
| 20 | | | | | Grey | Dry, medium soft shale. Pushed to 22'. |
| | 2' | 7" | | | | |
| | | | 22 | | Grey | Pushed to 23', then hit refusal. Medium to hard shale, some water present. |
| | | | | | | |
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# BORING LOG



Client: US EPA
Site Name. Mahoningside Power Plant Site
Project Number: 0012-004
Drilling Co.: Summit
Logged By: B. Ring

Elev:
Northing:
Easting:
Depth to water: NA
Total boring depth: 22 feet

Date: 12/04/00
Drill Method: auger/core
Site Type: boring

| Sample Interval (Ft) | | Recovery | Depth | Graphic Column | Color | Lithologic Description |
|---|---|---|---|---|---|---|
| 0 | | | 1 | | Brown to red | Brown soil with a lot of red brick fragments. |
| | | | 3 | | Brown to black | Brown to black sandy clays intermixed with soil. |
| | | | 5 | | Brown | Brown soils with cobbles. |
| 5 | | | 6 | | Brown | Mixed lithology, most likely fill. Sands with gravels, soils, and fill material. |
| 10 | | | | | | |
| | | | 12 | | Brown | Clay layer, some moisture. |
| 15 | | | | | | |
| 20 | 1' | 6" | 20 | | Light grey | Soft shale from 20' to 21'. Moist. |
| | 1' | 10' | 21 | | Grey | Medium hard shale. Spoon refusal at 22' on harder shale. Little water present. |

# BORING LOG



Client: US EPA
Site Name: Mahoningside Power Plant Site
Project Number: 0012-004
Drilling Co.: Summit
Logged By: B. Ring

Elev:
Northing:
Easting:
Depth to water: 20 feet
Total boring depth: 24.9 feet

Date: 12/04/00
Drill Method: auger/core
Site Type: boring

| Sample Interval (Ft) | | Recovery | Depth | Graphic Column | Color | Lithologic Description |
|---|---|---|---|---|---|---|
| 0 | | | 0 | | Varied | Various materials, definite fill material. |
| 5 | | | 5 | | Black to dark brown | Sandy to silty soils with many organic inclusions. Gravel to pebbles occur intermittently. |
| 10 | | | | | | * - petroleum odor noted in some of the cuttings from this layer. |
| 15 | | | | | | |
| 20 | 3' | 4" | 20 | | Grey | Soft to medium hard shale, water present. |
| | 1' | 1' | 23 | | Grey | Less water, harder shale. |
| | 9" | 9" | 24'9" | | Grey | More water present. Shale to refusal at 24'9". |

# BORING LOG



Client: US EPA
Site Name Mahoningside Power Plant Site
Project Number: 0012-004
Drilling Co.: Summit
Logged By: B. Ring

Elev:
Northing:
Easting:
Depth to water: 22 feet
Total boring depth: 22.5 feet

Date: 12/04/00
Drill Method: auger/core
Site Type: boring

| Sample Interval (Ft) | | Recovery | Depth | Graphic Column | Color | Lithologic Description |
|---|---|---|---|---|---|---|
| 0 | | | 0 | | Varied | Various materials, definite fill material. |
| | | | 4 | | Black | Dark sandy soils with many organic inclusions. |
| 5 | | | | | | |
| 10 | | | | | | |
| | 2' | 15" | 13 | | Black to brown | Black, gritty sands and soils. Some pebbles noted. Phases quickly to sandy clay. |
| 15 | 2' | 2' | 15 | | Brown | Sandy clay to clay. |
| | 2' | 2' | 17 | | Brown to dark grey | 18" of clay, phases to 6" of dark soft shale. Shale is very brittle. |
| | 2' | 6" | 19 | | Grey | Medium hard shale, less brittle than previous layer. |
| 20 | | | | | | |
| | 1.5' | 7" | 21 | | Dark grey | Shale, water is present. Refusal at 22.5'. |

# BORING LOG



Client: US EPA
Site Name: Mahoningside Power Plant Site
Project Number: 0012-004
Drilling Co.: Summit
Logged By: B. Ring

Elev:
Northing:
Easting:
Depth to water: 19 feet
Total boring depth: 20.5 feet

Date: 12/05/00
Drill Method: auger/core
Site Type: boring

| Sample Interval (Ft) | | Recovery | Depth | Graphic Column | Color | Lithologic Description |
|---|---|---|---|---|---|---|
| 0 | | | 0 | | Black | Sandy soils, black in nature. Fill material throughout. |
| | | | | | | |
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| 5 | | | | | | |
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| 10 | | | | | | |
| | | | | | | |
| | | | 12 | | Brown | Moist clay layer. |
| | | | | | | |
| | | | | | | |
| 15 | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | 1' | 8" | 19 | | Dark grey | Soft shale, water present. |
| 20 | 6" | 4" | 20 | | Grey | Harder shale, less water than before. Spoon refusal at 20.5'. |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

# BORING LOG



Client: US EPA
Site Name Mahoningside Power Plant Site
Project Number: 0012-004
Drilling Co.: Summit
Logged By: B. Ring

Elev:
Northing:
Easting:
Depth to water: 17 feet
Total boring depth: 20 feet

Date: 12/05/00
Drill Method: auger/core
Site Type: boring

| Sample Interval (Ft) | | Recovery | Depth | Graphic Column | Color | Lithologic Description |
|---|---|---|---|---|---|---|
| 0 | | | 0 | | Varied | Fill material, rocks, etc.. |
| 5 | | | 5 | | Brown | Clay layer. Ends at the 15' mark in a sand layer. |
| 10 | | | | | | |
| 15 | 2' | 7" | 15 | | Dark grey | Sand layer, very dark, with some pebbles. |
| | 2' | 7" | 17 | | Dark grey | Soft shale, water present. Harder shale at bottom of section. |
| | 1' | 10" | 19 | | Light grey | Medium hard shale, very little water present. Refusal at 20'. |
| 20 | | | | | | |

# BORING LOG



Client: US EPA
Site Name: Mahoningside Power Plant Site
Project Number: 0012-004
Drilling Co.: Summit
Logged By: B. Ring

Elev:
Northing:
Easting:
Depth to water: 19.5 feet
Total boring depth: 19.5 feet

Date: 12/05/00
Drill Method: auger/core
Site Type: boring

| Sample Interval (Ft) | | Recovery | Depth | Graphic Column | Color | Lithologic Description |
|---|---|---|---|---|---|---|
| 0 | | | 0 | | Varied | Fill material, rocks, etc.. |
| | | | 2 | | Black | Course grained, dark, sand and gravel. |
| 5 | | | | | | |
| 10 | | | | | | |
| | | | 12.5 | | Brown | Clay. |
| 15 | | | | | | |
| | 1' | 10" | 18 | | Light grey | Medium soft shale to 19'. |
| | 6" | 6" | 19 | | Dark grey | Wet, dark, hard shale. Refusal at 19.5'. |
| 20 | | | | | | |

# BORING LOG



Client: US EPA
Site Name: Mahoningside Power Plant Site
Project Number: 0012-004
Drilling Co : Summit
Logged By: B. Ring

Elev:
Northing:
Easting:
Depth to water: 18.5 feet
Total boring depth: 21 feet

Date: 12/05/00
Drill Method: auger/core
Site Type: boring

| Sample Interval (Ft) | | Recovery | Depth | Graphic Column | Color | Lithologic Description |
|---|---|---|---|---|---|---|
| 0 | | | 0 | | Black to brown | Black, course sandy soil/fill with many organic inclusions. |
| 5 | | | 5 | | Brown to grey | Mostly course to medium sands and pebbles. |
| 10 | | | | | | |
| 15 | 2' | 1' | 15 | | Dark brown | Very course sands. |
| | 2' | 18" | 17 | | Brown | Course sands, some clay present at bottom of the hole. Clay is wet. |
| | 2' | 18" | 19 | | Grey | Medium hard shale, little water past 19' end of clay. |
| 20 | | | | | | |

# BORING LOG



Client: US EPA
Site Name: Mahoningside Power Plant Site
Project Number: 0012-004
Drilling Co.: Summit
Logged By: B. Ring

Elev:
Northing:
Easting:
Depth to water: 18 feet
Total boring depth: 20 feet

Date: 12/06/00
Drill Method: auger/core
Site Type: boring

| Sample Interval (Ft) | | Recovery | Depth | Graphic Column | Color | Lithologic Description |
|---|---|---|---|---|---|---|
| 0 | | | 0 | | Red | Mostly red brick fragments, some soil in gaps. |
| | | | 3 | | Dark brown | Sandy soils. |
| 5 | | | | | | |
| | | | 6 | | Black | Very course sandy texture, scrap metal noted. Fill material. |
| 10 | | | 10 | | Black to brown | Black course sand-sized grains with gravel and pebbles. |
| 15 | 2' | 1' | 15 | | Brown to black | Mix of clays with dark sandy soils. |
| | 2' | 18" | 17 | | Dark grey | Course sands with some pebbles. Water present. |
| | 1' | 1' | 19 | | Grey | 8" of sand, 4" light grey dry shale. Refusal at 20'. |
| 20 | | | | | | |

# BORING LOG



Client: US EPA
Site Name: Mahoningside Power Plant Site
Project Number: 0012-004
Drilling Co.: Summit
Logged By B. Ring

Elev:
Northing:
Easting:
Depth to water: 16 feet
Total boring depth: 21 feet

Date: 12/06/00
Drill Method: auger/core
Site Type: boring

| Sample Interval (Ft) | | Recovery | Depth | Graphic Column | Color | Lithologic Description |
|---|---|---|---|---|---|---|
| 0 | | | 0 | | Dark brown | Sandy soil with fill material noted. |
| | | | 2.5 | | Black | Sand-sized course material and soils. |
| 5 | | | | | | |
| | | | 8 | | Brown | Clay. |
| 10 | | | | | | |
| | 2' | 18" | 12 | | Brown | Sandy soils. |
| | 2' | 18" | 14 | | Brown to orange, and grey | Mostly clay, phases to brittle shale at bottom of spoon. |
| 15 | | | | | | |
| | 2' | 8" | 16 | | Dark grey | Soft shale, water present. |
| | 2' | 1' | 18 | | Grey | Medium hard shale, less water present. |
| 20 | 1' | 5" | 20 | | Light grey | Hard shale with no water present. Refusal at 21'. |

# APPENDIX B

# ANALYTICAL RESULTS

# Environmental Chemical Corporation

SAMPLE
SW-BOXES

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: SLUICE WAY BOXES
Analysis: CV METALS
Instrument Batch: WG3212,
Preparation Batch: WG3210
Lab Sample ID.: L2052-1
Matrix: Soil
Date Sampled: 10-OCT-00
Lab Notebook No: 1073,
Date Received: 11-OCT-00
Initial Cal. ID.: WG3212,
Date Digested: 12-OCT-00
Final Volume: 100.0 ml
Date Analyzed: 12-OCT-00
Initial Weight: 1.1634 g
Percent Solids: 70 %
Prep. Method: EPA 7471A

SAMPLE RESULTS

| ANALYTICAL METHOD | ANALYTE | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|
| EPA Method 7471A | Mercury | 0.0042 | 0.61 | 28.4 | 25 | D |

RL - Reporting Limit
MDL - Method Detection Limit
D - Diluted

DATA REVIEWED
NOT VALIDATED
OCT 13 2000
BY: [signature]

SF 10-13-00
C/MA 10-13-00

Comments:

# Environmental Chemical Corporation

SAMPLE
GEN-BOXES

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: ALL OTHER BOXES
Analysis: CV METALS
Instrument Batch: WG3212,
Preparation Batch: WG3210
Lab Sample ID.: L2052-2
Matrix: Soil
Date Sampled: 10-OCT-00
Lab Notebook No: 1073,
Date Received: 11-OCT-00
Initial Cal. ID.: WG3212,
Date Digested: 12-OCT-00
Final Volume: 100.0 ml
Date Analyzed: 12-OCT-00
Initial Weight: 1.0627 g
Percent Solids: 74 %
Prep. Method: EPA 7471A

## SAMPLE RESULTS

| ANALYTICAL METHOD | ANALYTE | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|
| EPA Method 7471A | Mercury | 0.0046 | 0.025 | 0.027 | 1 | |

RL - Reporting Limit MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
OCT 13 2000
BY:

SS 10-13-00
C/M 10-13-00

Comments:

# Environmental Chemical Corporation

SAMPLE NUMBER
GEN-BOXES

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: ALL OTHER BOXES
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3311 | Instrument Batch: | WG3236 |
| Matrix: | Soil | Lab Sample ID.: | L2052-2 |
| Lab Notebook No: | 1055 P.79 | Date Sampled: | 10-OCT-00 |
| Initial Cal. ID.: | 4PCB0808 | Date Received: | 11-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 12-OCT-00 |
| Initial Weight: | 10.23 g | Date Analyzed: | 13-OCT-00 |
| Percent Solids: | 74 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 793 | --- | 10000 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 793 | --- | 10000 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 660 | --- | 10000 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 660 | --- | 10000 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 991 | --- | 10000 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 793 | --- | 10000 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 660 | 7850 | 10000 | D,B |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 0 | * | 55-130 | 0.13 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
B - Blank Contamination
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 13 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.



PRELIMINARY

# Environmental Chemical Corporation

SAMPLE NUMBER
SW-BOXES

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: SLUICE WAY BOXES
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3211 | Instrument Batch: | WG3236 |
| Matrix: | Soil | Lab Sample ID.: | L2052-1 |
| Lab Notebook No: | 1055 P.79 | Date Sampled: | 10-OCT-00 |
| Initial Cal. ID.: | 4PCB0808 | Date Received: | 11-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 12-OCT-00 |
| Initial Weight: | 10.45 g | Date Analyzed: | 13-OCT-00 |
| Percent Solids: | 70 % | | |
| Prep. Method. | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.82 | --- | 10 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.82 | --- | 10 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0065 | 0.68 | --- | 10 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.68 | 15.2 | 10 | D,B |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 1.0 | --- | 10 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.82 | --- | 10 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 0.68 | 7.1 | 10 | D,B |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 114 | 55-130 | 0.14 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
B - Blank Contamination
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 13 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.



PRELIMINARY

# Environmental Chemical Corporation

SAMPLE
SW-BOXES

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: SLUICE WAY BOXES
Analysis: CV METALS
Instrument Batch: WG3223,
Preparation Batch: WG3220
Lab Sample ID.: L2052-1
Matrix: Leachate
Date Sampled: 10-OCT-00
Lab Notebook No: 1073,
Date Received: 11-OCT-00
Initial Cal. ID.: WG3223,
Date Digested: 12-OCT-00
Final Volume: 100.0 ml
Date Analyzed: 13-OCT-00
Initial Volume: 100.0 ml
Prep. Method: EPA 7470A
pH: 6 su

## SAMPLE RESULTS

| ANALYTICAL METHOD | ANALYTE | MDL (mg/l) | R L (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|---|---|---|---|---|---|---|
| EPA Method 7470A | Mercury | 0.000057 | 0.00020 | 0.0087 | 1 | B |

RL - Reporting Limit
MDL - Method Detection Limit
B - Blank Contamination

DATA REVIEWED
NOT VALIDATED
OCT 16 2000
BY: [illegible]

ST 10-16-00
[illegible] 10-13-00
[illegible] 10-16-00

Comments:

# Environmental Chemical Corporation

SAMPLE
GEN-BOXES

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: ALL OTHER BOXES
Analysis: CV METALS
Instrument Batch: WG3223,
Preparation Batch: WG3220
Lab Sample ID.: L2052-2
Matrix: Leachate
Date Sampled: 10-OCT-00
Lab Notebook No: 1073,
Date Received: 11-OCT-00
Initial Cal. ID.: WG3223,
Date Digested: 12-OCT-00
Final Volume: 100.0 ml
Date Analyzed: 13-OCT-00
Initial Volume: 100.0 ml
Prep. Method: EPA 7470A
pH: 6 su

## SAMPLE RESULTS

| ANALYTICAL METHOD | ANALYTE | MDL (mg/l) | R L (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|---|---|---|---|---|---|---|
| EPA Method 7470A | Mercury | 0.000057 | 0.00020 | 0.0059 | 1 | B |

RL - Reporting Limit
MDL - Method Detection Limit
B - Blank Contamination

DATA REVIEWED
NOT VALIDATED
OCT 16 2000
BY: [illegible]

ST 10-16-00
CH 10-13-00
BS 10-16-00

Comments:

# Environmental Chemical Corporation

SAMPLE
SW-BOXES

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: SLUICE WAY BOXES
Analysis: ICP METALS
Instrument Batch: WG3224.
Preparation Batch: WG3205
Matrix: Leachate
Lab Notebook No: 1091.
Initial Cal. ID.: IP1013.
Final Volume: 50.0 ml
Initial Volume: 50.0 ml
Prep. Method: EPA 3010A
pH: 6 su

Lab Sample ID.: L2052-1
Date Sampled: 10-OCT-00
Date Received: 11-OCT-00
Date Digested: 13-OCT-00
Date Analyzed: 13-OCT-00

## SAMPLE RESULTS

| ANALYTICAL METHOD | ANALYTE | MDL (mg/l) | R L (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|---|---|---|---|---|---|---|
| EPA Method 6010B | ARSENIC | 0.016 | 0.030 | -- | 1 | U |
| EPA Method 6010B | BARIUM | 0.00069 | 0.0040 | 0.25 | 1 | B |
| EPA Method 6010B | CADMIUM | 0.0018 | 0.0080 | 0.0035 | 1 | J,B |
| EPA Method 6010B | CHROMIUM | 0.0042 | 0.020 | 0.0069 | 1 | J |
| EPA Method 6010B | LEAD | 0.018 | 0.060 | -- | 1 | U |
| EPA Method 6010B | SELENIUM | 0.017 | 0.060 | -- | 1 | U |
| EPA Method 6010B | SILVER | 0.0032 | 0.015 | 0.016 | 1 | |

RL - Reporting Limit
MDL - Method Detection Limit
B - Blank Contamination
J - Estimated Value
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 16 2000
BY: [illegible]

CMR 10-13-00
AS 10-16-00
JS 10-16-00

Comments:

# Environmental Chemical Corporation

SAMPLE
GEN-BOXES

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: ALL OTHER BOXES
Analysis: ICP METALS
Instrument Batch: WG3224,
Preparation Batch: WG3205
Matrix: Leachate
Lab Notebook No: 1091,
Initial Cal. ID.: IP1013,
Final Volume: 50.0 ml
Initial Volume: 50.0 ml
Prep. Method: EPA 3010A
pH: 6 su

Lab Sample ID.: L2052-2
Date Sampled: 10-OCT-00
Date Received: 11-OCT-00
Date Digested: 13-OCT-00
Date Analyzed: 13-OCT-00

## SAMPLE RESULTS

| ANALYTICAL METHOD | ANALYTE | MDL (mg/l) | R L (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|---|---|---|---|---|---|---|
| EPA Method 6010B | ARSENIC | 0.016 | 0.050 | 0.027 | 1 | J |
| EPA Method 6010B | BARIUM | 0.00069 | 0.0040 | 0.34 | 1 | B |
| EPA Method 6010B | CADMIUM | 0.0018 | 0.0080 | 0.0043 | 1 | J,B |
| EPA Method 6010B | CHROMIUM | 0.0042 | 0.020 | 0.0056 | 1 | J |
| EPA Method 6010B | LEAD | 0.018 | 0.060 | --- | 1 | U |
| EPA Method 6010B | SELENIUM | 0.017 | 0.060 | 0.035 | 1 | J |
| EPA Method 6010B | SILVER | 0.0032 | 0.015 | 0.014 | 1 | J |

RL - Reporting Limit
MDL - Method Detection Limit
B - Blank Contamination
J - Estimated Value
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 16 2000
BY: [illegible]

[illegible] 10-13-00
[illegible] 10-16-00
[illegible] 10-16-00

Comments:

# Environmental Chemical Corporation

SAMPLE NUMBER
[redacted]

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: C-14 Sump
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3242 | Instrument Batch: | WG3256 |
| Matrix: | Soil | Lab Sample ID.: | L2065-2 |
| Lab Notebook No: | 1005 P.84 | Date Sampled: | 12-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 13-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 16-OCT-00 |
| Initial Weight: | 10.06 g | Date Analyzed: | 17-OCT-00 |
| Percent Solids: | 25 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 23.9 | --- | 100 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 23.9 | --- | 100 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 19.9 | --- | 100 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.015 | 19.9 | --- | 100 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 29.8 | --- | 100 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 23.9 | --- | 100 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 19.9 | [redacted] | 100 | D,B |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 0 | * | 55-130 | 0.40 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
B - Blank Contamination
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 17 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
[redacted]

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: C-17 Excavation Low
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3242 | Instrument Batch: | WG3256 |
| Matrix: | Soil | Lab Sample ID.: | L2065-3 |
| Lab Notebook No: | 1005 P.84 | Date Sampled: | 12-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 13-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 16-OCT-00 |
| Initial Weight: | 10.18 g | Date Analyzed: | 17-OCT-00 |
| Percent Solids: | 76 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 7.8 | --- | 100 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 7.8 | --- | 100 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 6.5 | --- | 100 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 6.5 | --- | 100 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 9.7 | --- | 100 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 7.8 | --- | 100 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 6.5 | [redacted] | 100 | D,B |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 0 | * | 55-130 | 0.13 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
B - Blank Contamination
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 17 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
[redacted]

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: C-17 Excavation High
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3242 | Instrument Batch: | WG3256 |
| Matrix: | Soil | Lab Sample ID.: | L2065-4 |
| Lab Notebook No: | 1005 P.84 | Date Sampled: | 12-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 13-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 16-OCT-00 |
| Initial Weight: | 10.16 g | Date Analyzed: | 17-OCT-00 |
| Percent Solids: | 89 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 6.6 | — | 100 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 6.6 | — | 100 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 5.5 | — | 100 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 5.5 | — | 100 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 8.3 | — | 100 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 6.6 | [redacted] | 100 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 5.5 | 1060 | 100 | D,B |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 0 * | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
B - Blank Contamination
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 17 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
[redacted]

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: C-2 Sump
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3242 | Instrument Batch: | WG3256 |
| Matrix: | Soil | Lab Sample ID.: | L2065-5 |
| Lab Notebook No: | 1005 P.84 | Date Sampled: | 12-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 13-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 16-OCT-00 |
| Initial Weight: | 10.13 g | Date Analyzed: | 17-OCT-00 |
| Percent Solids: | 48 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 12.3 | --- | 100 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 12.3 | --- | 100 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 10.3 | --- | 100 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 10.3 | --- | 100 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 15.4 | --- | 100 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 12.3 | --- | 100 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 10.3 | [redacted] | 100 | D,B |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 0 | * | 55-130 | 0.21 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
B - Blank Contamination
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 17 2000
BY

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER [redacted]

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: [redacted]
Analysis: [redacted] Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3242 | Instrument Batch: | WG3256 |
| Matrix: | Soil | Lab Sample ID.: | L2065-6 |
| Lab Notebook No: | 1005 P.84 | Date Sampled: | 12-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 13-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 16-OCT-00 |
| Initial Weight: | 10.22 g | Date Analyzed: | 17-OCT-00 |
| Percent Solids: | 42 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 14.0 | --- | 100 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 14.0 | --- | 100 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 11.6 | --- | 100 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 11.6 | --- | 100 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 17.5 | --- | 100 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 14.0 | --- | 100 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 11.6 | [redacted] | 100 | D,B |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 0 * | 55-130 | 0.23 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
B - Blank Contamination
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 17 2000
BY: [signature]

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER [redacted]

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: Transformer Room
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3242 | Instrument Batch: | WG3256 |
| Matrix: | Soil | Lab Sample ID.: | L2065-1 |
| Lab Notebook No: | 1005 P.84 | Date Sampled: | 12-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 13-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 16-OCT-00 |
| Initial Weight: | 10.09 g | Date Analyzed: | 17-OCT-00 |
| Percent Solids: | 61 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.97 | --- | 10 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.97 | --- | 10 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 0.81 | --- | 10 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.81 | --- | 10 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 1.2 | --- | 10 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.97 | --- | 10 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.81 | [redacted] | 10 | D,B |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 150 | * | 55-130 | 0.16 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
B - Blank Contamination
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 17 2000
BY: [signature]

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# EQ FAX

*Environmental Quality Management, Inc.*

EMERGENCY AND RAPID
RESPONSE SERVICES (ERRS)
1310 Kemper Meadow Drive
Cincinnati, OH 45240

FAX # (513) 825-9728

Transmission Confirmation # (800) 500-0575

Date: 10/17/00 Time: 1645

Number of pages (with cover): 7

To: Eric Bowman Phone No.:

Company: EQM

Fax No.: 330-306-0479

From: Mark Swat

Message: Results are Preliminary.

# Environmental Chemical Corporation

SAMPLE NUMBER
**TR-1012**

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: Transformer Room
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3242 | Instrument Batch: | WG3256 |
| Matrix: | Soil | Lab Sample ID.: | L2065-1 |
| Lab Notebook No: | 1005 P.84 | Date Sampled: | 12-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 13-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 16-OCT-00 |
| Initial Weight: | 10.09 g | Date Analyzed: | 17-OCT-00 |
| Percent Solids: | 61 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.97 | --- | 10 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.97 | --- | 10 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 0.81 | --- | 10 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.81 | --- | 10 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 1.2 | --- | 10 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.97 | --- | 10 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.81 | 26.1 | 10 | D |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 150 | * | 55-130 | 0.16 mg/kg |

RL - Reporting Limit MDL - Method Detection Limit
* - Value(s) outside of QC limits
D - Diluted U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 18 2000
[redacted]

10-18-00
10.18.00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
C14-1012

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: C-14 Sump
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3242 | Instrument Batch: | WG3256 |
| Matrix: | Soil | Lab Sample ID.: | L2065-2 |
| Lab Notebook No: | 1005 P.84 | Date Sampled: | 12-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 13-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 16-OCT-00 |
| Initial Weight: | 10.06 g | Date Analyzed: | 17-OCT-00 |
| Percent Solids: | 25 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 23.9 | --- | 100 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 23.9 | --- | 100 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 19.9 | --- | 100 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.015 | 19.9 | --- | 100 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 29.8 | --- | 100 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 23.9 | --- | 100 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 199 | 1770 | 1000 | D |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 0 | * | 55-130 | 0.40 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 18 2000
BY:

R 10-18-00
CH 10.19.00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
C17-L-1012

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: C-17 Excavation Low
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3242 | Instrument Batch: | WG3256 |
| Matrix: | Soil | Lab Sample ID.: | L2065-3 |
| Lab Notebook No: | 1005 P.84 | Date Sampled: | 12-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 13-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 16-OCT-00 |
| Initial Weight: | 10.18 g | Date Analyzed: | 17-OCT-00 |
| Percent Solids: | 76 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 7.8 | — | 100 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 7.8 | — | 100 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 6.5 | — | 100 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 6.5 | — | 100 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 9.7 | — | 100 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 7.8 | — | 100 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 64.6 | 683 | 1000 | D |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 0 | * | 55-130 | 0.13 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 18 2000
BY: [signature]

[signature] 10-18-00
CH 10.18.00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
C17-H-1012

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: C-17 Excavation High
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3242 | Instrument Batch: | WG3256 |
| Matrix: | Soil | Lab Sample ID.: | L2065-4 |
| Lab Notebook No: | 1005 P.84 | Date Sampled: | 12-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 13-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 16-OCT-00 |
| Initial Weight: | 10.16 g | Date Analyzed: | 17-OCT-00 |
| Percent Solids: | 89 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 6.6 | --- | 100 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 6.6 | --- | 100 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 5.5 | --- | 100 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 5.5 | --- | 100 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 8.3 | --- | 100 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 6.6 | --- | 100 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 111 | 1250 | 2000 | D |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 0 | * | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 18 2000
BY

10-18-00
10.18.00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
D2-1012

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: D-2 Sump
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3242 | Instrument Batch: | WG3256 |
| Matrix: | Soil | Lab Sample ID.: | L2065-6 |
| Lab Notebook No: | 1005 P.84 | Date Sampled: | 12-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 13-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 16-OCT-00 |
| Initial Weight: | 10.22 g | Date Analyzed: | 17-OCT-00 |
| Percent Solids: | 42 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 14.0 | --- | 100 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 14.0 | --- | 100 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 11.6 | --- | 100 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 11.6 | --- | 100 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 17.3 | --- | 100 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 14.0 | --- | 100 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 116 | 1470 | 1000 | D |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 0 | * | 55-130 | 0.23 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 18 2000
BY: [signature]

R 10-18-00
10.18.00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
C2-1012

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: C-2 Sump
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3242 | Instrument Batch: | WG3256 |
| Matrix: | Soil | Lab Sample ID.: | L2065-5 |
| Lab Notebook No: | 1005 P.84 | Date Sampled: | 12-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 13-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 16-OCT-00 |
| Initial Weight: | 10.13 g | Date Analyzed: | 17-OCT-00 |
| Percent Solids: | 48 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 12.3 | — | 100 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 12.3 | — | 100 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 10.3 | — | 100 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 10.3 | — | 100 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 15.4 | — | 100 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 12.3 | — | 100 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 206 | 3430 | 2000 | D |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 0 | * | 55-130 | 0.21 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 18 2000
BY

10-18-00
10.18.00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
C21-N-01

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: C21- NORTH WALL
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3312 | Instrument Batch: | WG3336 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2102-9 |
| Lab Notebook No: | 1055 P88 | Date Sampled: | 23-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 24-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 24-OCT-00 |
| Initial Weight: | 10.12 g | Date Analyzed: | 25-OCT-00 |
| Percent Solids: | 84 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 70.6 | --- | 1000 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 70.6 | --- | 1000 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 58.8 | --- | 1000 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 58.8 | --- | 1000 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 88.2 | --- | 1000 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 70.6 | --- | 1000 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 58.8 | 585 | 1000 | D,B |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 0 | * | 55-130 | 0.12 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
B - Blank Contamination
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 26 2000
EQ

10-26-00
10-26-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
C21-S-01

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: C21- SOUTH WALL
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3312 | Instrument Batch: | WG3336 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2102-10 |
| Lab Notebook No: | 1055 P88 | Date Sampled: | 23-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 24-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 24-OCT-00 |
| Initial Weight: | 10.22 g | Date Analyzed: | 25-OCT-00 |
| Percent Solids: | 60 % | | |
| Prep. Method: | EPA 3541 | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 97.8 | --- | 1000 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 97.8 | --- | 1000 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 81.5 | --- | 1000 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 81.5 | --- | 1000 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 122 | --- | 1000 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 97.8 | --- | 1000 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 408 | 6140 | 5000 | D,B |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 0 | * | 55-130 | 0.16 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
B - Blank Contamination
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 26 2000
BY:

10-26-00
10-26-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
C21-E-01

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: C21- EAST WALL
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3312 | Instrument Batch: | WG3336 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2102-8 |
| Lab Notebook No: | 1055 P88 | Date Sampled: | 23-OCT-00 |
| Initial Cal. ID.: | 4PI013 | Date Received: | 24-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 24-OCT-00 |
| Initial Weight: | 10.34 g | Date Analyzed: | 25-OCT-00 |
| Percent Solids: | 75 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 77.4 | --- | 1000 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 77.4 | --- | 1000 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0065 | 64.5 | --- | 1000 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 64.5 | --- | 1000 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 96.7 | --- | 1000 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 77.4 | --- | 1000 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 322 | 4660 | 5000 | D,B |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 0 | * | 55-130 | 0.13 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
B - Blank Contamination
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 26 2000
BY:

CH 10-26-00
K 10-26-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
C21-B-01

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: C21- BOTTOM
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3312 | Instrument Batch: | WG3336 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2102-7 |
| Lab Notebook No: | 1055 P88 | Date Sampled: | 23-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 24-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 24-OCT-00 |
| Initial Weight: | 10.33 g | Date Analyzed: | 25-OCT-00 |
| Percent Solids: | 65 % | | |
| Prep. Method: | EPA 3541 | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 89.4 | -- | 1000 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 89.4 | -- | 1000 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0065 | 74.5 | -- | 1000 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 74.5 | -- | 1000 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 112 | -- | 1000 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 89.4 | -- | 1000 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 149 | 3060 | 2000 | D,B |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 0 * | 55-130 | 0.15 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
B - Blank Contamination
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 26 2000
BY:

10-26-00
10-26-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
C17-B-01

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: C17- BOTTOM
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3312 | Instrument Batch: | WG3336 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2102-6 |
| Lab Notebook No: | 1055 P88 | Date Sampled: | 23-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 24-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 24-OCT-00 |
| Initial Weight: | 10.17 g | Date Analyzed: | 24-OCT-00 |
| Percent Solids: | 82 % | | |
| Prep. Method: | EPA 3541 | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 71.9 | --- | 1000 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 71.9 | --- | 1000 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 60.0 | --- | 1000 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 60.0 | --- | 1000 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 89.9 | --- | 1000 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 71.9 | --- | 1000 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 60.0 | 1890 | 1000 | D,B |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 0 * | 55-130 | 0.12 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
B - Blank Contamination
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 26 2000
BY: [signature]

[signature] 10-26-00
[signature] 10-26-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
C17-W-01

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: C17- WEST WALL
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3312 | Instrument Batch: | WG3336 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2102-8 |
| Lab Notebook No: | 1055 P88 | Date Sampled: | 23-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 24-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 24-OCT-00 |
| Initial Weight: | 10.16 g | Date Analyzed: | 24-OCT-00 |
| Percent Solids: | 87 % | | |
| Prep. Method: | EPA 3541 | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 67.9 | — | 1000 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 67.9 | — | 1000 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 56.6 | — | 1000 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 56.6 | — | 1000 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 84.8 | — | 1000 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 67.9 | — | 1000 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 56.6 | 661 | 1000 | D,B |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 0 | * | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
B - Blank Contamination
D - Diluted
U - Below MDL

DATA REVIEW
NOT VALIDATED
OCT 26 2000

CH 10-26-00
10-26-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
C17-E-01

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: C17- EAST WALL
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3312 | Instrument Batch: | WG3336 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2102-4 |
| Lab Notebook No: | 1055 P88 | Date Sampled: | 23-OCT-00 |
| Initial Cal. ID.: | 4PI013 | Date Received: | 24-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 24-OCT-00 |
| Initial Weight: | 10.48 g | Date Analyzed: | 25-OCT-00 |
| Percent Solids: | 86 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 66.6 | --- | 1000 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 66.6 | --- | 1000 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0064 | 55.5 | --- | 1000 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 55.5 | --- | 1000 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.023 | 83.2 | --- | 1000 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 66.6 | --- | 1000 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 111 | 2250 | 2000 | D,B |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 0 | * | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
B - Blank Contamination
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 26 2000
BY:

10-26-00
10-26-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
C17-N-01

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: C17- NORTH WALL
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3312 | Instrument Batch: | WG3336 |
| Matrix: | Misc Solid | Lab Sample ID.: | L3102-2 |
| Lab Notebook No: | 1055 P88 | Date Sampled: | 23-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 24-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 24-OCT-00 |
| Initial Weight: | 10.0 g | Date Analyzed: | 25-OCT-00 |
| Percent Solids: | 85 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 70.6 | --- | 1000 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.020 | 70.6 | --- | 1000 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0068 | 58.8 | --- | 1000 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.015 | 58.8 | --- | 1000 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.025 | 88.2 | --- | 1000 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 70.6 | --- | 1000 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 118 | 2970 | 2000 | D,B |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 0 | * | 55-130 | 0.12 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
B - Blank Contamination
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 26 2000
BY: [signature]

[signature] 10-26-00
K 10-26-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
C17-S-01

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: C17- SOUTH WALL
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3312 | Instrument Batch: | WG3336 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2102-3 |
| Lab Notebook No: | 1055 P88 | Date Sampled: | 23-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 24-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 24-OCT-00 |
| Initial Weight: | 10.07 g | Date Analyzed: | 25-OCT-00 |
| Percent Solids: | 89 % | | |
| Prep. Method: | EPA 3541 | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 6.7 | --- | 100 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 6.7 | --- | 100 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 5.6 | --- | 100 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.015 | 5.6 | --- | 100 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 8.4 | --- | 100 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 6.7 | --- | 100 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 5.6 | 29.7 | 100 | D,B |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 0 * | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
B - Blank Contamination
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 26 2000
BY:

CH 10-26-00
R 10-26-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
L42-01

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: 42" LINE
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3312 | Instrument Batch: | WG3336 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2102-1 |
| Lab Notebook No: | 1055 P88 | Date Sampled: | 23-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 24-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 24-OCT-00 |
| Initial Weight: | 10.11 g | Date Analyzed: | 25-OCT-00 |
| Percent Solids: | 80 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 7.4 | --- | 100 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 7.4 | --- | 100 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 6.2 | --- | 100 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 6.2 | — | 100 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 9.3 | --- | 100 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 7.4 | --- | 100 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 6.2 | 68.6 | 100 | D,B |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 0 * | 55-130 | 0.12 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
B - Blank Contamination
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 26 2000
BY:

CH 10-26-00
K 10-26-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# ENVIRONMENTAL CHEMICAL CORPORATION

| | | | |
|---|---|---|---|
| Customer: | EQM | Cust. Proj. No.: | 30141.0065 |
| Source: | Mahoning Side Power Plant | Project No.: | L2090 |
| Analysis: | Total Hardness | Date Received: | 20-Oct-00 |
| Method: | Std. Method 2340B | Date Analyzed: | 24-Oct-00 |
| Lab Notebook: | 1091 | Prep Batch: | WG3297 |
| Reporting Limit: | 1.4 mg/L | Instr. Batch: | WG3314 |

| LAB I.D. | CUSTOMER SAMPLE NO. | MATRIX | LOCATION | VALUE mg/L |
|---|---|---|---|---|
| L2090-1 | WTPI-1 | Misc. Water | Water Plant Influent Water | 431 |

DATA REVIEWED
NOT VALIDATED
OCT 25 2000
BY: [signature]

CMR 10-25-00

BRL: Below Reporting Limit

# Environmental Chemical Corporation

SAMPLE NUMBER
WTPI-1

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING SIDE POWER PLANT
Location: WATER PLANT INFLUENT WATER
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3300 | Instrument Batch: | WG3311 |
| Matrix: | Misc. H2O | Lab Sample ID.: | L2090-1 |
| Lab Notebook No: | 1055 P.86 | Date Sampled: | 19-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 20-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 23-OCT-00 |
| Initial Volume: | 990 ml | Date Analyzed: | 23-OCT-00 |
| Prep. Method: | EPA 3510C | | |
| pH: | 7 su | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/l) | RL (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.00017 | 0.00051 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.00010 | 0.00051 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.00021 | 0.00066 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.00020 | 0.00066 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.00013 | 0.00051 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.00015 | 0.00051 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.000067 | 0.00051 | 0.017 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 74 | 50-150 | 0.0010 mg/l |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 25 2000
BY:

10-25-00
CH
10-25-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
**WTP-E2**

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING SIDE POWER PLANT
Location: WTP EFLUENT WATER
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3300 | Instrument Batch: | WG3311 |
| Matrix: | Misc. H2O | Lab Sample ID.: | L2090-2 |
| Lab Notebook No: | 1055 P.86 | Date Sampled: | 19-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 20-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 23-OCT-00 |
| Initial Volume: | 990 ml | Date Analyzed: | 23-OCT-00 |
| Prep. Method: | EPA 3510C | | |
| pH: | 7 su | | |

**SAMPLE RESULTS**

| | CAS NO. | COMPOUND | MDL (mg/l) | R L (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.00017 | 0.00051 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.00010 | 0.00051 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.00021 | 0.00066 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.00020 | 0.00066 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.00013 | 0.00051 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.00015 | 0.00051 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.000067 | 0.00051 | 0.0012 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 127 | 50-150 | 0.0010 mg/l |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 25 2000
BY: 10-25-00
10.25.00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
EW2-120600

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING SIDE RIVER SITE
Location: EFFLUENT WATER
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3660 | Instrument Batch: | WG3685 |
| Matrix: | Misc. H2O | Lab Sample ID.: | L2290-1 |
| Lab Notebook No: | 1152, 14 | Date Sampled: | 06-DEC-00 |
| Initial Cal. ID.: | PF1208 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 08-DEC-00 |
| Initial Volume: | 980 ml | Date Analyzed: | 09-DEC-00 |
| Prep. Method: | EPA 3510C | | |
| pH: | 7 su | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/l) | RL (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.00017 | 0.00051 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.00010 | 0.00051 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.00021 | 0.00066 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.00021 | 0.00066 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.00013 | 0.00051 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.00015 | 0.00051 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.000067 | 0.00051 | 0.00082 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 109 | 50-150 | 0.0010 mg/l |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 11 2000
BY: [signature]

Run Through 1 carbon + 1 bag filter

[signature] 10-11-00
[signature] 12-11-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
WTP-3

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING SIDE POWER PLANT
Location: WTP EFLUENT
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3782 | Instrument Batch: | WG3797 |
| Matrix: | Misc. H2O | Lab Sample ID.: | L2372-1 |
| Lab Notebook No: | 1152, 18 | Date Sampled: | 14-DEC-00 |
| Initial Cal. ID.: | PF1212 | Date Received: | 15-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 15-DEC-00 |
| Initial Volume: | 980 ml | Date Analyzed: | 16-DEC-00 |
| Prep. Method: | EPA 3510C | | |
| pH: | 7 su | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/l) | RL (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.00017 | 0.00051 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.00010 | 0.00051 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.00021 | 0.00066 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.00021 | 0.00066 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.00013 | 0.00051 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.00015 | 0.00051 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.000067 | 0.00051 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 105 | 50-150 | 0.0010 mg/l |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA REV -
NOT VALIDATED
DEC 1 9 2000
BY: [signature]

MKW 12-19-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
WTPI-1

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING SIDE POWER PLANT
Location: WATER PLANT INFLUENT WATER
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3300 | Instrument Batch: | WG3311 |
| Matrix: | Misc. H2O | Lab Sample ID.: | L2090-1 |
| Lab Notebook No: | 1055 P.86 | Date Sampled: | 19-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 20-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 23-OCT-00 |
| Initial Volume: | 990 ml | Date Analyzed: | 23-OCT-00 |
| Prep. Method: | EPA 3510C | | |
| pH: | 7 su | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/l) | RL (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.00017 | 0.00051 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.00010 | 0.00051 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.00021 | 0.00066 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.00020 | 0.00066 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.00013 | 0.00051 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.00015 | 0.00051 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.000067 | 0.00051 | 0.017 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 74 | 50-150 | 0.0010 mg/l |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
OCT 25 2000
BY:

10-25-00
CH
10-25-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER

**WTP-E2**

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065

Source: MAHONING SIDE POWER PLANT

Location: WTP EFLUENT WATER

Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3300 | Instrument Batch: | WG3311 |
| Matrix: | Misc. H2O | Lab Sample ID.: | L2090-2 |
| Lab Notebook No: | 1055 P.86 | Date Sampled: | 19-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 20-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 23-OCT-00 |
| Initial Volume: | 990 ml | Date Analyzed: | 23-OCT-00 |
| Prep. Method: | EPA 3510C | | |
| pH: | 7 su | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/l) | R L (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.00017 | 0.00051 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.00010 | 0.00051 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.00021 | 0.00066 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.00020 | 0.00066 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.00013 | 0.00051 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.00015 | 0.00051 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.000067 | 0.00051 | 0.0012 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 127 | 50-150 | 0.0010 mg/l |

RL - Reporting Limit

U - Below MDL

MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
OCT 25 2000
BY: R 10-25-00
CH 10.25.00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# ENVIRONMENTAL CHEMICAL CORPORATION

| | | | |
|---|---|---|---|
| Customer: | EQM | Cust. Proj. No.: | 30141.0065 |
| Source: | Mahoning Side Power Plant | Project No.: | L2090 |
| Analysis: | Total Hardness | Date Received: | 20-Oct-00 |
| Method: | Std. Method 2340B | Date Analyzed: | 24-Oct-00 |
| Lab Notebook: | 1091 | Prep Batch: | WG3297 |
| Reporting Limit: | 1.4 mg/L | Instr. Batch: | WG3314 |

| LAB I.D. | CUSTOMER SAMPLE NO. | MATRIX | LOCATION | VALUE mg/L |
|---|---|---|---|---|
| L2090-1 | WTPI-1 | Misc. Water | Water Plant Influent Water | 431 |

DATA REVIEWED
NOT VALIDATED
OCT 25 2000
BY: [signature]

[signature] 10-25-00

BRL: Below Reporting Limit

STS CONSULTANTS, LTD.

GRAIN SIZE DISTRIBUTION (ASTM D 422)

Project: MAHONING RIVER SITE
Boring/Source: BULK SAMPLE
Sample Number: L2111-1
Depth (feet): -
USCS Classification: --
Soil Description: RIVER SEDIMENTS

STS Job No.: 26312
Date: 11-15-00
LL: - PL: - PI: -
WC: - SP.GR.: 2.70 Est.
Cu: - Cc: -

SIEVE ANALYSIS --

SAMPLE WEIGHT: 54.41 GRAMS

| SIEVE SIZE | PER CENT RETAINED | PER CENT PASSING |
|---|---|---|
| 3/4" | .0 | 100.0 |
| 1/2" | 3.7 | 96.3 |
| 3/8" | 1.8 | 94.6 |
| #4 | 2.5 | 92.1 |
| #10 | 4.5 | 87.6 |
| #40 | 8.8 | 78.7 |
| #100 | 11.5 | 67.2 |
| #200 | 3.7 | 63.6 |

DATA REVIEWED
NOT VALIDATED
NOV 16 2000
BY:

HYDROMETER ANALYSIS --

HYDROMETER SAMPLE WEIGHT: 47.15 GRAMS

| ELAPSED TIME | TEMPERATURE CENTIGRADE | ACTUAL READING | ADJUST READING | GRAIN SIZE | PER CENT FINER |
|---|---|---|---|---|---|
| .50 | 21.0 | 39.5 | 32.0 | .0589 | 58.8 |
| 1.00 | 21.0 | 39.0 | 31.5 | .0418 | 57.9 |
| 2.00 | 21.0 | 38.0 | 30.5 | .0298 | 56.0 |
| 5.00 | 21.0 | 35.5 | 28.0 | .0192 | 51.4 |
| 10.00 | 21.0 | 33.0 | 25.5 | .0139 | 46.9 |
| 20.00 | 21.0 | 30.5 | 23.0 | .0100 | 42.3 |
| 30.00 | 21.0 | 29.0 | 21.5 | .0082 | 39.5 |
| 60.00 | 21.0 | 25.5 | 18.0 | .0060 | 33.1 |
| 120.00 | 21.0 | 23.0 | 15.5 | .0043 | 28.5 |
| 240.00 | 21.0 | 20.5 | 13.0 | .0031 | 23.9 |
| 1440.00 | 21.0 | 16.5 | 9.0 | .0013 | 16.5 |

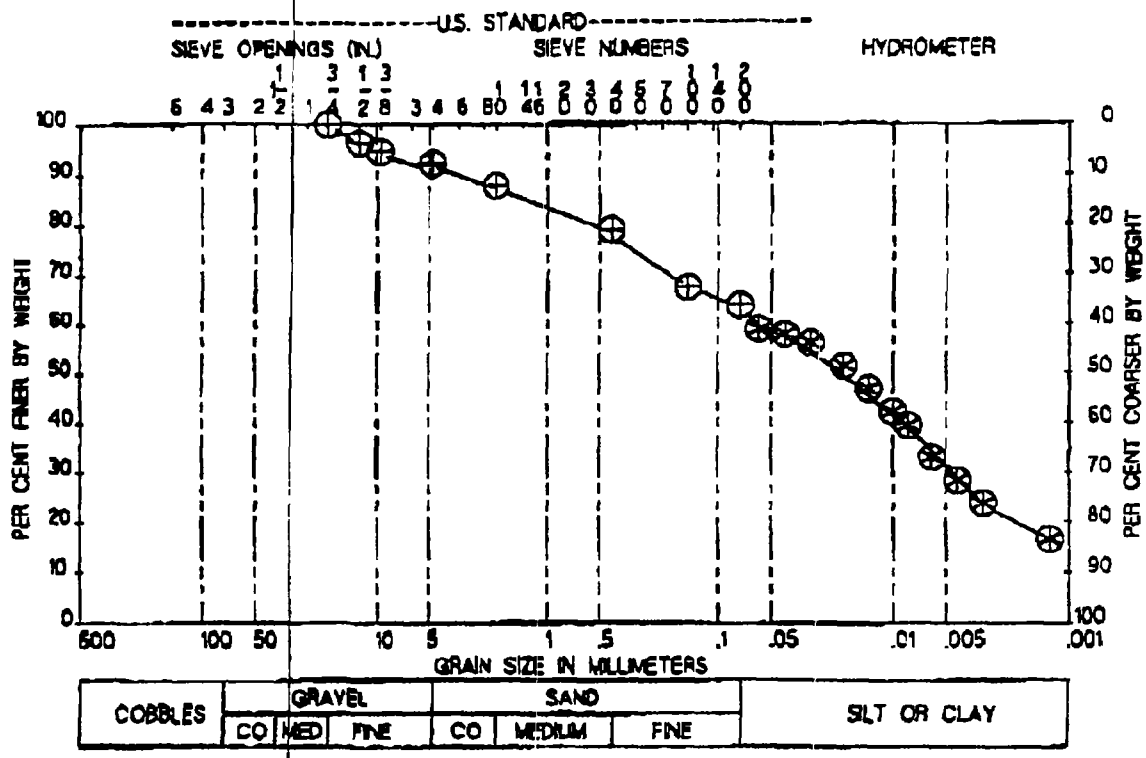
# STS Laboratory Services Group

GRAIN SIZE DISTRIBUTION (ASTM D 422)
STS JOB NO.: 26516
DATE: 11-15-00
LL: - PL: - PI: -
WC: - SP.GR.: 2.70 EST.

STS CONSULTANTS LTD.

PROJECT: MAHONING RIVER SITE
BORING/SOURCE: BULK SAMPLE
SAMPLE NUMBER: L2111-1
DEPTH (FEET): -
USCS CLASSIFICATION: —
SOIL DESCRIPTION: RIVER SEDIMENTS

DATA REVIEWED
NOT VALIDATED
NOV 16 2000
EM



# Environmental Chemical Corporation

SAMPLE
MR-PRESED

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: NEAR 42" PLUG
Analysis: CV METALS
Instrument Batch: WG3374,
Preparation Batch: WG3371
Lab Sample ID.: L2111-1
Matrix: Misc Solid
Date Sampled: 24-OCT-00
Lab Notebook No: 1147,
Date Received: 26-OCT-00
Initial Cal. ID.: WG3374,
Date Digested: 01-NOV-00
Final Volume: 100.0 ml
Date Analyzed: 01-NOV-00
Initial Weight: 1.0780 g
Percent Solids: 47 %
Prep. Method: EPA 7471A

## SAMPLE RESULTS

| ANALYTICAL METHOD | ANALYTE | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|
| EPA Method 7471A | Mercury | 0.0045 | 0.039 | 0.43 | 1 | |

*RL - Reporting Limit* *MDL - Method Detection Limit*

DATA REVIEWED
NOT VALIDATED
NOV 02 2000
BY: [signature]

83 11-1-00
[illegible] 11-1-00
ST 11-01-00

Comments:

# Environmental Chemical Corporation

SAMPLE
**MR-PRESED**

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: NEAR 42" PLUG
Analysis: ICP METALS
Instrument Batch: WG3379,
Preparation Batch: WG3358 Lab Sample ID.: L2111-1
Matrix: Misc Solid Date Sampled: 24-OCT-00
Lab Notebook No: 1091, Date Received: 26-OCT-00
Initial Cal. ID.: E110100, Date Digested: 31-OCT-00
Final Volume: 100.0 ml Date Analyzed: 01-NOV-00
Initial Weight: 1.9017 g
Percent Solids: 47 %
Prep. Method: EPA 3050B

## SAMPLE RESULTS

| ANALYTICAL METHOD | ANALYTE | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|
| EPA Method 6010B | ARSENIC | 0.38 | 11.2 | 57.2 | 2 | D |
| EPA Method 6010B | BARIUM | 0.093 | 1.3 | 194 | 2 | D |
| EPA Method 6010B | CADMIUM | 0.089 | 1.8 | 2.2 | 2 | D |
| EPA Method 6010B | CHROMIUM | 0.17 | 4.5 | 121 | 2 | D |
| EPA Method 6010B | LEAD | 1.4 | 17.9 | 351 | 2 | D |
| EPA Method 6010B | SELENIUM | 1.1 | 145 | --- | 2 | D,U |
| EPA Method 6010B | SILVER | 0.27 | 3.4 | --- | 2 | D,U |

RL - Reporting Limit MDL - Method Detection Limit
D - Diluted U - Below MDL

Post Digest Spike Recovery: Barium= 91%; Chromium= 93%; Lead= 93%

DATA REVIEWED
NOT VALIDATED
NOV 0 2 2000
BY: [signature]
11-2-00

Comments:

# Environmental Chemical Corporation

SAMPLE NUMBER
**MR-PRESED**

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: NEAR 42" PLUG
Analysis: EPA Method 8270C Semivolatiles by GC/MS

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3339 | Instrument Batch: | WG3357 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2111-1 |
| Lab Notebook No: | 1079,P.56 | Date Sampled: | 24-OCT-00 |
| Initial Cal. ID.: | 3OCT3000 | Date Received: | 26-OCT-00 |
| Final Volume: | 1.0 ml | Date Extracted: | 27-OCT-00 |
| Initial Weight: | 10.27 g | Date Analyzed: | 31-OCT-00 |
| Percent Solids: | 47 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (ug/kg) | R L (ug/kg) | RESULTS (ug/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 83-32-9 | Acenaphthene | 65.2 | 1040 | 166 | 1 | J |
| 2. | 208-96-8 | Acenaphthylene | 69.1 | 1040 | 112 | 1 | J |
| 3. | 120-12-7 | Anthracene | 75.9 | 1040 | 454 | 1 | J |
| 4. | 56-55-3 | Benzo(a)Anthracene | 54.5 | 1040 | 2340 | 1 | |
| 5. | 50-32-8 | Benzo(a)Pyrene | 69.1 | 1040 | 1510 | 1 | |
| 6. | 205-99-2 | Benzo(b)Fluoranthene | 82.8 | 1040 | 2080 | 1 | |
| 7. | 191-24-2 | Benzo(g,h,i)Perylene | 106 | 1040 | 680 | 1 | J |
| 8. | 207-08-9 | Benzo(k)Fluoranthene | 82.8 | 1040 | 783 | 1 | J |
| 9. | 218-01-9 | Chrysene | 64.3 | 1040 | 2950 | 1 | |
| 10. | 53-70-3 | Dibenzo(a,h)Anthracene | 108 | 1040 | 222 | 1 | J |
| 11. | 206-44-0 | Fluoranthene | 60.4 | 1040 | 3030 | 1 | |
| 12. | 86-73-7 | Fluorene | 63.3 | 1040 | 224 | 1 | J |
| 13. | 193-39-5 | Indeno(1,2,3-cd)Pyrene | 109 | 1040 | 785 | 1 | J |
| 14. | 91-20-3 | Naphthalene | 58.4 | 1040 | 189 | 1 | J |
| 15. | 85-01-8 | Phenanthrene | 63.3 | 1040 | 1770 | 1 | |
| 16. | 129-00-0 | Pyrene | 75.9 | 1040 | 5740 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| 2-Fluorobiphenyl | 94 | | 30-115 | 5180 ug/kg |
| Nitrobenzene d5 | 74 | | 23-120 | 5180 ug/kg |
| Terphenyl d14 | 173 | * | 18-137 | 5180 ug/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
J - Estimated Value

DATA REVIEWED
NOT VALIDATED
NOV 02 2000
BY:

VF 11/3/00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-PRESED

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: NEAR 42" PLUG
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3354 | Instrument Batch: | WG3388 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2111-1 |
| Lab Notebook No: | 1055 P.94 | Date Sampled: | 24-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 26-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 30-OCT-00 |
| Initial Weight: | 10.04 g | Date Analyzed: | 01-NOV-00 |
| Percent Solids: | 47 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 127 | --- | 1000 | D |
| 2. | 11104-28-2 | Aroclor 1221 | 0.020 | 127 | --- | 1000 | D |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 106 | --- | 1000 | D |
| 4. | 53469-21-9 | Aroclor 1242 | 0.015 | 106 | --- | 1000 | D |
| 5. | 12672-29-6 | Aroclor 1248 | 0.025 | 159 | --- | 1000 | D |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 127 | --- | 1000 | D |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 530 | 6550 | 5000 | D |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 0 | * | 55-130 | 0.21 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
D - Diluted

DATA REVIEWED
NOT VALIDATED
NOV 02 2000
BY:

VF 11/2/00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
C2-TR-W-01

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: TRENCH C2-WALLS
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3354 | Instrument Batch: | WG3388 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2111-2 |
| Lab Notebook No: | 1055 P.94 | Date Sampled: | 25-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 26-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 30-OCT-00 |
| Initial Weight: | 10.42 g | Date Analyzed: | 01-NOV-00 |
| Percent Solids: | 70 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.082 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.082 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0065 | 0.069 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.069 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.10 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.082 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 0.069 | 0.31 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 84 | 55-130 | 0.14 mg/kg |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA R[illegible]ED
NOT VAL[illegible]TED
NOV 0 2 2000
BY: [illegible]

RF 11/2/00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
C2-TR-B-01

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: TRENCH C2-BOTTOM
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3354 | Instrument Batch: | WG3388 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2111-3 |
| Lab Notebook No: | 1055 P.94 | Date Sampled: | 25-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 26-OCT-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 30-OCT-00 |
| Initial Weight: | 10.02 g | Date Analyzed: | 01-NOV-00 |
| Percent Solids: | 92 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.065 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.020 | 0.065 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 0.054 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.015 | 0.054 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.025 | 0.081 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.065 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.054 | 0.27 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 85 | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
NOV 02 2000
BY: [signature]

VF 11/2/00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MP-P-01

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: 4 FT AT D13
Analysis: NIOSH 5503 PCBs By GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3353 | Instrument Batch: | WG3377 |
| Matrix: | Filter | Lab Sample ID.: | L2108-1 |
| Lab Notebook No: | 1055, 94 | Date Sampled: | 23-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 25-OCT-00 |
| Final Volume: | 6 ml | Date Extracted: | 30-OCT-00 |
| Prep. Method: | NIOSH 5503 | Date Analyzed: | 31-OCT-00 |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (ug) | R L (ug) | RESULTS (ug) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.11 | 0.60 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.090 | 0.60 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.18 | 0.60 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.18 | 0.60 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.29 | 0.88 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.12 | 0.60 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.17 | 0.60 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 95 | 70-132 | 0.60 ug |

RL - Reporting Limit MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
NOV 02 2000
BY:

Re 11/2/00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MP-P-02

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: WORKER
Analysis: NIOSH 5503 PCBs By GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3353 | Instrument Batch: | WG3377 |
| Matrix: | Filter | Lab Sample ID.: | L2108-2 |
| Lab Notebook No: | 1055, 94 | Date Sampled: | 23-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 25-OCT-00 |
| Final Volume: | 6 ml | Date Extracted: | 30-OCT-00 |
| Prep. Method: | NIOSH 5503 | Date Analyzed: | 31-OCT-00 |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (ug) | RL (ug) | RESULTS (ug) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.11 | 0.60 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.090 | 0.60 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.18 | 0.60 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.18 | 0.60 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.29 | 0.88 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.12 | 0.60 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.17 | 0.60 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 96 | 70-132 | 0.60 ug |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
NOV 02 2000
BY: [signature]

[illegible] 11/2/00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MP-P-03

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: WORKER
Analysis: NIOSH 5503 PCBs By GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3353 | Instrument Batch: | WG3377 |
| Matrix: | Filter | Lab Sample ID.: | L2108-3 |
| Lab Notebook No: | 1055, 94 | Date Sampled: | 23-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 25-OCT-00 |
| Final Volume: | 6 ml | Date Extracted: | 30-OCT-00 |
| Prep. Method: | NIOSH 5503 | Date Analyzed: | 31-OCT-00 |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (ug) | RL (ug) | RESULTS (ug) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.11 | 0.60 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.090 | 0.60 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.18 | 0.60 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.18 | 0.60 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.29 | 0.88 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.12 | 0.60 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.17 | 0.60 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 93 | 70-132 | 0.60 ug |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
NOV 02 2000
BY:

11/2/00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MP-P-04

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: BACKGROUND/4FT/EPA COMMAND
Analysis: NIOSH 5503 PCBs By GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3353 | Instrument Batch: | WG3377 |
| Matrix: | Filter | Lab Sample ID.: | L2108-4 |
| Lab Notebook No: | 1055, 94 | Date Sampled: | 23-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 25-OCT-00 |
| Final Volume: | 6 ml | Date Extracted: | 30-OCT-00 |
| Prep. Method: | NIOSH 5503 | Date Analyzed: | 31-OCT-00 |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (ug) | RL (ug) | RESULTS (ug) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.11 | 0.60 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.090 | 0.60 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.18 | 0.60 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.18 | 0.60 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.29 | 0.88 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.12 | 0.60 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.17 | 0.60 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 94 | 70-132 | 0.60 ug |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
NOV 0 2 2000
BY: [signature]

fe 11/2/00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MP-P-05

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: 4 FT AT D1
Analysis: NIOSH 5503 PCBs By GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3353 | Instrument Batch: | WG3377 |
| Matrix: | Filter | Lab Sample ID.: | L2108-5 |
| Lab Notebook No: | 1055, 94 | Date Sampled: | 23-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 25-OCT-00 |
| Final Volume: | 6 ml | Date Extracted: | 30-OCT-00 |
| Prep. Method: | NIOSH 5503 | Date Analyzed: | 31-OCT-00 |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (ug) | RL (ug) | RESULTS (ug) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.11 | 0.60 | — | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.090 | 0.60 | — | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.18 | 0.60 | — | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.18 | 0.60 | — | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.29 | 0.88 | — | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.12 | 0.60 | — | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.17 | 0.60 | — | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 91 | 70-132 | 0.60 ug |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
NOV 02 2000
BY:

11/2/00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MP-P-B

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: FIELD BLANK
Analysis: NIOSH 5503 PCBs By GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3353 | Instrument Batch: | WG3377 |
| Matrix: | Filter | Lab Sample ID.: | L2108-6 |
| Lab Notebook No: | 1055, 94 | Date Sampled: | 23-OCT-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 25-OCT-00 |
| Final Volume: | 6 ml | Date Extracted: | 30-OCT-00 |
| Prep. Method: | NIOSH 5503 | Date Analyzed: | 31-OCT-00 |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (ug) | R L (ug) | RESULTS (ug) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.11 | 0.60 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.090 | 0.60 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.18 | 0.60 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.18 | 0.60 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.29 | 0.88 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.12 | 0.60 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.17 | 0.60 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 94 | 70-132 | 0.60 ug |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
NOV 1 2 2000
BY:

Re 11/2/00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
**LOT BLANK**

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: LOT BLANK
Analysis: NIOSH 5503 PCBs By GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3353 | Instrument Batch: | WG3377 |
| Matrix: | Filter | Lab Sample ID.: | L2108-7 |
| Lab Notebook No: | 1055, 94 | Date Sampled: | N/A |
| Initial Cal. ID.: | 4P1013 | Date Received: | 25-OCT-00 |
| Final Volume: | 6 ml | Date Extracted: | 30-OCT-00 |
| Prep. Method: | NIOSH 5503 | Date Analyzed: | 01-NOV-00 |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (ug) | RL (ug) | RESULTS (ug) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.11 | 0.60 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.090 | 0.60 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.18 | 0.60 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.18 | 0.60 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.29 | 0.88 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.12 | 0.60 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.17 | 0.60 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 93 | 70-132 | 0.60 ug |

RL - Reporting Limit MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
NOV 02 2000
BY:

11/2/00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# LABORATORY REPORT
## (Phase Contrast Microscopy Fiber Count)

**Batch No: 2000100621**

*Customer:* ENVIRONMENTAL QUALITY MANAGEMENT
*Attention:* MARK JARSKI
*Address:* 1310 KEMPER MEADOW DR
STE 100

*City, State:* CINCINNATI, OH 45240-1651
*Country:*

*Tel No:* (800) 229-7495
*Fax No:* (513) 825-9728

*Client No:* 39392
*Project No:*
*PO No:* MAHONINGSIDE POWER PLANT

*Date Received:* October 23, 2000
*Date Reported:* October 25, 2000

*Date(s) Analyzed:* 10/25/00

**Phase Contrast Microscopy fiber count results reported as Fibers/Field. Air concentration (Fibers/CC) reported if Sample Volume has been provided by Client. ND = None Detected at or above the detection limit. Please contact Technical Support at 1-800-833-1258 with any inquiries within 30 days.**

| Lab Sample ID | Date Sampled | Client Sample ID | Chemical Analyzed | Sample Volume (L) | Quantity Found (Fibers/Field) | Quantity Found (Fibers/CC) | Detection Limit (Fibers/Field) |
|---|---|---|---|---|---|---|---|
| 2000035671 | 10/20/00 | MP-A 01/ SUMP D2 (4FT) | ASBESTOS, FIBERS BY PCM | 968 | 0.055 | 0.0033 | 0.055 |
| 2000035672 | 10/20/00 | MP-A 02/ DECON AREA (4FT) | ASBESTOS, FIBERS BY PCM | 977 | ND | < 0.003 | 0.055 |
| 2000035673 | 10/20/00 | MP-A-03/ WORKER | ASBESTOS, FIBERS BY PCM | 1007 | 0.14 | 0.0068 | 0.055 |
| 2000035674 | 10/20/00 | MP-A-04/ WORKER | ASBESTOS, FIBERS BY PCM | 983 | 0.155 | 0.0077 | 0.056 |
| 2000035675 | 10/20/00 | MP-A-05/ EPA COMMAND (4FT BACK | ASBESTOS, FIBERS BY PCM | 972 | 0.06 | 0.003 | 0.056 |
| 2000035676 | 10/20/00 | MP-A-B/ BLANK | ASBESTOS, FIBERS BY PCM | | ND | | 0.055 |

**Messages**

| Lab Sample ID | Message | Chemical Analyzed | Method Name | Analyzed By | Approved By |
|---|---|---|---|---|---|
| | | ASBESTOS, FIBERS BY PCM | NIOSH 7400 | W. EWING | K. TAYLOR |

DATA REVIEWED
NOT VALIDATED
OCT 25 2000
BY:

Results Reviewed by Employee: _____ _____
(Initials/Date)



001
ASSAY TECHNOLOGY

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-02

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3553 | Instrument Batch: | WG3563 |
| Matrix: | Soil | Lab Sample ID.: | L2196-38 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 16-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 28-NOV-00 |
| Initial Weight: | 10.43 g | Date Analyzed: | 04-DEC-00 |
| Percent Solids: | 55 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.10 | -- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.10 | -- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0065 | 0.087 | — | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.087 | — | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.13 | — | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.10 | 0.27 | 1 | |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 0.087 | — | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 90 | 55-130 | 0.17 mg/kg |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY: [signature]

MKW 12-5-00 CH 12-5-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-02-A

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3553 | Instrument Batch: | WG3563 |
| Matrix: | Soil | Lab Sample ID.: | L2196-39 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 16-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 28-NOV-00 |
| Initial Weight: | 10.03 g | Date Analyzed: | 01-DEC-00 |
| Percent Solids: | 61 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.098 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.020 | 0.098 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 0.082 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.015 | 0.082 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.025 | 0.12 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.098 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.082 | 0.066 | 1 | J |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 95 | 55-130 | 0.16 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
J - Estimated Value
U - Below MDL

DATA REVIEW
NOT VALIDATED
DEC 05 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
**MR-03**

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3553 | Instrument Batch: | WG3563 |
| Matrix: | Soil | Lab Sample ID.: | L2196-37 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 16-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 28-NOV-00 |
| Initial Weight: | 10.31 g | Date Analyzed: | 01-DEC-00 |
| Percent Solids: | 80 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.073 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.073 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0065 | 0.061 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.061 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.091 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.073 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.061 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 98 | 55-130 | 0.12 mg/kg |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER

**MR-04**

Customer: ENVIRONMENTAL QUALITY MGT., INC.

Project No.: 30141.0065

Source: MAHONING RIVER SITE

Location: N/A

Analysis: **EPA Method 8082 PCBs by GC/ECD**

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3532 | Instrument Batch: | WG3561 |
| Matrix: | Soil | Lab Sample ID.: | L2196-29 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 27-NOV-00 |
| Initial Weight: | 10.46 g | Date Analyzed: | 01-DEC-00 |
| Percent Solids: | 72 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.080 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.080 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0065 | 0.066 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.066 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.10 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.080 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 0.066 | 0.064 | 1 | J |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 80 | 55-130 | 0.13 mg/kg |

RL - Reporting Limit

MDL - Method Detection Limit

J - Estimated Value

U - Below MDL

DATA REVIEWED
NOT VALIDATED

DEC 0 5 2000

BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-05

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3532 | Instrument Batch: | WG3561 |
| Matrix: | Soil | Lab Sample ID.: | L2196-30 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 27-NOV-00 |
| Initial Weight: | 10.01 g | Date Analyzed: | 01-DEC-00 |
| Percent Solids: | 77 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.078 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.020 | 0.078 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 0.065 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.015 | 0.065 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.025 | 0.097 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.078 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.065 | 1.9 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 199 | * | 55-130 | 0.13 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 05 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER

**MR-06**

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065

Source: MAHONING RIVER SITE

Location: N/A

Analysis: **EPA Method 8082 PCBs by GC/ECD**

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3532 | Instrument Batch: | WG3561 |
| Matrix: | Soil | Lab Sample ID.: | L2196-31 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 27-NOV-00 |
| Initial Weight: | 10.03 g | Date Analyzed: | 01-DEC-00 |
| Percent Solids: | 76 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.079 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.020 | 0.079 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 0.066 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.015 | 0.066 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.025 | 0.098 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.079 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.066 | 0.048 | 1 | J |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 88 | 55-130 | 0.13 mg/kg |

RL - Reporting Limit MDL - Method Detection Limit

J - Estimated Value U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER

**MR-07**

Customer: ENVIRONMENTAL QUALITY MGT., INC.

Project No.: 30141.0065

Source: MAHONING RIVER SITE

Location: N/A

Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3532 | Instrument Batch: | WG3561 |
| Matrix: | Soil | Lab Sample ID.: | L2196-28 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 27-NOV-00 |
| Initial Weight: | 10.07 g | Date Analyzed: | 01-DEC-00 |
| Percent Solids: | 83 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.072 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.072 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 0.060 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.015 | 0.060 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.090 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.072 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.060 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 91 | 55-130 | 0.12 mg/kg |

RL - Reporting Limit

MDL - Method Detection Limit

U - Below MDL

DATA REVIEWED
NOT VALIDATED

DEC 0 5 2000

BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER

**MR-08**

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065

Source: MAHONING RIVER SITE

Location: N/A

Analysis: **EPA Method 8082 PCBs by GC/ECD**

| | | | |
|---|---|---|---|
| Preparation Batch: | **WG3532** | Instrument Batch: | **WG3561** |
| Matrix: | Soil | Lab Sample ID.: | **L2196-33** |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 27-NOV-00 |
| Initial Weight: | 10.08 g | Date Analyzed: | 01-DEC-00 |
| Percent Solids: | 77 % | | |
| Prep. Method: | EPA 3541 | | |

**SAMPLE RESULTS**

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.077 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.077 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 0.064 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.015 | 0.064 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.097 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.077 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.064 | 0.79 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 94 | 55-130 | 0.13 mg/kg |

RL - Reporting Limit MDL - Method Detection Limit

U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER

MR-09

Customer: ENVIRONMENTAL QUALITY MGT., INC.

Project No.: 30141.0065

Source: MAHONING RIVER SITE

Location: N/A

Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3532 | Instrument Batch: | WG3561 |
| Matrix: | Soil | Lab Sample ID.: | L2196-32 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 27-NOV-00 |
| Initial Weight: | 10.39 g | Date Analyzed: | 01-DEC-00 |
| Percent Solids: | 64 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.090 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.090 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0065 | 0.075 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.075 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.11 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.090 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 0.075 | 0.083 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 89 | 55-130 | 0.15 mg/kg |

RL - Reporting Limit

MDL - Method Detection Limit

U - Below MDL

DATA REVIEWED
NOT VALIDATED

DEC 0 5 2000

BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER

**MR-10**

Customer: ENVIRONMENTAL QUALITY MGT., INC.

Project. No.: 30141.0065

Source: MAHONING RIVER SITE

Location: N/A

Analysis: **EPA Method 8082 PCBs by GC/ECD**

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3532 | Instrument Batch: | WG3561 |
| Matrix: | Soil | Lab Sample ID.: | L2196-27 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 27-NOV-00 |
| Initial Weight: | 10.3 g | Date Analyzed: | 01-DEC-00 |
| Percent Solids: | 73 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.080 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.080 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 0.066 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.066 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.10 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.080 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.066 | 0.13 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 91 | 55-130 | 0.13 mg/kg |

RL - Reporting Limit

MDL - Method Detection Limit

U - Below MDL

DATA REVIEWED
NOT VALIDATED

DEC 0 5 2000

BY: [signature]

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-12

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3532 | Instrument Batch: | WG3561 |
| Matrix: | Soil | Lab Sample ID.: | L2196-26 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 27-NOV-00 |
| Initial Weight: | 10.4 g | Date Analyzed: | 01-DEC-00 |
| Percent Solids: | 66 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.087 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.087 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0065 | 0.073 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.073 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.11 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.087 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 0.073 | 0.58 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 76 | 55-130 | 0.15 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 05 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER

MR-13

Customer: ENVIRONMENTAL QUALITY MGT., INC.

Project. No.: 30141.0065

Source: MAHONING RIVER SITE

Location: N/A

Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3532 | Instrument Batch: | WG3561 |
| Matrix: | Soil | Lab Sample ID.: | L2196-25 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 27-NOV-00 |
| Initial Weight: | 10.32 g | Date Analyzed: | 01-DEC-00 |
| Percent Solids: | 74 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.079 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.079 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0065 | 0.065 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.065 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.098 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.079 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.065 | 0.090 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 84 | 55-130 | 0.13 mg/kg |

RL - Reporting Limit

MDL - Method Detection Limit

U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 05 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-14

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3532 | Instrument Batch: | WG3561 |
| Matrix: | Soil | Lab Sample ID.: | L2196-24 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 27-NOV-00 |
| Initial Weight: | 10.13 g | Date Analyzed: | 04-DEC-00 |
| Percent Solids: | 46 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.13 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.13 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 0.11 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.11 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.16 | 0.44 | 1 | |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.13 | 0.62 | 1 | |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.11 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 83 | 55-130 | 0.21 mg/kg |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA R[illegible]
NOT VALID[illegible]
DEC 0 5 2000
BY: [illegible]

NKW 12-5-00 CH 12-5-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-15

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3532 | Instrument Batch: | WG3561 |
| Matrix: | Soil | Lab Sample ID.: | L2196-23 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 27-NOV-00 |
| Initial Weight: | 10.4 g | Date Analyzed: | 04-DEC-00 |
| Percent Solids: | 55 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.10 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.10 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0065 | 0.087 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.087 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.13 | 0.35 | 1 | |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.10 | 0.43 | 1 | |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 0.087 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 72 | 55-130 | 0.17 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 05 2000
BY: [signature]

MLW 12-5-00
CH 12-5-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER

MR-16

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065

Source: MAHONING RIVER SITE

Location: N/A

Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3532 | Instrument Batch: | WG3561 |
| Matrix: | Soil | Lab Sample ID.: | L2196-22 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 27-NOV-00 |
| Initial Weight: | 10.08 g | Date Analyzed: | 04-DEC-00 |
| Percent Solids: | 54 % | | |
| Prep. Method: | EPA 3541 | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.11 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.11 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 0.092 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.015 | 0.092 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.14 | 0.23 | 1 | |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.11 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.092 | 0.22 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 76 | 55-130 | 0.18 mg/kg |

RL - Reporting Limit MDL - Method Detection Limit

U - Below MDL

DATA REVIEWED
NOT VALIDATED

DEC 0 5 2000

BY: [signature]

MKW 12-5-00 [signature] 12-5-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER

MR-17

Customer: ENVIRONMENTAL QUALITY MGT., INC.

Project. No.: 30141.0065

Source: MAHONING RIVER SITE

Location: N/A

Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3532 | Instrument Batch: | WG3561 |
| Matrix: | Soil | Lab Sample ID.: | L2196-21 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 27-NOV-00 |
| Initial Weight: | 10.09 g | Date Analyzed: | 29-NOV-00 |
| Percent Solids: | 66 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.090 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.090 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 0.075 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.075 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.11 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.090 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.075 | 1.0 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 81 | 55-130 | 0.15 mg/kg |

RL - Reporting Limit

MDL - Method Detection Limit

U - Below MDL

DATA REVIEWED
NOT VALIDATED

DEC 0 5 2000

BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-18

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3514 | Instrument Batch: | WG3515 |
| Matrix: | Soil | Lab Sample ID.: | L2196-20 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 21-NOV-00 |
| Initial Weight: | 10.1 g | Date Analyzed: | 01-DEC-00 |
| Percent Solids: | 67 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.089 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.089 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 0.074 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.074 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.11 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.089 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.074 | 0.11 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 82 | 55-130 | 0.15 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
**MR-19**

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3514 | Instrument Batch: | WG3515 |
| Matrix: | Soil | Lab Sample ID.: | L2196-19 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 21-NOV-00 |
| Initial Weight: | 10.21 g | Date Analyzed: | 04-DEC-00 |
| Percent Solids: | 53.97 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.11 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.11 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 0.091 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.091 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.14 | 0.37 | 1 | |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.11 | 0.54 | 1 | |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.091 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 85 | 55-130 | 0.18 mg/kg |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY: [signature]

MKW 12-5-00 CH 12-5-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-20

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3514 | Instrument Batch: | WG3515 |
| Matrix: | Soil | Lab Sample ID.: | L2196-18 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 21-NOV-00 |
| Initial Weight: | 10.18 g | Date Analyzed: | 22-NOV-00 |
| Percent Solids: | 72 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.82 | --- | 10 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.82 | --- | 10 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 0.68 | --- | 10 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.68 | --- | 10 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 1.0 | --- | 10 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.82 | --- | 10 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.68 | 1.3 | 10 | D |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 133 | * | 55-130 | 0.14 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
**MR-21**

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: **EPA Method 8082 PCBs by GC/ECD**

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3514 | Instrument Batch: | WG3515 |
| Matrix: | Soil | Lab Sample ID.: | L2196-17 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 21-NOV-00 |
| Initial Weight: | 10.06 g | Date Analyzed: | 01-DEC-00 |
| Percent Solids: | 58 % | | |
| Prep. Method: | EPA 3541 | | |

**SAMPLE RESULTS**

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.10 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.10 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 0.086 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.015 | 0.086 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.13 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.10 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.086 | 0.27 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 92 | 55-130 | 0.17 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 05 2000
BY

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-22-A

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3514 | Instrument Batch: | WG3515 |
| Matrix: | Soil | Lab Sample ID.: | L2196-16 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 21-NOV-00 |
| Initial Weight: | 10.15 g | Date Analyzed: | 22-NOV-00 |
| Percent Solids: | 57 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 1.0 | --- | 10 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 1.0 | --- | 10 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 0.86 | --- | 10 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.86 | --- | 10 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 1.3 | --- | 10 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 1.0 | --- | 10 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.86 | 3.8 | 10 | D |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 110 | 55-130 | 0.17 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-22-B

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3553 | Instrument Batch: | WG3563 |
| Matrix: | Soil | Lab Sample ID.: | L2196-35 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 28-NOV-00 |
| Initial Weight: | 10.17 g | Date Analyzed: | 01-DEC-00 |
| Percent Solids: | 62 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.095 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.095 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 0.079 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.079 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.12 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.095 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.079 | 1.2 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 87 | 55-130 | 0.16 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-23

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3514 | Instrument Batch: | WG3515 |
| Matrix: | Soil | Lab Sample ID.: | L2196-15 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 21-NOV-00 |
| Initial Weight: | 10.45 g | Date Analyzed: | 04-DEC-00 |
| Percent Solids: | 61 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.094 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.094 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0065 | 0.078 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.078 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.12 | 0.17 | 1 | |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.094 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 0.078 | 0.44 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 86 | 55-130 | 0.16 mg/kg |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY:

MKW 12-5-00

CH 12-5-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-24

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3514 | Instrument Batch: | WG3515 |
| Matrix: | Soil | Lab Sample ID.: | L2196-14 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 21-NOV-00 |
| Initial Weight: | 10.14 g | Date Analyzed: | 22-NOV-00 |
| Percent Solids: | 46 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 1.3 | --- | 10 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 1.3 | --- | 10 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 1.1 | --- | 10 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 1.1 | --- | 10 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 1.6 | --- | 10 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 1.3 | --- | 10 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 1.1 | 8.4 | 10 | D |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 135 | * | 55-130 | 0.21 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER

MR-25

Customer: ENVIRONMENTAL QUALITY MGT., INC.

Project. No.: 30141.0065

Source: MAHONING RIVER SITE

Location: N/A

Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3514 | Instrument Batch: | WG3515 |
| Matrix: | Soil | Lab Sample ID.: | L2196-13 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 21-NOV-00 |
| Initial Weight: | 10.29 g | Date Analyzed: | 01-DEC-00 |
| Percent Solids: | 65 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.090 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.090 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 0.075 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.075 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.11 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.090 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.075 | 0.037 | 1 | J |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 87 | 55-130 | 0.15 mg/kg |

RL - Reporting Limit

MDL - Method Detection Limit

J - Estimated Value

U - Below MDL

DATA REVIEWED
NOT VALIDATED

DEC 0 5 2000

BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-26

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3514 | Instrument Batch: | WG3515 |
| Matrix: | Soil | Lab Sample ID.: | L2196-12 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 21-NOV-00 |
| Initial Weight: | 10.32 g | Date Analyzed: | 01-DEC-00 |
| Percent Solids: | 62 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.094 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.094 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0065 | 0.078 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.078 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.12 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.094 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.078 | 0.14 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 87 | 55-130 | 0.16 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 05 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-27

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3514 | Instrument Batch: | WG3515 |
| Matrix: | Soil | Lab Sample ID.: | L2196-11 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 21-NOV-00 |
| Initial Weight: | 10.34 g | Date Analyzed: | 22-NOV-00 |
| Percent Solids: | 60 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.19 | --- | 2 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.19 | --- | 2 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0065 | 0.16 | --- | 2 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.16 | --- | 2 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.24 | --- | 2 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.19 | --- | 2 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 0.16 | 0.22 | 2 | D |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 88 | 55-130 | 0.16 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-28

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3514 | Instrument Batch: | WG3515 |
| Matrix: | Soil | Lab Sample ID.: | L2196-10 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 21-NOV-00 |
| Initial Weight: | 10.1 g | Date Analyzed: | 01-DEC-00 |
| Percent Solids: | 46 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.13 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.13 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 0.11 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.11 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.16 | 1.4 | 1 | |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.13 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.11 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 90 | 55-130 | 0.22 mg/kg |

RL - Reporting Limit MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
**MR-28-B**

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3553 | Instrument Batch: | WG3563 |
| Matrix: | Soil | Lab Sample ID.: | L2196-36 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 28-NOV-00 |
| Initial Weight: | 10.43 g | Date Analyzed: | 01-DEC-00 |
| Percent Solids: | 47 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.12 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.12 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0065 | 0.10 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.10 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.15 | 0.83 | 1 | |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.12 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 0.10 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 90 | 55-130 | 0.20 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 05 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-30

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3514 | Instrument Batch: | WG3515 |
| Matrix: | Soil | Lab Sample ID.: | L2196-9 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 21-NOV-00 |
| Initial Weight: | 10.23 g | Date Analyzed: | 01-DEC-00 |
| Percent Solids: | 69 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.085 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.085 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 0.071 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.071 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.11 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.085 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.071 | 0.15 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 89 | 55-130 | 0.14 mg/kg |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-32

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3514 | Instrument Batch: | WG3515 |
| Matrix: | Soil | Lab Sample ID.: | L2196-8 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 21-NOV-00 |
| Initial Weight: | 10.44 g | Date Analyzed: | 22-NOV-00 |
| Percent Solids: | 69 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.83 | --- | 10 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.83 | --- | 10 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0065 | 0.69 | --- | 10 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.69 | --- | 10 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 1.0 | --- | 10 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.83 | --- | 10 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 0.69 | 1.4 | 10 | D |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 117 | 55-130 | 0.14 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-33

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3514 | Instrument Batch: | WG3515 |
| Matrix: | Soil | Lab Sample ID.: | L2196-7 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 21-NOV-00 |
| Initial Weight: | 10.0 g | Date Analyzed: | 01-DEC-00 |
| Percent Solids: | 79 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.076 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.020 | 0.076 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0068 | 0.063 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.015 | 0.063 | 0.19 | 1 | |
| 5. | 12672-29-6 | Aroclor 1248 | 0.025 | 0.095 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.076 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.063 | 0.14 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 97 | 55-130 | 0.13 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY: [signature]

MKW 12-5-00

CH 12.5.00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-34

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3514 | Instrument Batch: | WG3515 |
| Matrix: | Soil | Lab Sample ID.: | L2196-6 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 21-NOV-00 |
| Initial Weight: | 10.07 g | Date Analyzed: | 22-NOV-00 |
| Percent Solids: | 70 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.85 | --- | 10 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.85 | --- | 10 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 0.71 | --- | 10 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.015 | 0.71 | --- | 10 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 1.1 | --- | 10 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.85 | --- | 10 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.71 | 1.8 | 10 | D |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 145 | * | 55-130 | 0.14 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY: [signature]

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-36

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3514 | Instrument Batch: | WG3515 |
| Matrix: | Soil | Lab Sample ID.: | L2196-5 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 21-NOV-00 |
| Initial Weight: | 10.42 g | Date Analyzed: | 22-NOV-00 |
| Percent Solids: | 66 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.87 | --- | 10 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.87 | --- | 10 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0065 | 0.73 | --- | 10 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.73 | --- | 10 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 1.1 | --- | 10 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.87 | --- | 10 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 0.73 | 1.5 | 10 | D |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 148 | * | 55-130 | 0.15 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-37

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3514 | Instrument Batch: | WG3515 |
| Matrix: | Soil | Lab Sample ID.: | L2196-3 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 21-NOV-00 |
| Initial Weight: | 10.04 g | Date Analyzed: | 22-NOV-00 |
| Percent Solids: | 74 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.16 | --- | 2 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.020 | 0.16 | --- | 2 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 0.13 | --- | 2 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.015 | 0.13 | --- | 2 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.025 | 0.20 | --- | 2 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.16 | --- | 2 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.13 | 0.31 | 2 | D |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 136 | * | 55-130 | 0.13 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 05 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-38

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3514 | Instrument Batch: | WG3515 |
| Matrix: | Soil | Lab Sample ID.: | L2196-4 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 21-NOV-00 |
| Initial Weight: | 10.09 g | Date Analyzed: | 22-NOV-00 |
| Percent Solids: | 67 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.89 | --- | 10 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.89 | --- | 10 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 0.74 | --- | 10 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.74 | --- | 10 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 1.1 | --- | 10 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.89 | --- | 10 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.74 | 5.2 | 10 | D |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 144 | * | 55-130 | 0.15 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-39

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3514 | Instrument Batch: | WG3515 |
| Matrix: | Soil | Lab Sample ID.: | L2196-2 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 21-NOV-00 |
| Initial Weight: | 10.28 g | Date Analyzed: | 22-NOV-00 |
| Percent Solids: | 42 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 1.4 | --- | 10 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 1.4 | --- | 10 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 1.2 | --- | 10 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 1.2 | --- | 10 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 1.7 | --- | 10 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 1.4 | --- | 10 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 1.2 | 2.1 | 10 | D |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 156 | * | 55-130 | 0.23 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-40-A

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3514 | Instrument Batch: | WG3515 |
| Matrix: | Soil | Lab Sample ID.: | L2196-1 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 21-NOV-00 |
| Initial Weight: | 10.2 g | Date Analyzed: | 22-NOV-00 |
| Percent Solids: | 51 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 1.2 | --- | 10 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 1.2 | --- | 10 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 0.96 | --- | 10 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.96 | --- | 10 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 1.4 | --- | 10 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 1.2 | --- | 10 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.96 | 1.4 | 10 | D |

| SURROGATE STANDARD | RECOVERY (%) | | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|---|
| Decachlorobiphenyl | 150 | * | 55-130 | 0.19 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 05 2000
BY: [signature]

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
**MR-40-B**

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC/ECD

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3532 | Instrument Batch: | WG3561 |
| Matrix: | Soil | Lab Sample ID.: | L2196-34 |
| Lab Notebook No: | 1152, 9 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 4P1013 | Date Received: | 17-NOV-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 27-NOV-00 |
| Initial Weight: | 10.38 g | Date Analyzed: | 01-DEC-00 |
| Percent Solids: | 43 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.27 | --- | 2 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.27 | --- | 2 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0065 | 0.22 | --- | 2 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.22 | --- | 2 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.34 | --- | 2 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.27 | --- | 2 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 0.22 | 6.3 | 2 | D |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 96 | 55-130 | 0.22 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# ENVIRONMENTAL CHEMICAL CORPORATION

| | | | |
|---|---|---|---|
| Customer: | ENVIRONMENTAL QUALITY MGT., INC. | Cust. Proj. No.: | 30141.0065 |
| Source: | MAHONING RIVER SITE | Project No.: | L2196 |
| Analysis: | TOTAL ORGANIC CARBON | Date Received: | 17-NOV-00 |
| Method: | EPA 415.1 | Date Analyzed: | 29-NOV-00 |
| Lab Notebook: | 929 P.84-85 | Prep Batch: | TOCS1129 |
| Reporting Limit: | 50 mg/kg | Instr. Batch: | TOCS1129 |

| LAB I.D. | CUSTOMER SAMPLE NO. | MATRIX | LOCATION | VALUE mg/kg |
|---|---|---|---|---|
| L2196-1 | MR-40-A | SOIL | N/A | 17800 |
| L2196-10 | MR-28 | SOIL | N/A | 40800 |
| L2196-13 | MR-25 | SOIL | N/A | 25300 |
| L2196-16 | MR-22-A | SOIL | N/A | 62200 |
| L2196-19 | MR-19 | SOIL | N/A | 43400 |
| L2196-34 | MR-40-B | SOIL | N/A | 32700 |
| L2196-38 | MR-02 | SOIL | N/A | 20200 |

DATA REVIEWED
NOT VALIDATED

DEC 0 5 2000

BY: [signature]

BRL: Below Reporting Limit

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-40-A

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8270C Semivolatiles by GC/MS

Preparation Batch: WG3500
Matrix: Soil
Lab Notebook No: 1079,P.77
Initial Cal. ID.: 3NOV30P
Final Volume: 1.0 ml
Initial Weight: 30.12 g
Percent Solids: 51 %
Prep. Method: EPA 3541

Instrument Batch: WG3590
Lab Sample ID.: L2196-1
Date Sampled: 15-NOV-00
Date Received: 17-NOV-00
Date Extracted: 20-NOV-00
Date Analyzed: 02-DEC-00

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (ug/kg) | R L (ug/kg) | RESULTS (ug/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 83-32-9 | Acenaphthene | 22.2 | 325 | 324 | 1 | J |
| 2. | 208-96-8 | Acenaphthylene | 23.6 | 325 | — | 1 | U |
| 3. | 120-12-7 | Anthracene | 25.9 | 325 | 2860 | 1 | |
| 4. | 56-55-3 | Benzo(a)Anthracene | 18.6 | 3250 | 4740 | 10 | D |
| 5. | 50-32-8 | Benzo(a)Pyrene | 23.6 | 325 | 3200 | 1 | |
| 6. | 205-99-2 | Benzo(b)Fluoranthene | 28.2 | 3250 | 3670 | 10 | D |
| 7. | 191-24-2 | Benzo(g,h,i)Perylene | 36.2 | 325 | 1160 | 1 | |
| 8. | 207-08-9 | Benzo(k)Fluoranthene | 28.2 | 325 | 1190 | 1 | |
| 9. | 218-01-9 | Chrysene | 21.9 | 325 | 3580 | 1 | |
| 10. | 53-70-3 | Dibenzo(a,h)Anthracene | 36.9 | 325 | 375 | 1 | |
| 11. | 206-44-0 | Fluoranthene | 20.6 | 3250 | 12900 | 10 | D |
| 12. | 86-73-7 | Fluorene | 21.6 | 325 | 809 | 1 | |
| 13. | 193-39-5 | Indeno(1,2,3-cd)Pyrene | 37.2 | 325 | 1450 | 1 | |
| 14. | 91-20-3 | Naphthalene | 19.9 | 325 | 20.2 | 1 | J |
| 15. | 85-01-8 | Phenanthrene | 21.6 | 3250 | 9710 | 10 | D |
| 16. | 129-00-0 | Pyrene | 25.9 | 3250 | 10600 | 10 | D |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| 2-Fluorobiphenyl | 86 | 30-115 | 1630 ug/kg |
| Nitrobenzene d5 | 74 | 23-120 | 1630 ug/kg |
| Terphenyl d14 | 84 | 18-137 | 1630 ug/kg |

DATA REVIEW
NOT VALIDATED
DEC 0 5 2000
BY: [signature]

RL - Reporting Limit
D - Diluted
U - Below MDL
MDL - Method Detection Limit
J - Estimated Value

RF12/14/00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-28

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8270C Semivolatiles by GC/MS

Preparation Batch: WG3500
Matrix: Soil
Lab Notebook No: 1079,P.77
Initial Cal. ID.: 3NOV30P
Final Volume: 1.0 ml
Initial Weight: 30.07 g
Percent Solids: 46 %
Prep. Method: EPA 3541

Instrument Batch: WG3590
Lab Sample ID.: L2196-10
Date Sampled: 15-NOV-00
Date Received: 17-NOV-00
Date Extracted: 20-NOV-00
Date Analyzed: 03-DEC-00

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (ug/kg) | RL (ug/kg) | RESULTS (ug/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 83-32-9 | Acenaphthene | 22.3 | 361 | 552 | 1 | |
| 2. | 208-96-8 | Acenaphthylene | 23.6 | 361 | --- | 1 | U |
| 3. | 120-12-7 | Anthracene | 25.9 | 361 | 2070 | 1 | |
| 4. | 56-55-3 | Benzo(a)Anthracene | 18.6 | 361 | 4300 | 1 | |
| 5. | 50-32-8 | Benzo(a)Pyrene | 23.6 | 361 | 3540 | 1 | |
| 6. | 205-99-2 | Benzo(b)Fluoranthene | 28.3 | 3610 | 4260 | 10 | D |
| 7. | 191-24-2 | Benzo(g,h,i)Perylene | 36.2 | 361 | 1170 | 1 | |
| 8. | 207-08-9 | Benzo(k)Fluoranthene | 28.3 | 361 | 1750 | 1 | |
| 9. | 218-01-9 | Chrysene | 21.9 | 361 | 3810 | 1 | |
| 10. | 53-70-3 | Dibenzo(a,h)Anthracene | 36.9 | 361 | 405 | 1 | |
| 11. | 206-44-0 | Fluoranthene | 20.6 | 3610 | 11900 | 10 | D |
| 12. | 86-73-7 | Fluorene | 21.6 | 361 | 677 | 1 | |
| 13. | 193-39-5 | Indeno(1,2,3-cd)Pyrene | 37.2 | 361 | 1480 | 1 | |
| 14. | 91-20-3 | Naphthalene | 20.0 | 361 | 83.1 | 1 | J |
| 15. | 85-01-8 | Phenanthrene | 21.6 | 3610 | 7410 | 10 | D |
| 16. | 129-00-0 | Pyrene | 25.9 | 3610 | 9380 | 10 | D |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| 2-Fluorobiphenyl | 52 | 30-115 | 1810 ug/kg |
| Nitrobenzene d5 | 47 | 23-120 | 1810 ug/kg |
| Terphenyl d14 | 48 | 18-137 | 1810 ug/kg |

RL - Reporting Limit
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 05 2000
BY:

MDL - Method Detection Limit
J - Estimated Value

VF 12/4/00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-25

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8270C Semivolatiles by GC/MS

Preparation Batch: WG3500
Matrix: Soil
Lab Notebook No: 1079,P.77
Initial Cal. ID.: 3NOV30P
Final Volume: 1.0 ml
Initial Weight: 30.43 g
Percent Solids: 65 %
Prep. Method: EPA 3541

Instrument Batch: WG3590
Lab Sample ID.: L2196-13
Date Sampled: 15-NOV-00
Date Received: 17-NOV-00
Date Extracted: 20-NOV-00
Date Analyzed: 01-DEC-00

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (ug/kg) | R L (ug/kg) | RESULTS (ug/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 83-32-9 | Acenaphthene | 22.0 | 253 | --- | 1 | U |
| 2. | 208-96-8 | Acenaphthylene | 23.3 | 253 | --- | 1 | U |
| 3. | 120-12-7 | Anthracene | 25.6 | 253 | 31.9 | 1 | J |
| 4. | 56-55-3 | Benzo(a)Anthracene | 18.4 | 253 | 97.6 | 1 | J |
| 5. | 50-32-8 | Benzo(a)Pyrene | 23.3 | 253 | 98.1 | 1 | J |
| 6. | 205-99-2 | Benzo(b)Fluoranthene | 27.9 | 253 | 111 | 1 | J |
| 7. | 191-24-2 | Benzo(g,h,i)Perylene | 35.8 | 253 | 45.5 | 1 | J |
| 8. | 207-08-9 | Benzo(k)Fluoranthene | 27.9 | 253 | 54.6 | 1 | J |
| 9. | 218-01-9 | Chrysene | 21.7 | 253 | 103 | 1 | J |
| 10. | 53-70-3 | Dibenzo(a,h)Anthracene | 36.5 | 253 | --- | 1 | U |
| 11. | 206-44-0 | Fluoranthene | 20.4 | 253 | 214 | 1 | J |
| 12. | 86-73-7 | Fluorene | 21.4 | 253 | --- | 1 | U |
| 13. | 193-39-5 | Indeno(1,2,3-cd)Pyrene | 36.8 | 253 | 114 | 1 | J |
| 14. | 91-20-3 | Naphthalene | 19.7 | 253 | --- | 1 | U |
| 15. | 85-01-8 | Phenanthrene | 21.4 | 253 | 141 | 1 | J |
| 16. | 129-00-0 | Pyrene | 25.6 | 253 | 193 | 1 | J |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| 2-Fluorobiphenyl | 82 | 30-115 | 1260 ug/kg |
| Nitrobenzene d5 | 70 | 23-120 | 1260 ug/kg |
| Terphenyl d14 | 68 | 18-137 | 1260 ug/kg |

DATA REVIEWED
NOT VALIDATED
DEC 05 2000
BY:

RL - Reporting Limit
J - Estimated Value
MDL - Method Detection Limit
U - Below MDL

VF 12/14/00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-22-A

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8270C Semivolatiles by GC/MS

Preparation Batch: WG3500
Matrix: Soil
Lab Notebook No: 1079,P.77
Initial Cal. ID.: 3NOV30P
Final Volume: 1.0 ml
Initial Weight: 30.23 g
Percent Solids: 57 %
Prep. Method: EPA 3541

Instrument Batch: WG3590
Lab Sample ID.: L2196-16
Date Sampled: 15-NOV-00
Date Received: 17-NOV-00
Date Extracted: 20-NOV-00
Date Analyzed: 03-DEC-00

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (ug/kg) | RL (ug/kg) | RESULTS (ug/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 83-32-9 | Acenaphthene | 22.2 | 290 | 54.6 | 1 | J |
| 2. | 208-96-8 | Acenaphthylene | 23.5 | 290 | --- | 1 | U |
| 3. | 120-12-7 | Anthracene | 25.8 | 290 | 150 | 1 | J |
| 4. | 56-55-3 | Benzo(a)Anthracene | 18.5 | 290 | 205 | 1 | J |
| 5. | 50-32-8 | Benzo(a)Pyrene | 23.5 | 290 | 216 | 1 | J |
| 6. | 205-99-2 | Benzo(b)Fluoranthene | 28.1 | 290 | 292 | 1 | |
| 7. | 191-24-2 | Benzo(g,h,i)Perylene | 36.1 | 290 | 115 | 1 | J |
| 8. | 207-08-9 | Benzo(k)Fluoranthene | 28.1 | 290 | 117 | 1 | J |
| 9. | 218-01-9 | Chrysene | 21.8 | 290 | 268 | 1 | J |
| 10. | 53-70-3 | Dibenzo(a,h)Anthracene | 36.7 | 290 | --- | 1 | U |
| 11. | 206-44-0 | Fluoranthene | 20.5 | 290 | 297 | 1 | |
| 12. | 86-73-7 | Fluorene | 21.5 | 290 | 66.2 | 1 | J |
| 13. | 193-39-5 | Indeno(1,2,3-cd)Pyrene | 37.0 | 290 | 203 | 1 | J |
| 14. | 91-20-3 | Naphthalene | 19.8 | 290 | 45.3 | 1 | J |
| 15. | 85-01-8 | Phenanthrene | 21.5 | 290 | 444 | 1 | |
| 16. | 129-00-0 | Pyrene | 25.8 | 290 | 349 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| 2-Fluorobiphenyl | 68 | 30-115 | 1450 ug/kg |
| Nitrobenzene d5 | 56 | 23-120 | 1450 ug/kg |
| Terphenyl d14 | 25 | 18-137 | 1450 ug/kg |

DATA REV[illegible] NOT VALID[illegible]ED

RL - Reporting Limit
J - Estimated Value

MDL - Method Detection Limit
U - Below MDL

DEC 0 5 2000
BY: [illegible]

VF12/14/00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-19

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8270C Semivolatiles by GC/MS

Preparation Batch: WG3500
Matrix: Soil
Lab Notebook No: 1079,P.77
Initial Cal. ID.: 3NOV30P
Final Volume: 1.0 ml
Initial Weight: 30.32 g
Percent Solids: 54 %
Prep. Method: EPA 3541

Instrument Batch: WG3590
Lab Sample ID.: L2196-19
Date Sampled: 15-NOV-00
Date Received: 17-NOV-00
Date Extracted: 20-NOV-00
Date Analyzed: 03-DEC-00

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (ug/kg) | RL (ug/kg) | RESULTS (ug/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 83-32-9 | Acenaphthene | 22.1 | 305 | 23.8 | 1 | J |
| 2. | 208-96-8 | Acenaphthylene | 23.4 | 305 | --- | 1 | U |
| 3. | 120-12-7 | Anthracene | 25.7 | 305 | 48.9 | 1 | J |
| 4. | 56-55-3 | Benzo(a)Anthracene | 18.5 | 305 | 123 | 1 | J |
| 5. | 50-32-8 | Benzo(a)Pyrene | 23.4 | 305 | 129 | 1 | J |
| 6. | 205-99-2 | Benzo(b)Fluoranthene | 28.0 | 305 | 150 | 1 | J |
| 7. | 191-24-2 | Benzo(g,h,i)Perylene | 35.9 | 305 | 64.1 | 1 | J |
| 8. | 207-08-9 | Benzo(k)Fluoranthene | 28.0 | 305 | 67.2 | 1 | J |
| 9. | 218-01-9 | Chrysene | 21.8 | 305 | 206 | 1 | J |
| 10. | 53-70-3 | Dibenzo(a,h)Anthracene | 36.6 | 305 | --- | 1 | U |
| 11. | 206-44-0 | Fluoranthene | 20.4 | 305 | 238 | 1 | J |
| 12. | 86-73-7 | Fluorene | 21.4 | 305 | 22.6 | 1 | J |
| 13. | 193-39-5 | Indeno(1,2,3-cd)Pyrene | 36.9 | 305 | 145 | 1 | J |
| 14. | 91-20-3 | Naphthalene | 19.8 | 305 | — | 1 | U |
| 15. | 85-01-8 | Phenanthrene | 21.4 | 305 | 160 | 1 | J |
| 16. | 129-00-0 | Pyrene | 25.7 | 305 | 322 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| 2-Fluorobiphenyl | 76 | 30-115 | 1530 ug/kg |
| Nitrobenzene d5 | 71 | 23-120 | 1530 ug/kg |
| Terphenyl d14 | 68 | 18-137 | 1530 ug/kg |

DATA REVIEWED
NOT VALIDATED

RL - Reporting Limit
J - Estimated Value
MDL - Method Detection Limit
U - Below MDL

DEC 0 5 2000
BY:

KF12/4/00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-40-B

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8270C Semivolatiles by GC/MS

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3500 | Instrument Batch: | WG3590 |
| Matrix: | Soil | Lab Sample ID.: | L2196-34 |
| Lab Notebook No: | 1079,P.77 | Date Sampled: | 15-NOV-00 |
| Initial Cal. ID.: | 3NOV30P | Date Received: | 17-NOV-00 |
| Final Volume: | 1.0 ml | Date Extracted: | 20-NOV-00 |
| Initial Weight: | 30.39 g | Date Analyzed: | 03-DEC-00 |
| Percent Solids: | 43 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (ug/kg) | RL (ug/kg) | RESULTS (ug/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 83-32-9 | Acenaphthene | 22.0 | 383 | 210 | 1 | J |
| 2. | 208-96-8 | Acenaphthylene | 23.4 | 383 | --- | 1 | U |
| 3. | 120-12-7 | Anthracene | 25.7 | 383 | 536 | 1 | |
| 4. | 56-55-3 | Benzo(a)Anthracene | 18.4 | 383 | 1070 | 1 | |
| 5. | 50-32-8 | Benzo(a)Pyrene | 23.4 | 383 | 1040 | 1 | |
| 6. | 205-99-2 | Benzo(b)Fluoranthene | 28.0 | 383 | 1300 | 1 | |
| 7. | 191-24-2 | Benzo(g,h,i)Perylene | 35.9 | 383 | 400 | 1 | |
| 8. | 207-08-9 | Benzo(k)Fluoranthene | 28.0 | 383 | 608 | 1 | |
| 9. | 218-01-9 | Chrysene | 21.7 | 383 | 1080 | 1 | |
| 10. | 53-70-3 | Dibenzo(a,h)Anthracene | 36.5 | 383 | 135 | 1 | J |
| 11. | 206-44-0 | Fluoranthene | 20.4 | 383 | 1960 | 1 | |
| 12. | 86-73-7 | Fluorene | 21.4 | 383 | 303 | 1 | J |
| 13. | 193-39-5 | Indeno(1,2,3-cd)Pyrene | 36.9 | 383 | 552 | 1 | |
| 14. | 91-20-3 | Naphthalene | 19.7 | 383 | 232 | 1 | J |
| 15. | 85-01-8 | Phenanthrene | 21.4 | 383 | 1880 | 1 | |
| 16. | 129-00-0 | Pyrene | 25.7 | 383 | 2330 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| 2-Fluorobiphenyl | 81 | 30-115 | 1910 ug/kg |
| Nitrobenzene d5 | 77 | 23-120 | 1910 ug/kg |
| Terphenyl d14 | 70 | 18-137 | 1910 ug/kg |

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY:

RL - Reporting Limit
J - Estimated Value
MDL - Method Detection Limit
U - Below MDL

VF 12/4/00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MR-02

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8270C Semivolatiles by GC/MS

Preparation Batch: WG3500
Matrix: Soil
Lab Notebook No: 1079,P.77
Initial Cal. ID.: 3NOV30P
Final Volume: 1.0 ml
Initial Weight: 30.05 g
Percent Solids: 55 %
Prep. Method: EPA 3541

Instrument Batch: WG3590
Lab Sample ID.: L2196-38
Date Sampled: 16-NOV-00
Date Received: 17-NOV-00
Date Extracted: 20-NOV-00
Date Analyzed: 03-DEC-00

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (ug/kg) | R L (ug/kg) | RESULTS (ug/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 83-32-9 | Acenaphthene | 22.3 | 303 | 97.4 | 1 | J |
| 2. | 208-96-8 | Acenaphthylene | 23.6 | 303 | --- | 1 | U |
| 3. | 120-12-7 | Anthracene | 26.0 | 303 | 173 | 1 | J |
| 4. | 56-55-3 | Benzo(a)Anthracene | 18.6 | 303 | 422 | 1 | |
| 5. | 50-32-8 | Benzo(a)Pyrene | 23.6 | 303 | 431 | 1 | |
| 6. | 205-99-2 | Benzo(b)Fluoranthene | 28.3 | 303 | 526 | 1 | |
| 7. | 191-24-2 | Benzo(g,h,i)Perylene | 36.3 | 303 | 229 | 1 | J |
| 8. | 207-08-9 | Benzo(k)Fluoranthene | 28.3 | 303 | 208 | 1 | J |
| 9. | 218-01-9 | Chrysene | 22.0 | 303 | 413 | 1 | |
| 10. | 53-70-3 | Dibenzo(a,h)Anthracene | 36.9 | 303 | 59.9 | 1 | J |
| 11. | 206-44-0 | Fluoranthene | 20.6 | 303 | 923 | 1 | |
| 12. | 86-73-7 | Fluorene | 21.6 | 303 | 104 | 1 | J |
| 13. | 193-39-5 | Indeno(1,2,3-cd)Pyrene | 37.3 | 303 | 321 | 1 | |
| 14. | 91-20-3 | Naphthalene | 20.0 | 303 | 27.8 | 1 | J |
| 15. | 85-01-8 | Phenanthrene | 21.6 | 303 | 713 | 1 | |
| 16. | 129-00-0 | Pyrene | 26.0 | 303 | 906 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| 2-Fluorobiphenyl | 73 | 30-115 | 1510 ug/kg |
| Nitrobenzene d5 | 69 | 23-120 | 1510 ug/kg |
| Terphenyl d14 | 59 | 18-137 | 1510 ug/kg |

DATA REVIEWED
NOT VALIDATED
DEC 05 2000
BY:

RL - Reporting Limit
J - Estimated Value
MDL - Method Detection Limit
U - Below MDL

VF 12/4/00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE
MR-40-A

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: Not Submitted
**Analysis:** ICP METALS
**Instrument Batch:** WG3559,
**Preparation Batch:** WG3538
Lab Sample ID.: L2196-1
Matrix: Soil
Date Sampled: 15-NOV-00
Lab Notebook No: 1091,
Date Received: 17-NOV-00
Initial Cal. ID.: E112900,
Date Digested: 28-NOV-00
Final Volume: 100.0 ml
Date Analyzed: 29-NOV-00
Initial Weight: 1.1344 g
Percent Solids: 51 %
Prep. Method: EPA 3050B

## SAMPLE RESULTS

| ANALYTICAL METHOD | ANALYTE | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|
| EPA Method 6010B | ARSENIC | 0.64 | 17.3 | 47.0 | 2 | D,B |
| EPA Method 6010B | BARIUM | 0.16 | 2.1 | 74.1 | 2 | D |
| EPA Method 6010B | CADMIUM | 0.15 | 2.8 | --- | 2 | D,U |
| EPA Method 6010B | CHROMIUM | 0.28 | 6.9 | 291 | 2 | D |
| EPA Method 6010B | SELENIUM | 1.9 | 225 | --- | 2 | D,U |
| EPA Method 6010B | SILVER | 0.45 | 5.2 | --- | 2 | D,U |
| EPA Method 6010B | LEAD | 2.3 | 13.8 | 88.3 | 1 | |

RL - Reporting Limit MDL - Method Detection Limit

DATA R
NOT VAL
DEC 05
BY:

12-1-00
12-1-00
12-1-00

Comments:

# Environmental Chemical Corporation

SAMPLE
**MR-25**

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: Not Submitted
**Analysis:** ICP METALS
**Instrument Batch:** WG3559,
**Preparation Batch:** WG3538
Lab Sample ID.: L2196-13
Matrix: Soil
Date Sampled: 15-NOV-00
Lab Notebook No: 1091,
Date Received: 17-NOV-00
Initial Cal. ID.: E112900,
Date Digested: 28-NOV-00
Final Volume: 100.0 ml
Date Analyzed: 29-NOV-00
Initial Weight: 1.5633 g
Percent Solids: 65 %
Prep. Method: EPA 3050B

**SAMPLE RESULTS**

| ANALYTICAL METHOD | ANALYTE | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|
| EPA Method 6010B | ARSENIC | 0.47 | 9.8 | 18.0 | 2 | D,B |
| EPA Method 6010B | BARIUM | 0.11 | 1.2 | 70.0 | 2 | D |
| EPA Method 6010B | CADMIUM | 0.11 | 1.6 | 1.5 | 2 | D,J |
| EPA Method 6010B | CHROMIUM | 0.20 | 3.9 | 44.7 | 2 | D |
| EPA Method 6010B | SELENIUM | 1.3 | 128 | --- | 2 | D,U |
| EPA Method 6010B | SILVER | 0.32 | 3.0 | --- | 2 | D,U |
| EPA Method 6010B | LEAD | 1.7 | 7.9 | 56.5 | 1 | |

RL - Reporting Limit MDL - Method Detection Limit

DATA REVIEW
NOT VALIDATED
DEC 05 2000
BY:

BS 12-1-00
AS 12-1-00
12-1-00

Comments:

# Environmental Chemical Corporation

SAMPLE
MR-40-A

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: Not Submitted
Analysis: CV METALS
Instrument Batch: WG3548,
Preparation Batch: WG3542
Lab Sample ID.: L2196-1
Matrix: Soil
Date Sampled: 15-NOV-00
Lab Notebook No: 1147,
Date Received: 17-NOV-00
Initial Cal. ID.: WG3548,
Date Digested: 27-NOV-00
Final Volume: 100.0 ml
Date Analyzed: 28-NOV-00
Initial Weight: 1.0228 g
Percent Solids: 51 %
Prep. Method: EPA 7471A

## SAMPLE RESULTS

| ANALYTICAL METHOD | ANALYTE | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|
| EPA Method 7471A | Mercury | 0.0048 | 0.038 | 0.13 | 1 | B |

RL - Reporting Limit MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 05 2000
BY:

11-30-00
11-30-00
11-30-00

Comments:

# Environmental Chemical Corporation

SAMPLE
MR-28

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: Not Submitted
Analysis: ICP METALS
Instrument Batch: WG3559,
Preparation Batch: WG3538
Lab Sample ID.: L2196-10
Matrix: Soil
Date Sampled: 15-NOV-00
Lab Notebook No: 1091,
Date Received: 17-NOV-00
Initial Cal. ID.: E112900,
Date Digested: 28-NOV-00
Final Volume: 100.0 ml
Date Analyzed: 29-NOV-00
Initial Weight: 1.5508 g
Percent Solids: 46 %
Prep. Method: EPA 3050B

## SAMPLE RESULTS

| ANALYTICAL METHOD | ANALYTE | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|
| EPA Method 6010B | ARSENIC | 0.47 | 35.0 | 74.9 | 5 | D,B |
| EPA Method 6010B | BARIUM | 0.11 | 4.2 | 160 | 5 | D |
| EPA Method 6010B | CADMIUM | 0.11 | 5.6 | --- | 5 | D,U |
| EPA Method 6010B | CHROMIUM | 0.21 | 14.0 | 423 | 5 | D |
| EPA Method 6010B | SELENIUM | 1.4 | 456 | --- | 5 | D,U |
| EPA Method 6010B | SILVER | 0.33 | 10.5 | --- | 5 | D,U |
| EPA Method 6010B | LEAD | 1.7 | 11.2 | 244 | 1 | |

RL - Reporting Limit
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY:

BS 12-1-00
AS 12-1-00
GB 12-1-00

Comments:

# Environmental Chemical Corporation

SAMPLE
**MR-28**

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: Not Submitted
**Analysis: CV METALS**
**Instrument Batch: WG3548,**
**Preparation Batch: WG3542** Lab Sample ID.: **L2196-10**
Matrix: Soil Date Sampled: 15-NOV-00
Lab Notebook No: 1147, Date Received: 17-NOV-00
Initial Cal. ID.: WG3548, Date Digested: 27-NOV-00
Final Volume: 100.0 ml Date Analyzed: 28-NOV-00
Initial Weight: 1.0200 g
Percent Solids: 46 %
Prep. Method: EPA 7471A

**SAMPLE RESULTS**

| ANALYTICAL METHOD | ANALYTE | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|
| EPA Method 7471A | Mercury | 0.0048 | 0.043 | 0.38 | 1 | B |

RL - Reporting Limit MDL - Method Detection Limit

DATA REV[illegible]
NOT VALI[illegible]
DEC 0 5 20[illegible]
BY: [illegible]

[illegible] 11-30-00
[illegible] 11-30-00
[illegible] 11-30-00

Comments:

# Environmental Chemical Corporation

SAMPLE
MR-25

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: Not Submitted
Analysis: CV METALS
Instrument Batch: WG3548,
Preparation Batch: WG3542
Lab Sample ID.: L2196-13
Matrix: Soil
Date Sampled: 15-NOV-00
Lab Notebook No: 1147,
Date Received: 17-NOV-00
Initial Cal. ID.: WG3548,
Date Digested: 27-NOV-00
Final Volume: 100.0 ml
Date Analyzed: 28-NOV-00
Initial Weight: 1.0117 g
Percent Solids: 65 %
Prep. Method: EPA 7471A

## SAMPLE RESULTS

| ANALYTICAL METHOD | ANALYTE | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|
| EPA Method 7471A | Mercury | 0.0048 | 0.030 | 0.21 | 1 | B |

RL - Reporting Limit
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY:

11-30-00
11-30-00
11-30-00

Comments:

# Environmental Chemical Corporation

SAMPLE
MR-22-A

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: Not Submitted
Analysis: ICP METALS
Instrument Batch: WG3559,
Preparation Batch: WG3538 Lab Sample ID.: L2196-16
Matrix: Soil Date Sampled: 15-NOV-00
Lab Notebook No: 1091, Date Received: 17-NOV-00
Initial Cal. ID.: E112900, Date Digested: 28-NOV-00
Final Volume: 100.0 ml Date Analyzed: 29-NOV-00
Initial Weight: 1.4816 g
Percent Solids: 57 %
Prep. Method: EPA 3050B

## SAMPLE RESULTS

| ANALYTICAL METHOD | ANALYTE | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|
| EPA Method 6010B | ARSENIC | 0.49 | 29.6 | 57.3 | 5 | D,B |
| EPA Method 6010B | BARIUM | 0.12 | 3.6 | 97.3 | 5 | D |
| EPA Method 6010B | CADMIUM | 0.11 | 4.7 | --- | 5 | D,U |
| EPA Method 6010B | CHROMIUM | 0.22 | 11.8 | 359 | 5 | D |
| EPA Method 6010B | SELENIUM | 1.4 | 385 | --- | 5 | D,U |
| EPA Method 6010B | SILVER | 0.34 | 8.9 | --- | 5 | D,U |
| EPA Method 6010B | LEAD | 1.8 | 9.5 | 111 | 1 | |

RL - Reporting Limit MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY:

gs 12-1-00
AS 12-1-00
CJ/AB 12-1-00

Comments:

# Environmental Chemical Corporation

SAMPLE
MR-22-A

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: Not Submitted
Analysis: CV METALS
Instrument Batch: WG3548,
Preparation Batch: WG3542
Lab Sample ID.: L2196-16
Matrix: Soil
Date Sampled: 15-NOV-00
Lab Notebook No: 1147,
Date Received: 17-NOV-00
Initial Cal. ID.: WG3548,
Date Digested: 27-NOV-00
Final Volume: 100.0 ml
Date Analyzed: 28-NOV-00
Initial Weight: 1.0608 g
Percent Solids: 57 %
Prep. Method: EPA 7471A

## SAMPLE RESULTS

| ANALYTICAL METHOD | ANALYTE | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|
| EPA Method 7471A | Mercury | 0.0046 | 0.033 | 0.18 | 1 | B |

RL - Reporting Limit MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 05 2000
BY:

DB 11-30-00
11-30-00
11-30-00

Comments:

# Environmental Chemical Corporation

SAMPLE
MR-19

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: Not Submitted
Analysis: ICP METALS
Instrument Batch: WG3559,
Preparation Batch: WG3538 Lab Sample ID.: L2196-19
Matrix: Soil Date Sampled: 15-NOV-00
Lab Notebook No: 1091, Date Received: 17-NOV-00
Initial Cal. ID.: E112900, Date Digested: 28-NOV-00
Final Volume: 100.0 ml Date Analyzed: 29-NOV-00
Initial Weight: 1.5874 g
Percent Solids: 54 %
Prep. Method: EPA 3050B

## SAMPLE RESULTS

| ANALYTICAL METHOD | ANALYTE | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|
| EPA Method 6010B | ARSENIC | 0.46 | 46.7 | 34.7 | 8 | D,J,B |
| EPA Method 6010B | BARIUM | 0.11 | 5.6 | 101 | 8 | D |
| EPA Method 6010B | CADMIUM | 0.11 | 7.5 | --- | 8 | D,U |
| EPA Method 6010B | CHROMIUM | 0.20 | 18.7 | 951 | 8 | D |
| EPA Method 6010B | SELENIUM | 1.3 | 607 | --- | 8 | D,U |
| EPA Method 6010B | SILVER | 0.32 | 14.0 | 17.1 | 8 | D |
| EPA Method 6010B | LEAD | 1.6 | 9.3 | 347 | 1 | |

RL - Reporting Limit MDL - Method Detection Limit

DATA REVIEW
NOT VALIDATED
DEC 0 5 2000
BY:

BJ 12-1-00
AJ 12-1-00
CAA 12-1-00

Comments:

# Environmental Chemical Corporation

SAMPLE
MR-02

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: Not Submitted
Analysis: ICP METALS
Instrument Batch: WG3559,
Preparation Batch: WG3538
Lab Sample ID.: L2196-38
Matrix: Soil
Date Sampled: 16-NOV-00
Lab Notebook No: 1091,
Date Received: 17-NOV-00
Initial Cal. ID.: E112900,
Date Digested: 28-NOV-00
Final Volume: 100.0 ml
Date Analyzed: 29-NOV-00
Initial Weight: 1.3114 g
Percent Solids: 55 %
Prep. Method: EPA 3050B

## SAMPLE RESULTS

| ANALYTICAL METHOD | ANALYTE | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|
| EPA Method 6010B | ARSENIC | 0.56 | 34.7 | 13.9 | 5 | D,J,B |
| EPA Method 6010B | BARIUM | 0.13 | 4.2 | 66.4 | 5 | D |
| EPA Method 6010B | CADMIUM | 0.13 | 5.5 | --- | 5 | D,U |
| EPA Method 6010B | CHROMIUM | 0.24 | 13.9 | 390 | 5 | D |
| EPA Method 6010B | SELENIUM | 1.6 | 451 | --- | 5 | D,U |
| EPA Method 6010B | SILVER | 0.39 | 10.4 | --- | 5 | D,U |
| EPA Method 6010B | LEAD | 2.0 | 11.1 | 88.4 | 1 | |

RL - Reporting Limit MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY:

JS 12-1-00
AB 12-1-00
12-1-00

Comments:

# Environmental Chemical Corporation

SAMPLE
MR-19

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: Not Submitted
Analysis: CV METALS
Instrument Batch: WG3548,
Preparation Batch: WG3542
Lab Sample ID.: L2196-19
Matrix: Soil
Date Sampled: 15-NOV-00
Lab Notebook No: 1147,
Date Received: 17-NOV-00
Initial Cal. ID.: WG3548,
Date Digested: 27-NOV-00
Final Volume: 100.0 ml
Date Analyzed: 28-NOV-00
Initial Weight: 1.0440 g
Percent Solids: 54 %
Prep. Method: EPA 7471A

## SAMPLE RESULTS

| ANALYTICAL METHOD | ANALYTE | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|
| EPA Method 7471A | Mercury | 0.0047 | 0.035 | 0.21 | 1 | B |

RL - Reporting Limit MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY:

DO 11-30-00
CMA 11-30-00
DQ 11-30-00

Comments:

# Environmental Chemical Corporation

SAMPLE
MR-40-B

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: Not Submitted
Analysis: ICP METALS
Instrument Batch: WG3559,
Preparation Batch: WG3538
Lab Sample ID.: L2196-34
Matrix: Soil
Date Sampled: 15-NOV-00
Lab Notebook No: 1091,
Date Received: 17-NOV-00
Initial Cal. ID.: E112900,
Date Digested: 28-NOV-00
Final Volume: 100.0 ml
Date Analyzed: 29-NOV-00
Initial Weight: 1.5425 g
Percent Solids: 43 %
Prep. Method: EPA 3050B

## SAMPLE RESULTS

| ANALYTICAL METHOD | ANALYTE | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|
| EPA Method 6010B | ARSENIC | 0.47 | 37.7 | 35.6 | 5 | D,J,B |
| EPA Method 6010B | BARIUM | 0.11 | 4.5 | 78.8 | 5 | D |
| EPA Method 6010B | CADMIUM | 0.11 | 6.0 | --- | 5 | D,U |
| EPA Method 6010B | CHROMIUM | 0.21 | 15.1 | 298 | 5 | D |
| EPA Method 6010B | SELENIUM | 1.4 | 490 | --- | 5 | D,U |
| EPA Method 6010B | SILVER | 0.33 | 11.3 | --- | 5 | D,U |
| EPA Method 6010B | LEAD | 1.7 | 12.1 | 97.2 | 1 | |

RL - Reporting Limit MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 0 5 2000
BY: [signature]

[signature] 12-1-00
[signature] 12-1-00
[signature] 12-1-00

Comments:

# Environmental Chemical Corporation

SAMPLE
MR-40-B

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: Not Submitted
Analysis: CV METALS
Instrument Batch: WG3548,
Preparation Batch: WG3542
Lab Sample ID.: L2196-34
Matrix: Soil
Date Sampled: 15-NOV-00
Lab Notebook No: 1147,
Date Received: 17-NOV-00
Initial Cal. ID.: WG3548,
Date Digested: 27-NOV-00
Final Volume: 100.0 ml
Date Analyzed: 28-NOV-00
Initial Weight: 1.1133 g
Percent Solids: 43 %
Prep. Method: EPA 7471A

## SAMPLE RESULTS

| ANALYTICAL METHOD | ANALYTE | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|
| EPA Method 7471A | Mercury | 0.0044 | 0.042 | 0.10 | 1 | B |

RL - Reporting Limit MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED

DEC 0 5 2000

BY: [signature]

[signature] 11-30-00
[signature] 11-30-00
[signature] 11-30-00

Comments:

# Environmental Chemical Corporation

SAMPLE
MR-02

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: Not Submitted
Analysis: CV METALS
Instrument Batch: WG3548,
Preparation Batch: WG3542
Lab Sample ID.: L2196-38
Matrix: Soil
Date Sampled: 16-NOV-00
Lab Notebook No: 1147,
Date Received: 17-NOV-00
Initial Cal. ID.: WG3548,
Date Digested: 27-NOV-00
Date Analyzed: 28-NOV-00
Final Volume: 100.0 ml
Initial Weight: 1.0114 g
Percent Solids: 55 %
Prep. Method: EPA 7471A

## SAMPLE RESULTS

| ANALYTICAL METHOD | ANALYTE | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|
| EPA Method 7471A | Mercury | 0.0048 | 0.036 | 0.063 | 1 | B |

RL - Reporting Limit MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED

DEC 0 5 2000

BY: [signature]

BB 11-30-00
[illegible] 11-30-00
[illegible] 11-30-00

Comments:

# Environmental Chemical Corporation

SAMPLE NUMBER
1A-DR

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIDGE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3663 | Instrument Batch: | WG3736 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2178-1 |
| Lab Notebook No: | 1132, 14 | Date Sampled: | 27-NOV-00 |
| Initial Cal. ID.: | FF1208 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 08-DEC-00 |
| Initial Weight: | 10.23 g | Date Analyzed: | 09-DEC-00 |
| Percent Solids: | 83 % | | |
| Prep. Method: | EPA 3541 | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.071 | -- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.071 | -- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0056 | 0.059 | -- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.059 | -- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.078 | -- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.071 | -- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.059 | -- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 110 | 55-130 | 0.12 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA RE
NOT VAL
DEC 1 5
BY

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
1B-DR

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3852 | Instrument Batch: | WG3756 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2378-2 |
| Lab Notebook No: | 1152, 14 | Date Sampled: | 27-NOV-00 |
| Initial Cal. ID.: | FF1208 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 08-DEC-00 |
| Initial Weight: | 10.5 g | Date Analyzed: | 09-DEC-00 |
| Percent Solids: | 83 % | | |
| Prep. Method: | EPA 3541 | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.069 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.069 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0064 | 0.057 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.057 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.023 | 0.086 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.069 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 0.057 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 94 | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 15 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
1FS-DR

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WC3663 | Instrument Batch: | WC3736 |
| Matrix: | Misc Solid | Lab Sample ID.: | LE378-3 |
| Lab Notebook No: | 1152, 14 | Date Sampled: | 27-NOV-00 |
| Initial Cal. ID.: | FF1208 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 08-DEC-00 |
| Initial Weight: | 10.16 g | Date Analyzed: | 09-DEC-00 |
| Percent Solids: | 87 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.068 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.068 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 0.037 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.037 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.083 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.068 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.013 | 5.7 | 50.0 | 100 | D |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 104 | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 15 2000
BY

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
1CORE-DR

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3468 | Instrument Serial: | WG3756 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2276-36 |
| Lab Notebook No: | 1152, 14 | Date Sampled: | 27-NOV-00 |
| Initial Cal. ID.: | FF1208 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 08-DEC-00 |
| Initial Weight: | 10.47 g | Date Analyzed: | 13-DEC-00 |
| Percent Solids: | 97 % | | |
| Prep. Method: | EPA 3541 | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.059 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.059 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0064 | 0.049 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.049 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.023 | 0.074 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.059 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 0.049 | 0.12 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 99 | 55-130 | 0.098 mg/kg |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 15 2000
BY: [signature]

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
2A-DR

Customer: ENVIRONMENTAL QUALITY MGT., INC
Project. No.: 30141.0065
Source: MAHONING SIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3662 | Instrument Batch: | WG3756 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2278-4 |
| Lab Notebook No: | 1132, 14 | Date Sampled: | 28-NOV-00 |
| Initial Cal. ID.: | PP1268 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 08-DEC-00 |
| Initial Weight: | 10.37 g | Date Analyzed: | 09-DEC-00 |
| Percent Solids: | 83 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.070 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.070 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0065 | 0.058 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.058 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.087 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.070 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 5.8 | 209 | 100 | D |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 130 | 55-130 | 0.12 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 1 5 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
2B-DR

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG5463 | Instrument Batch: | WG3736 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2378-6 |
| Lab Notebook No: | 1132, 14 | Date Sampled: | 28-NOV-00 |
| Initial Cal. ID.: | FF1208 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 08-DEC-00 |
| Initial Weight: | 10.31 g | Date Analyzed: | 09-DEC-00 |
| Percent Solids: | 88 % | | |
| Prep. Method: | EPA 3541 | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.066 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.066 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0083 | 0.055 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.055 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.083 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.066 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.11 | 2.1 | 2 | D |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 110 | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 1 5 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
2FS-DR

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3662 | Instrument Batch: | WG1736 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2278-6 |
| Lab Notebook No: | 1152, 14 | Date Sampled: | 28-NOV-00 |
| Initial Cal. ID.: | FF1208 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 08-DEC-00 |
| Initial Weight: | 10.45 g | Date Analyzed: | 09-DEC-00 |
| Percent Solids: | 81 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.071 | — | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.071 | — | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0083 | 0.059 | — | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.059 | — | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.089 | — | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.071 | — | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 11.9 | 281 | 200 | D |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 122 | 55-130 | 0.12 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 15 2000
BY: [signature]

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
SA-DR

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER RTB
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3653 | Instrument Batch: | WG3736 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2278-7 |
| Lab Notebook No: | 1132, 14 | Date Sampled: | 28-NOV-00 |
| Initial Cal. ID.: | FF1208 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 08-DEC-00 |
| Initial Weight: | 10.43 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 86 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.087 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.087 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0065 | 0.056 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.056 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.084 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.087 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 23.3 | 936 | 400 | D |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 97 | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
D - Diluted
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 15 2000
BY: [illegible]

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
SB-DIR

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0045
Source: MAHONING SIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3683 | Instrument Batch: | WG3736 |
| Matrix: | Misc Solid | Lab Sample ID.: | L3778-8 |
| Lab Notebook No: | 1152, 14 | Date Sampled: | 28-NOV-00 |
| Initial Cal ID.: | PF1208 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 08-DEC-00 |
| Initial Weight: | 10.16 g | Date Analyzed: | 12-DEC-00 |
| Percent Solids: | 92 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.064 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.064 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 0.053 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.053 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.080 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.064 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.053 | 1.4 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 103 | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
'U' - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 15 2000
BY: [signature]

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
4A-DIR

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIDGE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG35683 | Instrument Batch: | WG35736 |
| Matrix: | Misc Solid | Lab Sample ID.: | L3278-8 |
| Lab Notebook No: | 1152, 14 | Date Sampled: | 28-NOV-00 |
| Initial Cal. ID.: | FF1208 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 08-DEC-00 |
| Initial Weight | 10.03 g | Date Analyzed: | 12-DEC-00 |
| Percent Solids: | 71 % | | |
| Prep. Method: | EPA 3541 | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R.L. (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.084 | -- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.020 | 0.084 | -- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0087 | 0.070 | -- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.015 | 0.070 | -- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.11 | -- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.084 | -- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.070 | 1.3 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 103 | 55-130 | 0.14 mg/kg |

R.L. - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 15 2000
BY: [illegible]

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
4B-DR

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING SIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCB by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3653 | Instrument Batch: | WC8734 |
| Matrix: | Misc Solid | Lab Sample ID.: | L3278-18 |
| Lab Notebook No: | 1152, 14 | Date Sampled: | 28-NOV-00 |
| Initial Cal. ID.: | FF1208 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 08-DEC-00 |
| Initial Weight: | 10.16 g | Date Analyzed: | 12-DEC-00 |
| Percent Solids: | 85 % | | |
| Prep. Method: | EPA 3541 | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.069 | — | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.069 | — | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0086 | 0.058 | — | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.038 | — | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.087 | — | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.069 | — | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.013 | 0.058 | — | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 99 | 55-130 | 0.12 mg/kg |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 15 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
6A-DR

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

Project No.: 30141.0065

Preparation Batch: WG3662
Matrix: Misc Solid
Lab Notebook No: 1152, 14
Initial Cal. ID.: FF1208
Final Volume: 10.0 ml
Initial Weight: 10.27 g
Percent Solids: 81 %
Prep. Method: EPA 3541

Instrument Batch: WG3736
Lab Sample ID.: L2378-11
Date Sampled: 28-NOV-00
Date Received: 07-DEC-00
Date Extracted: 08-DEC-00
Date Analyzed: 12-DEC-00

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.072 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.072 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0086 | 0.060 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.060 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.090 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.072 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.060 | 0.17 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 112 | 55-130 | 0.12 mg/kg |

RL - Reporting Limit
U - Below MDL

MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 15 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
SB-DR

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3683 | Instrument Batch: | WG3736 |
| Matrix: | Misc Solid | Lab Sample ID.: | L3278-12 |
| Lab Notebook No: | 1152, 14 | Date Sampled: | 28-NOV-00 |
| Initial Cal. ID.: | FF1208 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 08-DEC-00 |
| Initial Weight: | 10.4 g | Date Analyzed: | 12-DEC-00 |
| Percent Solids: | 88 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R.L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.018 | 0.086 | — | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.086 | — | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0063 | 0.055 | — | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.055 | — | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.082 | — | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.086 | — | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 0.095 | — | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 98 | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
U - Below MDL

MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 1 5 2000

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
6A-DR

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0045
Source: MARIONING SIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

Preparation Batch: WG3888
Matrix: Misc Solid
Lab Notebook No: 1152, 15
Initial Cal. ID.: PF1212
Final Volume: 10.0 ml
Initial Weight: 10.14 g
Percent Solids: 75 %
Prep. Method: EPA 3540C

Instrument Batch: WG3781
Lab Sample ID.: L2178-13
Date Sampled: 29-NOV-00
Date Received: 07-DEC-00
Date Extracted: 11-DEC-00
Date Analyzed: 15-DEC-00

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.079 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.079 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0087 | 0.046 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.066 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.099 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.079 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.013 | 0.66 | 6.3 | 10 | D |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 88 | 55-130 | 0.13 mg/kg |

RL - Reporting Limit
D - Diluted
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
68-DR

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0003
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3890 | Instrument Batch: | WG3781 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2378-14 |
| Lab Notebook No: | 1152, 15 | Date Sampled: | 29-NOV-00 |
| Initial Cal. ID.: | PFI212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.18 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 89 % | | |
| Prep. Method: | EPA 3540C | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R.L. (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.066 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.066 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 0.055 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.055 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.083 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.066 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.055 | 0.65 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 98 | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
U - Below MDL

MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
MDL

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
7A-DR

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0045
Source: MAHONING SIDE RIVER RTB
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3698 | Instrument Batch: | WG3781 |
| Matrix: | Miss Solid | Lab Sample ID.: | L2278-16 |
| Lab Notebook No: | 1152, 15 | Date Sampled: | 29-NOV-00 |
| Initial Cal. ID.: | FF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.0 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 73 % | | |
| Prep. Method: | EPA 3540C | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.082 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.020 | 0.082 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0068 | 0.068 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.015 | 0.068 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.025 | 0.10 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.082 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.68 | 13.4 | 10 | D |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 96 | 55-130 | 0.14 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
78-DR

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3488 | Instrument Batch: | WG3781 |
| Matrix: | Misc Solid | Lab Sample ID.: | LX78-16 |
| Lab Notebook No: | 1152, 15 | Date Sampled: | 29-NOV-00 |
| Initial Cal. ID.: | FF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.6 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 82 % | | |
| Prep. Method: | EPA 3540C | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.069 | — | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.018 | 0.069 | — | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0064 | 0.058 | — | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.052 | — | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.023 | 0.086 | — | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.069 | — | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 0.058 | 0.43 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 100 | 55-130 | 0.12 mg/kg |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
8A-DR

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING SIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG16298 | Instrument Batch: | WG3781 |
| Matrix: | Misc Solid | Lab Sample ID.: | L3278-17 |
| Lab Notebook No: | 1152, 13 | Date Sampled: | 29-NOV-00 |
| Initial Cal. ID.: | FF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.18 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 85 % | | |
| Prep. Method: | EPA 3540C | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.074 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.074 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0086 | 0.041 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.041 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.092 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.074 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 3.1 | 88.2 | 50 | D |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 110 | 55-130 | 0.12 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
SB-DR

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MARONINO SIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

Preparation Batch: WG3698
Matrix: Mine Solid
Lab Notebook No: 1152, 18
Initial Cal. ID.: FF1213
Final Volume: 10.0 ml
Initial Weight: 10.32 g
Percent Solids: 85 %
Prep Method: EPA 3540C

Instrument Batch: WG3781
Lab Sample ID.: L2378-18
Date Sampled: 29-NOV-00
Date Received: 07-DEC-00
Date Extracted: 11-DEC-00
Date Analyzed: 15-DEC-00

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.058 | -- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.018 | 0.058 | -- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0045 | 0.056 | -- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.058 | -- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.085 | -- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.068 | -- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.056 | 0.25 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 96 | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
'U' - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
SCORE-DB

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project No.: 30141.0063
Source: MAHONING SIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3698 | Instrument Batch: | WG3781 |
| Matrix: | Misc Solid | Lab Sample ID.: | L3378-28 |
| Lab Notebook No: | 1152, 15 | Date Sampled: | 29-NOV-00 |
| Initial Cal. ID.: | FF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.12 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 95 % | | |
| Prep. Method: | EPA 3540C | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.062 | -- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.062 | -- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0087 | 0.052 | -- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.032 | -- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.078 | -- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.062 | -- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.019 | 0.052 | 0.29 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 106 | 59-130 | 0.10 mg/kg |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to more decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
9A-DR

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING SIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3698 | Instrument Batch: | WG3781 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2378-19 |
| Lab Notebook No: | 1152, 15 | Date Sampled: | 29-NOV-00 |
| Initial Cal. ID.: | PF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.4 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 84 % | | |
| Prep. Method: | EPA 3540C | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.069 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.069 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0068 | 0.037 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.037 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.086 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.069 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 0.11 | 2.7 | 2 | D |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 84 | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
9B-DR

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0085
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8081 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WQ3698 | Instrument Batch: | WG3781 |
| Matrix: | Misc Solid | Lab Sample ID.: | L3378-20 |
| Lab Notebook No: | 1152, 15 | Date Sampled: | 29-NOV-00 |
| Initial Cal. ID.: | PF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.1 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 81 % | | |
| Prep. Method: | EPA 3540C | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.73 | --- | 10 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.73 | --- | 10 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 0.61 | --- | 10 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.61 | --- | 10 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.92 | --- | 10 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.73 | --- | 10 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.61 | 6.4 | 10 | D |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 50 * | 55-130 | 0.12 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
10A-DR

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3686 | Instrument Batch: | WG3781 |
| Matrix: | Misc Solid | Lab Sample ID.: | L3378-31 |
| Lab Notebook No: | 1132, 15 | Date Sampled: | 29-NOV-00 |
| Initial Cal. ID.: | PF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.16 g | Date Analyzed: | 14-DEC-00 |
| Percent Solids: | 88 % | | |
| Prep. Method: | EPA 3540C | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.067 | — | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.067 | — | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 0.056 | — | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.056 | — | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.084 | — | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.067 | — | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.056 | — | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 80 | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY: [illegible]

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
16B-DR

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING SIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3698 | Instrument Batch: | WG3781 |
| Matrix: | Misc Solid | Lab Sample ID.: | L3278-23 |
| Lab Notebook No: | 1132, 15 | Date Sampled: | 29-NOV-00 |
| Initial Cal. ID.: | FF1213 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.01 g | Date Analyzed: | 14-DEC-00 |
| Percent Solids: | 89 % | | |
| Prep. Method: | EPA 3540C | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.067 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.020 | 0.067 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 0.036 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.015 | 0.036 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.025 | 0.084 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.067 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.036 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 91 | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
11B-DR

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING SIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3498 | Instrument Batch: | WG3981 |
| Matrix: | Misc Solid | Lab Sample ID.: | L3278-23 |
| Lab Notebook No: | 1153, 15 | Date Sampled: | 29-NOV-00 |
| Initial Cal. ID.: | FF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.09 g | Date Analyzed: | 14-DEC-00 |
| Percent Solids: | 83 % | | |
| Prep. Method: | EPA 3540C | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.015 | 0.069 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.015 | 0.069 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0064 | 0.057 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.057 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.022 | 0.086 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.069 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 0.057 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 94 | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
11D-DR

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3698 | Instrument Batch: | WG3781 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2178-34 |
| Lab Notebook No: | 1152, 15 | Date Sampled: | 29-NOV-00 |
| Initial Cal. ID.: | PF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.03 g | Date Analyzed: | 14-DEC-00 |
| Percent Solids: | 86 % | | |
| Prep. Method: | EPA 3540C | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.070 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.080 | 0.070 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0087 | 0.058 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.015 | 0.058 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.025 | 0.087 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.070 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.058 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 87 | 55-130 | 0.12 mg/kg |

RL - Reporting Limit
U - Below MDL

MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 1 8 2000
BY: [illegible]

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
12A

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Setter: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3858 | Instrument Batch: | WG3781 |
| Matrix: | Mixe Solid | Lab Sample ID.: | L3287-1 |
| Lab Notebook No: | 1152, 15 | Date Sampled: | 01-DEC-00 |
| Initial Cal. ID.: | FF1213 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.14 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 84 % | | |
| Prep. Method: | EPA 3540C | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.070 | -- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.070 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 0.039 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.039 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.088 | — | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.070 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.039 | 1.1 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 95 | 55-130 | 0.12 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY:

12-18-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
021501 EFFL-B

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project No.: 30141.0065
Source: MAHONING SIDE POWER PLANT
Location: WTP B EFFLUENT
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG4579 | Instrument Batch: | WG4581 |
| Matrix: | Misc. H2O | Lab Sample ID.: | L2772-5 |
| Lab Notebook No: | 1152, 47 | Date Sampled: | 15-FEB-01 |
| Initial Cal. ID.: | PB0206 | Date Received: | 16-FEB-01 |
| Final Volume: | 10.0 ml | Date Extracted: | 16-FEB-01 |
| Initial Volume: | 940 ml | Date Analyzed: | 20-FEB-01 |
| Prep. Method: | EPA 3510C | | |
| pH: | 7 su | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/l) | R L (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.00017 | 0.00053 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.00011 | 0.00053 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.00022 | 0.00069 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.00021 | 0.00069 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.00013 | 0.00053 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.00016 | 0.00053 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.000070 | 0.00053 | 0.00058 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 120 | 34-133 | 0.0011 mg/l |

RL - Reporting Limit MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
FEB 21 2001
BY: [signature]
NW 2-21-01
2.21.01

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
12C

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIDGE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3698 | Instrument Batch: | WG3781 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2287-2 |
| Lab Notebook No: | 1132, 15 | Date Sampled: | 01-DEC-00 |
| Initial Cal. ID.: | FF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.48 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 86 % | | |
| Prep. Method: | EPA 3540C | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.067 | -- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.067 | -- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 0.053 | -- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.053 | -- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.023 | 0.083 | -- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.067 | -- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 0.053 | -- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 92 | 35-130 | 0.11 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY: [signature]

[signature] 12-18-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
13A

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: HAMONING SIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8081 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3698 | Instrument Batch: | WG3781 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2287-3 |
| Lab Notebook No: | 1132, 13 | Date Sampled: | 01-DEC-00 |
| Initial Cal. ID.: | PF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.34 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 82 % | | |
| Prep. Method: | EPA 3540C | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R.L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.071 | — | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.071 | — | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0063 | 0.059 | — | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.059 | — | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.088 | — | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.071 | — | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 0.059 | 0.34 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 93 | 55-130 | 0.12 mg/kg |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY: [signature]

[signature] 12-18-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
130

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG[illegible] | Instrument Batch: | WG[illegible] |
| Matrix: | Misc Solid | Lab Sample ID.: | L2287-4 |
| Lab Notebook No: | 1132, 13 | Date Sampled: | 01-DEC-00 |
| Initial Cal. ID.: | FF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.16 g | Date Analyzed: | 14-DEC-00 |
| Percent Solids: | 86 % | | |
| Prep. Method: | EPA 3540C | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.069 | -- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.069 | -- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0088 | 0.037 | -- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.037 | -- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.086 | -- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.069 | -- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.037 | -- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 95 | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY: [illegible]

CH 12-18-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
14A-DR

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0045
Source: MAHONING SIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG1890 | Instrument Batch: | W05781 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2378-27 |
| Lab Notebook No: | 1152, 15 | Date Sampled: | 03-DEC-00 |
| Initial Cal. ID.: | PF1211 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.0 g | Date Analyzed: | 14-DEC-00 |
| Percent Solids: | 86 % | | |
| Prep. Method: | EPA 3540C | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.070 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.020 | 0.070 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0068 | 0.058 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.015 | 0.058 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.023 | 0.087 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.070 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.058 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 70 | 55-130 | 0.12 mg/kg |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
14B-DR

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3690 | Instrument Batch: | WG3781 |
| Matrix: | Misc Solid | Lab Sample ID.: | L3378-28 |
| Lab Notebook No: | 1152, 15 | Date Sampled: | 03-DEC-00 |
| Initial Cal. ID.: | PF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.03 g | Date Analyzed: | 14-DEC-00 |
| Percent Solids: | 79 % | | |
| Prep. Method: | EPA 3540C | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.076 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.020 | 0.076 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0087 | 0.083 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.015 | 0.083 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.025 | 0.095 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.076 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.083 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 85 | 55-130 | 0.13 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
18A

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING SIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3698 | Instrument Batch: | WG3781 |
| Matrix: | Misc Solid | Lab Sample ID.: | L3387-6 |
| Lab Notebook No: | 1132, 13 | Date Sampled: | 04-DEC-00 |
| Initial Cal. ID.: | FJ1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.04 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 93 % | | |
| Prep. Method: | EPA 3540C | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.054 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.020 | 0.054 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0087 | 0.054 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.018 | 0.054 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.023 | 0.050 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.054 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.054 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 109 | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY: [signature]

Cal 12.18.00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
15B

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3689 | Instrument Batch: | WG3798 |
| Matrix: | Misc Solid | Lab Sample ID: | L2187-6 |
| Lab Notebook No: | 1152, 17 | Date Sampled: | 04-DEC-00 |
| Initial Cal. ID.: | FF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.24 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 83 % | | |
| Prep. Method: | EPA 3540C | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.071 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.071 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0056 | 0.059 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.059 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.068 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.016 | 0.071 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.059 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 102 | 55-130 | 0.12 mg/kg |

RL - Reporting Limit
U - Below MDL

MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY:

12-18-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
16A

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG9669 | Instrument Batch: | WG3793 |
| Matrix: | Misc Solid | Lab Sample ID.: | L3287-7 |
| Lab Notebook No: | 1152, 17 | Date Sampled: | 04-DEC-00 |
| Initial Cal. ID.: | PF1213 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.33 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 92 % | | |
| Prep. Method: | EPA 3540C | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.063 | -- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.063 | -- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0085 | 0.033 | -- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.033 | -- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.079 | -- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.063 | -- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.033 | 0.019 | 1 | J |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 103 | 55-120 | 0.11 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
J - Estimated Value
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY: [signature]

12.18.00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
16B

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

Preparation Batch: WG3499
Matrix: Misc Solid
Lab Notebook No: 1152, 17
Initial Cal. ID.: PP1212
Final Volume: 10.0 ml
Initial Weight: 10.25 g
Percent Solids: 94 %
Prep. Method: EPA 3540C

Instrument Batch: WG3793
Lab Sample ID.: L2287-8
Date Sampled: 04-DEC-00
Date Received: 07-DEC-00
Date Extracted: 11-DEC-00
Date Analyzed: 15-DEC-00

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.062 | -- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.062 | -- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0088 | 0.032 | -- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.032 | -- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.078 | -- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.062 | -- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.032 | -- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 107 | 55-130 | 0.10 mg/kg |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 1 8 2000
BY: [signature]

12.18.00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
17A

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIDGE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3698 | Instrument Batch: | WG3799 |
| Matrix: | Misc Solid | Lab Sample ID.: | L3287-9 |
| Lab Notebook No: | 1152, 17 | Date Sampled: | 04-DEC-00 |
| Initial Cal. ID.: | FF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.0 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 79 % | | |
| Prep. Method: | EPA 3540C | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.076 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.028 | 0.076 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0088 | 0.063 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.015 | 0.063 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.025 | 0.063 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.076 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.063 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 90 | 55-130 | 0.13 mg/kg |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY: [illegible]

CH 12.18.00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
17B

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3699 | Instrument Batch: | WG3795 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2207-10 |
| Lab Notebook No: | 1152, 17 | Date Sampled: | 04-DEC-00 |
| Initial Cal. ID.: | 971213 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.28 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 93 % | | |
| Prep. Method: | EPA 3540C | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R.L. (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.083 | — | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.083 | — | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 0.033 | — | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.052 | — | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.078 | — | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.083 | — | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.013 | 0.052 | — | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 106 | 55-130 | 0.10 mg/kg |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY: [signature]

12-18-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
17C

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 10141.0065
Source: HANNONING RIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3699 | Instrument Batch: | WG3793 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2287-11 |
| Lab Notebook No: | 1152, 17 | Date Sampled: | 04-DEC-00 |
| Initial Cal. ID.: | PF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.16 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 82 % | | |
| Prep. Method: | EPA 3540C | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.072 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.072 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0086 | 0.060 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.060 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.090 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.072 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.060 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 87 | 55-120 | 0.12 mg/kg |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY: [signature]

[signature] 12.18.00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
18A

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0045
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3699 | Instrument Batch: | WG3789 |
| Matrix: | Misc Solid | Lab Sample ID.: | L1287-12 |
| Lab Notebook No: | 1152, 17 | Date Sampled: | 04-DEC-00 |
| Initial Cal. ID.: | FF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.12 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 82 % | | |
| Prep. Method: | EPA 3540C | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R.L. (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.072 | — | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.072 | — | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0087 | 0.060 | — | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.060 | — | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.090 | — | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.072 | — | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.060 | — | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 92 | 55-130 | 0.12 mg/kg |

RL - Reporting Limit
U - Below MDL

MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY:

12-18-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
19C

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.006S
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3690 | Instrument Batch: | WG1798 |
| Matrix: | Miscellaneous | Lab Sample ID.: | L2287-13 |
| Lab Notebook No: | 1152, 17 | Date Sampled: | 04-DEC-00 |
| Initial Cal. ID.: | FF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.46 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 90 % | | |
| Prep. Method: | EPA 3540C | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.064 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.064 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0085 | 0.053 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.055 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.080 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.064 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 0.052 | 0.027 | 1 | J |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 102 | 55-120 | 0.11 mg/kg |

RL - Reporting Limit
J - Estimated Value
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY: [signature]

GH 12-18-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
18E

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING SIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3699 | Instrument Batch: | WG1793 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2287-14 |
| Lab Notebook No: | 1153, 17 | Date Sampled: | 04-DEC-00 |
| Initial Cal. ID.: | FF1312 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.12 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 87 % | | |
| Prep. Method: | EPA 3540C | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.068 | -- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.068 | -- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 0.057 | -- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.057 | -- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.020 | 0.085 | -- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.068 | -- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.057 | -- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 97 | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
U - Below MDL

MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY: [signature]

12.18.00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
19A

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Source: MARONING SIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCB by GC

Project No.: 30141.0065

Preparation Batch: WG3699
Matrix: Mine Solid
Lab Notebook No: 1152, 17
Initial Cal. ID.: FF1212
Final Volume: 10.0 ml
Initial Weight: 10.18 g
Percent Solids: 86 %
Prep. Methods: EPA 3540C

Instrument Batch: WG3793
Lab Sample ID.: L2287-18
Date Sampled: 05-DEC-00
Date Received: 07-DEC-00
Date Extracted: 11-DEC-00
Date Analyzed: 15-DEC-00

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.069 | — | 1 | U |
| 2. | 11104-28-3 | Aroclor 1221 | 0.019 | 0.069 | — | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0086 | 0.057 | — | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.057 | — | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.086 | — | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.069 | — | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.057 | — | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 105 | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
U - Below MDL

MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY:

12.18.00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
198

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0045
Source: MAHONING SIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3659 | Instrument Batch: | WG3753 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2387-16 |
| Lab Notebook No: | 1152, 17 | Date Sampled: | 05-DEC-00 |
| Initial Cal. ID.: | 99121 2 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.13 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 88 % | | |
| Prep. Method: | EPA 3540C | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.067 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.067 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0087 | 0.056 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.056 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.064 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.067 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.058 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 104 | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
U - Below MDL

MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY:

12.18.00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
388

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC
Preparation Batch: WG3669
Matrix: Miss Solid
Lab Notebook No: 1152, 17
Initial Cal. ID.: FF1217
Final Volume: 10.0 ml
Initial Weight: 10.3 g
Percent Solids: 87 %
Prep. Method: EPA 3540C

Project No.: 30141.0065
Instrument Batch: WG3792
Lab Sample ID.: L2287-17
Date Sampled: 05-DEC-00
Date Received: 07-DEC-00
Date Extracted: 11-DEC-00
Date Analyzed: 15-DEC-00

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.067 | — | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.067 | — | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 0.036 | — | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.036 | — | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.084 | — | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.067 | — | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.036 | 0.18 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 84 | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY:

12 18.00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
30C

Project No.: 30141.0065

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Source: MAHONING SIDE RIVER, E.TX
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3699 | Instrument Batch: | WG3798 |
| Matrix: | Mixe Solid | Lab Sample ID.: | L3389-18 |
| Lab Notebook No: | 1182, 17 | Date Sampled: | 05-DEC-00 |
| Initial Cal. ID.: | PF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.00 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 87 % | | |
| Prep. Method: | EPA 3540C | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.069 | -- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.020 | 0.069 | -- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0087 | 0.057 | -- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.015 | 0.057 | -- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.025 | 0.085 | -- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.069 | -- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.057 | -- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 101 | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
U - Below MDL

MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY

12.18.00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
21A

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAMONING RIDGE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3699 | Instrument Batch: | WG3798 |
| Matrix: | Misc Solid | Lab Sample ID.: | LE07-19 |
| Lab Notebook No: | 1152, 17 | Date Sampled: | 05-DEC-00 |
| Initial Cal. ID.: | FF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.07 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 91 % | | |
| Prep. Method: | EPA 3540C | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.020 | 0.065 | -- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.065 | -- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0087 | 0.055 | -- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.015 | 0.055 | -- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.062 | -- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.065 | -- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.055 | -- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 103 | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
U - Below MDL

MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY: [signature]

12/18/00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
21B

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3699 | Instrument Batch: | WG8783 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2287-30 |
| Lab Notebook No: | 1152, 17 | Date Sampled: | 05-DEC-00 |
| Initial Cal. ID.: | FF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.47 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 67 % | | |
| Prep. Method: | EPA 3540C | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R.L. (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.066 | — | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.066 | — | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0084 | 0.035 | — | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.055 | — | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.023 | 0.082 | — | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.066 | — | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 0.055 | — | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 84 | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY:

OK 12/18/00

Comment: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
22B

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Source: MAHONING RIDE RIVER RTN
Location: N/A
Analysis: EPA 8082 8081 PCBs by GC

Project No.: 30141.0069

Preparation Batch: WG3459
Matrix: Misc Solid
Lab Notebook No: 1152, 17
Initial Cal. ID.: FF1212
Final Volume: 10.0 ml
Initial Weight: 10.36 g
Percent Solids: 66 %
Prep. Method: EPA 3540C

Instrument Batch: WG3793
Lab Sample ID.: L3187-21
Date Sampled: 05-DEC-00
Date Received: 07-DEC-00
Date Extracted: 11-DEC-00
Date Analyzed: 15-DEC-00

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R.L. (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.067 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.067 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0085 | 0.056 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.056 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.086 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.067 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 0.056 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | [illegible] | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
U - Below MDL

MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY: [illegible]
12.18.00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
23C

Customer: ENVIRONMENTAL QUALITY MGT., INC
Project. No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3699 | Instrument Batch: | WG3793 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2217-23 |
| Lab Notebook No: | 1152, 17 | Date Sampled: | 06-DEC-00 |
| Initial Cal. ID.: | FF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.17 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 83 % | | |
| Prep. Method: | EPA 3540C | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.071 | -- | 1 | U |
| 2. | 11104-28-2 | Arbclor 1221 | 0.019 | 0.071 | -- | 1 | U |
| 3. | 11141-16-5 | Arbclor 1232 | 0.0088 | 0.059 | -- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.059 | -- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.083 | -- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.071 | -- | 1 | U |
| 7. | 11096-82-5 | Arbclor 1260 | 0.013 | 0.059 | -- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 97 | 55-130 | 0.12 mg/kg |

RL - Reporting Limit
U - Below MDL

MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY: [signature]

Cal 12.18.00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
23A

Customer: ENVIRONMENTAL QUALITY MGT., INC
Project No.: 30141.0065
Source: MAHONING SIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3699 | Instrument Batch: | WG3798 |
| Matrix: | Misc Solid | Lab Sample ID.: | L3587-23 |
| Lab Notebook No: | 1182, 17 | Date Sampled: | 06-DEC-00 |
| Initial Cal. ID.: | FF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.21 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 79 % | | |
| Prep. Method: | EPA 3540C | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.074 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.074 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 0.082 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.082 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.093 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.074 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.082 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 85 | 55-130 | 0.12 mg/kg |

RL - Reporting Limit
U - Below MDL

MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY:

12-18-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
13B

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30161.0065
Source: MAHONING RIDE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3699 | Instrument Batch: | WG3793 |
| Matrix: | Misc Solid | Lab Sample ID.: | L3387-34 |
| Lab Notebook No: | 1132, 17 | Date Sampled: | 06-DEC-00 |
| Initial Cal. ID.: | FF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.21 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 86 % | | |
| Prep. Method: | EPA 3540C | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R.L. (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.068 | -- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.068 | -- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0084 | 0.057 | -- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.057 | -- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.015 | -- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 0.068 | -- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.057 | -- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 105 | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
REV.

12-18-00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
23C

Customer: ENVIRONMENTAL QUALITY MGT., INC
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3459 | Instrument Batch: | WG3768 |
| Matrix | Misc Solid | Lab Sample ID.: | L3387-18 |
| Lab Notebook No: | 1152, 17 | Date Sampled: | 06-DEC-00 |
| Initial Cal ID.: | FF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 11-DEC-00 |
| Initial Weight: | 10.26 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 94 % | | |
| Prep. Method: | EPA 3540C | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.062 | — | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.062 | — | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 0.032 | — | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.032 | — | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.078 | — | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.062 | — | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.032 | — | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 136 | 55-130 | 0.10 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY:

CH 12.18.00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
24A

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIDGE RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3703 | Instrument Batch: | WG1798 |
| Matrix: | Misc Solid | Lab Sample ID.: | L3367-24 |
| Lab Notebook No: | 1132, 18 | Date Sampled: | 06-DEC-00 |
| Initial Cal. ID.: | FF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 12-DEC-00 |
| Initial Weight: | 10.49 g | Date Analyzed: | 15-DEC-00 |
| Percent Solids: | 82 % | | |
| Prep. Method: | EPA 3541 | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.070 | — | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.070 | — | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0064 | 0.058 | — | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.058 | — | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.023 | 0.087 | — | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.070 | — | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 0.058 | 0.047 | 1 | J |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | [illegible] | 55-130 | 0.12 mg/kg |

RL - Reporting Limit
J - Estimated Value
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY: [illegible]

12/18/00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
24C

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

Preparation Batch: WG3798
Matrix: Mine Solid
Lab Notebook No: 1152, 18
Initial Cal. ID.: FF1212
Final Volume: 10.0 ml
Initial Weight: 10.29 g
Percent Solids: 88 %
Prep. Method: EPA 3541

Instrument Batch: WG3798
Lab Sample ID.: L2287-37
Date Sampled: 06-DEC-00
Date Received: 07-DEC-00
Date Extracted: 12-DEC-00
Date Analyzed: 16-DEC-00

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.066 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.066 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 0.033 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.033 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.083 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.066 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.019 | 0.033 | 0.018 | 1 | J |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 81 | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
J - Estimated Value

MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY:

12.18.00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
24E

Project No.: 30141.0065

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Source: MAHONING RIVER SITE
Location: N/A
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG3785 | Instrument Batch: | WG3798 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2287-3E |
| Lab Notebook No: | 1152, 18 | Date Sampled: | 06-DEC-00 |
| Initial Cal. ID.: | FF1212 | Date Received: | 07-DEC-00 |
| Final Volume: | 10.0 ml | Date Extracted: | 12-DEC-00 |
| Initial Weight: | 10.41 g | Date Analyzed: | 16-DEC-00 |
| Percent Solids: | 89 % | | |
| Prep. Method: | EPA 3541 | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.018 | 0.063 | — | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.018 | 0.063 | — | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0085 | 0.054 | — | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.054 | — | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.081 | — | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.063 | — | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 0.054 | 0.025 | 1 | J |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 98 | 55-130 | 0.11 mg/kg |

RL - Reporting Limit
J - Estimated Value

MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
DEC 18 2000
BY: [signature]

CH 12.18.00

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
**MP-B-W**

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING POWER PLANT
Location: SOLID, WEST FLOOR
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG4265 | Instrument Batch: | WG4271 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2634-4 |
| Lab Notebook No: | 1152, 35 | Date Sampled: | 18-JAN-01 |
| Initial Cal. ID.: | PB0110 | Date Received: | 19-JAN-01 |
| Final Volume: | 10.0 ml | Date Extracted: | 19-JAN-01 |
| Initial Weight: | 10.44 g | Date Analyzed: | 22-JAN-01 |
| Percent Solids: | 93 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 3.1 | --- | 50 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 3.1 | --- | 50 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0065 | 2.6 | --- | 50 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 2.6 | --- | 50 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 3.9 | --- | 50 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 3.1 | --- | 50 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.014 | 2.6 | 59.5 | 50 | D |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 0 * | 25-143 | 0.10 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
D - Diluted
U - Below MDL

DATA F... NOT V... ...D
JAN 2 2 2001
BY:

1.22.01
1-22-01

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MP-B-E

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING POWER PLANT
Location: SOLID, EAST FLOOR
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG4265 | Instrument Batch: | WG4271 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2634-3 |
| Lab Notebook No: | 1152, 35 | Date Sampled: | 18-JAN-01 |
| Initial Cal. ID.: | PB0110 | Date Received: | 19-JAN-01 |
| Final Volume: | 10.0 ml | Date Extracted: | 19-JAN-01 |
| Initial Weight: | 10.25 g | Date Analyzed: | 22-JAN-01 |
| Percent Solids: | 96 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | RL (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 0.061 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 0.061 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 0.051 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 0.051 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 0.076 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 0.061 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 0.051 | 0.15 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 98 | 25-143 | 0.10 mg/kg |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
JAN 22 2001
BY: [signature]

[signature] 1-22-01
[signature] 1-22-01

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MP-SW-002

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING POWER PLANT
Location: SOLID, NORTHEAST CORNER
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG4265 | Instrument Batch: | WG4271 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2634-2 |
| Lab Notebook No: | 1152, 35 | Date Sampled: | 18-JAN-01 |
| Initial Cal. ID.: | PB0110 | Date Received: | 19-JAN-01 |
| Final Volume: | 10.0 ml | Date Extracted: | 19-JAN-01 |
| Initial Weight: | 10.29 g | Date Analyzed: | 22-JAN-01 |
| Percent Solids: | 83 % | | |
| Prep. Method: | EPA 3541 | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 3.5 | --- | 50 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 3.5 | --- | 50 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0066 | 2.9 | --- | 50 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 2.9 | --- | 50 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 4.4 | --- | 50 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.018 | 3.5 | --- | 50 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 2.9 | 84.5 | 50 | D |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 0 * | 25-143 | 0.12 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
JAN 2 2 2001
BY:
1-22-01
1-22-01

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MP-SW-001

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project No.: 30141.0065
Source: MAHONING POWER PLANT
Location: SOLID, EAST WALL
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG4265 | Instrument Batch: | WG4271 |
| Matrix: | Misc Solid | Lab Sample ID.: | L2634-1 |
| Lab Notebook No: | 1152, 35 | Date Sampled: | 18-JAN-01 |
| Initial Cal. ID.: | PB0110 | Date Received: | 19-JAN-01 |
| Final Volume: | 10.0 ml | Date Extracted: | 19-JAN-01 |
| Initial Weight: | 10.12 g | Date Analyzed: | 22-JAN-01 |
| Percent Solids: | 81 % | | |
| Prep. Method: | EPA 3541 | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/kg) | R L (mg/kg) | RESULTS (mg/kg) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.019 | 3.7 | --- | 50 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.019 | 3.7 | --- | 50 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.0067 | 3.0 | --- | 50 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.014 | 3.0 | --- | 50 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.024 | 4.6 | --- | 50 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.019 | 3.7 | --- | 50 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.015 | 3.0 | 114 | 50 | D |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 0 * | 25-143 | 0.12 mg/kg |

RL - Reporting Limit
MDL - Method Detection Limit
* - Value(s) outside of QC limits
D - Diluted
U - Below MDL

DATA REVIEWED
NOT VALIDATED
JAN 22 2001
BY: [signature]

CH 1-22-01
R 1-22-01

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
MPP-UST-01

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING POWER PLANT SITE
Location: TUNNEL & TANK
Analysis: EPA Method 8260B TCLP Volatiles by GC/MS

| | | | |
|---|---|---|---|
| Preparation Batch: | WG4302 | Instrument Batch: | WG4303 |
| Matrix: | Leachate | Lab Sample ID.: | L2601-1 |
| Lab Notebook No: | 1080,P.98 | Date Sampled: | 15-JAN-01 |
| Initial Cal. ID.: | 2VTCLP35 | Date Received: | 16-JAN-01 |
| Final Volume: | 5.0 ml | Date Extracted: | 24-JAN-01 |
| Initial Volume: | 0.1 ml | Date Analyzed: | 24-JAN-01 |
| Prep. Method: | EPA 5030B | | |
| pH: | 2 su | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/l) | R L (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 75-35-4 | 1,1-dichloroethene | 0.0095 | 0.10 | --- | 1 | U |
| 2. | 107-06-2 | 1,2-dichloroethane | 0.021 | 0.10 | --- | 1 | U |
| 3. | 78-93-3 | 2-Butanone | 0.023 | 0.50 | --- | 1 | U |
| 4. | 71-43-2 | benzene | 0.012 | 0.10 | 0.012 | 1 | J |
| 5. | 56-23-5 | carbon tetrachloride | 0.011 | 0.10 | --- | 1 | U |
| 6. | 108-90-7 | chlorobenzene | 0.010 | 0.10 | --- | 1 | U |
| 7. | 67-66-3 | chloroform | 0.016 | 0.10 | --- | 1 | U |
| 8. | 127-18-4 | tetrachloroethene | 0.0090 | 0.10 | --- | 1 | U |
| 9. | 79-01-6 | trichloroethene | 0.014 | 0.10 | --- | 1 | U |
| 10. | 75-01-4 | vinyl chloride | 0.027 | 0.10 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| 1,2-dichloroethane-d4 | 101 | 75-125 | 2.5 mg/l |
| 4-bromofluorobenzene | 109 | 80-120 | 2.5 mg/l |
| dibromofluoromethane | 112 | 82-124 | 2.5 mg/l |
| toluene-d8 | 102 | 85-120 | 2.5 mg/l |

RL - Reporting Limit
MDL - Method Detection Limit
J - Estimated Value
U - Below MDL

DATA REVIEWED
NOT VALIDATED

JAN 2 4 2001

BY: [signature]

1/24/01

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
012201-EA

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING POWER PLANT
Location: EFLUENT A SIDE
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG4313 | Instrument Batch: | WG4343 |
| Matrix: | Misc. H2O | Lab Sample ID.: | L2648-1 |
| Lab Notebook No: | 1152, 37 | Date Sampled: | 22-JAN-01 |
| Initial Cal. ID.: | PP0125 | Date Received: | 23-JAN-01 |
| Final Volume: | 10.0 ml | Date Extracted: | 23-JAN-01 |
| Initial Volume: | 980 ml | Date Analyzed: | 25-JAN-01 |
| Prep. Method: | EPA 3510C | | |
| pH: | 7 su | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/l) | R L (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.00017 | 0.00051 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.00010 | 0.00051 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.00021 | 0.00066 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.00021 | 0.00066 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.00013 | 0.00051 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.00015 | 0.00051 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.000067 | 0.00051 | --- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 109 | 34-133 | 0.0010 mg/l |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
JAN 26 2001
BY:

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
012201-EB

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING POWER PLANT
Location: EFLUENT B SIDE
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG4313 | Instrument Batch: | WG4343 |
| Matrix: | Misc. H2O | Lab Sample ID.: | L2648-2 |
| Lab Notebook No: | 1152, 37 | Date Sampled: | 22-JAN-01 |
| Initial Cal. ID.: | PF0125 | Date Received: | 23-JAN-01 |
| Final Volume: | 10.0 ml | Date Extracted: | 23-JAN-01 |
| Initial Volume: | 970 ml | Date Analyzed: | 25-JAN-01 |
| Prep. Method: | EPA 3510C | | |
| pH: | 7 su | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/l) | RL (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.00017 | 0.00052 | -- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.00010 | 0.00052 | -- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.00022 | 0.00067 | -- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.00021 | 0.00067 | -- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.00013 | 0.00052 | -- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.00015 | 0.00052 | -- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.000068 | 0.00052 | -- | 1 | U |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 108 | 34-133 | 0.0010 mg/l |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
JAN 26 2001
BY: [signature]

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Environmental Quality Mgt., Inc.
MAHONING POWER PLANT
Project Number: 3141-65



Lot #: A1A260189 Date Reported: 2/02/01

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | ANALYTICAL METHOD | |
|---|---|---|---|---|---|
| **Client Sample ID: MR-42-001** | | | | | |
| **Sample #: 001 Date Sampled: 01/23/01 14:15 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | In Review |
| PCB-1016 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1242 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1248 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1260 | [redacted]000 | 330000 | ug/kg | SW846 8082 | |
| Inorganic Analysis | | | | | Reviewed |
| Total Residue as Percent Solids | 45.2 | 10.0 | % | MCAWW 160.3 MOD | |
| **Client Sample ID: MR-42-002** | | | | | |
| **Sample #: 002 Date Sampled: 01/23/01 14:45 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | In Review |
| PCB-1016 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1242 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1248 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1260 | [redacted]000 | 330000 | ug/kg | SW846 8082 | |
| Inorganic Analysis | | | | | Reviewed |
| Total Residue as Percent Solids | 46.0 | 10.0 | % | MCAWW 160.3 MOD | |
| **Client Sample ID: MR-42-003** | | | | | |
| **Sample #: 003 Date Sampled: 01/23/01 11:15 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | In Review |
| PCB-1016 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 330000 | ug/kg | SW846 8082 | |

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Environmental Quality Mgt., Inc. PAGE 2

Lot #: A1A260189 MAHONING POWER PLANT Date Reported: 2/02/01

Project Number: 3141-65

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | ANALYTICAL METHOD | |
|---|---|---|---|---|---|
| **Client Sample ID: MR-42-003** | | | | | |
| **Sample #: 003 Date Sampled: 01/23/01 11:15 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | In Review |
| PCB-1242 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1248 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1260 | [redacted]000 | 330000 | ug/kg | SW846 8082 | |
| Mixture of more than one aroclor may be present. The best pattern match has been quantitated. | | | | | |
| Inorganic Analysis | | | | | Reviewed |
| Total Residue as Percent Solids | 74.4 | 10.0 | % | MCAWW 160.3 MOD | |
| **Client Sample ID: MR-42-004** | | | | | |
| **Sample #: 004 Date Sampled: 01/23/01 11:40 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | In Review |
| PCB-1016 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1242 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1248 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1260 | [redacted]00 | 330000 | ug/kg | SW846 8082 | |
| Inorganic Analysis | | | | | Reviewed |
| Total Residue as Percent Solids | 67.6 | 10.0 | % | MCAWW 160.3 MOD | |
| **Client Sample ID: MR-42-005** | | | | | |
| **Sample #: 005 Date Sampled: 01/23/01 11:50 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | In Review |
| PCB-1016 | ND | 3300 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 3300 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 3300 | ug/kg | SW846 8082 | |
| PCB-1242 | ND | 3300 | ug/kg | SW846 8082 | |

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Environmental Quality Mgt., Inc.
MAHONING POWER PLANT
Project Number: 3141-65



Lot #: A1A260189 Date Reported: 2/02/01

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | ANALYTICAL METHOD | |
|---|---|---|---|---|---|
| **Client Sample ID: MR-42-005** | | | | | |
| **Sample #: 005 Date Sampled: 01/23/01 11:50 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | In Review |
| PCB-1248 | ND | 3300 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 3300 | ug/kg | SW846 8082 | |
| PCB-1260 | 280000 | 3300 | ug/kg | SW846 8082 | |
| Inorganic Analysis | | | | | Reviewed |
| Total Residue as Percent Solids | 45.1 | 10.0 | % | MCAWW 160.3 MOD | |
| **Client Sample ID: MR-42-006** | | | | | |
| **Sample #: 006 Date Sampled: 01/23/01 12:05 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | In Review |
| PCB-1016 | ND | 6600 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 6600 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 6600 | ug/kg | SW846 8082 | |
| PCB-1242 | ND | 6600 | ug/kg | SW846 8082 | |
| PCB-1248 | ND | 6600 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 6600 | ug/kg | SW846 8082 | |
| PCB-1260 | 120000 | 6600 | ug/kg | SW846 8082 | |
| Inorganic Analysis | | | | | Reviewed |
| Total Residue as Percent Solids | 72.8 | 10.0 | % | MCAWW 160.3 MOD | |
| **Client Sample ID: MR-42-007** | | | | | |
| **Sample #: 007 Date Sampled: 01/23/01 12:15 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | In Review |
| PCB-1016 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1242 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1248 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 330000 | ug/kg | SW846 8082 | |
| PCB-1260 | 810000 | 330000 | ug/kg | SW846 8082 | |

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Environmental Quality Mgt., Inc.
MAHONING POWER PLANT
Project Number: 3141-65



Lot #: A1A260189 Date Reported: 2/02/01

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | ANALYTICAL METHOD | |
|---|---|---|---|---|---|
| **Client Sample ID: MR-42-007** | | | | | |
| **Sample #: 007 Date Sampled: 01/23/01 12:15 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| Inorganic Analysis | | | | | Reviewed |
| Total Residue as Percent Solids | 65.9 | 10.0 | % | MCAWW 160.3 MOD | |
| **Client Sample ID: MR-42-008** | | | | | |
| **Sample #: 008 Date Sampled: 01/23/01 12:30 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | In Review |
| PCB-1016 | ND | 3300 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 3300 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 3300 | ug/kg | SW846 8082 | |
| PCB-1242 | ND | 3300 | ug/kg | SW846 8082 | |
| PCB-1248 | ND | 3300 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 3300 | ug/kg | SW846 8082 | |
| PCB-1260 | [illegible]00 | 3300 | ug/kg | SW846 8082 | |
| Inorganic Analysis | | | | | Reviewed |
| Total Residue as Percent Solids | 68.6 | 10.0 | % | MCAWW 160.3 MOD | |
| **Client Sample ID: MR-42-009** | | | | | |
| **Sample #: 009 Date Sampled: 01/23/01 11:25 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | In Review |
| PCB-1016 | ND | 33000 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 33000 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 33000 | ug/kg | SW846 8082 | |
| PCB-1242 | ND | 33000 | ug/kg | SW846 8082 | |
| PCB-1248 | ND | 33000 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 33000 | ug/kg | SW846 8082 | |
| PCB-1260 | [illegible]00 | 33000 | ug/kg | SW846 8082 | |
| Inorganic Analysis | | | | | Reviewed |
| Total Residue as Percent Solids | 63.9 | 10.0 | % | MCAWW 160.3 MOD | |

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Environmental Quality Mgt., Inc.
MAHONING POWER PLANT
Project Number: 3141-65



Lot #: A1AZ50189 Date Reported: 2/02/01

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | ANALYTICAL METHOD |
|---|---|---|---|---|
| **Client Sample ID: MP-CS-001** | | | | |
| **Sample #: 010 Date Sampled: 01/25/01 11:00 Date Received: 01/26/01 Matrix: SOLID** | | | | |
| PCBs by SW-846 8082 | | | | In Review |
| PCB-1016 | ND | 330 | ug/kg | SW846 8082 |
| PCB-1221 | ND | 330 | ug/kg | SW846 8082 |
| PCB-1232 | ND | 330 | ug/kg | SW846 8082 |
| PCB-1242 | ND | 330 | ug/kg | SW846 8082 |
| PCB-1248 | ND | 330 | ug/kg | SW846 8082 |
| PCB-1254 | ND | 330 | ug/kg | SW846 8082 |
| PCB-1260 | 1700 | 330 | ug/kg | SW846 8082 |
| Inorganic Analysis | | | | Reviewed |
| Total Residue as Percent Solids | 86.1 | 10.0 | % | MCAWW 160.3 MOD |
| **Client Sample ID: MP-CS-002** | | | | |
| **Sample #: 011 Date Sampled: 01/25/01 10:30 Date Received: 01/26/01 Matrix: SOLID** | | | | |
| PCBs by SW-846 8082 | | | | In Review |
| PCB-1016 | ND | 330 | ug/kg | SW846 8082 |
| PCB-1221 | ND | 330 | ug/kg | SW846 8082 |
| PCB-1232 | ND | 330 | ug/kg | SW846 8082 |
| PCB-1242 | ND | 330 | ug/kg | SW846 8082 |
| PCB-1248 | ND | 330 | ug/kg | SW846 8082 |
| PCB-1254 | ND | 330 | ug/kg | SW846 8082 |
| PCB-1260 | 4800 | 330 | ug/kg | SW846 8082 |
| Inorganic Analysis | | | | Reviewed |
| Total Residue as Percent Solids | 80.8 | 10.0 | % | MCAWW 160.3 MOD |
| **Client Sample ID: MP-CS-003** | | | | |
| **Sample #: 012 Date Sampled: 01/25/01 13:40 Date Received: 01/26/01 Matrix: SOLID** | | | | |
| PCBs by SW-846 8082 | | | | In Review |
| PCB-1016 | ND | 1600 | ug/kg | SW846 8082 |
| PCB-1221 | ND | 1600 | ug/kg | SW846 8082 |
| PCB-1232 | ND | 1600 | ug/kg | SW846 8082 |

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Environmental Quality Mgt., Inc.
MAHONING POWER PLANT
Project Number: 3141-65



Lot #: A1A260189 Date Reported: 2/02/01

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | ANALYTICAL METHOD |
|---|---|---|---|---|
| **Client Sample ID: MP-CS-003** | | | | |
| **Sample #: 012 Date Sampled: 01/25/01 13:40 Date Received: 01/26/01 Matrix: SOLID** | | | | |
| PCBs by SW-846 8082 | | | | In Review |
| PCB-1242 | ND | 1600 | ug/kg | SW846 8082 |
| PCB-1248 | ND | 1600 | ug/kg | SW846 8082 |
| PCB-1254 | ND | 1600 | ug/kg | SW846 8082 |
| PCB-1260 | 18000 | 1600 | ug/kg | SW846 8082 |
| Inorganic Analysis | | | | Reviewed |
| Total Residue as Percent Solids | 88.2 | 10.0 | % | MCAWW 160.3 MOD |
| **Client Sample ID: MP-CS-004** | | | | |
| **Sample #: 013 Date Sampled: 01/25/01 14:30 Date Received: 01/26/01 Matrix: SOLID** | | | | |
| PCBs by SW-846 8082 | | | | In Review |
| PCB-1016 | ND | 660 | ug/kg | SW846 8082 |
| PCB-1221 | ND | 660 | ug/kg | SW846 8082 |
| PCB-1232 | ND | 660 | ug/kg | SW846 8082 |
| PCB-1242 | ND | 660 | ug/kg | SW846 8082 |
| PCB-1248 | ND | 660 | ug/kg | SW846 8082 |
| PCB-1254 | ND | 660 | ug/kg | SW846 8082 |
| PCB-1260 | 9500 | 660 | ug/kg | SW846 8082 |

Mixture of more than one aroclor may be present. The best pattern match has been quantitated.

| | | | | |
|---|---|---|---|---|
| Inorganic Analysis | | | | Reviewed |
| Total Residue as Percent Solids | 87.8 | 10.0 | % | MCAWW 160.3 MOD |
| **Client Sample ID: MP-CS-005** | | | | |
| **Sample #: 014 Date Sampled: 01/25/01 14:50 Date Received: 01/26/01 Matrix: SOLID** | | | | |
| PCBs by SW-846 8082 | | | | In Review |
| PCB-1016 | ND | 3300 | ug/kg | SW846 8082 |
| PCB-1221 | ND | 3300 | ug/kg | SW846 8082 |
| PCB-1232 | ND | 3300 | ug/kg | SW846 8082 |
| PCB-1242 | ND | 3300 | ug/kg | SW846 8082 |

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Environmental Quality Mgt., Inc.



Lot #: A1A260189 MAHONING POWER PLANT Date Reported: 2/02/01

Project Number: 3141-65

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | ANALYTICAL METHOD |
|---|---|---|---|---|
| **Client Sample ID: MP-CS-005** | | | | |
| **Sample #: 014 Date Sampled: 01/25/01 14:50 Date Received: 01/26/01 Matrix: SOLID** | | | | |
| PCBs by SW-846 8082 | | | | In Review |
| PCB-1248 | ND | 3300 | ug/kg | SW846 8082 |
| PCB-1254 | ND | 3300 | ug/kg | SW846 8082 |
| PCB-1260 | 57000 | 3300 | ug/kg | SW846 8082 |
| Inorganic Analysis | | | | Reviewed |
| Total Residue as Percent Solids | 87.3 | 10.0 | % | MCAWW 160.3 MOD |
| **Client Sample ID: MP-CS-006** | | | | |
| **Sample #: 015 Date Sampled: 01/25/01 15:10 Date Received: 01/26/01 Matrix: SOLID** | | | | |
| PCBs by SW-846 8082 | | | | In Review |
| PCB-1016 | ND | 3300 | ug/kg | SW846 8082 |
| PCB-1221 | ND | 3300 | ug/kg | SW846 8082 |
| PCB-1232 | ND | 3300 | ug/kg | SW846 8082 |
| PCB-1242 | ND | 3300 | ug/kg | SW846 8082 |
| PCB-1248 | ND | 3300 | ug/kg | SW846 8082 |
| PCB-1254 | ND | 3300 | ug/kg | SW846 8082 |
| PCB-1260 | 57000 | 3300 | ug/kg | SW846 8082 |
| Inorganic Analysis | | | | Reviewed |
| Total Residue as Percent Solids | 88.3 | 10.0 | % | MCAWW 160.3 MOD |
| **Client Sample ID: MP-CS-007** | | | | |
| **Sample #: 016 Date Sampled: 01/25/01 15:55 Date Received: 01/26/01 Matrix: SOLID** | | | | |
| PCBs by SW-846 8082 | | | | In Review |
| PCB-1016 | ND | 3300 | ug/kg | SW846 8082 |
| PCB-1221 | ND | 3300 | ug/kg | SW846 8082 |
| PCB-1232 | ND | 3300 | ug/kg | SW846 8082 |
| PCB-1242 | ND | 3300 | ug/kg | SW846 8082 |
| PCB-1248 | ND | 3300 | ug/kg | SW846 8082 |
| PCB-1254 | ND | 3300 | ug/kg | SW846 8082 |
| PCB-1260 | 41000 | 3300 | ug/kg | SW846 8082 |

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Environmental Quality Mgt., Inc.
MAHONING POWER PLANT
Project Number: 3141-65



Lot #: A1A250189 Date Reported: 2/02/01

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | ANALYTICAL METHOD | |
|---|---|---|---|---|---|
| **Client Sample ID: MP-CS-007** | | | | | |
| **Sample #: 016 Date Sampled: 01/25/01 15:55 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| Inorganic Analysis | | | | | Reviewed |
| Total Residue as Percent Solids | 88.7 | 10.0 | % | MCAWW 160.3 MOD | |
| **Client Sample ID: MP-CS-008** | | | | | |
| **Sample #: 017 Date Sampled: 01/25/01 15:40 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | In Review |
| PCB-1016 | ND | 1600 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 1600 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 1600 | ug/kg | SW846 8082 | |
| PCB-1242 | ND | 1600 | ug/kg | SW846 8082 | |
| PCB-1248 | ND | 1600 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 1600 | ug/kg | SW846 8082 | |
| PCB-1260 | 29000 | 1600 | ug/kg | SW846 8082 | |
| Inorganic Analysis | | | | | Reviewed |
| Total Residue as Percent Solids | 88.8 | 10.0 | % | MCAWW 160.3 MOD | |
| **Client Sample ID: MP-CS-009** | | | | | |
| **Sample #: 018 Date Sampled: 01/25/01 16:15 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | In Review |
| PCB-1016 | ND | 16000 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 16000 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 16000 | ug/kg | SW846 8082 | |
| PCB-1242 | ND | 16000 | ug/kg | SW846 8082 | |
| PCB-1248 | ND | 16000 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 16000 | ug/kg | SW846 8082 | |
| PCB-1260 | 160000 | 16000 | ug/kg | SW846 8082 | |

Mixture of more than one aroclor may be present. The best pattern match has been quantitated.

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Environmental Quality Mgt., Inc.
MAHONING POWER PLANT
Project Number: 3141-65



Lot #: A1A260189 Date Reported: 2/02/01

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | ANALYTICAL METHOD | |
|---|---|---|---|---|---|
| **Client Sample ID: MP-CS-009** | | | | | |
| **Sample #: 018 Date Sampled: 01/25/01 16:15 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| Inorganic Analysis | | | | | Reviewed |
| Total Residue as Percent Solids | 94.3 | 10.0 | % | MCAWW 160.3 MOD | |
| **Client Sample ID: MP-CS-010** | | | | | |
| **Sample #: 019 Date Sampled: 01/25/01 16:30 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | In Review |
| PCB-1016 | ND | 16000 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 16000 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 16000 | ug/kg | SW846 8082 | |
| PCB-1242 | ND | 16000 | ug/kg | SW846 8082 | |
| PCB-1248 | ND | 16000 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 16000 | ug/kg | SW846 8082 | |
| PCB-1260 | 160000 | 16000 | ug/kg | SW846 8082 | |
| Inorganic Analysis | | | | | Reviewed |
| Total Residue as Percent Solids | 91.8 | 10.0 | % | MCAWW 160.3 MOD | |
| **Client Sample ID: MP-CS-011** | | | | | |
| **Sample #: 020 Date Sampled: 01/25/01 16:30 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | In Review |
| PCB-1016 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1242 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1248 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1260 | 100 | 33 | ug/kg | SW846 8082 | |
| Inorganic Analysis | | | | | Reviewed |
| Total Residue as Percent Solids | 94.4 | 10.0 | % | MCAWW 160.3 MOD | |

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SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Environmental Quality Mgt., Inc.
MAHONING POWER PLANT
Project Number: 3141-65



Lot #: A1A260189 Date Reported: 2/02/01

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | ANALYTICAL METHOD | |
|---|---|---|---|---|---|
| **Client Sample ID: MP-CS-012** | | | | | |
| **Sample #: 021 Date Sampled: 01/25/01 16:40 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | In Review |
| PCB-1016 | ND | 330 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 330 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 330 | ug/kg | SW846 8082 | |
| PCB-1242 | ND | 330 | ug/kg | SW846 8082 | |
| PCB-1248 2.2 | ND | 330 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 330 | ug/kg | SW846 8082 | |
| PCB-1260 | 2200 | 330 | ug/kg | SW846 8082 | |
| Inorganic Analysis | | | | | Reviewed |
| Total Residue as Percent Solids | 91.5 | 10.0 | % | MCAWW 160.3 MOD | |
| **Client Sample ID: MP-CS-013** | | | | | |
| **Sample #: 022 Date Sampled: 01/25/01 17:15 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | In Review |
| PCB-1016 | ND | 66 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 66 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 66 | ug/kg | SW846 8082 | |
| PCB-1242 | ND | 66 | ug/kg | SW846 8082 | |
| PCB-1248 0.6 | ND | 66 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 66 | ug/kg | SW846 8082 | |
| PCB-1260 | 600 | 66 | ug/kg | SW846 8082 | |
| Inorganic Analysis | | | | | Reviewed |
| Total Residue as Percent Solids | 94.7 | 10.0 | % | MCAWW 160.3 MOD | |
| **Client Sample ID: MP-CS-014** | | | | | |
| **Sample #: 023 Date Sampled: 01/25/01 14:10 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | In Review |
| PCB-1016 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 33 | ug/kg | SW846 8082 | |

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PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Environmental Quality Mgt., Inc.
MAHONING POWER PLANT
Project Number: 3141-65



Lot #: A1A260189 Date Reported: 2/02/01

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | ANALYTICAL METHOD | |
|---|---|---|---|---|---|
| **Client Sample ID: MP-SW-004** | | | | | |
| **Sample #: 027 Date Sampled: 01/26/01 09:50 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| Inorganic Analysis | | | | | Reviewed |
| Total Residue as Percent Solids | 92.0 | 10.0 | % | MCAWW 160.3 MOD | |
| **Client Sample ID: MP-SW-005** | | | | | |
| **Sample #: 028 Date Sampled: 01/26/01 10:10 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | In Review |
| PCB-1016 | ND | 330 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 330 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 330 | ug/kg | SW846 8082 | |
| PCB-1242 | ND | 330 | ug/kg | SW846 8082 | |
| PCB-1248 | ND | 330 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 330 | ug/kg | SW846 8082 | |
| PCB-1260 | 1900 | 330 | ug/kg | SW846 8082 | |
| Inorganic Analysis | | | | | Reviewed |
| Total Residue as Percent Solids | 93.6 | 10.0 | % | MCAWW 160.3 MOD | |
| **Client Sample ID: MP-SW-006** | | | | | |
| **Sample #: 029 Date Sampled: 01/26/01 10:20 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | In Review |
| PCB-1016 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1242 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1248 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1260 | 93 | 33 | ug/kg | SW846 8082 | |
| Inorganic Analysis | | | | | Reviewed |
| Total Residue as Percent Solids | 92.2 | 10.0 | % | MCAWW 160.3 MOD | |

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PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Environmental Quality Mgt., Inc.
MAHONING POWER PLANT
Project Number: 3141-65



Lot #: A1A260189 Date Reported: 2/02/01

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | ANALYTICAL METHOD |
|---|---|---|---|---|
| **Client Sample ID: MP-CS-014** | | | | |
| **Sample #: 023 Date Sampled: 01/25/01 14:10 Date Received: 01/26/01 Matrix: SOLID** | | | | |
| PCBs by SW-846 8082 | | | | In Review |
| PCB-1242 | ND | 33 | ug/kg | SW846 8082 |
| PCB-1248 | ND | 33 | ug/kg | SW846 8082 |
| PCB-1254 | ND | 33 | ug/kg | SW846 8082 |
| PCB-1260 | 75 | 33 | ug/kg | SW846 8082 |
| Inorganic Analysis | | | | Reviewed |
| Total Residue as Percent Solids | 91.5 | 10.0 | % | MCAWW 160.3 MOD |
| **Client Sample ID: MP-CS-015** | | | | |
| **Sample #: 024 Date Sampled: 01/25/01 17:20 Date Received: 01/26/01 Matrix: SOLID** | | | | |
| PCBs by SW-846 8082 | | | | In Review |
| PCB-1016 | ND | 1600 | ug/kg | SW846 8082 |
| PCB-1221 | ND | 1600 | ug/kg | SW846 8082 |
| PCB-1232 | ND | 1600 | ug/kg | SW846 8082 |
| PCB-1242 | ND | 1600 | ug/kg | SW846 8082 |
| PCB-1248 | ND | 1600 | ug/kg | SW846 8082 |
| PCB-1254 | ND | 1600 | ug/kg | SW846 8082 |
| PCB-1260 | 17000 | 1600 | ug/kg | SW846 8082 |
| Inorganic Analysis | | | | Reviewed |
| Total Residue as Percent Solids | 87.1 | 10.0 | % | MCAWW 160.3 MOD |
| **Client Sample ID: MP-CS-016** | | | | |
| **Sample #: 025 Date Sampled: 01/25/01 17:25 Date Received: 01/26/01 Matrix: SOLID** | | | | |
| PCBs by SW-846 8082 | | | | In Review |
| PCB-1016 | ND | 330 | ug/kg | SW846 8082 |
| PCB-1221 | ND | 330 | ug/kg | SW846 8082 |
| PCB-1232 | ND | 330 | ug/kg | SW846 8082 |
| PCB-1242 | ND | 330 | ug/kg | SW846 8082 |
| PCB-1248 | ND | 330 | ug/kg | SW846 8082 |
| PCB-1254 | ND | 330 | ug/kg | SW846 8082 |

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PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Environmental Quality Mgt., Inc.
MAHONING POWER PLANT
Project Number: 3141-65



Lot #: A1A260189 Date Reported: 2/02/01

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | ANALYTICAL METHOD | |
|---|---|---|---|---|---|
| **Client Sample ID: MP-CS-016** | | | | | |
| **Sample #: 025 Date Sampled: 01/25/01 17:25 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | In Review |
| PCB-1260 | 4100 | 330 | ug/kg | SW846 8082 | |
| Inorganic Analysis | | | | | Reviewed |
| Total Residue as Percent Solids | 91.7 | 10.0 | % | MCAWW 160.3 MOD | |
| **Client Sample ID: MP-SW-003** | | | | | |
| **Sample #: 026 Date Sampled: 01/26/01 10:00 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | In Review |
| PCB-1016 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1242 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1248 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1260 | 330 | 33 | ug/kg | SW846 8082 | |
| Inorganic Analysis | | | | | Reviewed |
| Total Residue as Percent Solids | 92.6 | 10.0 | % | MCAWW 160.3 MOD | |
| **Client Sample ID: MP-SW-004** | | | | | |
| **Sample #: 027 Date Sampled: 01/26/01 09:50 Date Received: 01/26/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | In Review |
| PCB-1016 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1242 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1248 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1260 | 320 | 33 | ug/kg | SW846 8082 | |

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PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Environmental Quality Mgt., Inc.
MAHONING POWER PLANT
Project Number: 3141-65



Lot #: A1A260189 Date Reported: 2/02/01

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | ANALYTICAL METHOD |
|---|---|---|---|---|
| **Client Sample ID: MP-SW-007** | | | | |
| **Sample #: 030 Date Sampled: 01/26/01 10:25 Date Received: 01/26/01 Matrix: SOLID** | | | | |
| PCBs by SW-846 8082 | | | | In Review |
| PCB-1016 | ND | 660 | ug/kg | SW846 8082 |
| PCB-1221 | ND | 660 | ug/kg | SW846 8082 |
| PCB-1232 | ND | 660 | ug/kg | SW846 8082 |
| PCB-1242 | ND | 660 | ug/kg | SW846 8082 |
| PCB-1248 | ND | 660 | ug/kg | SW846 8082 |
| PCB-1254 | ND | 660 | ug/kg | SW846 8082 |
| PCB-1260 | 6100 | 660 | ug/kg | SW846 8082 |
| Inorganic Analysis | | | | Reviewed |
| Total Residue as Percent Solids | 81.6 | 10.0 | % | MCAWW 160.3 MOD |
| **Client Sample ID: MP-SW-008** | | | | |
| **Sample #: 031 Date Sampled: 01/26/01 10:35 Date Received: 01/26/01 Matrix: SOLID** | | | | |
| PCBs by SW-846 8082 | | | | In Review |
| PCB-1016 | ND | 330 | ug/kg | SW846 8082 |
| PCB-1221 | ND | 330 | ug/kg | SW846 8082 |
| PCB-1232 | ND | 330 | ug/kg | SW846 8082 |
| PCB-1242 | ND | 330 | ug/kg | SW846 8082 |
| PCB-1248 | ND | 330 | ug/kg | SW846 8082 |
| PCB-1254 | ND | 330 | ug/kg | SW846 8082 |
| PCB-1260 | 2600 | 330 | ug/kg | SW846 8082 |
| Inorganic Analysis | | | | Reviewed |
| Total Residue as Percent Solids | 87.5 | 10.0 | % | MCAWW 160.3 MOD |
| **Client Sample ID: MP-SW-009** | | | | |
| **Sample #: 032 Date Sampled: 01/26/01 10:50 Date Received: 01/26/01 Matrix: SOLID** | | | | |
| PCBs by SW-846 8082 | | | | In Review |
| PCB-1016 | ND | 66 | ug/kg | SW846 8082 |
| PCB-1221 | ND | 66 | ug/kg | SW846 8082 |
| PCB-1232 | ND | 66 | ug/kg | SW846 8082 |

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PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Environmental Quality Mgt., Inc.



Lot #: A1A260189 MAHONING POWER PLANT Date Reported: 2/02/01

Project Number: 3141-65

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | ANALYTICAL METHOD | |
|---|---|---|---|---|---|
| Client Sample ID: MP-SW-009 | | | | | |
| Sample #: 032 Date Sampled: 01/26/01 10:50 Date Received: 01/26/01 Matrix: SOLID | | | | | |
| PCBs by SW-846 8082 | | | | | In Review |
| PCB-1242 | ND | 66 | ug/kg | SW846 8082 | |
| PCB-1248 | ND | 66 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 66 | ug/kg | SW846 8082 | |
| PCB-1260 | 540 | 66 | ug/kg | SW846 8082 | |
| Inorganic Analysis | | | | | Reviewed |
| Total Residue as Percent Solids | 80.7 | 10.0 | % | MCAWW 160.3 MOD | |

DATA RE
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BY:

# Environmental Chemical Corporation

SAMPLE NUMBER
020601 INF

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project. No.: 30141.0065
Source: MAHONING SITE POWER PLANT
Location: WTP INFFLUENT
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG4516 | Instrument Batch: | WG4527 |
| Matrix: | Misc. H2O | Lab Sample ID.: | L2731-1 |
| Lab Notebook No: | 1152, 45 | Date Sampled: | 06-FEB-01 |
| Initial Cal. ID.: | PB0206 | Date Received: | 07-FEB-01 |
| Final Volume: | 10.0 ml | Date Extracted: | 08-FEB-01 |
| Initial Volume: | 980 ml | Date Analyzed: | 08-FEB-01 |
| Prep. Method: | EPA 3510C | | |
| pH: | 7 su | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/l) | RL (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.00017 | 0.00051 | — | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.00010 | 0.00051 | — | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.00021 | 0.00066 | — | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.00021 | 0.00066 | — | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.00013 | 0.00051 | — | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.00015 | 0.00051 | — | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.000067 | 0.00051 | 0.017 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 60 | 34-133 | 0.0010 mg/l |

RL - Reporting Limit
MDL - Method Detection Limit
U - Below MDL

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Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Environmental Quality Mgt., Inc.
MAHONING POWER PLANT
Project Number: 3141-65



Lot #: A13030105 Date Reported: 2/14/01

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | ANALYTICAL METHOD | |
|---|---|---|---|---|---|
| **Client Sample ID: MP-CS2-002** | | | | | |
| **Sample #: 001 Date Sampled: 02/07/01 13:00 Date Received: 02/09/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | Reviewed |
| PCB-1016 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1242 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1248 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1260 | 40 | 33 | ug/kg | SW846 8082 | |
| Inorganic Analysis | | | | | In Review |
| Total Residue as Percent Solids | 95.8 | 0.10 | % | MCAWW 160.3 MOD | |
| **Client Sample ID: MP-CS2-003** | | | | | |
| **Sample #: 002 Date Sampled: 02/07/01 13:00 Date Received: 02/09/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | Reviewed |
| PCB-1016 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1242 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1248 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1260 | ND | 33 | ug/kg | SW846 8082 | |
| Inorganic Analysis | | | | | In Review |
| Total Residue as Percent Solids | 95.7 | 0.10 | % | MCAWW 160.3 MOD | |
| **Client Sample ID: MP-CS2-004** | | | | | |
| **Sample #: 003 Date Sampled: 02/07/01 16:00 Date Received: 02/09/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | Reviewed |
| PCB-1016 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 33 | ug/kg | SW846 8082 | |

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PRELIMINARY DATA SUMMARY

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ns taken based on these results are the responsibility of the data user.

Environmental Quality Mgt., Inc. PAGE 2
105 MAHONING POWER PLANT Date Reported: 2/14/01
Project Number: 3141-65

| ER | RESULT | REPORTING LIMIT | UNITS | ANALYTICAL METHOD | |
|---|---|---|---|---|---|
| e ID: MP-CS2-004 | | | | | |
| 003 Date Sampled: 02/07/01 16:00 Date Received: 02/09/01 Matrix: SOLID | | | | | |
| -846 8082 | | | | | Reviewed |
| | ND | 33 | ug/kg | SW846 8082 | |
| 48 | ND | 33 | ug/kg | SW846 8082 | |
| 54 | ND | 33 | ug/kg | SW846 8082 | |
| ) | 370 | 33 | ug/kg | SW846 8082 | |
| : Analysis | | | | | In Review |
| esidue as | 95.6 | 0.10 | % | MCAWW 160.3 MOD | |
| nt Solids | | | | | |
| le ID: MP-CS2-007 | | | | | |
| 004 Date Sampled: 02/07/01 16:30 Date Received: 02/09/01 Matrix: SOLID | | | | | |
| SW-846 8082 | | | | | Reviewed |
| 5 | ND | 330 | ug/kg | SW846 8082 | |
| 1 | ND | 330 | ug/kg | SW846 8082 | |
| 32 | ND | 330 | ug/kg | SW846 8082 | |
| 42 | ND | 330 | ug/kg | SW846 8082 | |
| 8 | ND | 330 | ug/kg | SW846 8082 | |
| 4 | ND | 330 | ug/kg | SW846 8082 | |
| 60 | 1900 | 330 | ug/kg | SW846 8082 | |
| Analysis | | | | | In Review |
| esidue as | 94.9 | 0.10 | % | MCAWW 160.3 MOD | |
| ent Solids | | | | | |
| le ID: MP-CS2-005 | | | | | |
| 005 Date Sampled: 02/08/01 10:45 Date Received: 02/09/01 Matrix: SOLID | | | | | |
| W-846 8082 | | | | | Reviewed |
| 16 | ND | 330 | ug/kg | SW846 8082 | |
| 21 | ND | 330 | ug/kg | SW846 8082 | |
| 2 | ND | 330 | ug/kg | SW846 8082 | |
| 2 | ND | 330 | ug/kg | SW846 8082 | |
| 48 | ND | 330 | ug/kg | SW846 8082 | |
| 54 | ND | 330 | ug/kg | SW846 8082 | |

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PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Environmental Quality Mgt., Inc.
MAHONING POWER PLANT
Project Number: 3141-65



Lot #: A1B090105 Date Reported: 2/14/01

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | ANALYTICAL METHOD | |
|---|---|---|---|---|---|
| **Client Sample ID: MP-CS2-005** | | | | | |
| **Sample #: 005 Date Sampled: 02/08/01 10:45 Date Received: 02/09/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | Reviewed |
| PCB-1260 | 1700 | 330 | ug/kg | SW846 8082 | |
| Inorganic Analysis | | | | | In Review |
| Total Residue as Percent Solids | 94.3 | 0.10 | % | MCAWW 160.3 MOD | |
| **Client Sample ID: MP-CS2-006** | | | | | |
| **Sample #: 006 Date Sampled: 02/08/01 11:00 Date Received: 02/09/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | Reviewed |
| PCB-1016 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1242 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1248 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1260 | 190 | 33 | ug/kg | SW846 8082 | |
| Inorganic Analysis | | | | | In Review |
| Total Residue as Percent Solids | 95.1 | 0.10 | % | MCAWW 160.3 MOD | |
| **Client Sample ID: MP-CS2-008** | | | | | |
| **Sample #: 007 Date Sampled: 02/08/01 11:20 Date Received: 02/09/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | Reviewed |
| PCB-1016 | ND | 160 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 160 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 160 | ug/kg | SW846 8082 | |
| PCB-1242 | ND | 160 | ug/kg | SW846 8082 | |
| PCB-1248 | ND | 160 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 160 | ug/kg | SW846 8082 | |
| PCB-1260 | 860 | 160 | ug/kg | SW846 8082 | |

DATA REVIEWED
NOT VALIDATED
FEB 14 2001
BY:

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Environmental Quality Mgt., Inc.
MAHONING POWER PLANT
Project Number: 3141-65



Lot #: A1B090105 Date Reported: 2/14/01

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | ANALYTICAL METHOD | |
|---|---|---|---|---|---|
| **Client Sample ID: MP-CS2-008** | | | | | |
| **Sample #: 007 Date Sampled: 02/08/01 11:20 Date Received: 02/09/01 Matrix: SOLID** | | | | | |
| Inorganic Analysis | | | | | In Review |
| Total Residue as Percent Solids | 93.9 | 0.10 | % | MCAWW 160.3 MOD | |
| **Client Sample ID: MP-CS2-009** | | | | | |
| **Sample #: 008 Date Sampled: 02/08/01 11:45 Date Received: 02/09/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | Reviewed |
| PCB-1016 | ND | 660 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 660 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 660 | ug/kg | SW846 8082 | |
| PCB-1242 | ND | 660 | ug/kg | SW846 8082 | |
| PCB-1248 | ND | 660 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 660 | ug/kg | SW846 8082 | |
| PCB-1260 | 4600 | 660 | ug/kg | SW846 8082 | |
| Inorganic Analysis | | | | | In Review |
| Total Residue as Percent Solids | 94.2 | 0.10 | % | MCAWW 160.3 MOD | |
| **Client Sample ID: MP-CS2-010** | | | | | |
| **Sample #: 009 Date Sampled: 02/08/01 12:25 Date Received: 02/09/01 Matrix: SOLID** | | | | | |
| PCBs by SW-846 8082 | | | | | Reviewed |
| PCB-1016 | ND | 330 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 330 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 330 | ug/kg | SW846 8082 | |
| PCB-1242 | ND | 330 | ug/kg | SW846 8082 | |
| PCB-1248 | ND | 330 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 330 | ug/kg | SW846 8082 | |
| PCB-1260 | 3400 | 330 | ug/kg | SW846 8082 | |
| Inorganic Analysis | | | | | In Review |
| Total Residue as Percent Solids | 94.7 | 0.10 | % | MCAWW 160.3 MOD | |

DATA REVIEWED
NOT VALIDATED
FEB 14 2001
BY:

(Continued on next page)

SEVERN TRENT LABORATORIES, INC.

PRELIMINARY DATA SUMMARY

The results shown below may still require additional laboratory review and are subject to change. Actions taken based on these results are the responsibility of the data user.

Environmental Quality Mgt., Inc.
MAHONING POWER PLANT
Project Number: 3141-65



Lot #: A1B090105 Date Reported: 2/14/01

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | ANALYTICAL METHOD | |
|---|---|---|---|---|---|
| Client Sample ID: MP-CS-SPIT | | | | | |
| Sample #: 010 Date Sampled: 02/08/01 14:40 Date Received: 02/09/01 Matrix: SOLID | | | | | |
| PCBs by SW-846 8082 | | | | | Reviewed |
| PCB-1016 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1242 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1248 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 33 | ug/kg | SW846 8082 | |
| PCB-1260 | 140 | 33 | ug/kg | SW846 8082 | |
| Inorganic Analysis | | | | | In Review |
| Total Residue as Percent Solids | 76.8 | 0.10 | % | MCAWW 160.3 MOD | |
| Client Sample ID: MP-PILE | | | | | |
| Sample #: 011 Date Sampled: 02/08/01 14:45 Date Received: 02/09/01 Matrix: SOLID | | | | | |
| PCBs by SW-846 8082 | | | | | Reviewed |
| PCB-1016 | ND | 330 | ug/kg | SW846 8082 | |
| PCB-1221 | ND | 330 | ug/kg | SW846 8082 | |
| PCB-1232 | ND | 330 | ug/kg | SW846 8082 | |
| PCB-1242 | ND | 330 | ug/kg | SW846 8082 | |
| PCB-1248 | ND | 330 | ug/kg | SW846 8082 | |
| PCB-1254 | ND | 330 | ug/kg | SW846 8082 | |
| PCB-1260 | 6000 | 330 | ug/kg | SW846 8082 | |
| Inorganic Analysis | | | | | In Review |
| Total Residue as Percent Solids | 78.7 | 0.10 | % | MCAWW 160.3 MOD | |

DATA REVIEWED
NOT VALIDATED

FEB 14 2001

BY:

# Environmental Chemical Corporation

SAMPLE NUMBER
021501 INF

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING SIDE POWER PLANT
Location: INFLUENT
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG4579 | Instrument Batch: | WG4581 |
| Matrix: | Misc. H2O | Lab Sample ID.: | L2772-1 |
| Lab Notebook No: | 1152, 47 | Date Sampled: | 15-FEB-01 |
| Initial Cal. ID.: | PB0206 | Date Received: | 16-FEB-01 |
| Final Volume: | 10.0 ml | Date Extracted: | 16-FEB-01 |
| Initial Volume: | 980 ml | Date Analyzed: | 20-FEB-01 |
| Prep. Method: | EPA 3510C | | |
| pH: | 7 su | | |

SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/l) | R L (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.00017 | 0.0051 | --- | 10 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.00010 | 0.0051 | --- | 10 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.00021 | 0.0066 | --- | 10 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.00021 | 0.0066 | --- | 10 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.00013 | 0.0051 | --- | 10 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.00015 | 0.0051 | --- | 10 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.000067 | 0.0051 | 0.20 | 10 | D |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 111 | 34-133 | 0.0010 mg/l |

RL - Reporting Limit
D - Diluted
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
FEB 21 2001
BY:

2.21.01

2.21.01

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
021501 MID-A

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING SIDE POWER PLANT
Location: WTP LEAD A EFFLUENT
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG4579 | Instrument Batch: | WG4581 |
| Matrix: | Misc. H2O | Lab Sample ID.: | L2772-2 |
| Lab Notebook No: | 1152, 47 | Date Sampled: | 15-FEB-01 |
| Initial Cal. ID.: | PB0206 | Date Received: | 16-FEB-01 |
| Final Volume: | 10.0 ml | Date Extracted: | 16-FEB-01 |
| Initial Volume: | 980 ml | Date Analyzed: | 20-FEB-01 |
| Prep. Method: | EPA 3510C | | |
| pH: | 7 su | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/l) | R L (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.00017 | 0.0010 | — | 2 | D,U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.00010 | 0.0010 | — | 2 | D,U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.00021 | 0.0013 | — | 2 | D,U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.00021 | 0.0013 | — | 2 | D,U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.00013 | 0.0010 | — | 2 | D,U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.00015 | 0.0010 | — | 2 | D,U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.000067 | 0.0010 | 0.034 | 2 | D |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 115 | 34-133 | 0.0010 mg/l |

RL - Reporting Limit
D - Diluted
MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
FEB 21 2001
BY: MLW 2-21-01
CH 2.21.01

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
021501 MID-B

Customer: ENVIRONMENTAL QUALITY MGT., INC.
Project No.: 30141.0065
Source: MAHONING SIDE POWER PLANT
Location: WTP LEAD B EFFLUENT
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG4579 | Instrument Batch: | WG4581 |
| Matrix: | Misc. H2O | Lab Sample ID.: | L2772-3 |
| Lab Notebook No: | 1152, 47 | Date Sampled: | 15-FEB-01 |
| Initial Cal. ID.: | PB0206 | Date Received: | 16-FEB-01 |
| Final Volume: | 10.0 ml | Date Extracted: | 16-FEB-01 |
| Initial Volume: | 980 ml | Date Analyzed: | 20-FEB-01 |
| Prep. Method: | EPA 3510C | | |
| pH: | 7 su | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/l) | RL (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.00017 | 0.00051 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.00010 | 0.00051 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.00021 | 0.00066 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.00021 | 0.00066 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.00013 | 0.00051 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.00015 | 0.00051 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.000067 | 0.00051 | 0.014 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 118 | 34-133 | 0.0010 mg/l |

RL - Reporting Limit
U - Below MDL
MDL - Method Detection Limit

DATA REVIEWED
NOT VALIDATED
FEB 21 2001
BY:

2-21-01 2-21-01

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.

# Environmental Chemical Corporation

SAMPLE NUMBER
**021501 EFFL-A**

Customer: ENVIRONMENTAL QUALITY MGT., INC. Project. No.: 30141.0065
Source: MAHONING SIDE POWER PLANT
Location: WTP A EFFLUENT
Analysis: EPA Method 8082 PCBs by GC

| | | | |
|---|---|---|---|
| Preparation Batch: | WG4579 | Instrument Batch: | WG4581 |
| Matrix: | Misc. H2O | Lab Sample ID.: | L2772-4 |
| Lab Notebook No: | 1152, 47 | Date Sampled: | 15-FEB-01 |
| Initial Cal. ID.: | PB0206 | Date Received: | 16-FEB-01 |
| Final Volume: | 10.0 ml | Date Extracted: | 16-FEB-01 |
| Initial Volume: | 960 ml | Date Analyzed: | 20-FEB-01 |
| Prep. Method: | EPA 3510C | | |
| pH: | 7 su | | |

## SAMPLE RESULTS

| | CAS NO. | COMPOUND | MDL (mg/l) | R L (mg/l) | RESULTS (mg/l) | DILUTION | FLAG |
|---|---|---|---|---|---|---|---|
| 1. | 12674-11-2 | Aroclor 1016 | 0.00017 | 0.00052 | --- | 1 | U |
| 2. | 11104-28-2 | Aroclor 1221 | 0.00010 | 0.00052 | --- | 1 | U |
| 3. | 11141-16-5 | Aroclor 1232 | 0.00022 | 0.00068 | --- | 1 | U |
| 4. | 53469-21-9 | Aroclor 1242 | 0.00021 | 0.00068 | --- | 1 | U |
| 5. | 12672-29-6 | Aroclor 1248 | 0.00013 | 0.00052 | --- | 1 | U |
| 6. | 11097-69-1 | Aroclor 1254 | 0.00015 | 0.00052 | --- | 1 | U |
| 7. | 11096-82-5 | Aroclor 1260 | 0.000069 | 0.00052 | 0.0062 | 1 | |

| SURROGATE STANDARD | RECOVERY (%) | ACCEPTABLE (%) | SPIKE |
|---|---|---|---|
| Decachlorobiphenyl | 119 | 34-133 | 0.0010 mg/l |

RL - Reporting Limit MDL - Method Detection Limit
U - Below MDL

DATA REVIEWED
NOT VALIDATED
FEB 21 2001
BY:

2-21-01 2-21-01

Comments: 1) Sample results are reported as rounded values. Percent recoveries are calculated using raw values and are reported rounded to zero decimal places.