# Revised Facility Investigation Report
# RCRA §3013 Administrative Order

EPA ID No. OHD. 000 724 138
RCRA Docket No. R3013-5-00-001

Morton International, Inc. Facility
Reading, Ohio

Prepared for:

**The Rohm and Haas Co.**
Croydon, Pennsylvania

September 2004

Project No. 7168

**REVISED**
**Facility Investigation Report**
**RCRA §3013 Administrative Order**
**EPA ID No. OHD. 000 724 138**
**RCRA Docket No. R3013-5-00-001**
**Morton International, Inc. Facility**
**Reading, Ohio**

**Prepared by Geomatrix Consultants, Inc.**
**5725 Highway 290 West Suite 200B**
**Austin, Texas 78735**

**September 2004**
**Project No. 7168**

**Prepared in Compliance with Administrative Order**
**RCRA Docket No. R3013-5-00-001, Paragraph 67**

Certification by the Rohm and Haas Company

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: Bruce E Beiser

Name: BRUCE E BEISER

Title: PLANT MANAGER

Date: AUGUST 30, 2004

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## ACRONYMS AND ABBREVIATIONS

- µg/l - micrograms per liter
- 1,1-DCA - 1,1-dichloroethane
- 1,1-DCE - 1,1-dichloroethene
- 1,2-DCA - 1,2-dichloroethane
- 1,2-DCB - 1,2-dichlorobenzene
- AADD - Annual Average Daily Dose
- AO - Administrative Order
- App. IX-TAL - Appendix IX Target Analyte List
- bgs - below ground surface
- BHC- Benzene Hexachloride
- BKG-TAL - Background Target Analyte List
- BTEX - benzene, toluene, ethylbenzene, and xylenes
- BRA – Baseline Risk Assessment
- CCR – Current Conditions Report
- CDM - Camp Dresser & McKee Inc.
- CLP-TAL - Contract Laboratory Program Target Analyte List
- CSOs - Combined Sewer Outfalls
- CSS - Combined Sewer System
- DDD – Dichlorodiphenyldichloroethane
- DDE – Dichlorodiphenyldichloroethylene
- DDT - Dichlorodiphenyltrichloroethane
- DPT - direct push technique
- EDQL – Environmental Data Quality Limit
- E&E - Ecology and Environment, Inc.
- EM61 - the Geonics EM61 time domain electromagnetic metal detector, a type of electromagnetic survey instrument

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## ACRONYMS AND ABBREVIATIONS
## (Continued)

- EM31 - the Geonics EM31 terrain conductivity meter, a type of electromagnetic survey instrument
- FI - Facility Investigation
- ft/day - feet per day
- ft/ft - feet per foot
- K - hydraulic conductivity
- LAW - Lower Aquifer Well
- mg/kg - milligrams per kilogram
- MON-TAL – Monitoring Target Analyte List
- MSD - Metropolitan Sewer District
- NPDES - National Pollution Discharge Elimination System
- NPL - National Priorities List
- OEPA - Ohio Environmental Protection Agency
- PAHs - polycyclic aromatic hydrocarbons
- PCBs - polychlorinated biphenyls
- PCE - tetrachloroethene
- PID - photoionization detector
- PRP - Potentially Responsible Party
- PVC - polyvinyl chloride
- QA/QC - quality assurance/quality control
- QAPP - Quality Assurance Project Plan
- RCRA - Resource Conservation and Recovery Act
- RFA - RCRA Facility Assessment
- RFI - RCRA Facility Investigation
- SERA - Screening-Level Ecological Risk Assessment

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## ACRONYMS AND ABBREVIATIONS
## (Continued)

- SS-TAL - Sediment Target Analyte List
- STL - Severn Trent Laboratories
- SVOCs - Semivolatile Organic Compounds
- SWMUs - Solid Waste Management Units
- T - transmissivity
- TCA - 1,1,1-trichloroethane
- TCE - trichloroethene
- TDS - Total Dissolved Solids
- TSS - Total Suspended Solids
- UA - Upper Aquifer
- UAW - Upper Aquifer Well
- USCS - Unified Soil Classification System
- USEPA - U.S. Environmental Protection Agency
- VOCs - Volatile Organic Compounds

## 2.2 SURFACE WATER HYDROLOGY

Mill Creek is the only body of surface water in the vicinity of the Morton Facility. Mill Creek is a tributary of the Ohio River, and the confluence of the two streams is located approximately 14 miles, measured along the Mill Creek channel, south of the Morton Facility.

Mill Creek currently lies 80 to 100 feet west of the Morton Facility property boundary. Before about 1950, however, aerial photographs indicate that, in the vicinity of the Morton Facility, the creek lay about 300 feet to the west of its current location. The change is believed to be part of drainage and flood control improvements performed by the U.S. Army Corps of Engineers around 1950.

A contributing stream enters Mill Creek from the General Electric property to the northwest of the Morton Facility, and surface drainages also enter Mill Creek from the Cincinnati Drum and Pristine properties, upstream of the Morton Facility. In addition, treated water from the Pristine groundwater recovery and treatment system is discharged to Mill Creek.

Drainage from the Morton Facility does not enter Mill Creek under typical conditions. Instead, this drainage enters the facility's sewers, discharging into the combined sewer system operated by the Metropolitan Sewer District (MSD). Facility runoff does periodically enter Mill Creek during major storm/flooding events. Runoff and wastewaters from local facilities have entered Mill Creek through documented on-going failures in the MSD sewer system (Thiokol, 1981).

Mill Creek is not used for drinking water supply or agricultural watering in Hamilton County (PRC, 1993), and no surface water intakes are located within three miles of the Morton Facility (TechLaw, 1998). The creek has been, however, reported to be

occasionally used for recreational purposes (U.S. Army Corps of Engineers, 1990; CDM, 1986).

## 2.3 REGIONAL GEOLOGY AND HYDROGEOLOGY

Hamilton County is located on the west flank of the regional anticline termed the Cincinnati Arch. The Morton Facility is located within the Mill Creek Valley, which is one of a series of buried glacially-incised valleys in the region. The Mill Creek Valley is a buried valley of the Deep Stage Cincinnati River.

In general, the lower portion of this valley is formed of the Ordovician Kope Formation, comprising limey shales with limestone interbeds (Osborne, 1968; Osborne, 1974). The valley is filled predominantly with glacial outwash deposits, with lesser amounts of moraine deposits and alluvial deposits from the valley walls.

Sand and gravel deposits within the outwash facies filling the buried valleys form a generally prolific aquifer system, referred to as the Buried Valley Aquifer System (E&E, 1991). This aquifer system is the primary source of groundwater for the Cincinnati area (ODNR, 1989), and is widely used for municipal and industrial supply. As discussed in the Current Conditions Report, the shale bedrock underlying the outwash deposits is not considered a significant source of groundwater in the area of the Morton Facility.

Previous drilling in the vicinity of the Morton Facility (primarily for Pristine investigations) indicated typical local thicknesses for the outwash deposits ranging from 130 to 160 feet. To the east of the Morton Facility, these deposits thin and pinch out against the eastern edge of the Mill Creek Valley.

Previous work at this and neighboring facilities have divided the outwash deposits into two aquifers for the purposes of investigation and remediation. These are generally referred to as the Upper and Lower Aquifers, although terminology varies.

## 4.4 MILL CREEK RECONNAISSANCE

Geomatrix representatives performed a visual reconnaissance of Mill Creek at least once per calendar quarter during 2001, to check for the presence of active seeps or any apparent sign of chemical impact. In October 2003 representatives from USEPA and other government agencies participated in a reconnaissance trip to Mill Creek. Geomatrix representatives also performed a visual reconnaissance of Mill Creek as part of the Supplemental FI in March 2004. The following sections summarize Mill Creek reconnaissance activities performed:

- **First Quarter 2001 Reconnaissance**: March 21, 2001, by representatives of Geomatrix and Rohm and Haas. This reconnaissance was performed within 48 hours of a rainfall event. Access to the creek bank was marginal due to its steep slopes, slippery footing, and heavy brush cover. Despite this, the reconnaissance team was able to directly view an estimated 80 percent of the bank lying west of the Morton Facility.

- **Second Quarter 2001 Reconnaissance:** April 18 and again on May 29 and 30, by representatives of Geomatrix and Rohm and Haas. During the May 30th reconnaissance, 11 wellpoints with sorbent cotton pads were installed along the east bank of Mill Creek to check for the presence of optical brighteners. An ecological survey was also performed on May 29 and 30, 2001. The survey consisted of a visual evaluation of Mill Creek and the Morton Facility vicinity by an ecological risk assessor (see Section 4.13).

- **Third Quarter 2001 Reconnaissance:** August 22, 2001, by representatives of Geomatrix. Small seeps were identified near the northwest property corner of the Morton Facility and at a location about 300 feet south of the northwest property corner. Also during this quarter, the absorbent pads installed on May 30, 2001 were removed from the well points along the east bank of Mill Creek and analyzed for the presence of optical brighteners. This analysis is discussed in Section 5.3.3.

- **Fourth Quarter 2001 Reconnaissance:** December 6, 2001, by representatives of Geomatrix. A stream gauge was installed on the west bank of Mill Creek, near the north (upstream) Morton Facility boundary across from the SS-1 stream station location. An initial stream level reading was collected, followed by a second water level reading after a rainfall event that same day.

- **First Quarter 2002 Reconnaissance:** March 6, 2002, by representatives of Geomatrix. During this reconnaissance the stream level was recorded. The seeps

observed during the Third Quarter 2001 Reconnaissance were no longer visible. Creek sediment samples were collected along Mill Creek at locations upstream, downstream, and adjacent to the Morton Facility. This sampling event is detailed in Section 4.7.

- **October 2003 Reconnaissance** – On October 28, 2003 a meeting was held at the Morton Facility. Part of the meeting included a viewing of Mill Creek. Attendees included representatives from Rohm and Haas, USEPA, Geomatrix, Booz Allen Hamilton, the U.S. Geological Survey, and Ohio Environmental Protection Agency.

- **March 2004 Reconnaissance:** March 25, 26, and 27 by representatives of Geomatrix. During this reconnaissance, 6 creek bed samples and 6 surface water samples were collected at locations downstream and adjacent to the Morton Facility. This sampling event is detailed in Section 4.7.

## 4.5 SOIL SAMPLING

Soil samples were utilized to characterize subsurface lithology and stratigraphy, measure geotechnical characteristics of various site strata, and measure levels of chemical impact. For sampling during the initial FI field activities (2001/2002) one soil sample was typically retained for geochemical analysis (i.e., for the CLP-Target Analyte List or Appendix IX-Target Analyte List) from the upper 3 feet to represent surface soils. A second sample was typically retained for analysis from the interval from 3 to 15 feet bgs, at a depth selected based on the following criteria in descending order of priority:

1. The soils exhibiting the greatest field indication of chemical impact.
2. The soils from the apparent depth of the water table.
3. The soils at 15 feet bgs.

If soils below 15 feet bgs exhibited some characteristic of particular interest (e.g., staining or odor), these were also selected for analysis. Samples were also retained from selected stratigraphic borings (STR01, STR02, STR03, STR04, STR06, STR08, and STR11) for geotechnical analysis. One geotechnical sample was typically retained from each of the major strata observed in each boring. Table 4-2 summarizes the soil samples

the Lower Aquifer only penetrated into the upper 20 to 30 feet. At the fully penetrating locations, observations regarding the Lower Aquifer were:

- At LAW05-150, along the northwest margin of the site, the Lower Aquifer was encountered at a depth of 50 feet bgs and extended to a depth of 150 feet.
- At STR06, in the east-central portion of the site, the Lower Aquifer was wholly absent. Drilling transitioned directly from Upper Aquifer clays to shaley bedrock at a depth of approximately 139 feet. Thin sands observed at a depth of approximately 50 feet, however, appear to be laterally connected to the Lower Aquifer.

At all locations where it was present, the Lower Aquifer comprised sands and gravels, generally coarsening with depth.

Although the natural Lower Aquifer groundwater gradient is generally to the south, along the Mill Creek valley, the gradient is locally affected by pumping activities. At the Morton Facility, data from Conestoga-Rovers indicates that the entire facility lies within the capture zone of the Pristine Lower Aquifer groundwater recovery system (Conestoga-Rovers, 2000).

## 5.2 CHARACTERIZATION OF MILL CREEK

Geomatrix and subcontract personnel performed multiple reconnaissances of Mill Creek, as described in Section 4.4. The following observations were made during the course of those reconnaissance actions:

- The creek is typically shallow (less than 24 inches), with intermittent rapids and pools; pools in the vicinity of the Morton Facility exhibited depths up to 5 feet (all depths based on normal, non-flooding conditions). Water levels and flow were consistent for all FI observations performed during the period 2001 through 2004.
- The bed of the creek is comprised predominantly of rock and concrete debris, probably reflecting the materials used during the U.S. Army Corps of Engineers rechannelization (see Section 2.2). Sediment is completely absent through most of the streambed, with small accumulations (typically less than 1 inch thick)

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GEOMATRIX

Ms. Mirtha Capiro
Enforcement and Compliance Assurance Branch
Waste, Pesticides and Toxics Division
U.S. Environmental Protection Agency (USEPA)
Region 5 (DE-9F)
77 West Jackson Street
Chicago, Illinois 60604-3590

Subject: Submittal of Revised Facility Investigation (FI) Report
Morton International, Inc., Reading, Ohio
RCRA Docket No. R3010-5-00-001

Dear Ms. Capiro:

On behalf of the Rohm and Haas Co., Geomatrix Consultants, Inc. (Geomatrix) is submitting three copies of the Revised FI Report for your review. This document includes all data originally submitted in the original 2002 FI Report, as well as data acquired in the French drain pumping test, groundwater monitoring events, and the approved supplemental work that was performed this spring. This report is submitted to comply with Section 57 of the Administrative Order.

The supplemental field work (March and April 2004) was performed to address specific data gaps identified by the USEPA. All work specified in the Supplemental FI Work Plan was completed as planned, and no additional field activities are currently planned.

We look forward to discussing the findings of the total FI with you; our previous conversations on this work have been productive. Until that time, please contact Carl Coker at Rohm and Haas Co. (215/785-7193) or me with any questions.

Sincerely,
GEOMATRIX CONSULTANTS, INC.

Mark P. Hemingway, P.G.
Principal Hydrogeologist

cc: Bruce Beiser
Carl Coker
Eric Walker

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GEOMATRIX

May 16, 2005
Project 7168

Ms. Mirtha Capiro
Project Coordinator
U.S. Environmental Protection Agency (EPA)
Region 5
77 W. Jackson Boulevard, DRE-9J
Chicago, Illinois 60604-3590

Subject: Rohm and Haas Chemicals LLC (formerly known as Morton International, Inc.)
2000 West Street, Reading, Hamilton County, Ohio
OHD 000 724 138

Dear Ms. Capiro:

On behalf of Rohm and Haas Chemicals LLC, Geomatrix Consultants, Inc. (Geomatrix) is providing you with updated groundwater data summary tables for the referenced facility. As you are aware, Upper Aquifer monitoring wells at the facility were sampled last November. The data from that sampling event have been incorporated into the data summary tables previously submitted to the EPA. These four data tables now include the November 2004 groundwater data and all the analytes detected in groundwater, seep, and surface water sampling since 2001. Four tables were updated and are being provided:

- Summary of Volatile Organic (VOC) Detections
- Summary of Semi-volatile Organic (SVOC) Detections
- Summary of Pesticide and Polychlorinated Biphenyl Detections
- Summary of Inorganic Detections

The recent groundwater data will also be considered in the Revised Baseline Risk Assessment, currently in preparation. The data will also be incorporated into the EQuIS updates.

If you have any questions, please feel free to contact me or Carl J. Coker with Rohm and Haas.

Sincerely,
GEOMATRIX CONSULTANTS, INC.

Mark P. Hemingway, P.G.
Principal Hydrogeologist

cc: Mr. Carl Coker, The Rohm and Haas Co.
Mr. Julian Hayward, Conestoga-Rovers & Associates

Attachments

**Summary of VOC Detections in Groundwater, Seep, and Surface Water Samples**

Morton International, Inc.

Reading, Ohio

**Units: µg/l**

| SAMPLE LOCATION | SAMPLE DATE | 1,1,1-Trichloroethane | 1,1,2-Trichloro-1,2,2-trifluoroethane | 1,1,2-Trichloroethane | 1,1-Dichloroethane | 1,1-Dichloroethene | 1,2-Dichloroethane | 1,2-Dichloroethene (total) | 2-Butanone | 4-Methyl-2-pentanone | Acetone | Benzene | Bromodichloromethane | Bromoform | Carbon disulfide | Carbon tetrachloride | Chlorobenzene | Chloroethane | Chloroform | cis-1,2-Dichloroethene | Cyclohexane | Dibromochloromethane | Dichlorodifluoromethane | Ethylbenzene | Isopropylbenzene | Methyl tert-butyl ether | Methylcyclohexane | Methylene chloride | Tetrachloroethene | Toluene | trans-1,2-Dichloroethene | Trichloroethene | Vinyl chloride | Xylenes (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Groundwater** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW-EPA-1 | 5/8/2001 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <500 | <500 | <500 | <50 | <50 | <50 | <50 | <50 | 1600 | <100 | <50 | <25 | <50 | <50 | <50 | 19 J | <50 | <250 | <50 | <50 | <50 | <50 | <25 | <50 | <100 | 30 J |
| MW-EPA-1 | 11/15/2001 | <83 | <83 | <83 | <83 | <83 | <83 | <83 | <830 | <830 | 63 J B | 31 J | <83 | <83 | <83 | <83 | 3200 | <170 | <83 | <42 | <83 | <83 | <83 | 40 J | <83 | <420 | <83 | 140 B | <83 | 59 J | <42 | <83 | <170 | 93 |
| MW-EPA-1 | 10/20/2002 | NA | NA | NA | <100 | NA | <100 | NA | NA | NA | 220 J | <100 | <100 | NA | <100 | NA | 3900 | <100 | <100 | NA | NA | NA | <100 | <100 | NA | NA | <100 | 100 B | NA | 49 J | NA | NA | NA | <100 |
| MW-EPA-1 | 11/12/2003 | <200 | <200 | <200 | <200 | <200 | <200 | NA | <2000 | <2000 | <2000 | <200 | <200 | <200 | <200 | <200 | 4500 | <200 | <200 | <100 | <200 | <200 | <200 | <200 | <200 | <1000 | <200 | <200 | <200 | <200 | <100 | <200 | <200 | <200 |
| MW-EPA1 | 3/28/2004 | <83 | <83 | <83 | <83 | <83 | <83 | NA | <830 | <830 | <830 | <83 | <83 | <83 | <83 | <83 | 2800 | <83 | <83 | <42 | <83 | <83 | <83 | <83 | <83 | <420 | <83 | <83 | <83 | <83 | <42 | <83 | <83 | <83 |
| MW-EPA-1 | 11/4/2004 | <100 | <100 | <100 | <100 | <100 | <100 | NA | <1000 | <1000 | 310 J B | 49 J B | <100 | <100 | <100 | <100 | 2500 | <100 | <100 | <50 | <100 | <100 | <100 | 28 J | <100 | <500 | <100 | 85 J B | <100 | <100 | <50 | <100 | <100 | 130 |
| MW-EPA-2 | 5/8/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <2 | 1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | 0.98 J | 11 | <1 | <0.5 | <1 | <2 | <1 |
| MW-EPA-2 | 11/14/2001 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | <33 | <33 | 2 J | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | <6.7 | 0.81 J | <1.7 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | <17 | <3.3 | 2 J B | 45 | <3.3 | <1.7 | <3.3 | <6.7 | <3.3 |
| MWEPA-2 | 10/20/2002 | NA | NA | NA | <2.2 | NA | <2.2 | NA | NA | NA | 3.4 J | <2.2 | <2.2 | NA | <2.2 | NA | <2.2 | <2.2 | 1.3 J | NA | NA | NA | <2.2 | <2.2 | NA | NA | <2.2 | 1.1 J B | NA | <2.2 | NA | NA | NA | <2.2 |
| MW-EPA-2 | 11/11/2003 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | NA | <25 | <25 | <25 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <1.2 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <12 | <2.5 | <2.5 | 80 | <2.5 | <1.2 | <2.5 | <2.5 | <2.5 |
| MW-EPA-2 | 3/29/2004 | <2 | <2 | <2 | <2 | <2 | <2 | NA | <20 | <20 | <20 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <1 | <2 | <2 | <2 | <2 | <2 | <10 | <2 | <2 | 52 | <2 | <1 | <2 | <2 | <2 |
| MW-EPA-2 | 11/4/2004 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | NA | <33 | <33 | 9.2 J B | 0.89 J B | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | 1.2 J | <1.7 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | <17 | <3.3 | 2.4 J B | 75 | <3.3 | <1.7 | <3.3 | <3.3 | <3.3 |
| MW-EPA-3 | 5/6/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| MW-EPA-3 | 11/13/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | <10 | 2.6 J | <1 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | 0.3 J | <0.5 | <1 | <2 | <1 |
| MWEPA-3 | 10/17/2002 | NA | NA | NA | <1 | NA | <1 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | NA | <1 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| MW-EPA-3 | 11/13/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| MW-EPA-3 | 3/30/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| MW-EPA-3 | 11/4/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | 1.9 J B | 0.31 J B | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | 0.2 J | <1 | <1 | <1 | 0.21 J | <0.5 | <1 | <1 | 0.51 J |
| MW-EPA-4 | 5/8/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| MW-EPA-4 | 11/13/2001 | 0.2 J | <1 | <1 | <1 | <1 | <1 | <1 | <10 | <10 | 2.5 J | <1 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| MW-EPA-4 | 10/18/2002 | NA | NA | NA | <1 | NA | <1 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | NA | <1 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| MW-EPA-4 | 11/16/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| MW-EPA-4 | 4/6/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| MW-EPA-4 | 11/6/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| Recovery Well | 7/29/2001 | <29 | NA | <29 | <29 | <29 | <29 | <29 | <290 | <140 | 1600 | <29 | <29 | <29 | <29 | <29 | 8.7 J | <57 | <29 | <14 | NA | <29 | <57 | <29 | NA | NA | NA | <29 | <29 | <29 | <14 | <29 | <57 | <29 |
| UAW01-30 | 5/4/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | 1.6 | <2 | <1 | <0.5 | <1 | <1 | 0.41 J | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW01-30 | 11/8/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | 0.5 J | <2 | <1 | <0.5 | <1 | <1 | 0.38 J | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW01-30 | 10/17/2002 | NA | NA | NA | <1 | NA | <1 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | NA | 0.47 J | <1 | <1 | NA | NA | NA | <1 | <1 | NA | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| UAW01-30 | 11/11/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW01-30 | 3/24/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW01-30 | 11/3/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | 1.1 J | <1 | <1 | <1 | <1 | <1 | 0.23 J | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |

**Summary of VOC Detections in Groundwater, Seep, and Surface Water Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| SAMPLE LOCATION | SAMPLE DATE | 1,1,1-Trichloroethane | 1,1,2-Trichloro-1,2,2-trifluoroethane | 1,1,2-Trichloroethane | 1,1-Dichloroethane | 1,1-Dichloroethene | 1,2-Dichloroethane | 1,2-Dichloroethene (total) | 2-Butanone | 4-Methyl-2-pentanone | Acetone | Benzene | Bromodichloromethane | Bromoform | Carbon disulfide | Carbon tetrachloride | Chlorobenzene | Chloroethane | Chloroform | cis-1,2-Dichloroethene | Cyclohexane | Dibromochloromethane | Dichlorodifluoromethane | Ethylbenzene | Isopropylbenzene | Methyl tert-butyl ether | Methylcyclohexane | Methylene chloride | Tetrachloroethene | Toluene | trans-1,2-Dichloroethene | Trichloroethene | Vinyl chloride | Xylenes (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW01-80 | 5/4/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | 1.4 J | <1 |
| UAW01-80 | 10/10/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | <10 | 1.2 J B | <1 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | 2.1 | <1 |
| UAW01-80 | 11/12/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | 0.23 J | <0.5 | <1 | 1.9 J | <1 |
| UAW01-80 | 10/17/2002 | NA | NA | NA | <1 | NA | <1 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | NA | <1 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| UAW01-80 | 11/11/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | 2.5 | <1 |
| UAW01-80 | 3/24/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | 2.8 | <1 |
| UAW01-80 | 11/2/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | 0.82 J | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | 4 | <1 |
| UAW02-20 | 5/7/2001 | <1 | <1 | <1 | 0.74 J | <1 | 0.42 J | <1 | <10 | <10 | <10 | 0.49 J | <1 | <1 | <1 | <1 | 32 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW02-20 | 11/10/2001 | <1 | <1 | <1 | 0.21 J | <1 | <1 | <1 | <10 | <10 | <10 | 0.6 J | <1 | <1 | <1 | <1 | 32 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | 0.45 J | <0.5 | <1 | <2 | <1 |
| UAW02-20 | 10/17/2002 | NA | NA | NA | <1 | NA | <1 | NA | NA | NA | <10 | 0.37 J | <1 | NA | <1 | NA | 17 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | NA | <1 | <1 | NA | 0.39 J | NA | NA | NA | <1 |
| UAW02-20 | 11/12/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | 13 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW02-20 | 3/26/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | 12 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW02-20 | 11/3/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | 0.91 J | <1 | <1 | <1 | <1 | <1 | 10 | <1 | <1 | <0.5 | 0.44 J | <1 | <1 | <1 | 0.59 J | <5 | 0.63 J B | <1 | <1 | <1 | <0.5 | <1 | <1 | 0.56 J |
| UAW02-40 | 5/7/2001 | <2.5 | <2.5 | <2.5 | 28 | 4.3 | <2.5 | 66 | <25 | <25 | <25 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <5 | <2.5 | 62 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <12 | <2.5 | <2.5 | <2.5 | <2.5 | 3.3 | <2.5 | <5 | <2.5 |
| UAW02-20 (Dup) | 5/7/2001 | <1.2 | <1.2 | <1.2 | 0.67 J | <1.2 | 0.44 J | <1.2 | <12 | <12 | <12 | 0.47 J | <1.2 | <1.2 | <1.2 | <1.2 | 31 | <2.5 | <1.2 | <0.62 | <1.2 | <1.2 | <1.2 | <1.2 | <1.2 | <6.2 | <1.2 | <1.2 | <1.2 | <1.2 | <0.62 | <1.2 | <2.5 | <1.2 |
| UAW02-40 | 11/10/2001 | <2.5 | <2.5 | <2.5 | 27 | 4.5 | <2.5 | 63 | <25 | <25 | 1.8 J B | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <5 | <2.5 | 59 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <12 | <2.5 | <2.5 | <2.5 | <2.5 | 3.2 | <2.5 | <5 | <2.5 |
| UAW02-40 | 10/17/2002 | NA | NA | NA | 25 | NA | <2 | NA | NA | NA | <20 | <2 | <2 | NA | <2 | NA | <2 | <2 | <2 | NA | NA | NA | <2 | <2 | NA | NA | <2 | 1.4 J B | NA | <2 | NA | NA | NA | <2 |
| UAW02-40 | 11/12/2003 | <2 | <2 | <2 | 22 | 4.4 | <2 | NA | <20 | <20 | <20 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | 50 | <2 | <2 | <2 | <2 | <2 | <10 | <2 | <2 | <2 | <2 | 2.9 | <2 | <2 | <2 |
| UAW02-40 | 3/26/2004 | <2 | <2 | <2 | 20 | 3.5 | <2 | NA | <20 | <20 | <20 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | 49 | <2 | <2 | <2 | <2 | <2 | <10 | <2 | <2 | <2 | <2 | 3.2 | <2 | <2 | <2 |
| UAW02-40 | 11/3/2004 | <1.7 | <1.7 | <1.7 | 20 | 3.9 | <1.7 | NA | <17 | <17 | 1.6 J | <1.7 | <1.7 | <1.7 | <1.7 | <1.7 | <1.7 | <1.7 | <1.7 | 48 | <1.7 | <1.7 | <1.7 | <1.7 | <1.7 | <8.4 | <1.7 | 4.9 B | <1.7 | <1.7 | 2.5 | <1.7 | 0.78 J | <1.7 |
| UAW03-20 | 5/7/2001 | <1 | <1 | <1 | 0.84 J | <1 | 14 | <1 | <10 | <10 | 3.4 J | 1.2 | <1 | <1 | 1.5 | <1 | 8.6 | <2 | <1 | <0.5 | <1 | <1 | <1 | 0.55 J | <1 | <5 | 0.41 J | <1 | <1 | 12 | <0.5 | <1 | <2 | 2.5 |
| UAW03-20 | 11/11/2001 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | 1.2 J | <2.5 | <25 | <25 | 3.8 J B | 1.4 J | <2.5 | <2.5 | <2.5 | <2.5 | 41 | <5 | <2.5 | <1.2 | 0.73 J | <2.5 | <2.5 | 1.6 J | 0.34 J | <12 | 2.6 | 1.3 J B | <2.5 | 3.6 | <1.2 | <2.5 | <5 | 4.5 |
| UAW03-20 | 10/23/2002 | NA | NA | NA | <6.7 | NA | <6.7 | NA | NA | NA | 12 J | <6.7 | <6.7 | NA | <6.7 | NA | 55 | <6.7 | <6.7 | NA | NA | NA | <6.7 | <6.7 | NA | NA | 3.4 J | 4.5 J | NA | <6.7 | NA | NA | NA | 5.9 J |
| UAW03-20 | 11/12/2003 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <100 | <100 | <100 | <10 | <10 | <10 | <10 | <10 | 130 | <10 | <10 | <5 | <10 | <10 | <10 | <10 | <10 | <50 | 17 | <10 | <10 | <10 | <5 | <10 | <10 | <10 |
| UAW03-20 | 3/28/2004 | <13 | <13 | <13 | <13 | <13 | <13 | NA | <130 | <130 | <130 | <13 | <13 | <13 | <13 | <13 | 150 | <13 | <13 | <6.7 | <13 | <13 | <13 | <13 | <13 | <67 | <13 | <13 | <13 | <13 | <6.7 | <13 | <13 | <13 |
| UAW03-20 | 11/4/2004 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <100 | <100 | 23 J B | 4 J B | <10 | <10 | 2.8 J | <10 | 110 | <10 | <10 | <5 | <10 | <10 | <10 | <10 | <10 | <50 | 6.2 J | 8.6 J B | <10 | <10 | <5 | <10 | <10 | 15 |
| UAW03-20 (Dup) | 11/4/2004 | <12 | <12 | <12 | <12 | <12 | <12 | NA | <120 | <120 | 32 J B | 4.7 J B | <12 | <12 | <12 | <12 | 110 | <12 | <12 | <6.2 | <12 | <12 | <12 | 3.9 J | <12 | <62 | <12 | 9.7 J B | <12 | <12 | <6.2 | <12 | <12 | 17 |
| UAW04-20 | 5/7/2001 | <1000 | <1000 | <1000 | <1000 | <1000 | <1000 | <1000 | <10000 | <10000 | <10000 | <1000 | <1000 | <1000 | <1000 | <1000 | <1000 | <2000 | <1000 | <500 | <1000 | <1000 | <1000 | <1000 | <1000 | <5000 | <1000 | <1000 | <1000 | 21000 | <500 | <1000 | <2000 | <1000 |
| UAW04-20 | 11/11/2001 | <250 | <250 | <250 | <250 | <250 | <250 | <250 | <2500 | <2500 | 590 J B | <250 | <250 | <250 | <250 | <250 | <250 | <500 | <250 | <120 | <250 | <250 | <250 | <250 | <250 | <1200 | <250 | 200 J B | <250 | 8800 | <120 | <250 | <500 | <250 |
| UAW04-20 | 10/20/2002 | NA | NA | NA | <33 | NA | <33 | NA | NA | NA | 1300 B | <33 | <33 | NA | <33 | NA | <33 | <33 | <33 | NA | NA | NA | <33 | <33 | NA | NA | <33 | <33 | NA | 320 | NA | NA | NA | <33 |
| UAW04-20 | 11/12/2003 | <100 | <100 | <100 | <100 | <100 | <100 | NA | <1000 | <1000 | <1000 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <50 | <100 | <100 | <100 | <100 | <100 | <500 | <100 | <100 | <100 | 3500 | <50 | <100 | <100 | <100 |
| UAW04-20 | 3/28/2004 | <1000 | <1000 | <1000 | <1000 | <1000 | <1000 | NA | <10000 | <10000 | <10000 | <1000 | <1000 | <1000 | <1000 | <1000 | <1000 | <1000 | <1000 | <500 | <1000 | <1000 | <1000 | <1000 | <1000 | <5000 | <1000 | <1000 | <1000 | 24000 | <500 | <1000 | <1000 | <1000 |
| UAW04-20 | 11/3/2004 | <330 | <330 | <330 | <330 | <330 | <330 | NA | <3300 | <3300 | 980 J B | 87 J B | <330 | <330 | <330 | <330 | <330 | <330 | <330 | <170 | <330 | <330 | <330 | <330 | <330 | <1700 | <330 | 280 J B | <330 | 11000 | <170 | <330 | <330 | 200 J |

**Summary of VOC Detections in Groundwater, Seep, and Surface Water Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| SAMPLE LOCATION | SAMPLE DATE | 1,1,1-Trichloroethane | 1,1,2-Trichloro-1,2,2-trifluoroethane | 1,1,2-Trichloroethane | 1,1-Dichloroethane | 1,1-Dichloroethene | 1,2-Dichloroethane | 1,2-Dichloroethene (total) | 2-Butanone | 4-Methyl-2-pentanone | Acetone | Benzene | Bromodichloromethane | Bromoform | Carbon disulfide | Carbon tetrachloride | Chlorobenzene | Chloroethane | Chloroform | cis-1,2-Dichloroethene | Cyclohexane | Dibromochloromethane | Dichlorodifluoromethane | Ethylbenzene | Isopropylbenzene | Methyl tert-butyl ether | Methylcyclohexane | Methylene chloride | Tetrachloroethene | Toluene | trans-1,2-Dichloroethene | Trichloroethene | Vinyl chloride | Xylenes (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW09-20 | 5/5/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | <10 | <10 | <1 | 0.49 J | <1 | <1 | <1 | <1 | <2 | 0.4 J | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW09-20 | 11/9/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | <10 | <10 | <1 | 0.2 J | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | 0.28 J B | <2 | <1 |
| UAW09-20 | 10/16/2002 | NA | NA | NA | <1 | NA | <1 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | NA | <1 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| UAW09-20 | 11/11/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW09-20 | 4/6/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW09-20 | 11/6/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW09-60 | 5/5/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <2 | 0.4 J | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW09-60 | 11/9/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <2 | 0.32 J | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | 0.27 J B | <2 | <1 |
| UAW09-60 | 10/16/2002 | NA | NA | NA | <1 | NA | <1 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | NA | <1 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| UAW09-60 | 11/11/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW09-60 | 4/6/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW09-60 | 11/6/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | 0.83 J B | <1 | 0.26 J | <1 | <1 | <1 | <1 | <1 | 6.1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW10-50 | 10/12/2001 | 36 | 2.1 | 1.9 J | 12 | 3.4 | 54 | 55 | <20 | <20 | 1.1 J | <2 | <2 | <2 | <2 | <2 | <2 | <4 | 20 | 54 | <2 | <2 | <2 | <2 | <2 | <10 | <2 | 2.1 | 0.48 J | <2 | 0.87 J | 3.6 | 0.43 J | <2 |
| UAW10-50 | 11/13/2001 | 32 | 1.5 J | 1.4 J | 12 | 1.6 J | 45 | 47 | 5.3 J B | <40 | 3 J | <4 | <4 | <4 | <4 | <4 | <4 | <8 | 35 | 46 | <4 | <4 | <4 | <4 | <4 | <20 | <4 | 3.5 J B | <4 | <4 | 0.75 J | 2.8 J | <8 | <4 |
| UAW10-50 | 10/19/2002 | NA | NA | NA | 13 | NA | 23 | NA | NA | NA | 1.9 J | <1.4 | <1.4 | NA | <1.4 | NA | <1.4 | 0.44 J | 13 | NA | NA | NA | <1.4 | <1.4 | NA | NA | <1.4 | 0.91 J B | NA | <1.4 | NA | NA | NA | <1.4 |
| UAW10-50 | 11/10/2003 | 14 | 1.7 | <1.4 | 14 | 1.7 | 10 | NA | <14 | <14 | <14 | <1.4 | <1.4 | <1.4 | <1.4 | <1.4 | <1.4 | <1.4 | 24 | 38 | <1.4 | <1.4 | <1.4 | <1.4 | <1.4 | <7.2 | <1.4 | <1.4 | <1.4 | <1.4 | 0.97 | 1.7 | <1.4 | <1.4 |
| UAW10-50 | 3/30/2004 | 16 | <10 | <10 | 13 | <10 | 380 | NA | <100 | <100 | <100 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 68 | 59 | <10 | <10 | <10 | <10 | <10 | <50 | <10 | <10 | <10 | <10 | <5 | <10 | <10 | <10 |
| UAW10-50 | 11/5/2004 | 13 | 3.2 J | <9.1 | 11 | <9.1 | 230 | NA | <91 | <91 | 17 J B | <9.1 | <9.1 | <9.1 | <9.1 | <9.1 | <9.1 | 6.8 J | 29 | 52 | <9.1 | <9.1 | <9.1 | <9.1 | <9.1 | <45 | <9.1 | 3.6 J | 3.2 J | <9.1 | <4.5 | 3.2 J | <9.1 | <9.1 |
| UAW10-80 | 10/12/2001 | <67 | <67 | <67 | <67 | <67 | 2200 | <67 | <670 | <670 | 35 J | <67 | <67 | <67 | <67 | <67 | <67 | <130 | 24 J | <33 | <67 | <67 | <67 | <67 | <67 | <330 | <67 | 240 | <67 | <67 | <33 | <67 | 23 J | <67 |
| UAW10-80 | 11/13/2001 | <170 | <170 | <170 | <170 | <170 | 3500 | <170 | 190 J B | <1700 | <1700 | <170 | <170 | <170 | <170 | <170 | <170 | <330 | <170 | <83 | <170 | <170 | <170 | <170 | <170 | <830 | <170 | 81 J B | <170 | <170 | <83 | <170 | <330 | <170 |
| UAW10-80 | 10/19/2002 | NA | NA | NA | <6.7 | NA | 67 | NA | NA | NA | 12 J | <6.7 | <6.7 | NA | <6.7 | NA | <6.7 | <6.7 | <6.7 | NA | NA | NA | <6.7 | <6.7 | NA | NA | <6.7 | 3.1 J B | NA | <6.7 | NA | NA | NA | <6.7 |
| UAW10-80 | 11/13/2003 | <22 | <22 | <22 | <22 | <22 | 530 | NA | <220 | <220 | <220 | <22 | <22 | <22 | <22 | <22 | <22 | <22 | <22 | <11 | <22 | <22 | <22 | <22 | <22 | <110 | <22 | <22 | <22 | <22 | <11 | <22 | <22 | <22 |
| UAW10-80 | 3/30/2004 | <2 | <2 | <2 | <2 | <2 | 63 | NA | <20 | <20 | <20 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <1 | <2 | <2 | <2 | <2 | <2 | <10 | <2 | <2 | <2 | <2 | <1 | <2 | <2 | <2 |
| UAW10-80 | 11/5/2004 | <1.7 | <1.7 | <1.7 | <1.7 | <1.7 | 49 | NA | <17 | <17 | 3.4 J B | 1 J B | <1.7 | <1.7 | <1.7 | <1.7 | <1.7 | <1.7 | <1.7 | 1 | <1.7 | <1.7 | <1.7 | <1.7 | <1.7 | <8.4 | <1.7 | 1.8 B | <1.7 | <1.7 | <0.84 | <1.7 | 0.92 J | 2.1 |
| UAW11-10 | 5/8/2001 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <5000 | <5000 | 32000 | <500 | <500 | <500 | 270 J | <500 | <500 | <1000 | <500 | <250 | <500 | <500 | <500 | <500 | <500 | <2500 | <500 | <500 | <500 | <500 | <250 | <500 | <1000 | <500 |
| UAW11-10 | 11/10/2001 | <250 | <250 | <250 | <250 | <250 | <250 | <250 | <2500 | <2500 | 14000 | <250 | <250 | <250 | <250 | <250 | <250 | <500 | <250 | <120 | <250 | <250 | <250 | <250 | <250 | <1200 | <250 | 190 J B | <250 | <250 | <120 | <250 | <500 | <250 |
| UAW11-10 | 10/18/2002 | NA | NA | NA | <20 | NA | <20 | NA | NA | NA | 1100 | <20 | <20 | NA | <20 | NA | 32 | <20 | <20 | NA | NA | NA | <20 | <20 | NA | NA | <20 | 20 B | NA | <20 | NA | NA | NA | <20 |
| UAW11-10 | 11/16/2003 | <7.1 | <7.1 | <7.1 | <7.1 | <7.1 | <7.1 | NA | <71 | <71 | 350 | <7.1 | <7.1 | <7.1 | <7.1 | <7.1 | 17 | <7.1 | <7.1 | <3.6 | <7.1 | <7.1 | <7.1 | <7.1 | <7.1 | <36 | <7.1 | <7.1 | <7.1 | <7.1 | <3.6 | <7.1 | <7.1 | <7.1 |
| UAW11-10 | 4/6/2004 | <40 | <40 | <40 | <40 | <40 | <40 | NA | <400 | <400 | 2000 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <20 | <40 | <40 | <40 | <40 | <40 | <200 | <40 | <40 | <40 | <40 | <20 | <40 | <40 | <40 |
| UAW11-10 | 11/7/2004 | <5 | <5 | <5 | 1.8 J | <5 | <5 | NA | 3.4 J | <50 | 230 B | 1.1 J | <5 | <5 | <5 | <5 | 11 | <5 | <5 | 1.4 J | <5 | <5 | <5 | <5 | <5 | <25 | <5 | 7.3 B | <5 | 1.3 J | <2.5 | <5 | <5 | <5 |

**Summary of VOC Detections in Groundwater, Seep, and Surface Water Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| SAMPLE LOCATION | SAMPLE DATE | 1,1,1-Trichloroethane | 1,1,2-Trichloro-1,2,2-trifluoroethane | 1,1,2-Trichloroethane | 1,1-Dichloroethane | 1,1-Dichloroethene | 1,2-Dichloroethane | 1,2-Dichloroethene (total) | 2-Butanone | 4-Methyl-2-pentanone | Acetone | Benzene | Bromodichloromethane | Bromoform | Carbon disulfide | Carbon tetrachloride | Chlorobenzene | Chloroethane | Chloroform | cis-1,2-Dichloroethene | Cyclohexane | Dibromochloromethane | Dichlorodifluoromethane | Ethylbenzene | Isopropylbenzene | Methyl tert-butyl ether | Methylcyclohexane | Methylene chloride | Tetrachloroethene | Toluene | trans-1,2-Dichloroethene | Trichloroethene | Vinyl chloride | Xylenes (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW05-20 | 5/6/2001 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <400 | <400 | <400 | <40 | <40 | <40 | <40 | <40 | 460 | <80 | <40 | <20 | <40 | <40 | <40 | <40 | <40 | <200 | <40 | <40 | <40 | <40 | <20 | <40 | <80 | <40 |
| UAW05-20 | 10/10/2001 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <400 | <400 | 22 J B | <40 | <40 | <40 | <40 | <40 | 440 | <80 | <40 | <20 | <40 | <40 | <40 | <40 | <40 | <200 | <40 | <40 | <40 | <40 | <20 | <40 | <80 | <40 |
| UAW05-20 | 11/12/2001 | <22 | <22 | <22 | <22 | <22 | <22 | <22 | <220 | <220 | <220 | <22 | <22 | <22 | <22 | <22 | 390 | <44 | <22 | <11 | <22 | <22 | <22 | 4 J | <22 | <110 | 3.5 J | <22 | <22 | <22 | <11 | <22 | <44 | 10 J |
| UAW05-20 | 10/20/2002 | NA | NA | NA | <25 | NA | <25 | NA | NA | NA | 49 J B | 14 J | <25 | NA | 6.7 J | NA | 310 | <25 | <25 | NA | NA | NA | <25 | <25 | NA | NA | <25 | 13 J B | NA | <25 | NA | NA | NA | <25 |
| UAW05-20 | 11/10/2003 | <25 | <25 | <25 | <25 | <25 | <25 | NA | <250 | <250 | <250 | <25 | <25 | <25 | <25 | <25 | 770 | <25 | <25 | <12 | <25 | <25 | <25 | <25 | <25 | <120 | <25 | <25 | <25 | <25 | <12 | <25 | <25 | <25 |
| UAW05-20 | 3/28/2004 | <20 | <20 | <20 | <20 | <20 | <20 | NA | <200 | <200 | <200 | <20 | <20 | <20 | <20 | <20 | 580 | <20 | <20 | <10 | <20 | <20 | <20 | <20 | <20 | <100 | <20 | <20 | <20 | <20 | <10 | <20 | <20 | <20 |
| UAW05-20 (Dup) | 3/28/2004 | <17 | <17 | <17 | <17 | <17 | <17 | NA | <170 | <170 | <170 | <17 | <17 | <17 | <17 | <17 | 540 | <17 | <17 | <8.3 | <17 | <17 | <17 | <17 | <17 | <83 | <17 | <17 | <17 | <17 | <8.3 | <17 | <17 | <17 |
| UAW05-20 | 11/4/2004 | <20 | <20 | <20 | <20 | <20 | <20 | NA | <200 | <200 | 57 J B | 8.6 J B | <20 | <20 | 6.9 J | <20 | 560 | <20 | <20 | <10 | <20 | <20 | <20 | <20 | <20 | <100 | <20 | 16 J B | <20 | <20 | <10 | <20 | <20 | <20 |
| UAW06-20 | 5/6/2001 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <100 | <100 | 720 | <10 | <10 | <10 | <10 | <10 | 70 | <20 | <10 | <5 | <10 | <10 | <10 | <10 | <10 | <50 | <10 | <10 | <10 | <10 | <5 | <10 | <20 | <10 |
| UAW06-20 | 10/10/2001 | <170 | <170 | <170 | <170 | <170 | <170 | <170 | <1700 | <1700 | 11000 | <170 | <170 | <170 | <170 | <170 | 100 J | <330 | <170 | <83 | <170 | <170 | <170 | <170 | <170 | <830 | <170 | <170 | <170 | <170 | <83 | <170 | <330 | <170 |
| UAW06-20 | 11/13/2001 | <670 | <670 | <670 | <670 | <670 | <670 | <670 | 750 J B | <6700 | 45000 | <670 | <670 | <670 | <670 | <670 | 110 J | <1300 | <670 | <330 | <670 | <670 | <670 | <670 | <670 | <3300 | <670 | <670 | <670 | <670 | <330 | <670 | <1300 | <670 |
| UAW06-20 | 10/20/2002 | NA | NA | NA | 2.2 J | NA | <2.5 | NA | NA | NA | 170 B | 1.2 J | <2.5 | NA | 1.8 J | NA | 71 | <2.5 | <2.5 | NA | NA | NA | <2.5 | 1.3 J | NA | NA | <2.5 | <2.5 | NA | 13 | NA | NA | NA | <2.5 |
| UAW06-20 | 11/12/2003 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | NA | <33 | <33 | <33 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | 73 | <3.3 | <3.3 | <1.7 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | <17 | <3.3 | <3.3 | <3.3 | 3.8 | <1.7 | <3.3 | <3.3 | <3.3 |
| UAW06-20 | 3/29/2004 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | NA | <25 | <25 | <25 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | 52 | <2.5 | <2.5 | <1.2 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <12 | <2.5 | <2.5 | <2.5 | <2.5 | <1.2 | <2.5 | <2.5 | <2.5 |
| UAW06-20 | 11/4/2004 | <3.3 | <3.3 | <3.3 | 1.2 J | <3.3 | <3.3 | NA | <33 | <33 | 10 J B | 1.7 J B | <3.3 | <3.3 | 1.7 J | <3.3 | 83 | <3.3 | <3.3 | <1.7 | <3.3 | <3.3 | <3.3 | 1.6 J | 4.1 | <17 | <3.3 | 1.8 J B | <3.3 | 1.3 J | <1.7 | <3.3 | <3.3 | 4.7 |
| UAW07-20 | 5/8/2001 | <2 | NA | <2 | 1.6 J | <2 | <2 | <2 | <20 | <10 | <20 | 2.1 | <2 | <2 | 2.4 | <2 | 39 | <4 | <2 | <1 | NA | <2 | <4 | 4.4 | NA | NA | NA | <2 | <2 | 3.5 | <1 | <2 | <4 | 13 |
| UAW07-20 (Dup) | 5/8/2001 | <2.5 | NA | <2.5 | 1.5 J | <2.5 | <2.5 | <2.5 | <25 | <12 | <25 | 1.8 J | <2.5 | <2.5 | 1.1 J | <2.5 | 38 | <5 | <2.5 | <1.2 | NA | <2.5 | <5 | 4.3 | NA | NA | NA | <2.5 | <2.5 | 3.6 | <1.2 | <2.5 | <5 | 13 |
| UAW07-20 | 11/15/2001 | <2 | NA | <2 | 1.2 J | <2 | <2 | <2 | <20 | <10 | 3.3 J B | 5.2 | <2 | <2 | <2 | <2 | 64 | <4 | <2 | <1 | NA | <2 | <4 | 5.6 | NA | NA | NA | 2.3 B | <2 | 1.2 J | <1 | <2 | <4 | 13 |
| UAW07-20 | 10/20/2002 | NA | NA | NA | <2.5 | NA | <2.5 | NA | NA | NA | 4.8 J | 5.8 | <2.5 | NA | 0.67 J | NA | 71 | <2.5 | <2.5 | NA | NA | NA | <2.5 | 2.2 J | NA | NA | <2.5 | 1.4 J B | NA | <2.5 | NA | NA | NA | 7.6 |
| UAW07-20 | 11/12/2003 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | NA | <33 | <33 | <33 | 4.1 | <3.3 | <3.3 | <3.3 | <3.3 | 91 | <3.3 | <3.3 | <1.7 | <3.3 | <3.3 | <3.3 | <3.3 | 3.4 | <17 | <3.3 | <3.3 | <3.3 | <3.3 | <1.7 | <3.3 | <3.3 | 5.6 |
| UAW07-20 (Dup) | 11/12/2003 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | NA | <33 | <33 | <33 | 4.1 | <3.3 | <3.3 | <3.3 | <3.3 | 93 | <3.3 | <3.3 | <1.7 | <3.3 | <3.3 | <3.3 | <3.3 | 3.3 | <17 | <3.3 | <3.3 | <3.3 | <3.3 | <1.7 | <3.3 | <3.3 | 5.7 |
| UAW07-20 | 4/5/2004 | <2 | <2 | <2 | <2 | <2 | <2 | NA | <20 | <20 | <20 | 3.4 | <2 | <2 | <2 | <2 | 69 | <2 | <2 | <1 | <2 | <2 | <2 | 2.7 | <2 | <10 | <2 | <2 | <2 | <2 | <1 | <2 | <2 | 5 |
| UAW07-20 | 11/4/2004 | <6.7 | <6.7 | <6.7 | <6.7 | <6.7 | <6.7 | NA | <67 | <67 | 14 J B | 6.3 J B | <6.7 | <6.7 | 7.1 | <6.7 | 190 | <6.7 | <6.7 | <3.3 | <6.7 | <6.7 | <6.7 | <6.7 | 8.9 | <33 | <6.7 | 4.2 J B | <6.7 | <6.7 | <3.3 | <6.7 | <6.7 | 13 |
| UAW08-20 | 5/6/2001 | <33 | NA | <33 | <33 | <33 | <33 | <33 | <330 | <170 | 150 J | 41 | <33 | <33 | 20 J | <33 | 37 | <67 | <33 | <17 | NA | <33 | <67 | 32 J | NA | NA | NA | <33 | <33 | 1100 | <17 | <33 | <67 | 140 |
| UAW08-20 | 11/13/2001 | <100 | NA | <100 | <100 | <100 | <100 | <100 | 130 J B | <500 | 580 J | 110 | <100 | <100 | 64 J | <100 | 61 J | <200 | <100 | <50 | NA | <100 | <200 | 57 J | NA | NA | NA | 42 J B | <100 | 1400 | <50 | <100 | <200 | 190 |
| UAW08-20 | 10/20/2002 | NA | NA | NA | <33 | NA | <33 | NA | NA | NA | 250 J B | 110 | <33 | NA | 46 | NA | 48 | <33 | <33 | NA | NA | NA | <33 | 40 | NA | NA | <33 | 15 J B | NA | 1100 | NA | NA | NA | 180 |
| UAW08-20 | 11/10/2003 | <40 | <40 | <40 | <40 | <40 | <40 | NA | <400 | <400 | <400 | 120 | <40 | <40 | <40 | <40 | 54 | <40 | <40 | <20 | <40 | <40 | <40 | 44 | <40 | <200 | <40 | <40 | <40 | 1000 | <20 | <40 | <40 | 190 |
| UAW08-20 | 3/29/2004 | <50 | <50 | <50 | <50 | <50 | <50 | NA | <500 | <500 | <500 | 92 | <50 | <50 | 51 | <50 | 61 | <50 | <50 | <25 | <50 | <50 | <50 | 54 | <50 | <250 | <50 | <50 | <50 | 1200 | <25 | <50 | <50 | 230 |
| UAW08-20 | 11/4/2004 | <33 | <33 | <33 | <33 | <33 | <33 | NA | 29 J | 66 J | 280 J B | 150 B | <33 | <33 | 59 | <33 | 62 | <33 | <33 | <17 | <33 | <33 | <33 | 59 | <33 | <170 | 17 J | 25 J B | <33 | 1100 | <17 | <33 | <33 | 270 |

**Summary of VOC Detections in Groundwater, Seep, and Surface Water Samples**

Morton International, Inc.

Reading, Ohio

**Units: µg/l**

| SAMPLE LOCATION | SAMPLE DATE | 1,1,1-Trichloroethane | 1,1,2-Trichloro-1,2,2-trifluoroethane | 1,1,2-Trichloroethane | 1,1-Dichloroethane | 1,1-Dichloroethene | 1,2-Dichloroethane | 1,2-Dichloroethene (total) | 2-Butanone | 4-Methyl-2-pentanone | Acetone | Benzene | Bromodichloromethane | Bromoform | Carbon disulfide | Carbon tetrachloride | Chlorobenzene | Chloroethane | Chloroform | cis-1,2-Dichloroethene | Cyclohexane | Dibromochloromethane | Dichlorodifluoromethane | Ethylbenzene | Isopropylbenzene | Methyl tert-butyl ether | Methylcyclohexane | Methylene chloride | Tetrachloroethene | Toluene | trans-1,2-Dichloroethene | Trichloroethene | Vinyl chloride | Xylenes (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW11-40 | 5/8/2001 | 15 | <5 | <5 | 10 | <5 | 160 | 12 | <50 | <50 | <50 | <5 | <5 | <5 | <5 | <5 | 3 J | <10 | 2.1 J | 12 | <5 | <5 | <5 | <5 | <5 | <25 | <5 | <5 | 14 | <5 | <2.5 | 2.5 J | <10 | <5 |
| UAW11-40 | 11/12/2001 | 13 | <5 | <5 | 9.5 | <5 | 130 | 12 | <50 | <50 | 6.6 J B | <5 | <5 | <5 | <5 | <5 | 3.2 J | <10 | 3.5 J | 12 | <5 | <5 | <5 | <5 | <5 | <25 | <5 | <5 | 16 | <5 | <2.5 | 2.6 J | <10 | <5 |
| UAW11-40 | 10/18/2002 | NA | NA | NA | 7 | NA | 26 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | NA | 3.6 | <1 | 1.7 | NA | NA | NA | <1 | <1 | NA | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| UAW11-40 | 11/16/2003 | 8.1 | <1 | <1 | 4.8 | <1 | 11 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | 2.4 | <1 | <1 | 5.8 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | 21 | <1 | <0.5 | 2.1 | <1 | <1 |
| UAW11-40 | 4/6/2004 | 6.9 | <1 | <1 | 4.5 | <1 | 7.3 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | 2.4 | <1 | <1 | 5.2 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | 20 | <1 | <0.5 | 2.2 | <1 | <1 |
| UAW11-40 (Dup) | 4/6/2004 | 6.6 | <1 | <1 | 4.5 | <1 | 7.2 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | 2.3 | <1 | <1 | 5.1 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | 21 | <1 | <0.5 | 2.1 | <1 | <1 |
| UAW11-40 | 11/7/2004 | 8.4 | 1.4 | 0.51 J | 5.2 | <1 | 7.1 | NA | <10 | <10 | 0.79 J B | <1 | <1 | <1 | <1 | <1 | 2.3 | <1 | 0.52 J | 6 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | 26 | <1 | 0.31 J | 2.2 | <1 | <1 |
| UAW12-20 | 5/6/2001 | <56 | NA | <56 | <56 | <56 | <56 | <56 | <560 | <280 | <560 | <56 | <56 | <56 | <56 | <56 | 920 | <110 | <56 | <28 | NA | <56 | <110 | <56 | NA | NA | NA | <56 | <56 | <56 | <28 | <56 | <110 | <56 |
| UAW12-20 | 11/15/2001 | <50 | NA | <50 | <50 | <50 | <50 | <50 | <500 | <250 | <500 | <50 | <50 | <50 | <50 | <50 | 1400 | <100 | <50 | <25 | NA | <50 | <100 | <50 | NA | NA | NA | 79 B | <50 | <50 | <25 | <50 | <100 | <50 |
| UAW12-20 | 10/20/2002 | NA | NA | NA | <50 | NA | <50 | NA | NA | NA | 97 J | <50 | <50 | NA | <50 | NA | 1300 | <50 | <50 | NA | NA | NA | <50 | <50 | NA | NA | <50 | 16 J B | NA | <50 | NA | NA | NA | <50 |
| UAW12-20 | 11/12/2003 | <67 | <67 | <67 | <67 | <67 | <67 | NA | <670 | <670 | <670 | <67 | <67 | <67 | <67 | <67 | 1100 | <67 | <67 | <33 | <67 | <67 | <67 | <67 | <67 | <330 | <67 | <67 | <67 | <67 | <33 | <67 | <67 | <67 |
| UAW12-20 | 3/28/2004 | <56 | <56 | <56 | <56 | <56 | <56 | NA | <560 | <560 | <560 | <56 | <56 | <56 | <56 | <56 | 1400 | <56 | <56 | <28 | <56 | <56 | <56 | <56 | <56 | <280 | <56 | <56 | <56 | <56 | <28 | <56 | <56 | <56 |
| UAW12-20 | 11/4/2004 | <71 | <71 | <71 | <71 | <71 | <71 | NA | <710 | <710 | 250 J B | <71 | <71 | <71 | 20 J | <71 | 2400 | <71 | <71 | <36 | <71 | <71 | <71 | <71 | <71 | <360 | <71 | 54 J B | <71 | <71 | <36 | <71 | <71 | <71 |
| UAW13-20 | 5/6/2001 | <10 | NA | <10 | 4.9 J | <10 | <10 | <10 | <100 | <50 | 180 | 21 | <10 | <10 | 170 | <10 | 20 | <20 | <10 | 1.7 J | NA | <10 | <20 | <10 | NA | NA | NA | <10 | <10 | 250 | <5 | <10 | <20 | 5.4 J |
| UAW13-20 | 11/15/2001 | <17 | NA | <17 | <17 | <17 | <17 | <17 | 38 J | 22 J | 450 B | 20 | <17 | <17 | 140 | <17 | 31 | <33 | <17 | <8.3 | NA | <17 | <33 | 4.1 J | NA | NA | NA | 25 B | <17 | 350 | <8.3 | <17 | <33 | 9.1 J |
| UAW13-20 | 10/23/2002 | NA | NA | NA | <40 | NA | <40 | NA | NA | NA | 300 J | 18 J | <40 | NA | 410 | NA | 38 J | <40 | <40 | NA | NA | NA | <40 | <40 | NA | NA | <40 | 22 J | NA | 1400 | NA | NA | NA | <40 |
| UAW13-20 | 11/12/2003 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <100 | <100 | 190 | 19 | <10 | <10 | 120 | <10 | 29 | <10 | <10 | <5 | <10 | <10 | <10 | <10 | <10 | <50 | <10 | <10 | <10 | 210 | <5 | <10 | <10 | <10 |
| UAW13-20 | 3/28/2004 | <20 | <20 | <20 | <20 | <20 | <20 | NA | <200 | <200 | <200 | <20 | <20 | <20 | 150 | <20 | 28 | <20 | <20 | <10 | <20 | <20 | <20 | <20 | <20 | <100 | <20 | <20 | <20 | 97 | <10 | <20 | <20 | <20 |
| UAW13-20 | 11/5/2004 | <20 | <20 | <20 | <20 | <20 | <20 | NA | 21 J | 36 J | 200 B | 26 B | <20 | <20 | 180 | <20 | 32 | <20 | <20 | <10 | <20 | <20 | <20 | <20 | <20 | <100 | <20 | <20 | <20 | 52 | <10 | <20 | <20 | 24 |
| UAW14-10 | 5/5/2001 | <1 | <1 | <1 | <1 | <1 | 0.67 J | <1 | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <2 | 0.37 J | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW14-10 | 11/9/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | 0.31 J B | <2 | <1 |
| UAW14-10 | 10/16/2002 | NA | NA | NA | <1 | NA | <1 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | NA | <1 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| UAW14-10 | 11/16/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW14-10 | 4/5/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW14-10 | 11/6/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW15-20 | 5/6/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <2 | 3.1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW15-20 | 11/11/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <2 | 14 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | 5.8 | <0.5 | <1 | <2 | <1 |
| UAW15-20 | 10/18/2002 | NA | NA | NA | <1 | NA | <1 | NA | NA | NA | <10 | <1 | <1 | NA | 0.24 J | NA | <1 | <1 | 5.6 | NA | NA | NA | <1 | <1 | NA | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| UAW15-20 | 11/17/2003 | <8 | <8 | <8 | <8 | <8 | <8 | NA | <80 | <80 | <80 | <8 | <8 | <8 | <8 | <8 | <8 | <8 | 190 | <4 | <8 | <8 | <8 | <8 | <8 | <40 | <8 | <8 | <8 | <8 | <4 | <8 | <8 | <8 |
| UAW15-20 | 4/7/2004 | <5 | <5 | <5 | <5 | <5 | <5 | NA | <50 | <50 | <50 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | 120 | <2.5 | <5 | <5 | <5 | <5 | <5 | <25 | <5 | <5 | <5 | <5 | <2.5 | <5 | <5 | <5 |
| UAW15-20 | 11/7/2004 | <6.7 | <6.7 | <6.7 | <6.7 | <6.7 | <6.7 | NA | <67 | <67 | 5.5 J | <6.7 | <6.7 | <6.7 | <6.7 | 2.2 J | <6.7 | <6.7 | 140 | <3.3 | <6.7 | <6.7 | <6.7 | <6.7 | <6.7 | <33 | <6.7 | <6.7 | <6.7 | <6.7 | <3.3 | <6.7 | <6.7 | <6.7 |
| UAW15-50 | 5/6/2001 | <120 | <120 | <120 | <120 | <120 | <120 | <120 | <1200 | <1200 | 7300 | <120 | <120 | <120 | <120 | <120 | <120 | <250 | <120 | <62 | <120 | <120 | <120 | <120 | <120 | <620 | <120 | <120 | <120 | 230 | <62 | <120 | <250 | <120 |
| UAW15-50 | 11/11/2001 | <170 | <170 | <170 | <170 | <170 | <170 | <170 | <1700 | <1700 | 10000 | <170 | <170 | <170 | <170 | <170 | 25 J | <330 | <170 | <83 | <170 | <170 | <170 | <170 | <170 | <830 | <170 | 110 J B | <170 | 200 | <83 | <170 | <330 | <170 |
| UAW15-50 | 10/18/2002 | NA | NA | NA | <10 | NA | <10 | NA | NA | NA | 280 | <10 | <10 | NA | <10 | NA | 23 | <10 | <10 | NA | NA | NA | <10 | <10 | NA | NA | <10 | 6.3 J B | NA | 140 | NA | NA | NA | <10 |
| UAW15-50 | 11/17/2003 | <12 | <12 | <12 | <12 | <12 | <12 | NA | <120 | <120 | <120 | <12 | <12 | <12 | <12 | <12 | 21 | <12 | <12 | <6.2 | <12 | <12 | <12 | <12 | <12 | <62 | <12 | <12 | <12 | 87 | <6.2 | <12 | <12 | <12 |
| UAW15-50 | 4/7/2004 | <20 | <20 | <20 | <20 | <20 | <20 | NA | <200 | <200 | <200 | <20 | <20 | <20 | <20 | <20 | 34 | <20 | <20 | <10 | <20 | <20 | <20 | <20 | <20 | <100 | <20 | <20 | <20 | 200 | <10 | <20 | <20 | <20 |
| UAW15-50 | 11/7/2004 | <10 | <10 | <10 | <10 | <10 | <10 | NA | 4.6 J | 6.2 J | 20 J B | <10 | <10 | <10 | <10 | <10 | 19 | <10 | <10 | <5 | <10 | <10 | <10 | <10 | <10 | <50 | <10 | <10 | <10 | 64 | <5 | <10 | <10 | <10 |
| UAW15-50 (Dup) | 11/7/2004 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <100 | 18 J | <100 | 2.8 J | <10 | <10 | <10 | <10 | 23 | <10 | <10 | <5 | <10 | <10 | <10 | <10 | <10 | <50 | <10 | 12 B | <10 | 79 | <5 | <10 | <10 | <10 |

**Summary of VOC Detections in Groundwater,**
**Seep, and Surface Water Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| SAMPLE LOCATION | SAMPLE DATE | 1,1,1-Trichloroethane | 1,1,2-Trichloro-1,2,2-trifluoroethane | 1,1,2-Trichloroethane | 1,1-Dichloroethane | 1,1-Dichloroethene | 1,2-Dichloroethane | 1,2-Dichloroethene (total) | 2-Butanone | 4-Methyl-2-pentanone | Acetone | Benzene | Bromodichloromethane | Bromoform | Carbon disulfide | Carbon tetrachloride | Chlorobenzene | Chloroethane | Chloroform | cis-1,2-Dichloroethene | Cyclohexane | Dibromochloromethane | Dichlorodifluoromethane | Ethylbenzene | Isopropylbenzene | Methyl tert-butyl ether | Methylcyclohexane | Methylene chloride | Tetrachloroethene | Toluene | trans-1,2-Dichloroethene | Trichloroethene | Vinyl chloride | Xylenes (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW16-10 | 10/12/2001 | <120 | <120 | <120 | <120 | <120 | <120 | <120 | <1200 | <1200 | 8000 | <120 | <120 | <120 | <120 | <120 | 23 J | <250 | <120 | <62 | <120 | <120 | <120 | <120 | <120 | <620 | <120 | <120 | <120 | <120 | <62 | <120 | <250 | <120 |
| UAW16-10 (Dup) | 10/12/2001 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <1000 | <1000 | 6500 | <100 | <100 | <100 | <100 | <100 | 24 J | <200 | <100 | <50 | <100 | <100 | <100 | <100 | <100 | <500 | <100 | <100 | <100 | <100 | <50 | <100 | <200 | <100 |
| UAW16-10 | 11/13/2001 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <1000 | <1000 | 6100 | <100 | <100 | <100 | <100 | <100 | 23 J | <200 | <100 | <50 | <100 | <100 | <100 | <100 | <100 | <500 | <100 | 57 J B | <100 | <100 | <50 | <100 | <200 | <100 |
| UAW16-10 | 10/18/2002 | NA | NA | NA | <1 | NA | <1 | NA | NA | NA | 3.7 J | 0.58 J | <1 | NA | <1 | NA | 21 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | NA | 1.8 | <1 | NA | 1.1 | NA | NA | NA | <1 |
| UAW16-10 | 11/16/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | 17 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW16-10 (Dup) | 11/17/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | 17 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW16-10 | 4/7/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | 11 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW16-10 | 11/7/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | 2.9 J B | 0.28 J | <1 | <1 | 0.34 J | <1 | 10 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | 0.75 J | <1 | <1 | 0.3 J | <0.5 | <1 | <1 | 1.1 |
| UAW17-40 | 5/5/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW17-40 | 11/9/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | 0.24 J B | <2 | <1 |
| UAW17-40 | 10/16/2002 | NA | NA | NA | <1 | <1 | <1 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | NA | <1 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | NA | <1 | <1 | NA | <1 | NA | <1 | NA | <1 |
| UAW17-40 | 11/16/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW17-40 | 3/31/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW17-40 | 11/6/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW18-20 | 10/12/2001 | <1 | <1 | <1 | 0.29 J | <1 | <1 | <1 | 0.42 J | <10 | 1.4 J | <1 | <1 | <1 | 5.7 | <1 | 2.2 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | 0.22 J | <0.5 | <1 | <2 | <1 |
| UAW18-20 | 11/13/2001 | <2 | <2 | <2 | 0.49 J | <2 | <2 | <2 | 1.4 J B | <20 | 4.5 J | <2 | <2 | <2 | 1.9 J | <2 | 1.7 J | <4 | <2 | <1 | <2 | <2 | <2 | <2 | <2 | <10 | <2 | <2 | <2 | <2 | <1 | <2 | <4 | <2 |
| UAW18-20 | 10/18/2002 | NA | NA | NA | 0.54 J | NA | <1 | NA | NA | NA | <10 | <1 | <1 | NA | 0.7 J | NA | 2.3 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| UAW18-20 | 11/16/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | 2.1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW18-20 | 4/7/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | 1.7 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW18-20 | 11/7/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | 0.88 J | 2 J | 1.6 J B | <1 | <1 | <1 | 0.78 J | <1 | 1.5 | <1 | 1.2 | <0.5 | 0.87 J | <1 | <1 | <1 | 0.58 J | <5 | 0.63 J | <1 | <1 | 0.43 J | <0.5 | <1 | <1 | 0.52 J |
| UAW19-80 | 5/6/2001 | <1.7 | <1.7 | <1.7 | 5.7 | <1.7 | 45 | 1.3 J | <17 | <17 | <17 | <1.7 | <1.7 | <1.7 | <1.7 | <1.7 | <1.7 | <3.3 | 19 | 1.3 | <1.7 | <1.7 | <1.7 | <1.7 | <1.7 | <8.4 | <1.7 | 0.56 J | <1.7 | <1.7 | <0.84 | <1.7 | <3.3 | <1.7 |
| UAW19-80 | 11/12/2001 | 0.25 J | <1 | <1 | 4.8 | 0.29 J | 33 | 1.3 | <10 | <10 | 1.3 J B | <1 | <1 | <1 | <1 | <1 | <1 | <2 | 12 | 1.3 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | 0.36 J | <0.5 | <1 | <2 | <1 |
| UAW19-80 (Dup) | 11/12/2001 | 13 | <5 | <5 | 9.8 | <5 | 140 | 13 | <50 | <50 | 6.3 J B | <5 | <5 | <5 | <5 | <5 | 3.3 J | <10 | 3.7 J | 13 | <5 | <5 | <5 | <5 | <5 | <25 | <5 | <5 | 15 | <5 | <2.5 | 2.7 J | <10 | <5 |
| UAW19-80 | 10/17/2002 | NA | NA | NA | 8.4 | NA | 26 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | NA | <1 | <1 | 6 | NA | NA | NA | <1 | <1 | NA | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| UAW19-80 (Dup) | 10/17/2002 | NA | NA | NA | 8.1 | NA | 25 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | NA | <1 | <1 | 5.7 | NA | NA | NA | <1 | <1 | NA | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| UAW19-80 | 11/13/2003 | 1.9 | <1 | <1 | 11 | <1 | 26 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 1.2 | 5.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW19-80 | 3/30/2004 | 2.5 | <1 | <1 | 14 | 1.3 | 24 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 1.1 | 6.8 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW19-80 | 11/5/2004 | 2.8 | <1 | <1 | 14 | 1.8 | 25 | NA | <10 | <10 | 2.7 J B | 0.29 J B | <1 | <1 | <1 | <1 | <1 | <1 | 1.1 | 7.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW20-60 | 5/7/2001 | 83 | 3.7 J | 3.4 J | 55 | 11 | 300 | 110 | <100 | <100 | <100 | <10 | <10 | <10 | <10 | <10 | <10 | <20 | 40 | 100 | <10 | <10 | <10 | <10 | <10 | <50 | <10 | <10 | 17 | <10 | 2 J | 6.4 J | <20 | <10 |
| UAW20-60 | 11/14/2001 | 94 | 4.5 J | 4.2 J | 52 | 10 J | 310 | 95 | <110 | <110 | 7.8 J | <11 | <11 | <11 | <11 | <11 | <11 | <22 | 39 | 92 | <11 | <11 | <11 | <11 | <11 | <56 | <11 | 8 J B | 20 | <11 | 2.5 J | 7 J | <22 | <11 |
| UAW20-60 (Dup) | 11/14/2001 | 98 | 4.8 J | <11 | 58 | 11 | 320 | 100 | <110 | <110 | <110 | <11 | <11 | <11 | <11 | <11 | <11 | <22 | 41 | 99 | <11 | <11 | <11 | <11 | <11 | <56 | <11 | 7.8 J B | 20 | <11 | 1.8 J | 7.9 J | <22 | <11 |
| UAW20-60 | 10/19/2002 | NA | NA | NA | 38 | NA | 410 | NA | NA | NA | 21 J | <12 | <12 | NA | <12 | NA | <12 | 4.4 J | 35 | NA | NA | NA | <12 | <12 | NA | NA | <12 | 5.3 J B | NA | <12 | NA | NA | NA | <12 |
| UAW20-60 (Dup) | 10/19/2002 | NA | NA | NA | 35 | NA | 380 | NA | NA | NA | 28 J | <15 | <15 | NA | <15 | NA | <15 | <15 | 31 | NA | NA | NA | <15 | <15 | NA | NA | <15 | 6.7 J B | NA | <15 | NA | NA | NA | <15 |
| UAW20-60 | 11/13/2003 | 69 | <22 | <22 | 32 | <22 | 560 | NA | <220 | <220 | <220 | <22 | <22 | <22 | <22 | <22 | <22 | <22 | 65 | 73 | <22 | <22 | <22 | <22 | <22 | <110 | <22 | <22 | 32 | <22 | <11 | <22 | <22 | <22 |
| UAW20-60 | 3/30/2004 | 39 | <33 | <33 | <33 | <33 | 730 | NA | <330 | <330 | <330 | <33 | <33 | <33 | <33 | <33 | <33 | <33 | 53 | 57 | <33 | <33 | <33 | <33 | <33 | <170 | <33 | <33 | <33 | <33 | <17 | <33 | <33 | <33 |
| UAW20-60 | 11/5/2004 | 60 | <40 | <40 | 42 | 19 J | 1200 | NA | <400 | <400 | 130 J B | 9.3 J B | <40 | <40 | <40 | <40 | <40 | <40 | 71 | 80 | <40 | <40 | <40 | <40 | <40 | <200 | <40 | 36 J B | 41 | <40 | <20 | <40 | <40 | <40 |

**Summary of VOC Detections in Groundwater, Seep, and Surface Water Samples**

Morton International, Inc.

Reading, Ohio

**Units: µg/l**

| SAMPLE LOCATION | SAMPLE DATE | 1,1,1-Trichloroethane | 1,1,2-Trichloro-1,2,2-trifluoroethane | 1,1,2-Trichloroethane | 1,1-Dichloroethane | 1,1-Dichloroethene | 1,2-Dichloroethane | 1,2-Dichloroethene (total) | 2-Butanone | 4-Methyl-2-pentanone | Acetone | Benzene | Bromodichloromethane | Bromoform | Carbon disulfide | Carbon tetrachloride | Chlorobenzene | Chloroethane | Chloroform | cis-1,2-Dichloroethene | Cyclohexane | Dibromochloromethane | Dichlorodifluoromethane | Ethylbenzene | Isopropylbenzene | Methyl tert-butyl ether | Methylcyclohexane | Methylene chloride | Tetrachloroethene | Toluene | trans-1,2-Dichloroethene | Trichloroethene | Vinyl chloride | Xylenes (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW21-30 | 5/5/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW21-30 | 11/11/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | <10 | 0.8 J B | <1 | <1 | <1 | <1 | <1 | <1 | <2 | 0.23 J | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW21-30 | 10/18/2002 | NA | NA | NA | <1 | NA | <1 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | NA | <1 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| UAW21-30 | 11/11/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW21-30 | 3/27/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW21-30 | 11/3/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 0.33 J | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | 0.45 J | <1 | <0.5 | <1 | <1 | <1 |
| UAW21-80 | 5/5/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <2 | 0.43 J | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW21-80 | 11/11/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | <10 | 1.3 J B | <1 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW21-80 | 10/18/2002 | NA | NA | NA | <1 | NA | <1 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | NA | <1 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| UAW21-80 | 11/11/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW21-80 | 3/27/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW21-80 | 11/3/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW22-20 | 10/13/2001 | <2.5 | <2.5 | <2.5 | 53 | <2.5 | 2.5 | 6.9 | <25 | <25 | 6.2 J B | 1.3 J | <2.5 | <2.5 | <2.5 | <2.5 | 29 | <5 | <2.5 | 6.9 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <12 | <2.5 | 1.6 J B | <2.5 | 0.92 J | <1.2 | 0.39 J | 14 | <2.5 |
| UAW22-20 | 11/13/2001 | <6.9 | <6.9 | <6.9 | 66 | <6.9 | 2.3 J | 16 | 10 J B | <69 | 5.3 J | 2.2 J | <6.9 | <6.9 | <6.9 | <6.9 | 38 | <14 | <6.9 | 16 | <6.9 | <6.9 | <6.9 | <6.9 | <6.9 | <34 | <6.9 | 4.4 J B | <6.9 | 1.3 J | <3.4 | 2 J | 15 | <6.9 |
| UAW22-20 | 10/20/2002 | NA | NA | NA | <50 | NA | <50 | NA | NA | NA | 3700 B | <50 | <50 | NA | <50 | NA | 95 | <50 | <50 | NA | NA | NA | <50 | <50 | NA | NA | <50 | 32 J | NA | <50 | NA | NA | NA | <50 |
| UAW22-20 | 11/10/2003 | <2 | <2 | <2 | 12 | <2 | 2.7 | NA | <20 | <20 | <20 | <2 | <2 | <2 | <2 | <2 | 65 | <2 | <2 | 2.8 | <2 | <2 | <2 | <2 | <2 | <10 | <2 | <2 | <2 | <2 | <1 | <2 | 7.5 | <2 |
| UAW22-20 | 3/29/2004 | <1 | <1 | <1 | 8.1 | <1 | 2 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | 34 | <1 | <1 | 1.6 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | 3.3 | <1 |
| UAW22-20 | 11/4/2004 | <2.5 | <2.5 | <2.5 | 39 | <2.5 | 1.5 J | NA | <25 | <25 | 7.5 J B | 2.6 B | <2.5 | <2.5 | <2.5 | <2.5 | 53 | <2.5 | <2.5 | 17 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <12 | <2.5 | 1.8 J B | <2.5 | 0.59 J | <1.2 | 0.8 J | 4 | 2.4 J |
| UAW23-20 | 10/12/2001 | 51 | <20 | 6.3 J | 20 | <20 | 660 | 25 | <200 | <200 | 11 J | <20 | <20 | <20 | <20 | <20 | <20 | <40 | 67 | 25 | <20 | <20 | <20 | <20 | <20 | <100 | <20 | <20 | 82 | <20 | <10 | 8.4 J | <40 | <20 |
| UAW23-20 | 11/14/2001 | 50 | <20 | <20 | 17 J | <20 | 510 | 21 | <200 | <200 | <200 | <20 | <20 | <20 | <20 | <20 | <20 | <40 | 60 | 21 | <20 | <20 | <20 | <20 | <20 | <100 | <20 | 15 J B | 61 | <20 | <10 | 8.8 J | <40 | <20 |
| UAW23-20 | 10/19/2002 | NA | NA | NA | 11 | <1.2 | 34 | NA | NA | NA | <12 | <1.2 | <1.2 | NA | <1.2 | NA | <1.2 | <1.2 | 31 | NA | NA | NA | <1.2 | <1.2 | NA | NA | <1.2 | 0.45 J B | NA | <1.2 | NA | 7.2 | NA | <1.2 |
| UAW23-20 | 11/13/2003 | 22 | 2.2 | 2.9 | 10 | <1.7 | 20 | NA | <17 | <17 | <17 | <1.7 | <1.7 | <1.7 | <1.7 | <1.7 | <1.7 | <1.7 | 7.7 | 11 | <1.7 | <1.7 | <1.7 | <1.7 | <1.7 | <8.4 | <1.7 | <1.7 | 40 | <1.7 | <0.84 | 5 | <1.7 | <1.7 |
| UAW23-20 | 3/28/2004 | 20 | 2.4 | 2.6 | 10 | <1.4 | 21 | NA | <14 | <14 | <14 | <1.4 | <1.4 | <1.4 | <1.4 | <1.4 | <1.4 | <1.4 | 8 | 10 | <1.4 | <1.4 | <1.4 | <1.4 | <1.4 | <7.2 | <1.4 | <1.4 | 39 | <1.4 | 0.84 | 4.5 | <1.4 | <1.4 |
| UAW23-20 | 11/5/2004 | 16 | <1 | 2.6 | 9.1 | 2.8 | 5.6 | NA | <10 | <10 | <10 | 0.25 J B | <1 | <1 | <1 | <1 | <1 | <1 | 5.4 | 9.3 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | 47 | <1 | 0.6 | 5.1 | <1 | <1 |
| UAW24-70 | 10/13/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW24-70 | 11/15/2001 | <1 | <1 | <1 | <1 | <1 | 0.65 J | <1 | <10 | <10 | 2.9 J B | <1 | <1 | <1 | 1.5 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW24-70 | 10/17/2002 | NA | NA | NA | <1 | NA | <1 | NA | NA | NA | <10 | <1 | <1 | NA | 0.55 J | NA | <1 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | NA | <1 | <1 | NA | 0.48 J | NA | NA | NA | <1 |
| UAW24-70 | 11/16/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW24-70 | 4/5/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW24-70 | 11/6/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | 0.5 J | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW25-20 | 10/13/2001 | <1 | <1 | <1 | 0.28 J | <1 | <1 | <1 | 0.48 J | <10 | 1.5 J B | 0.6 J | <1 | <1 | <1 | <1 | 9 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | 0.61 J | <0.5 | <1 | <2 | <1 |
| UAW25-20 | 11/13/2001 | <1 | <1 | <1 | 0.17 J | <1 | <1 | <1 | <10 | <10 | 2.3 J | 0.33 J | <1 | <1 | <1 | <1 | 11 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | 0.77 J | <0.5 | <1 | <2 | <1 |
| UAW25-20 | 10/18/2002 | NA | NA | NA | 0.5 J | NA | <1 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | NA | 18 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| UAW25-20 | 11/12/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | 11 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW25-20 | 3/27/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | 8 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW25-20 | 11/3/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | 0.79 J | <1 | <1 | <1 | <1 | <1 | 7.9 | <1 | <1 | <0.5 | 1.2 | <1 | <1 | <1 | 0.57 J | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | 0.48 J |

**Summary of VOC Detections in Groundwater, Seep, and Surface Water Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| SAMPLE LOCATION | SAMPLE DATE | 1,1,1-Trichloroethane | 1,1,2-Trichloro-1,2,2-trifluoroethane | 1,1,2-Trichloroethane | 1,1-Dichloroethane | 1,1-Dichloroethene | 1,2-Dichloroethane | 1,2-Dichloroethene (total) | 2-Butanone | 4-Methyl-2-pentanone | Acetone | Benzene | Bromodichloromethane | Bromoform | Carbon disulfide | Carbon tetrachloride | Chlorobenzene | Chloroethane | Chloroform | cis-1,2-Dichloroethene | Cyclohexane | Dibromochloromethane | Dichlorodifluoromethane | Ethylbenzene | Isopropylbenzene | Methyl tert-butyl ether | Methylcyclohexane | Methylene chloride | Tetrachloroethene | Toluene | trans-1,2-Dichloroethene | Trichloroethene | Vinyl chloride | Xylenes (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW26-70 | 4/6/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW26-70 | 11/6/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW27-50 | 3/31/2004 | <1 | <1 | <1 | 10 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 5.2 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW27-50 | 11/5/2004 | 0.98 J | <1 | <1 | 9.9 | 0.66 J | 0.52 J | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 0.42 J | 5.4 | <1 | <1 | <1 | <1 | <1 | <5 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| LAW05-150 | 3/16/2002 | <20 | NA | <20 | 25 | <20 | 450 | 30 | <200 | <100 | <200 | <20 | <20 | <20 | <20 | <20 | <20 | <40 | <20 | 26 | NA | <20 | <40 | <20 | NA | NA | NA | <20 | <20 | <20 | 4 J | <20 | <40 | <20 |
| LAW05-150 (Dup) | 3/16/2002 | <20 | NA | <20 | 24 | <20 | 450 | 30 | <200 | <100 | <200 | <20 | <20 | <20 | <20 | <20 | <20 | <40 | <20 | 26 | NA | <20 | <40 | <20 | NA | NA | NA | <20 | <20 | <20 | 4.6 J | <20 | <40 | <20 |
| LAW05-60 | 3/16/2002 | <2.9 | NA | <2.9 | 46 | 9.8 | <2.9 | 68 | <29 | <14 | 5.5 J | <2.9 | <2.9 | <2.9 | <2.9 | <2.9 | <2.9 | <5.7 | 1 J | 64 | NA | <2.9 | <5.7 | <2.9 | NA | NA | NA | <2.9 | <2.9 | <2.9 | 3.5 | <2.9 | 0.78 J | <2.9 |
| LAW12-60 | 10/13/2001 | <1 | NA | <1 | 2.3 | <1 | 4.6 | 6 | <10 | <5 | 0.55 J B | <1 | <1 | <1 | <1 | <1 | 0.14 J | <2 | <1 | 5.3 | NA | <1 | <2 | <1 | NA | NA | NA | <1 | <1 | <1 | 0.73 | <1 | 0.2 J | <1 |
| LAW12-60 | 11/16/2001 | <1 | NA | <1 | 2.5 | <1 | 4.8 | 5.8 | <10 | <5 | 1.5 J | <1 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | 5.1 | NA | <1 | <2 | <1 | NA | NA | NA | <1 | <1 | <1 | 0.68 | <1 | <2 | <1 |
| French Drain Sump @ 46 hr | 10/19/2002 | NA | NA | NA | <8 | NA | <8 | NA | NA | NA | 210 | <8 | <8 | NA | 2.1 J | NA | 120 | <8 | <8 | NA | NA | NA | <8 | <8 | NA | NA | <8 | 9.7 B | NA | 66 | NA | NA | NA | <8 |
| French Drain Sump @ 72 hr | 10/20/2002 | NA | NA | NA | <5 | NA | <5 | NA | NA | NA | 230 | 2.1 J | <5 | NA | 2.2 J | NA | 110 | <5 | <5 | NA | NA | NA | <5 | 2.4 J | NA | NA | <5 | 1.5 J B | NA | 60 | NA | NA | NA | 7.4 |
| **Surface Water** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WS-1A | 3/25/2004 | 0.26 J | NA | <1 | <1 | <1 | <1 | NA | <10 | <5 | 6.3 J | <1 | <1 | <1 | <1 | <1 | <1 | <2 | 0.23 J | <0.5 | NA | <1 | <2 | <1 | NA | NA | NA | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| WS-2A | 3/26/2004 | 0.19 J | NA | <1 | <1 | <1 | <1 | NA | <10 | <5 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | NA | <1 | <2 | <1 | NA | NA | NA | <1 | <1 | <1 | <0.5 | 0.33 J | <2 | <1 |
| WS-3A | 3/26/2004 | 0.24 J | NA | <1 | <1 | <1 | <1 | NA | <10 | <5 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | NA | 0.86 J | <2 | <1 | NA | NA | NA | <1 | <1 | <1 | <0.5 | 0.33 J | <2 | <1 |
| WS-4A | 3/26/2004 | 0.23 J | NA | <1 | <1 | <1 | <1 | NA | <10 | <5 | 1.2 J | <1 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | NA | 0.82 J | <2 | <1 | NA | NA | NA | <1 | <1 | <1 | <0.5 | 0.33 J | <2 | <1 |
| WS-5A | 3/25/2004 | 0.39 J | NA | <1 | <1 | <1 | <1 | NA | <10 | <5 | 5.4 J | <1 | <1 | <1 | <1 | <1 | <1 | <2 | 0.24 J | 0.26 J | NA | <1 | <2 | <1 | NA | NA | NA | <1 | <1 | <1 | <0.5 | 0.24 J | <2 | <1 |
| WS-6A | 3/25/2004 | 0.4 J | NA | <1 | <1 | <1 | <1 | NA | <10 | <5 | 5.4 J | <1 | <1 | <1 | <1 | <1 | <1 | <2 | 0.26 J | <0.5 | NA | <1 | <2 | <1 | NA | NA | NA | <1 | <1 | <1 | <0.5 | 0.24 J | <2 | <1 |
| WS-6A (Dup) | 3/25/2004 | 0.4 J | NA | <1 | <1 | <1 | <1 | NA | <10 | <5 | 5.8 J | <1 | <1 | <1 | <1 | <1 | <1 | <2 | 0.23 J | <0.5 | NA | <1 | <2 | <1 | NA | NA | NA | <1 | <1 | <1 | <0.5 | 0.25 J | <2 | <1 |
| **Seeps** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SS-1 (Seep) | 10/11/2001 | NA | NA | NA | 1 | NA | <1 | NA | NA | NA | 2.1 J B | 1.1 | <1 | NA | 0.97 J | NA | 11 | <2 | <1 | NA | NA | NA | <1 | 0.39 J | NA | NA | 0.49 J | <1 | NA | 0.45 J | NA | NA | NA | 1.7 |
| SS-5 (Seep) | 10/11/2001 | NA | NA | NA | 0.55 J | NA | <1.8 | NA | NA | NA | 3.1 J B | 0.92 J | <1.8 | NA | 1.1 J | NA | 24 | <3.6 | <1.8 | NA | NA | NA | <1.8 | <1.8 | NA | NA | 0.3 J | <1.8 | NA | 0.55 J | NA | NA | NA | <1.8 |

Notes:
J = Estimated result; result is less than reporting limit.
B = Method blank contamination. The associated method blank contains the target analyte at a reportable level.
NA indicates chemical was not on the target analyte list for that sample.
<5 = Indicates constituent not detected at or above indicated detection limit.
This table only includes target analytes detected in one or more Facility Investigation samples.
See Appendix B for the complete target analyte lists.

**Summary of SVOC Detections in**

**Groundwater, Seep, and Surface Water Samples**

Morton International, Inc.

Reading, Ohio

**Units: µg/l**

| SAMPLE LOCATION | SAMPLE DATE | 1,1'-Biphenyl | 1,2,4-Trichlorobenzene | 1,2-Dichlorobenzene | 1,3-Dichlorobenzene | 1,4-Dichlorobenzene | 1,4-Dioxane | 2,4-Dichlorophenol | 2,4-Dimethylphenol | 2-Chlorophenol | 2-Methylphenol | 4-Methylphenol | Acenaphthene | Aniline | Benzaldehyde | bis(2-Ethylhexyl) phthalate | Butyl benzyl phthalate | Caprolactam | Carbazole | Dimethyl phthalate | Fluorene | Phenol |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Groundwater** | | | | | | | | | | | | | | | | | | | | | | |
| MW-EPA-1 | 5/8/2001 | <120 | <120 | 940 | <120 | 160 | NA | <120 | <120 | <120 | <120 | <120 | <120 | NA | <120 | <120 | <120 | <120 | <120 | <120 | <120 | <120 |
| MW-EPA-1 | 11/15/2001 | <200 | <200 | 1700 | 35 J | 260 | NA | <200 | <200 | <200 | <200 | <200 | <200 | NA | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 |
| MW-EPA-1 | 10/20/2002 | NA | NA | 1900 | NA | 300 J | NA | NA | NA | NA | <1000 | <1000 | NA | <1000 | <1000 | NA | NA | NA | NA | NA | NA | NA |
| MW-EPA-1 | 11/12/2003 | <500 | <500 | 1700 | <500 | <500 | NA | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 |
| MW-EPA1 | 3/28/2004 | <500 | <500 | 1300 | <500 | <500 | NA | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 |
| MW-EPA-1 | 11/4/2004 | <500 | <500 | 1100 | 35 J | 250 J | NA | <500 | <500 | <500 | <500 | <500 | <500 | 28 J | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 |
| MW-EPA-2 | 5/8/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| MW-EPA-2 | 11/14/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| MWEPA-2 | 10/20/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | <10 | NA | NA | NA | NA | NA | NA | NA |
| MW-EPA-2 | 11/11/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| MW-EPA-2 | 3/29/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 34 | <10 | <10 | <10 | <10 | <10 | <10 |
| MW-EPA-2 | 11/4/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 1.7 J | <10 | <10 | <10 | <10 |
| MW-EPA-3 | 5/6/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| MW-EPA-3 | 11/13/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| MWEPA-3 | 10/17/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | <10 | NA | NA | NA | NA | NA | NA | NA |
| MW-EPA-3 | 11/13/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| MW-EPA-3 | 3/30/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| MW-EPA-3 | 11/4/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| MW-EPA-4 | 5/8/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| MW-EPA-4 | 11/13/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| MWEPA-4 | 10/18/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | <10 | NA | NA | NA | NA | NA | NA | NA |
| MW-EPA-4 | 11/16/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| MW-EPA-4 | 4/6/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| MW-EPA-4 | 11/6/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |

**Summary of SVOC Detections in**
**Groundwater, Seep, and Surface Water Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| SAMPLE LOCATION | SAMPLE DATE | 1,1'-Biphenyl | 1,2,4-Trichlorobenzene | 1,2-Dichlorobenzene | 1,3-Dichlorobenzene | 1,4-Dichlorobenzene | 1,4-Dioxane | 2,4-Dichlorophenol | 2,4-Dimethylphenol | 2-Chlorophenol | 2-Methylphenol | 4-Methylphenol | Acenaphthene | Aniline | Benzaldehyde | bis(2-Ethylhexyl) phthalate | Butyl benzyl phthalate | Caprolactam | Carbazole | Dimethyl phthalate | Fluorene | Phenol |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Recovery Well | 7/29/2001 | NA | <10 | 2.4 J | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 4.6 J | NA | <10 | <10 | NA | NA | <10 | <10 | <10 |
| UAW01-30 | 5/4/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | 3.4 J | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW01-30 | 11/8/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW01-30 | 10/17/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | <10 | NA | NA | NA | NA | NA | NA | NA |
| UAW01-30 | 11/11/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW01-30 | 3/24/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW01-30 | 11/3/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW01-80 | 5/4/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW01-80 | 11/12/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW01-80 | 10/17/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | <10 | NA | NA | NA | NA | NA | NA | NA |
| UAW01-80 | 11/11/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW01-80 | 3/24/2004 | <67 | <67 | <67 | <67 | <67 | NA | <67 | <67 | <67 | <67 | <67 | <67 | <67 | <67 | <67 | <67 | <67 | <67 | <67 | <67 | <67 |
| UAW01-80 | 11/2/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 1.5 J B | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW02-20 | 5/7/2001 | <10 | <10 | 12 | <10 | 3.7 J | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW02-20 (Dup) | 5/7/2001 | <10 | <10 | 11 | <10 | 3.5 J | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW02-20 | 11/10/2001 | <10 | <10 | 12 | <10 | 4.1 J | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW02-20 | 10/17/2002 | NA | NA | 5.1 J | NA | 1.7 J | NA | NA | NA | NA | <10 | <10 | NA | <10 | <10 | NA | NA | NA | NA | NA | NA | NA |
| UAW02-20 | 11/12/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW02-20 | 3/26/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW02-20 | 11/3/2004 | <10 | <10 | 10 | <10 | 3.8 J | NA | <10 | <10 | <10 | <10 | <10 | <10 | 1.5 J | <10 | 3.2 J B | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW02-40 | 5/7/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW02-40 | 11/10/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW02-40 | 10/17/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | <10 | NA | NA | NA | NA | NA | NA | NA |
| UAW02-40 | 11/12/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW02-40 | 3/26/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW02-40 | 11/3/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW03-20 | 5/7/2001 | <10 | <10 | 19 | <10 | 3.3 J | NA | <10 | <10 | <10 | <10 | 7.7 J # | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW03-20 | 11/11/2001 | <20 | <20 | 140 | 3.5 J | 19 J | NA | <20 | <20 | <20 | <20 | <20 | <20 | NA | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 |
| UAW03-20 | 10/23/2002 | NA | NA | 190 | NA | 27 J | NA | NA | NA | NA | <67 | <67 | NA | 11 J | <67 | NA | NA | NA | NA | NA | NA | NA |
| UAW03-20 | 11/12/2003 | <100 | <100 | 190 | <100 | <100 | NA | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 |
| UAW03-20 | 3/28/2004 | <100 | <100 | 360 | <100 | <100 | NA | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 |
| UAW03-20 | 11/4/2004 | <67 | <67 | 220 | 5 J | 36 J | NA | <67 | <67 | <67 | <67 | <67 | <67 | 6.2 J | <67 | <67 | <67 | <67 | <67 | <67 | <67 | <67 |
| UAW03-20 (Dup) | 11/4/2004 | <40 | <40 | 160 | 4 J | 26 J | NA | <40 | <40 | <40 | <40 | <40 | <40 | 5.2 J | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 |

**Summary of SVOC Detections in**
**Groundwater, Seep, and Surface Water Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| SAMPLE LOCATION | SAMPLE DATE | 1,1'-Biphenyl | 1,2,4-Trichlorobenzene | 1,2-Dichlorobenzene | 1,3-Dichlorobenzene | 1,4-Dichlorobenzene | 1,4-Dioxane | 2,4-Dichlorophenol | 2,4-Dimethylphenol | 2-Chlorophenol | 2-Methylphenol | 4-Methylphenol | Acenaphthene | Aniline | Benzaldehyde | bis(2-Ethylhexyl) phthalate | Butyl benzyl phthalate | Caprolactam | Carbazole | Dimethyl phthalate | Fluorene | Phenol |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW04-20 | 5/7/2001 | <40 | <40 | <40 | <40 | <40 | NA | <40 | <40 | <40 | 140 | 150 # | <40 | NA | 53 | <40 | <40 | <40 | <40 | <40 | <40 | <40 |
| UAW04-20 | 11/11/2001 | <100 | <100 | <100 | <100 | <100 | NA | <100 | <100 | <100 | 47 J | 57 J # | <100 | NA | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 |
| UAW04-20 | 10/20/2002 | NA | NA | <120 | NA | <120 | NA | NA | NA | NA | <120 | <120 | NA | 410 | <120 | NA | NA | NA | NA | NA | NA | NA |
| UAW04-20 | 11/12/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | 12 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW04-20 | 3/28/2004 | <50 | <50 | <50 | <50 | <50 | NA | <50 | <50 | <50 | 79 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| UAW04-20 | 11/3/2004 | <50 | <50 | 3.8 J | <50 | <50 | NA | <50 | <50 | <50 | 15 J | 28 J # | <50 | 4.6 J | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| UAW05-20 | 5/6/2001 | <100 | <100 | 880 | <100 | 120 | NA | <100 | <100 | <100 | <100 | <100 | <100 | NA | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 |
| UAW05-20 | 10/10/2001 | <10 | 2.4 J | NA | 20 | NA | NA | 2.8 J | <10 | 6.3 J | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW05-20 | 11/12/2001 | <100 | <100 | 590 | 16 J | 82 J | NA | <100 | <100 | <100 | <100 | <100 | <100 | NA | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 |
| UAW05-20 | 10/20/2002 | NA | NA | 540 | NA | 82 J | NA | NA | NA | NA | <200 | <200 | NA | <200 | <200 | NA | NA | NA | NA | NA | NA | NA |
| UAW05-20 | 11/10/2003 | <50 | <50 | 200 | <50 | 63 | NA | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| UAW05-20 | 3/28/2004 | <25 | <25 | 91 | <25 | 44 | NA | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 |
| UAW05-20 (Dup) | 3/28/2004 | <40 | <40 | 95 | <40 | 47 | NA | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 |
| UAW05-20 | 11/4/2004 | <25 | <25 | 90 | 7.3 J | 52 | NA | <25 | <25 | <25 | <25 | <25 | <25 | 10 J | 1.7 J | <25 | <25 | <25 | <25 | <25 | <25 | <25 |
| UAW06-20 | 5/6/2001 | <10 | <10 | 14 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW06-20 | 10/10/2001 | <25 | <25 | 16 J | <25 | <25 | NA | <25 | <25 | <25 | <25 | <25 | <25 | NA | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 |
| UAW06-20 | 11/13/2001 | 7.3 J | <25 | 25 | <25 | 4 J | NA | <25 | <25 | <25 | <25 | 5.4 J # | 6.4 J | NA | <25 | <25 | <25 | <25 | <25 | <25 | 5.9 J | <25 |
| UAW06-20 | 10/20/2002 | NA | NA | 18 J | NA | <50 | NA | NA | NA | NA | <50 | <50 | NA | 37 J | <50 | NA | NA | NA | NA | NA | NA | NA |
| UAW06-20 | 11/12/2003 | <100 | <100 | <100 | <100 | <100 | NA | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 |
| UAW06-20 | 3/29/2004 | <20 | <20 | 41 | <20 | <20 | NA | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 |
| UAW06-20 | 11/4/2004 | <40 | <40 | 52 | <40 | 5.1 J | NA | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | 5.5 J | <40 | <40 | <40 | <40 |
| UAW07-20 | 5/8/2001 | NA | <100 | 37 J | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | 150 | NA | <100 | <100 | NA | <100 | <100 | <100 | <100 |
| UAW07-20 (Dup) | 5/8/2001 | NA | <25 | 34 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | 44 | NA | <25 | <25 | NA | NA | <25 | <25 | <25 |
| UAW07-20 | 11/15/2001 | NA | <40 | 57 | <40 | 8 J | <40 | <40 | <40 | <40 | <40 | <40 | <40 | 120 | NA | <40 | <40 | NA | NA | <40 | <40 | <40 |
| UAW07-20 | 10/20/2002 | NA | NA | 61 | NA | 7.2 J | NA | NA | NA | NA | <40 | <40 | NA | 9.1 J | <40 | NA | NA | NA | NA | NA | NA | NA |
| UAW07-20 | 11/12/2003 | 62 | <50 | 100 | <50 | <50 | NA | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| UAW07-20 (Dup) | 11/12/2003 | 56 | <40 | 83 | <40 | <40 | NA | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 |
| UAW07-20 | 4/5/2004 | <100 | <100 | <100 | <100 | <100 | NA | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 |
| UAW07-20 | 11/4/2004 | 60 J | <100 | 100 | <100 | 12 J | NA | <100 | <100 | <100 | <100 | <100 | <100 | 19 J | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 |
| UAW08-20 | 5/6/2001 | NA | <1700 | <1700 | <1700 | <1700 | <1700 | <1700 | <1700 | <1700 | <1700 | <1700 | <1700 | 12000 | NA | <1700 | <1700 | NA | NA | <1700 | <1700 | <1700 |
| UAW08-20 | 11/13/2001 | NA | <1300 | 530 J | <1300 | <1300 | <1300 | <1300 | <1300 | <1300 | <1300 | 330 J # | <1300 | 12000 | NA | <1300 | <1300 | NA | NA | <1300 | <1300 | <1300 |
| UAW08-20 | 10/20/2002 | NA | NA | 280 J | NA | <1000 | NA | NA | NA | NA | <1000 | 200 J | NA | 4400 | <1000 | NA | NA | NA | NA | NA | NA | NA |
| UAW08-20 | 11/10/2003 | <2500 | <2500 | <2500 | <2500 | <2500 | NA | <2500 | <2500 | <2500 | <2500 | <2500 | <2500 | 8300 | <2500 | <2500 | <2500 | <2500 | <2500 | <2500 | <2500 | <2500 |
| UAW08-20 | 3/29/2004 | <4000 | <4000 | <4000 | <4000 | <4000 | NA | <4000 | <4000 | <4000 | <4000 | <4000 | <4000 | 5900 | <4000 | <4000 | <4000 | <4000 | <4000 | <4000 | <4000 | <4000 |
| UAW08-20 | 11/4/2004 | <2000 | <2000 | 380 J | <2000 | <2000 | NA | <2000 | <2000 | <2000 | <2000 | <2000 | <2000 | 5900 | <2000 | <2000 | <2000 | <2000 | <2000 | <2000 | <2000 | 160 J |

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Morton International, Inc.
Reading, Ohio
**Units: µg/l**

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW09-20 | 5/5/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW09-20 | 11/9/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW09-20 | 10/16/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | <10 | NA | NA | NA | NA | NA | NA | NA |
| UAW09-20 | 11/11/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW09-20 | 4/6/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW09-20 | 11/6/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 0.4 J | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW09-60 | 5/5/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW09-60 | 11/9/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW09-60 | 10/16/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | <10 | NA | NA | NA | NA | NA | NA | NA |
| UAW09-60 | 11/11/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW09-60 | 4/6/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW09-60 | 11/6/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 3.5 J | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW10-50 | 10/12/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW10-50 | 11/13/2001 | <10 | <10 | 5 J | <10 | 2.3 J | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW10-50 | 10/19/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | <10 | NA | NA | NA | NA | NA | NA | NA |
| UAW10-50 | 11/10/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW10-50 | 3/30/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW10-50 | 11/5/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW10-80 | 10/12/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | NA | <10 | 1.5 J | <10 | 19 |
| UAW10-80 | 11/13/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | 2.4 J | 11 | <10 | 1.2 J | <10 | <10 |
| UAW10-80 | 10/19/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | <10 | NA | NA | NA | NA | NA | NA | NA |
| UAW10-80 | 11/13/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW10-80 | 3/30/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW10-80 | 11/5/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW11-10 | 5/8/2001 | <500 | <500 | <500 | <500 | <500 | NA | <500 | <500 | <500 | <500 | <500 | <500 | NA | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 |
| UAW11-10 | 11/10/2001 | <25 | <25 | 13 J | <25 | 3.7 J | NA | <25 | <25 | <25 | <25 | 9 J # | <25 | NA | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 |
| UAW11-10 | 10/18/2002 | NA | NA | 9.1 J | NA | 3 J | NA | NA | NA | NA | <10 | <10 | NA | 97 E | <10 | NA | NA | NA | NA | NA | NA | NA |
| UAW11-10 | 11/16/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | 44 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW11-10 | 4/6/2004 | <40 | <40 | <40 | <40 | <40 | NA | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 |
| UAW11-10 | 11/7/2004 | <10 | <10 | 8.9 J | <10 | 3.7 J | NA | <10 | <10 | <10 | <10 | <10 | <10 | 16 | <10 | 29 B | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW11-40 | 5/8/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW11-40 | 11/12/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW11-40 | 10/18/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | <10 | NA | NA | NA | NA | NA | NA | NA |
| UAW11-40 | 11/16/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW11-40 | 4/6/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW11-40 (Dup) | 4/6/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW11-40 | 11/7/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |

**Summary of SVOC Detections in**
**Groundwater, Seep, and Surface Water Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| SAMPLE LOCATION | SAMPLE DATE | 1,1'-Biphenyl | 1,2,4-Trichlorobenzene | 1,2-Dichlorobenzene | 1,3-Dichlorobenzene | 1,4-Dichlorobenzene | 1,4-Dioxane | 2,4-Dichlorophenol | 2,4-Dimethylphenol | 2-Chlorophenol | 2-Methylphenol | 4-Methylphenol | Acenaphthene | Aniline | Benzaldehyde | bis(2-Ethylhexyl) phthalate | Butyl benzyl phthalate | Caprolactam | Carbazole | Dimethyl phthalate | Fluorene | Phenol |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW12-20 | 5/6/2001 | NA | <250 | 1600 | <250 | 150 J | <250 | <250 | <250 | <250 | <250 | <250 | <250 | <250 | NA | <250 | <250 | NA | NA | <250 | <250 | <250 |
| UAW12-20 | 11/15/2001 | NA | <200 | 1900 | 41 J | 230 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | NA | <200 | <200 | NA | NA | <200 | <200 | <200 |
| UAW12-20 | 10/20/2002 | NA | NA | 1100 | NA | 130 J | NA | NA | NA | NA | <500 | <500 | NA | <500 | <500 | NA | NA | NA | NA | NA | NA | NA |
| UAW12-20 | 11/12/2003 | <500 | <500 | 1600 | <500 | <500 | NA | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 |
| UAW12-20 | 3/28/2004 | <500 | <500 | 1500 | <500 | <500 | NA | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 |
| UAW12-20 | 11/4/2004 | <400 | <400 | 1100 | 35 J | 180 J | NA | <400 | <400 | <400 | <400 | <400 | <400 | <400 | <400 | <400 | <400 | <400 | <400 | <400 | <400 | <400 |
| UAW13-20 | 5/6/2001 | NA | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | 400 | NA | <200 | <200 | NA | NA | <200 | <200 | <200 |
| UAW13-20 | 11/15/2001 | NA | <200 | 49 J | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | NA | <200 | <200 | NA | <200 | <200 | <200 | <200 |
| UAW13-20 | 10/23/2002 | NA | NA | 55 J | NA | <250 | NA | NA | NA | NA | <250 | <250 | NA | 830 | <250 | NA | NA | NA | NA | NA | NA | NA |
| UAW13-20 | 11/12/2003 | <100 | <100 | <100 | <100 | <100 | NA | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 |
| UAW13-20 | 3/28/2004 | <250 | <250 | <250 | <250 | <250 | NA | <250 | <250 | <250 | <250 | <250 | <250 | <250 | <250 | <250 | <250 | <250 | <250 | <250 | <250 | <250 |
| UAW13-20 | 11/5/2004 | <100 | <100 | 53 J | <100 | 11 J | NA | <100 | <100 | <100 | <100 | <100 | <100 | 160 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 |
| UAW14-10 | 5/5/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW14-10 | 11/9/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW14-10 | 10/16/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | <10 | NA | NA | NA | NA | NA | NA | NA |
| UAW14-10 | 11/16/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW14-10 | 4/5/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW14-10 | 11/6/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW15-20 | 5/6/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW15-20 | 11/11/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW15-20 | 10/18/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | <10 | NA | NA | NA | NA | NA | NA | NA |
| UAW15-20 | 11/17/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW15-20 | 4/7/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW15-20 | 11/7/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 1 J B | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW15-50 | 5/6/2001 | <200 | <200 | <200 | <200 | <200 | NA | <200 | <200 | <200 | <200 | <200 | <200 | NA | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 |
| UAW15-50 | 11/11/2001 | <500 | <500 | <500 | <500 | <500 | NA | <500 | <500 | <500 | <500 | 110 J # | <500 | NA | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 |
| UAW15-50 | 10/18/2002 | NA | NA | <500 | NA | <500 | NA | NA | NA | NA | <500 | <500 | NA | <500 | <500 | NA | NA | NA | NA | NA | NA | NA |
| UAW15-50 | 11/17/2003 | <200 | <200 | <200 | <200 | <200 | NA | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 |
| UAW15-50 | 4/7/2004 | <100 | <100 | <100 | <100 | <100 | NA | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 |
| UAW15-50 | 11/7/2004 | <100 | <100 | <100 | <100 | <100 | NA | <100 | <100 | <100 | <100 | 11 J # | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 |
| UAW15-50 (Dup) | 11/7/2004 | <100 | <100 | <100 | <100 | <100 | NA | <100 | <100 | <100 | <100 | 12 J # | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 |

**Summary of SVOC Detections in**
**Groundwater, Seep, and Surface Water Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| SAMPLE LOCATION | SAMPLE DATE | 1,1'-Biphenyl | 1,2,4-Trichlorobenzene | 1,2-Dichlorobenzene | 1,3-Dichlorobenzene | 1,4-Dichlorobenzene | 1,4-Dioxane | 2,4-Dichlorophenol | 2,4-Dimethylphenol | 2-Chlorophenol | 2-Methylphenol | 4-Methylphenol | Acenaphthene | Aniline | Benzaldehyde | bis(2-Ethylhexyl) phthalate | Butyl benzyl phthalate | Caprolactam | Carbazole | Dimethyl phthalate | Fluorene | Phenol |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW16-10 | 10/12/2001 | <10 | <10 | 6.9 J | <10 | 12 | NA | <10 | <10 | <10 | <10 | 2.4 J # | <10 | NA | <10 | <10 | <10 | 19 | <10 | <10 | <10 | <10 |
| UAW16-10 (Dup) | 10/12/2001 | <10 | <10 | 6.2 J | <10 | 11 | NA | <10 | <10 | <10 | <10 | 3.4 J # | <10 | NA | <10 | <10 | <10 | 17 | <10 | <10 | <10 | <10 |
| UAW16-10 | 11/13/2001 | <10 | <10 | 7.5 J | <10 | 10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW16-10 | 10/18/2002 | NA | NA | 7 J | NA | 8.3 J | NA | NA | NA | NA | <10 | <10 | NA | 9.5 J | <10 | NA | NA | NA | NA | NA | NA | NA |
| UAW16-10 | 11/16/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW16-10 (Dup) | 11/17/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW16-10 | 4/7/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW16-10 | 11/7/2004 | <40 | <40 | 7.5 J | <40 | 6.5 J | NA | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 |
| UAW17-40 | 5/5/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW17-40 | 11/9/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW17-40 | 10/16/2002 | NA | <10 | <10 | NA | <10 | NA | NA | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | NA | NA | NA | NA | NA | <10 |
| UAW17-40 | 11/16/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW17-40 | 3/31/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW17-40 | 11/6/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW18-20 | 10/12/2001 | <10 | <10 | 5.7 J | <10 | 2.8 J | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | 6 J | <10 | <10 | <10 | <10 |
| UAW18-20 | 11/13/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | 2.7 J | 14 | <10 | <10 | <10 | <10 |
| UAW18-20 | 10/18/2002 | NA | NA | 3 J | NA | 1.8 J | NA | NA | NA | NA | <10 | <10 | NA | 32 | <10 | NA | NA | NA | NA | NA | NA | NA |
| UAW18-20 | 11/16/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | 16 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW18-20 | 4/7/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW18-20 | 11/7/2004 | <10 | <10 | 2.3 J | <10 | 1.3 J | NA | <10 | <10 | <10 | <10 | <10 | <10 | 25 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW19-80 | 5/6/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW19-80 | 11/12/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW19-80 (Dup) | 11/12/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW19-80 | 10/17/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | <10 | NA | NA | NA | NA | NA | NA | NA |
| UAW19-80 (Dup) | 10/17/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | <10 | NA | NA | NA | NA | NA | NA | NA |
| UAW19-80 | 11/13/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW19-80 | 3/30/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 14 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW19-80 | 11/5/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW20-60 | 5/7/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW20-60 | 11/14/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW20-60 (Dup) | 11/14/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW20-60 | 10/19/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | <10 | NA | NA | NA | NA | NA | NA | NA |
| UAW20-60 (Dup) | 10/19/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | <10 | NA | NA | NA | NA | NA | NA | NA |
| UAW20-60 | 11/13/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW20-60 | 3/30/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW20-60 | 11/5/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 1.2 J | <10 | <10 | <10 | <10 | <10 | <10 |

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Reading, Ohio
**Units: µg/l**

| SAMPLE LOCATION | SAMPLE DATE | 1,1'-Biphenyl | 1,2,4-Trichlorobenzene | 1,2-Dichlorobenzene | 1,3-Dichlorobenzene | 1,4-Dichlorobenzene | 1,4-Dioxane | 2,4-Dichlorophenol | 2,4-Dimethylphenol | 2-Chlorophenol | 2-Methylphenol | 4-Methylphenol | Acenaphthene | Aniline | Benzaldehyde | bis(2-Ethylhexyl) phthalate | Butyl benzyl phthalate | Caprolactam | Carbazole | Dimethyl phthalate | Fluorene | Phenol |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW21-30 | 5/5/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW21-30 | 11/11/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW21-30 | 10/18/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | <10 | NA | NA | NA | NA | NA | NA | NA |
| UAW21-30 | 11/11/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW21-30 | 3/27/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW21-30 | 11/3/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 1.2 J B | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW21-80 | 5/5/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW21-80 | 11/11/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW21-80 | 10/18/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | <10 | NA | NA | NA | NA | NA | NA | NA |
| UAW21-80 | 11/11/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW21-80 | 3/27/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW21-80 | 11/3/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW22-20 | 10/13/2001 | <10 | <10 | 70 | 1.6 J | 9.7 J | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | 2.5 J | <10 | <10 | <10 | <10 |
| UAW22-20 | 11/13/2001 | <10 | <10 | 78 | 1.7 J | 9.9 J | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | 2.3 J | 2.6 J | <10 | <10 | <10 | <10 |
| UAW22-20 | 10/20/2002 | NA | NA | 60 | NA | 10 J | NA | NA | NA | NA | <50 | <50 | NA | <50 | <50 | NA | NA | NA | NA | NA | NA | NA |
| UAW22-20 | 11/10/2003 | <20 | <20 | 44 | <20 | <20 | NA | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 |
| UAW22-20 | 3/29/2004 | <10 | <10 | 31 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW22-20 | 11/4/2004 | <10 | <10 | 34 | 0.88 J | 6.8 J | NA | <10 | <10 | <10 | <10 | <10 | <10 | 2.2 J | <10 | <10 | <10 | 2 J | <10 | <10 | <10 | <10 |
| UAW23-20 | 10/12/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW23-20 | 11/14/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW23-20 | 10/19/2002 | NA | <10 | <10 | NA | <10 | NA | NA | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | NA | NA | NA | NA | NA | <10 |
| UAW23-20 | 11/13/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW23-20 | 3/28/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW23-20 | 11/5/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 0.91 J | <10 | <10 | <10 | <10 |
| UAW24-70 | 10/13/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW24-70 | 11/15/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW24-70 | 10/17/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | <10 | NA | NA | NA | NA | NA | NA | NA |
| UAW24-70 | 11/16/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW24-70 | 4/5/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW24-70 | 11/6/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW25-20 | 10/13/2001 | <10 | <10 | 11 | <10 | 3 J | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW25-20 | 11/13/2001 | <10 | <10 | 11 | <10 | 3.2 J | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW25-20 | 10/18/2002 | NA | NA | 5.6 J | NA | 1.7 J | NA | NA | NA | NA | <10 | <10 | NA | <10 | <10 | NA | NA | NA | NA | NA | NA | NA |
| UAW25-20 | 11/12/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW25-20 | 3/27/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW25-20 | 11/3/2004 | <10 | <10 | 6.4 J | <10 | 2.4 J | NA | <10 | <10 | <10 | <10 | <10 | <10 | 1.3 J | <10 | 2.3 J B | <10 | <10 | <10 | <10 | <10 | <10 |

## Summary of SVOC Detections in
## Groundwater, Seep, and Surface Water Samples

Morton International, Inc.

Reading, Ohio

**Units: µg/l**

| SAMPLE LOCATION | SAMPLE DATE | 1,1'-Biphenyl | 1,2,4-Trichlorobenzene | 1,2-Dichlorobenzene | 1,3-Dichlorobenzene | 1,4-Dichlorobenzene | 1,4-Dioxane | 2,4-Dichlorophenol | 2,4-Dimethylphenol | 2-Chlorophenol | 2-Methylphenol | 4-Methylphenol | Acenaphthene | Aniline | Benzaldehyde | bis(2-Ethylhexyl) phthalate | Butyl benzyl phthalate | Caprolactam | Carbazole | Dimethyl phthalate | Fluorene | Phenol |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW26-70 | 4/6/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW26-70 | 11/6/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 1.7 J B | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW27-50 | 3/31/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW27-50 | 11/5/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| LAW05-150 | 3/16/2002 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | NA | NA | <10 | <10 | <10 |
| LAW05-150 (Dup) | 3/16/2002 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | NA | NA | <10 | <10 | <10 |
| LAW05-60 | 3/16/2002 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | NA | NA | <10 | <10 | <10 |
| LAW12-60 | 10/13/2001 | NA | <10 | <10 | <10 | <10 | 1.6 J | <10 | 1.6 J B | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | NA | NA | <10 | <10 | <10 |
| LAW12-60 | 11/16/2001 | NA | <10 | <10 | <10 | <10 | 1.5 J | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | NA | NA | <10 | <10 | <10 |
| French Drain Sump @ 46 hr | 10/19/2002 | NA | NA | 200 | NA | 27 J | NA | NA | NA | NA | <50 | <50 | NA | 150 | <50 | NA | NA | NA | NA | NA | NA | NA |
| French Drain Sump @ 72 hr | 10/20/2002 | NA | NA | 140 | NA | 22 J | NA | NA | NA | NA | <100 | <100 | NA | 91 J | <100 | NA | NA | NA | NA | NA | NA | NA |
| **Surface Water** | | | | | | | | | | | | | | | | | | | | | | |
| WS-1A | 3/25/2004 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | 0.67 J | <10 | NA | NA | <10 | <10 | <10 |
| WS-2A | 3/26/2004 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | NA | NA | <10 | <10 | <10 |
| WS-3A | 3/26/2004 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | 1.4 J | <10 | NA | NA | <10 | <10 | <10 |
| WS-4A | 3/26/2004 | NA | <10 | <10 | <10 | <10 | 1.1 J | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | 0.55 J | <10 | NA | NA | <10 | <10 | <10 |
| WS-5A | 3/25/2004 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | 0.94 J | <10 | NA | NA | <10 | <10 | <10 |
| WS-6A | 3/25/2004 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | 0.78 J | <10 | NA | NA | <10 | <10 | <10 |
| WS-6A (Dup) | 3/25/2004 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | 0.58 J | <10 | NA | NA | <10 | <10 | <10 |
| **Seeps** | | | | | | | | | | | | | | | | | | | | | | |
| SS-1 (Seep) | 10/11/2001 | NA | NA | 21 | NA | 2.6 J | NA | NA | NA | NA | <10 | <10 | NA | <10 | <10 | NA | NA | NA | NA | NA | NA | NA |
| SS-5 (Seep) | 10/11/2001 | NA | NA | 14 | NA | 1.7 J | NA | NA | NA | NA | <10 | <10 | NA | <10 | <10 | NA | NA | NA | NA | NA | NA | NA |

Notes:

B = Method blank contamination. The associated method blank contains the target analyte at a reportable level.

J = Estimated result; result is less than reporting limit.

# = Co-Elution of 3-Methylphenol and 4-Methylphenol.

NA indicates chemical was not on the target analyte list for that sample.

<10 = Indicates constituent not detected at or above indicated detection limit.

This table only includes target analytes detected in one or more Facility Investigation samples.

See Appendix B for the complete target analyte lists.

**Summary of Pesticide and Polychlorinated Biphenyl Detections**
**in Groundwater, Seep, and Surface Water Samples**

Morton International, Inc.
Reading, Ohio

**Units: µg/l**

| SAMPLE LOCATION | SAMPLE DATE | 4,4'-DDD | 4,4'-DDE | 4,4'-DDT | Aldrin | alpha-BHC | alpha-Chlordane | beta-BHC | delta-BHC | Dieldrin | Endosulfan I | Endosulfan II | Endosulfan sulfate | Endrin | Endrin aldehyde | Endrin ketone | gamma-BHC (Lindane) | gamma-Chlordane | Heptachlor | Heptachlor epoxide | Isodrin | Methoxychlor | Toxaphene | Aroclor 1242 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Groundwater** | | | | | | | | | | | | | | | | | | | | | | | | |
| MW-EPA-1 | 5/8/2001 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | 0.11 J | <0.25 | 0.13 J | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | NA | <0.5 | <10 | <1 |
| MW-EPA-1 | 11/15/2001 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | NA | <5 | <100 | <1 |
| MW-EPA-1 | 10/20/2002 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | NA | <0.25 | <0.25 | <0.25 | NA | NA | <0.25 | <0.25 | <0.5 | NA | NA | NA |
| MW-EPA-1 | 11/12/2003 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | NA | <1 | <20 | <1 |
| MW-EPA1 | 3/28/2004 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <2 | <40 | <10 |
| MW-EPA-1 | 11/4/2004 | 0.035 J | 0.052 PG | <0.05 | 0.076 PG | <0.05 | <0.05 | 0.077 PG | 0.031 J | 0.07 PG | <0.05 | 0.27 PG | <0.05 | 0.021 J | 0.057 | 0.032 J | 0.04 J | <0.05 | <0.05 | 0.061 PG | NA | <0.1 | <2 | <1 |
| MW-EPA-2 | 5/8/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| MW-EPA-2 | 11/14/2001 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | NA | <0.2 | <4 | <1 |
| MWEPA-2 | 10/20/2002 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <1 | <1 | <1 | NA | NA | <1 | <1 | <2 | NA | NA | NA |
| MW-EPA-2 | 11/11/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| MW-EPA-2 | 3/29/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.1 | NA | <0.1 | <2 | <1 |
| MW-EPA-2 | 11/4/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.032 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| MW-EPA-3 | 5/6/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| MW-EPA-3 | 11/13/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| MWEPA-3 | 10/17/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | NA | NA | <0.05 | <0.05 | <0.1 | NA | NA | NA |
| MW-EPA-3 | 11/13/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| MW-EPA-3 | 3/30/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| MW-EPA-3 | 11/4/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.019 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| MW-EPA-4 | 5/8/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| MW-EPA-4 | 11/13/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| MWEPA-4 | 10/18/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | NA | NA | <0.05 | <0.05 | <0.1 | NA | NA | NA |
| MW-EPA-4 | 11/16/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| MW-EPA-4 | 4/6/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| MW-EPA-4 | 11/6/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| Recovery Well | 7/29/2001 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | NA | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | NA | <0.1 | NA | <0.1 | <0.1 | <0.2 | <0.2 | <4 | <200 |
| UAW01-30 | 5/4/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.03 J | <0.05 | NA | <0.1 | <2 | <1 |
| UAW01-30 | 11/8/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW01-30 | 10/17/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | NA | NA | <0.05 | <0.05 | <0.1 | NA | NA | NA |
| UAW01-30 | 11/11/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW01-30 | 3/24/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW01-30 | 11/3/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.033 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.0092 J | <0.05 | NA | <0.1 | <2 | <1 |
| UAW01-80 | 5/4/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW01-80 | 10/10/2001 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 |
| UAW01-80 | 11/12/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW01-80 | 10/17/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | NA | NA | <0.05 | <0.05 | <0.1 | NA | NA | NA |
| UAW01-80 | 11/11/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW01-80 | 3/24/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW01-80 | 11/2/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |

**Summary of Pesticide and Polychlorinated Biphenyl Detections**
**in Groundwater, Seep, and Surface Water Samples**

Morton International, Inc.
Reading, Ohio

**Units: µg/l**

| SAMPLE LOCATION | SAMPLE DATE | 4,4'-DDD | 4,4'-DDE | 4,4'-DDT | Aldrin | alpha-BHC | alpha-Chlordane | beta-BHC | delta-BHC | Dieldrin | Endosulfan I | Endosulfan II | Endosulfan sulfate | Endrin | Endrin aldehyde | Endrin ketone | gamma-BHC (Lindane) | gamma-Chlordane | Heptachlor | Heptachlor epoxide | Isodrin | Methoxychlor | Toxaphene | Aroclor 1242 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW02-20 | 5/7/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW02-20 (Dup) | 5/7/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW02-20 | 11/10/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW02-20 | 10/17/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | NA | NA | <0.05 | <0.05 | <0.1 | NA | NA | NA |
| UAW02-20 | 11/12/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW02-20 | 3/26/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW02-20 | 11/3/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW02-40 | 5/7/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW02-40 | 11/10/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW02-40 | 10/17/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | NA | NA | <0.05 | <0.05 | <0.1 | NA | NA | NA |
| UAW02-40 | 11/12/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW02-40 | 3/26/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW02-40 | 11/3/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW03-20 | 5/7/2001 | 0.074 PG | <0.05 | <0.05 | <0.05 | <0.05 | 0.053 PG | <0.05 | <0.05 | 0.062 PG | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.14 PG | <0.05 | <0.05 | <0.05 | 0.041 J | NA | <0.1 | <2 | <2 |
| UAW03-20 | 11/11/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.03 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW03-20 | 10/23/2002 | 0.025 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.02 J | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | NA | NA | <0.05 | <0.05 | <0.1 | NA | NA | NA |
| UAW03-20 | 11/12/2003 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | NA | <1 | <20 | <1 |
| UAW03-20 | 3/28/2004 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | NA | <1 | <20 | <1 |
| UAW03-20 | 11/4/2004 | 0.057 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.055 PG | <0.05 | 0.24 PG | <0.05 | <0.05 | <0.05 | 0.04 J | 0.042 J | <0.05 | <0.05 | 0.034 J | 0.11 PG | <0.05 | NA | <0.1 | <2 | <1 |
| UAW03-20 (Dup) | 11/4/2004 | 0.02 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.22 PG | <0.05 | 0.26 PG | <0.05 | <0.05 | <0.05 | 0.039 J | <0.05 | <0.05 | <0.05 | 0.17 PG | 0.22 PG | <0.05 | NA | 0.082 J | <2 | <1 |
| UAW04-20 | 5/7/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.039 J | 0.041 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW04-20 | 11/11/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW04-20 | 10/20/2002 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <1 | <1 | <1 | NA | NA | <1 | <1 | <2 | NA | NA | NA |
| UAW04-20 | 11/12/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW04-20 | 3/28/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW04-20 | 11/3/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.089 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.15 PG | 0.16 PG | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW05-20 | 5/6/2001 | 0.03 J | <0.05 | <0.05 | <0.05 | 0.029 J | <0.05 | <0.05 | <0.05 | <0.05 | 0.021 J | 0.028 J | <0.05 | <0.05 | 0.097 PG | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW05-20 | 10/10/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.022 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.028 J | NA | <0.1 | <2 | <1 |
| UAW05-20 | 11/12/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | 0.92 J |
| UAW05-20 | 10/20/2002 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | NA | <0.25 | <0.25 | <0.25 | NA | NA | <0.25 | <0.25 | <0.5 | NA | NA | NA |
| UAW05-20 | 11/10/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW05-20 | 3/28/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW05-20 (Dup) | 3/28/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW05-20 | 11/4/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.045 J | <0.05 | <0.05 | <0.05 | 0.027 J | <0.05 | 0.014 J | 0.075 | <0.05 | 0.02 J | <0.05 | 0.013 J | 0.37 PG | NA | 0.029 J | <2 | <1 |
| UAW06-20 | 5/6/2001 | <0.05 | 0.024 J | 0.022 J | <0.05 | <0.05 | <0.05 | 0.16 PG | 0.023 J | 0.033 J | <0.05 | 0.039 J | <0.05 | <0.05 | <0.05 | 0.045 J | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW06-20 | 10/10/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.026 J | 0.12 | <0.05 | 0.022 J | <0.05 | 0.034 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.054 PG | <0.05 | NA | <0.1 | <2 | <1 |
| UAW06-20 | 11/13/2001 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | NA | <50 | <1000 | <1 |
| UAW06-20 | 10/20/2002 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | NA | <0.25 | <0.25 | <0.25 | NA | NA | <0.25 | <0.25 | <0.5 | NA | NA | NA |
| UAW06-20 | 11/12/2003 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <2 | <40 | <1 |
| UAW06-20 | 3/29/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW06-20 | 11/4/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.042 J | <0.05 | <0.05 | <0.05 | 0.021 J | <0.05 | <0.05 | <0.05 | <0.05 | 0.019 J | <0.05 | 0.1 PG | <0.05 | NA | <0.1 | <2 | <1 |

**Summary of Pesticide and Polychlorinated Biphenyl Detections**
**in Groundwater, Seep, and Surface Water Samples**

Morton International, Inc.
Reading, Ohio

**Units: µg/l**

| SAMPLE LOCATION | SAMPLE DATE | 4,4'-DDD | 4,4'-DDE | 4,4'-DDT | Aldrin | alpha-BHC | alpha-Chlordane | beta-BHC | delta-BHC | Dieldrin | Endosulfan I | Endosulfan II | Endosulfan sulfate | Endrin | Endrin aldehyde | Endrin ketone | gamma-BHC (Lindane) | gamma-Chlordane | Heptachlor | Heptachlor epoxide | Isodrin | Methoxychlor | Toxaphene | Aroclor 1242 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW07-20 | 5/8/2001 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | NA | <0.25 | <0.25 | <0.25 | 0.19 J | 0.13 J | <0.25 | <0.25 | <0.25 | NA | <0.25 | NA | <0.25 | <0.25 | <0.5 | <0.5 | <10 | <1 |
| UAW07-20 (Dup) | 5/8/2001 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | NA | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.35 J | NA | <0.5 | NA | <0.5 | <0.5 | <1 | <1 | <20 | <10 |
| UAW07-20 | 11/15/2001 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <5 | <5 | <100 | <1 |
| UAW07-20 | 10/20/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.092 | NA | <0.05 | <0.05 | <0.05 | NA | NA | <0.05 | <0.05 | <0.1 | NA | NA | NA |
| UAW07-20 | 11/12/2003 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | NA | <1 | <20 | <1 |
| UAW07-20 (Dup) | 11/12/2003 | <0.05 | 0.2 PG | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.2 | <0.05 | 0.27 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.33 PG | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW07-20 | 4/5/2004 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | NA | <1 | <20 | <1 |
| UAW07-20 | 11/4/2004 | 0.14 J | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.25 J | <0.5 | 0.14 J | <0.5 | <0.5 | <0.5 | 0.37 J | <0.5 | 0.29 J | NA | 0.47 J | <20 | <1 |
| UAW08-20 | 5/6/2001 | <1 | <1 | <1 | <1 | <1 | NA | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <1 | NA | <1 | <1 | <2 | <2 | <40 | <1 |
| UAW08-20 | 11/13/2001 | <0.5 | <0.5 | <0.5 | <0.5 | 0.32 J | NA | <0.5 | <0.5 | 0.52 PG | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | NA | <0.5 | NA | 0.49 J | 0.32 J | <1 | <1 | <20 | <1 |
| UAW08-20 | 10/20/2002 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | NA | <0.5 | <0.5 | <0.5 | NA | NA | <0.5 | <0.5 | <1 | NA | NA | NA |
| UAW08-20 | 11/10/2003 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <2 | <40 | <1 |
| UAW08-20 | 3/29/2004 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <2 | <40 | <10 |
| UAW08-20 | 11/4/2004 | 0.08 J | 0.29 PG | <0.25 | <0.25 | <0.25 | <0.25 | 0.056 J | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | 0.47 PG | <0.25 | <0.25 | 0.2 J | NA | <0.5 | <10 | <1 |
| UAW09-20 | 5/5/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW09-20 | 11/9/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW09-20 | 10/16/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | NA | NA | <0.05 | <0.05 | <0.1 | NA | NA | NA |
| UAW09-20 | 11/11/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW09-20 | 4/6/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW09-20 | 11/6/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW09-60 | 5/5/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW09-60 | 11/9/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW09-60 | 10/16/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | NA | NA | <0.05 | <0.05 | <0.1 | NA | NA | NA |
| UAW09-60 | 11/11/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW09-60 | 4/6/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW09-60 | 11/6/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW10-50 | 10/12/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW10-50 | 11/13/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW10-50 | 10/19/2002 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | NA | <0.25 | <0.25 | <0.25 | NA | NA | <0.25 | <0.25 | <0.5 | NA | NA | NA |
| UAW10-50 | 11/10/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW10-50 | 3/30/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW10-50 | 11/5/2004 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.044 J | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.97 | NA | <0.2 | <4 | <1 |
| UAW10-80 | 10/12/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.081 | NA | <0.1 | <2 | <1 |
| UAW10-80 | 11/13/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW10-80 | 10/19/2002 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | NA | <0.5 | <0.5 | <0.5 | NA | NA | <0.5 | <0.5 | <1 | NA | NA | NA |
| UAW10-80 | 11/13/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW10-80 | 3/30/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW10-80 | 11/5/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.081 PG | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |

**Summary of Pesticide and Polychlorinated Biphenyl Detections**
**in Groundwater, Seep, and Surface Water Samples**

Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| SAMPLE LOCATION | SAMPLE DATE | 4,4'-DDD | 4,4'-DDE | 4,4'-DDT | Aldrin | alpha-BHC | alpha-Chlordane | beta-BHC | delta-BHC | Dieldrin | Endosulfan I | Endosulfan II | Endosulfan sulfate | Endrin | Endrin aldehyde | Endrin ketone | gamma-BHC (Lindane) | gamma-Chlordane | Heptachlor | Heptachlor epoxide | Isodrin | Methoxychlor | Toxaphene | Aroclor 1242 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW11-10 | 5/8/2001 | <0.05 | <0.05 | <0.05 | 0.42 | <0.05 | <0.05 | <0.05 | 0.11 | 0.054 PG | <0.05 | <0.05 | <0.05 | 0.043 J | <0.05 | <0.05 | <0.05 | <0.05 | 0.1 PG | <0.05 | NA | <0.1 | <2 | <1 |
| UAW11-10 | 11/10/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW11-10 | 10/18/2002 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | NA | <0.25 | <0.25 | <0.25 | NA | NA | <0.25 | <0.25 | <0.5 | NA | NA | NA |
| UAW11-10 | 11/16/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW11-10 | 4/6/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <5 |
| UAW11-10 | 11/7/2004 | 0.0085 J | 0.016 J | 0.016 J | <0.05 | <0.05 | <0.05 | 0.13 | 0.0074 J | <0.05 | 0.015 J | 0.044 J | <0.05 | <0.05 | 0.51 | <0.05 | <0.05 | 0.025 J | <0.05 | 0.033 J | NA | 0.024 J | <2 | <1 |
| UAW11-40 | 5/8/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW11-40 | 11/12/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | 0.52 J |
| UAW11-40 | 10/18/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | NA | NA | <0.05 | <0.05 | <0.1 | NA | NA | NA |
| UAW11-40 | 11/16/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW11-40 | 4/6/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW11-40 (Dup) | 4/6/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW11-40 | 11/7/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.073 | <0.05 | <0.05 | <0.05 | 0.025 J | <0.05 | <0.05 | <0.05 | <0.05 | 0.51 | NA | <0.1 | <2 | <1 |
| UAW12-20 | 5/6/2001 | 0.045 J | <0.05 | <0.05 | <0.05 | <0.05 | NA | 0.017 J | 0.058 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | NA | <0.05 | <0.05 | 0.017 J | <0.1 | <2 | <1 |
| UAW12-20 | 11/15/2001 | 0.022 J | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.033 J | NA | <0.05 | NA | 0.09 PG | <0.05 | <0.1 | <0.1 | <2 | <1 |
| UAW12-20 | 10/20/2002 | 0.039 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | NA | NA | <0.05 | <0.05 | <0.1 | NA | NA | NA |
| UAW12-20 | 11/12/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.1 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW12-20 | 3/28/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW12-20 | 11/4/2004 | 0.02 J | 0.3 PG | 0.036 J | <0.05 | 0.01 J | <0.05 | 0.39 PG | 0.038 J | 0.27 PG | 0.041 J | <0.05 | 0.17 PG | <0.05 | 0.036 J | <0.05 | 0.028 J | <0.05 | 0.27 PG | <0.05 | NA | <0.1 | <2 | <1 |
| UAW13-20 | 5/6/2001 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | NA | <0.5 | <0.5 | 0.25 J | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | NA | <0.5 | NA | <0.5 | 0.91 PG | <1 | <1 | <20 | <1 |
| UAW13-20 | 11/15/2001 | <5 | <5 | <5 | <5 | <5 | NA | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | NA | <5 | NA | <5 | <5 | <10 | <10 | <200 | <1 |
| UAW13-20 | 10/23/2002 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | NA | <0.25 | <0.25 | <0.25 | NA | NA | <0.25 | <0.25 | <0.5 | NA | NA | NA |
| UAW13-20 | 11/12/2003 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 2.7 PG | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 6 | <1 | NA | <2 | <40 | <1 |
| UAW13-20 | 3/28/2004 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <2 | <40 | <10 |
| UAW13-20 | 11/5/2004 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 0.31 J | <1 | <1 | <1 | <1 | <1 | NA | <2 | <40 | <1 |
| UAW14-10 | 5/5/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW14-10 | 11/9/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW14-10 | 10/16/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | NA | NA | <0.05 | <0.05 | <0.1 | NA | NA | NA |
| UAW14-10 | 11/16/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW14-10 | 4/5/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW14-10 | 11/6/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.34 PG | NA | <0.1 | <2 | <1 |
| UAW15-20 | 5/6/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW15-20 | 11/11/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW15-20 | 10/18/2002 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | NA | <0.25 | <0.25 | <0.25 | NA | NA | <0.25 | <0.25 | <0.5 | NA | NA | NA |
| UAW15-20 | 11/17/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW15-20 | 4/7/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW15-20 | 11/7/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.094 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.018 J | NA | <0.1 | <2 | <1 |

**Summary of Pesticide and Polychlorinated Biphenyl Detections**
**in Groundwater, Seep, and Surface Water Samples**

Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| SAMPLE LOCATION | SAMPLE DATE | 4,4'-DDD | 4,4'-DDE | 4,4'-DDT | Aldrin | alpha-BHC | alpha-Chlordane | beta-BHC | delta-BHC | Dieldrin | Endosulfan I | Endosulfan II | Endosulfan sulfate | Endrin | Endrin aldehyde | Endrin ketone | gamma-BHC (Lindane) | gamma-Chlordane | Heptachlor | Heptachlor epoxide | Isodrin | Methoxychlor | Toxaphene | Aroclor 1242 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW15-50 | 5/6/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW15-50 | 11/11/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.024 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.034 J | 0.031 J | NA | <0.1 | <2 | 0.55 J |
| UAW15-50 | 10/18/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | NA | NA | <0.05 | <0.05 | <0.1 | NA | NA | NA |
| UAW15-50 | 11/17/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW15-50 | 4/7/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW15-50 | 11/7/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 6.9 | <0.05 | <0.05 | <0.05 | <0.05 | 0.11 | NA | <0.1 | <2 | <1 |
| UAW15-50 (Dup) | 11/7/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 4.4 | <0.05 | <0.05 | <0.05 | <0.05 | 0.031 J | NA | <0.1 | <2 | <1 |
| UAW16-10 | 10/12/2001 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | NA | <5 | <100 | 130 J |
| UAW16-10 (Dup) | 10/12/2001 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <20 | <400 | <100 |
| UAW16-10 | 11/13/2001 | <0.05 | <0.05 | <0.05 | <0.05 | 0.053 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.041 J PG | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW16-10 | 10/18/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | NA | NA | <0.05 | <0.05 | <0.1 | NA | NA | NA |
| UAW16-10 | 11/16/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW16-10 (Dup) | 11/17/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.23 PG | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW16-10 | 4/7/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.11 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW16-10 | 11/7/2004 | 0.017 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.057 | 0.009 J | <0.05 | <0.05 | 0.047 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.009 J | <0.05 | <0.05 | NA | 0.022 J | <2 | <1 |
| UAW17-40 | 5/5/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW17-40 | 11/9/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW17-40 | 10/16/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.1 | NA | NA | NA |
| UAW17-40 | 11/16/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW17-40 | 3/31/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW17-40 | 11/6/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW18-20 | 10/12/2001 | <0.05 | 0.021 J | <0.05 | 0.03 J | <0.05 | <0.05 | 0.51 PG | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW18-20 | 11/13/2001 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.24 | <0.1 | <0.1 | <0.1 | 0.14 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | NA | <0.2 | <4 | <1 |
| UAW18-20 | 10/18/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.03 J | 0.12 PG | <0.05 | <0.05 | <0.05 | 0.033 J | NA | <0.05 | <0.05 | <0.05 | NA | NA | <0.05 | <0.05 | <0.1 | NA | NA | NA |
| UAW18-20 | 11/16/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.26 PG | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW18-20 | 4/7/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW18-20 | 11/7/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.039 J | 0.1 | 0.0084 J | <0.05 | <0.05 | 0.02 J | <0.05 | 0.018 J | 0.13 | <0.05 | 0.0063 J | <0.05 | 0.014 J | 0.048 J | NA | <0.1 | 1 J | <1 |
| UAW19-80 | 5/6/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW19-80 | 11/12/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW19-80 (Dup) | 11/12/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW19-80 | 10/17/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | NA | NA | <0.05 | <0.05 | <0.1 | NA | NA | NA |
| UAW19-80 (Dup) | 10/17/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | NA | NA | <0.05 | <0.05 | <0.1 | NA | NA | NA |
| UAW19-80 | 11/13/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW19-80 | 3/30/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW19-80 | 11/5/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |

**Summary of Pesticide and Polychlorinated Biphenyl Detections**
**in Groundwater, Seep, and Surface Water Samples**

Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| SAMPLE LOCATION | SAMPLE DATE | 4,4'-DDD | 4,4'-DDE | 4,4'-DDT | Aldrin | alpha-BHC | alpha-Chlordane | beta-BHC | delta-BHC | Dieldrin | Endosulfan I | Endosulfan II | Endosulfan sulfate | Endrin | Endrin aldehyde | Endrin ketone | gamma-BHC (Lindane) | gamma-Chlordane | Heptachlor | Heptachlor epoxide | Isodrin | Methoxychlor | Toxaphene | Aroclor 1242 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW20-60 | 5/7/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.021 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW20-60 | 11/14/2001 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | NA | <10 | <200 | <1 |
| UAW20-60 (Dup) | 11/14/2001 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | NA | <0.5 | <10 | <1 |
| UAW20-60 | 10/19/2002 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | NA | <0.5 | <0.5 | <0.5 | NA | NA | <0.5 | <0.5 | <1 | NA | NA | NA |
| UAW20-60 (Dup) | 10/19/2002 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | NA | <0.5 | <0.5 | <0.5 | NA | NA | <0.5 | <0.5 | <1 | NA | NA | NA |
| UAW20-60 | 11/13/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW20-60 | 3/30/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW20-60 | 11/5/2004 | <0.05 | <0.05 | <0.05 | <0.05 | 0.025 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.039 J | <0.05 | NA | <0.1 | <2 | <1 |
| UAW21-30 | 5/5/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW21-30 | 11/11/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | 0.45 J |
| UAW21-30 | 10/18/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | NA | NA | <0.05 | <0.05 | <0.1 | NA | NA | NA |
| UAW21-30 | 11/11/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW21-30 | 3/27/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW21-30 | 11/3/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW21-80 | 5/5/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW21-80 | 11/11/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW21-80 | 10/18/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | NA | NA | <0.05 | <0.05 | <0.1 | NA | NA | NA |
| UAW21-80 | 11/11/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW21-80 | 3/27/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW21-80 | 11/3/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW22-20 | 10/13/2001 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | NA | <0.5 | <10 | <1 |
| UAW22-20 | 11/13/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.21 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW22-20 | 10/20/2002 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | NA | <0.1 | <0.1 | <0.1 | NA | NA | <0.1 | <0.1 | <0.2 | NA | NA | NA |
| UAW22-20 | 11/10/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW22-20 | 3/29/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW22-20 | 11/4/2004 | 0.028 J | 0.054 PG | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.033 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.22 PG | <0.05 | <0.05 | <0.05 | 0.14 PG | <0.05 | NA | <0.1 | <2 | <1 |
| UAW23-20 | 10/12/2001 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | NA | <4 | <80 | <1 |
| UAW23-20 | 11/14/2001 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | NA | <5 | <100 | <1 |
| UAW23-20 | 10/19/2002 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | NA | <2.5 | <2.5 | <2.5 | <2.5 | NA | <2.5 | <2.5 | <5 | NA | NA | NA |
| UAW23-20 | 11/13/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW23-20 | 3/28/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW23-20 | 11/5/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 1 | <0.05 | 0.032 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.023 J | <0.05 | NA | <0.1 | <2 | <1 |
| UAW24-70 | 10/13/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW24-70 | 11/15/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW24-70 | 10/17/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | NA | NA | <0.05 | <0.05 | <0.1 | NA | NA | NA |
| UAW24-70 | 11/16/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW24-70 | 4/5/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW24-70 | 11/6/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |

**Summary of Pesticide and Polychlorinated Biphenyl Detections**
**in Groundwater, Seep, and Surface Water Samples**

Morton International, Inc.
Reading, Ohio

**Units: µg/l**

| SAMPLE LOCATION | SAMPLE DATE | 4,4'-DDD | 4,4'-DDE | 4,4'-DDT | Aldrin | alpha-BHC | alpha-Chlordane | beta-BHC | delta-BHC | Dieldrin | Endosulfan I | Endosulfan II | Endosulfan sulfate | Endrin | Endrin aldehyde | Endrin ketone | gamma-BHC (Lindane) | gamma-Chlordane | Heptachlor | Heptachlor epoxide | Isodrin | Methoxychlor | Toxaphene | Aroclor 1242 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW25-20 | 10/13/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.16 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW25-20 | 11/13/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.14 PG | <0.05 | 0.051 PG | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.022 J PG | NA | <0.1 | <2 | <1 |
| UAW25-20 | 10/18/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | NA | NA | <0.05 | <0.05 | <0.1 | NA | NA | NA |
| UAW25-20 | 11/12/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.065 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW25-20 | 3/27/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW25-20 | 11/3/2004 | <0.05 | <0.05 | <0.05 | <0.05 | 0.021 J | <0.05 | 0.19 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.049 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW26-70 | 4/6/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW26-70 | 11/6/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW27-50 | 3/31/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.1 | <2 | <1 |
| UAW27-50 | 11/5/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.22 | 0.18 PG | NA | <0.1 | <2 | <1 |
| LAW05-60 | 3/16/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | NA | <0.05 | <0.05 | <0.1 | <0.1 | <2 | <1 |
| LAW05-150 | 3/16/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | NA | <0.05 | <0.05 | <0.1 | <0.1 | <2 | <1 |
| LAW05-150 (Dup) | 3/16/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | NA | <0.05 | <0.05 | <0.1 | <0.1 | <2 | <1 |
| LAW12-60 | 10/13/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | NA | <0.05 | <0.05 | <0.1 | <0.1 | <2 | <1 |
| LAW12-60 | 11/16/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | NA | <0.05 | <0.05 | <0.1 | <0.1 | <2 | <1 |
| French Drain Sump @ 46 hr | 10/19/2002 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | NA | <0.25 | <0.25 | <0.25 | NA | NA | <0.25 | <0.25 | <0.5 | NA | NA | NA |
| French Drain Sump @ 72 hr | 10/20/2002 | 0.028 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | NA | NA | <0.05 | <0.05 | <0.1 | NA | NA | NA |
| **Surface Water** | | | | | | | | | | | | | | | | | | | | | | | | |
| WS-1A | 3/25/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | NA | <0.05 | <0.05 | <0.1 | <0.1 | <2 | <1 |
| WS-2A | 3/26/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | NA | <0.05 | <0.05 | <0.1 | <0.1 | <2 | <1 |
| WS-3A | 3/26/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | NA | <0.05 | <0.05 | <0.1 | <0.1 | <2 | <1 |
| WS-4A | 3/26/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | NA | <0.05 | <0.05 | <0.1 | <0.1 | <2 | <1 |
| WS-5A | 3/25/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | NA | <0.05 | <0.05 | <0.1 | <0.1 | <2 | <1 |
| WS-6A | 3/25/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | NA | <0.05 | <0.05 | <0.1 | <0.1 | <2 | <1 |
| WS-6A (Dup) | 3/25/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | NA | <0.05 | <0.05 | <0.1 | <0.1 | <2 | <1 |
| **Seeps** | | | | | | | | | | | | | | | | | | | | | | | | |
| SS-1 (Seep) | 10/11/2001 | <0.05 | <0.05 | 0.028 J | <0.05 | <0.05 | <0.05 | 0.042 J | <0.05 | 0.053 PG | <0.05 | 0.046 J | NA | <0.05 | <0.05 | <0.05 | NA | NA | <0.05 | 0.033 J | 0.005 J | NA | NA | NA |
| SS-5 (Seep) | 10/11/2001 | <0.05 | 0.025 J | <0.05 | <0.05 | <0.05 | 0.02 J | 0.056 | <0.05 | <0.05 | 0.03 J | <0.05 | NA | <0.05 | <0.05 | <0.05 | NA | NA | <0.05 | <0.05 | <0.1 | NA | NA | NA |

Notes:

J = Estimated result; result is less than reporting limit

PG = The percentage difference between the original and confirmation analyses is greater than 40%

NA indicates chemical was not on the target analyte list for that sample.

<0.05 = Indicates constituent not detected at or above indicated detection limit.

This table only includes target analytes detected in one or more Facility Investigation samples.

See Appendix B for the complete target analyte lists.

# Summary of Inorganic Detections in Groundwater, Seep, and Surface Water Samples

Morton International, Inc.

Reading, Ohio

**Units: µg/l**

| Sample Location | Sample Date | Aluminum | Aluminum-DISS | Antimony | Antimony-DISS | Arsenic | Arsenic-DISS | Barium | Barium-DISS | Beryllium | Beryllium-DISS | Cadmium | Cadmium-DISS | Calcium | Calcium-DISS | Chromium | Chromium-DISS | Cobalt | Cobalt-DISS | Copper | Copper-DISS | Cyanide, Total | Hexavalent Chromium | Iron | Iron-DISS | Lead | Lead-DISS | Magnesium | Magnesium-DISS | Manganese | Manganese-DISS | Mercury |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW02-20 | 5/7/2001 | 49.1 B | NA | <10 | NA | 3.9 B | NA | 400 | NA | <5 | NA | <2 | NA | 331000 | 316000 | 3.3 B | NA | <7 | NA | <25 | NA | <10 | NA | 4200 | 641 | <3 | NA | 58700 | 59200 | 892 | NA | <0.2 |
| UAW02-20 (Dup) | 5/7/2001 | 61.2 B | NA | <10 | NA | 6.1 B | NA | 395 | NA | <5 | NA | <2 | NA | 316000 | 302000 | 22.6 | NA | <7 | NA | <25 | NA | <10 | NA | 4480 | 659 | <3 | NA | 56200 | 53400 | 869 | NA | <0.2 |
| UAW02-20 | 11/10/2001 | <200 | NA | 2.9 B | NA | <10 | NA | 169 B | NA | <5 | NA | <2 | NA | 177000 J | 157000 J | <5 | NA | <7 | NA | <25 | NA | <10 | NA | 1940 | 340 | <3 | NA | 33200 J | 29800 J | 686 J | NA | <0.2 |
| UAW02-20 | 10/17/2002 | <200 | NA | <10 | NA | 3.2 B | NA | 311 | NA | <5 | NA | 0.67 B | NA | 203000 J | NA | 8.1 | NA | 2.2 B | NA | <25 | NA | 2.2 B | NA | 2600 | NA | <3 | NA | 34000 J | NA | 975 J | NA | <0.2 |
| UAW02-20 | 11/12/2003 | <200 | NA | <10 | NA | <10 | NA | 124 B J | NA | <5 | NA | <2 | NA | 175000 J | NA | 2.7 B | NA | <7 | NA | <25 | NA | <10 | NA | 2170 | NA | <3 | NA | 32600 J | NA | 555 J | NA | <0.2 |
| UAW02-20 | 3/26/2004 | 35 B J | NA | <10 | NA | <10 | NA | 271 | NA | <5 | NA | <2 | NA | 255000 J | NA | <5 | NA | <7 | NA | <25 | NA | <10 | NA | 3650 | NA | <3 | NA | 45700 J | NA | 878 J | NA | <0.2 |
| UAW02-20 | 11/3/2004 | <200 | NA | <10 | NA | <10 | NA | 77.4 B | NA | <5 | NA | <2 | NA | 109000 | NA | <5 | NA | <7 | NA | <25 | NA | <10 | NA | 1150 | NA | <3 | NA | 20800 | NA | 322 | NA | 0.047 B |
| UAW02-40 | 5/7/2001 | 213 | NA | <10 | NA | <10 | NA | 130 B | NA | <5 | NA | <2 | NA | 98800 | 99200 | <5 | NA | <7 | NA | <25 | NA | <10 | NA | 4260 | 100 | <3 | NA | 36100 | 36000 | 500 | NA | <0.2 |
| UAW02-40 | 11/10/2001 | <200 | NA | 2.5 B | NA | <10 | NA | 156 B | NA | <5 | NA | 0.36 B | NA | 106000 J | 101000 J | <5 | NA | <7 | NA | <25 | NA | <10 | NA | 3110 | 122 | <3 | NA | 40000 J | 38400 J | 652 J | NA | <0.2 |
| UAW02-40 | 10/17/2002 | <200 | NA | <10 | NA | <10 | NA | 129 B | NA | <5 | NA | <2 | NA | 98400 J | NA | <5 | NA | 0.94 B | NA | <25 | NA | <10 | NA | 4080 | NA | <3 | NA | 37600 J | NA | 513 J | NA | <0.2 |
| UAW02-40 | 11/12/2003 | <200 | NA | <10 | NA | <10 | NA | 117 B J | NA | <5 | NA | <2 | NA | 111000 J | NA | 1.4 B | NA | <7 | NA | <25 | NA | <10 | NA | 5190 | NA | <3 | NA | 41600 J | NA | 531 J | NA | <0.2 |
| UAW02-40 | 3/26/2004 | 36.9 B J | NA | <10 | NA | <10 | NA | 135 B | NA | <5 | NA | <2 | NA | 121000 J | NA | <5 | NA | <7 | NA | <25 | NA | <10 | NA | 6210 | NA | <3 | NA | 44700 J | NA | 600 J | NA | <0.2 |
| UAW02-40 | 11/3/2004 | <200 | NA | <10 | NA | <10 | NA | 125 B | NA | <5 | NA | <2 | NA | 123000 | NA | <5 | NA | <7 | NA | <25 | NA | <10 | NA | 4680 | NA | <3 | NA | 44800 | NA | 612 | NA | 0.03 B |
| UAW03-20 | 5/7/2001 | 39.6 B | NA | <10 | NA | 20.4 | NA | 422 | NA | <5 | NA | <2 | NA | 524000 | 551000 | 2.8 B | NA | 3.8 B | NA | <25 | NA | <10 | NA | 2490 | 1650 | <3 | NA | 92100 | 80300 | 2860 | NA | <0.2 |
| UAW03-20 | 11/11/2001 | 124 B J | NA | <10 | NA | 17.6 | NA | 235 | NA | <5 | NA | <2 | NA | 219000 | 210000 | 3.5 B | NA | 10.7 | NA | <25 | NA | <10 | NA | 1720 | 978 | <3 | NA | 37500 | 36100 | 1500 | NA | 0.3 |
| UAW03-20 | 10/23/2002 | <200 | NA | <10 | NA | 21 J | NA | 250 | NA | <5 | NA | <2 | NA | 169000 | NA | 5.3 | NA | 4.4 B | NA | 3.2 B | NA | <10 | NA | 2390 | NA | <3 | NA | 34000 | NA | 1170 | NA | <0.2 |
| UAW03-20 | 11/12/2003 | <200 | NA | <10 | NA | 12.1 | NA | 185 B J | NA | <5 | NA | <2 | NA | 227000 J | NA | 6.7 | NA | <7 | NA | <25 | NA | <10 | NA | 370 | NA | <3 | NA | 40700 J | NA | 1040 J | NA | <0.2 |
| UAW03-20 | 3/28/2004 | 83.7 B J | NA | <10 | NA | 9.5 B | NA | 227 | NA | <5 | NA | <2 | NA | 283000 | NA | 2.4 B | NA | <7 | NA | <25 | NA | <10 | NA | 422 | NA | <3 | NA | 49600 | NA | 1230 J | NA | <0.2 |
| UAW03-20 | 11/4/2004 | 75.7 B J | NA | <10 | NA | <10 | NA | 70.1 B | NA | <5 | NA | 0.5 B J | NA | 108000 | NA | 2 B | NA | 1.5 B J | NA | <25 | NA | <10 | NA | 424 | NA | <3 | NA | 19700 J | NA | 567 J | NA | <0.2 |
| UAW03-20 (Dup) | 11/4/2004 | 82.3 B J | NA | <10 | NA | 3.1 B | NA | 68.9 B | NA | <5 | NA | 0.48 B J | NA | 107000 | NA | <5 | NA | 1.4 B J | NA | <25 | NA | <10 | NA | 410 | NA | <3 | NA | 19400 J | NA | 557 J | NA | <0.2 |
| UAW04-20 | 5/7/2001 | 42.6 B | NA | 11.9 | NA | 82.4 | NA | 771 | NA | <5 | NA | <2 | NA | 343000 | 339000 | 6 | NA | 17.3 | NA | <25 | NA | 7.3 B | NA | 10500 | 2410 | <3 | NA | 65600 | 64000 | 3170 | NA | <0.2 |
| UAW04-20 | 11/11/2001 | 78.5 B J | NA | 7.6 B | NA | 20.5 | NA | 600 | NA | <5 | NA | 1.5 B | NA | 255000 | 235000 | 4 B | NA | 7.1 | NA | <25 | NA | <10 | NA | 5060 | 1820 | <3 | NA | 43100 | 39600 | 2000 | NA | <0.2 |
| UAW04-20 | 10/20/2002 | 82.9 B J | NA | 3.7 B | NA | 33.5 | NA | 798 | NA | <5 | NA | <2 | NA | 205000 J | NA | 6.5 | NA | 3.2 B | NA | <25 | NA | <10 | NA | 6650 | NA | <3 | NA | 47400 | NA | 1350 | NA | <0.2 |
| UAW04-20 | 11/12/2003 | <200 | NA | <10 | NA | 26.6 | NA | 443 J | NA | <5 | NA | <2 | NA | 219000 J | NA | 2.8 B | NA | <7 | NA | <25 | NA | <10 | NA | 6010 | NA | <3 | NA | 64600 J | NA | 1020 J | NA | <0.2 |
| UAW04-20 | 3/28/2004 | 68.2 B J | NA | 27.6 | NA | 30.8 | NA | 233 | NA | <5 | NA | 1.2 B | NA | 192000 | NA | <5 | NA | <7 | NA | 3.4 B J | NA | <10 | NA | 5230 | NA | <3 | NA | 36700 | NA | 5050 J | NA | <0.2 |
| UAW04-20 | 11/3/2004 | 70.1 B J | NA | <10 | NA | 10.7 | NA | 129 B | NA | <5 | NA | 0.31 B J | NA | 114000 | NA | <5 | NA | 1.2 B J | NA | <25 | NA | <10 | NA | 1250 | NA | <3 | NA | 21700 J | NA | 1720 J | NA | <0.2 |
| UAW05-20 | 5/6/2001 | 2550 | NA | <10 | NA | 8.7 B | NA | 102 B | NA | <5 | NA | <2 | NA | 338000 | 391000 | 8.1 | NA | 2.2 B | NA | 7.8 B | NA | <10 | NA | 3900 | <100 | <3 | NA | 60200 | 66900 | 938 | NA | <0.2 |
| UAW05-20 | 10/10/2001 | 189 B | NA | <10 | NA | 21 | NA | 67.9 B | NA | <5 | NA | <2 | NA | 292000 | 334000 | 7.3 | NA | <7 | NA | <25 | NA | <10 | NA | 2750 | <100 | <3 | NA | 45300 | 50300 | 901 | NA | <0.2 |
| UAW05-20 | 11/12/2001 | 558 J | NA | <10 | NA | 18.7 | NA | 68.6 B | NA | <5 | NA | <2 | NA | 265000 | 280000 | 8.8 | NA | 1.8 B | NA | 5.3 B | NA | <10 | NA | 2930 | <100 | <3 | NA | 49300 | 45900 | 802 | NA | <0.2 |
| UAW05-20 | 10/20/2002 | 110 B J | NA | <10 | NA | 21.8 | NA | 72.2 B | NA | <5 | NA | 0.3 B | NA | 253000 J | NA | 5.1 | NA | <7 | NA | <25 | NA | <10 | NA | 986 | NA | <3 | NA | 38300 | NA | 732 | NA | <0.2 |
| UAW05-20 | 11/10/2003 | <200 | NA | <10 | NA | 16.8 | NA | 55.9 B J | NA | <5 | NA | <2 | NA | 299000 J | NA | 2 B | NA | 1.5 B | NA | <25 | NA | <10 | NA | 1020 | NA | <3 | NA | 40200 J | NA | 772 J | NA | <0.2 |
| UAW05-20 | 3/28/2004 | 102 B J | NA | <10 | NA | 2.9 B | NA | 59.3 B | NA | <5 | NA | <2 | NA | 273000 | NA | 2.6 B | NA | <7 | NA | 2.9 B J | NA | <10 | NA | 948 | NA | <3 | NA | 42500 | NA | 820 J | NA | <0.2 |
| UAW05-20 (Dup) | 3/28/2004 | 121 B J | NA | <10 | NA | 2.7 B | NA | 63.7 B | NA | <5 | NA | <2 | NA | 295000 | NA | 4.2 B | NA | <7 | NA | 3.3 B J | NA | <10 | NA | 1090 | NA | <3 | NA | 45700 | NA | 873 J | NA | <0.2 |
| UAW05-20 | 11/4/2004 | 103 B J | NA | <10 | NA | 3.7 B | NA | 63.1 B | NA | <5 | NA | 0.45 B J | NA | 253000 | NA | 3.2 B | NA | 1.7 B J | NA | <25 | NA | <10 | NA | 637 | NA | <3 | NA | 38600 J | NA | 843 J | NA | <0.2 |
| UAW06-20 | 5/6/2001 | 754 | NA | <10 | NA | 13.4 | NA | 105 B | NA | <5 | NA | <2 | NA | 310000 | 344000 | 3.9 B | NA | 2.6 B | NA | 4.5 B | NA | <10 | NA | 3880 | 1150 | <3 | NA | 48300 | 54200 | 1580 | NA | <0.2 |
| UAW06-20 | 10/10/2001 | 391 | NA | <10 | NA | 26.7 | NA | 132 B | NA | <5 | NA | <2 | NA | 343000 | 294000 | 10.8 | NA | 1.5 B | NA | <25 | NA | <10 | NA | 1330 | 178 | <3 | NA | 43800 | 38800 | 2590 | NA | <0.2 |
| UAW06-20 | 11/13/2001 | 330 | NA | <10 | NA | 34.3 | NA | 154 B | NA | <5 | NA | <2 | NA | 407000 J | 376000 J | 13.4 | NA | <7 | NA | <25 | NA | 4.2 B | NA | 1020 | <100 | <3 | NA | 58000 J | 52800 J | 3000 J | NA | <0.2 |
| UAW06-20 | 10/20/2002 | 126 B J | NA | 16.5 | NA | 30.8 | NA | 173 B | NA | <5 | NA | <2 | NA | 268000 J | NA | 6.2 | NA | 1.3 B | NA | 2.7 B | NA | <10 | NA | 2580 | NA | <3 | NA | 40800 | NA | 1410 | NA | <0.2 |
| UAW06-20 | 11/12/2003 | <200 | NA | 3.3 B | NA | 17.8 | NA | 139 B J | NA | <5 | NA | <2 | NA | 221000 J | NA | 3.2 B | NA | <7 | NA | <25 | NA | <10 | NA | 1170 | NA | <3 | NA | 35700 J | NA | 1040 J | NA | <0.2 |
| UAW06-20 | 3/29/2004 | 91.7 B J | NA | <10 | NA | 20.7 | NA | 135 B | NA | <5 | NA | <2 | NA | 229000 | NA | 3.3 B | NA | <7 | NA | <25 | NA | <10 | <20 | 647 | NA | <3 | NA | 41300 | NA | 1160 J | NA | <0.2 |
| UAW06-20 | 11/4/2004 | 84.9 B J | NA | <10 | NA | 20.4 | NA | 132 B | NA | <5 | NA | 0.34 B J | NA | 305000 | NA | <5 | NA | 1.5 B J | NA | <25 | NA | <10 | NA | 2630 | NA | <3 | NA | 45700 J | NA | 1480 J | NA | <0.2 |

# Summary of Inorganic Detections in Groundwater, Seep, and Surface Water Samples

Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | Aluminum | Aluminum-DISS | Antimony | Antimony-DISS | Arsenic | Arsenic-DISS | Barium | Barium-DISS | Beryllium | Beryllium-DISS | Cadmium | Cadmium-DISS | Calcium | Calcium-DISS | Chromium | Chromium-DISS | Cobalt | Cobalt-DISS | Copper | Copper-DISS | Cyanide, Total | Hexavalent Chromium | Iron | Iron-DISS | Lead | Lead-DISS | Magnesium | Magnesium-DISS | Manganese | Manganese-DISS | Mercury |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Groundwater** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DP53-12.5' | 3/11/2004 | NA | NA | NA | NA | 15.6 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 10.9 | NA | NA | NA | NA | NA | NA | <20 | NA | NA | 8.1 | NA | NA | NA | NA | NA | NA |
| MW-EPA-1 | 5/8/2001 | 129 B | NA | 3.3 B | NA | 246 | NA | 287 | NA | <5 | NA | <2 | NA | 354000 | 365000 | 73 | NA | 2.1 B | NA | <25 | NA | <10 | NA | 7800 | <100 | <3 | NA | 126000 | 127000 | 330 | NA | <0.2 |
| MW-EPA-1 | 11/15/2001 | 138 B J | NA | <10 | NA | 611 | NA | 217 J | NA | <5 | NA | <2 | NA | 435000 J | 418000 J | 9.8 | NA | 1.4 B | NA | <25 | NA | 3.6 B | NA | 2140 | 240 | <3 | NA | 173000 | 152000 | 520 | NA | <0.2 |
| MW-EPA-1 | 10/20/2002 | 164 B J | NA | <10 | NA | 460 | NA | 244 | NA | <5 | NA | <2 | NA | 302000 J | NA | 14.7 | NA | 1.1 B | NA | <25 | NA | <10 | NA | 2540 | NA | <3 | NA | 172000 | NA | 219 | NA | <0.2 |
| MW-EPA-1 | 11/12/2003 | 215 | NA | 3.1 B | NA | 465 | NA | 260 J | NA | <5 | NA | <2 | NA | 425000 J | NA | 26.2 | NA | <7 | NA | <25 | NA | <10 | NA | 2450 | NA | <3 | NA | 173000 J | NA | 323 J | NA | <0.2 |
| MW-EPA1 | 3/28/2004 | 313 J | NA | <10 | NA | 483 | NA | 246 | NA | <5 | NA | <2 | NA | 466000 | NA | 37.2 | NA | <7 | NA | 5 B J | NA | <10 | NA | 1600 | NA | <3 | NA | 148000 | NA | 479 J | NA | <0.2 |
| MW-EPA-1 | 11/4/2004 | 365 J | NA | <10 | NA | 215 | NA | 209 | NA | <5 | NA | 0.38 B J | NA | 338000 | NA | 14.4 | NA | 1.5 B J | NA | <25 | NA | <10 | NA | 2030 | NA | <3 | NA | 123000 J | NA | 338 J | NA | <0.2 |
| MW-EPA-2 | 5/8/2001 | 38400 | NA | 3.6 B | NA | 27.4 | NA | 496 | NA | 1.9 B | NA | 0.65 B | NA | 327000 | 266000 | 1250 | NA | 38.9 | NA | 74.3 | NA | <10 | NA | 64800 | <100 | 27.6 | NA | 114000 | 91100 | 1610 | NA | <0.2 |
| MW-EPA-2 | 11/14/2001 | 39300 J | NA | 5.4 B | NA | 31.7 | NA | 292 | NA | 1.8 B | NA | 5.2 | NA | 254000 | 151000 | 1750 | NA | 51.2 | NA | 109 | NA | 2.6 B | NA | 74600 | <100 | 32.4 | NA | 88100 J | 50700 J | 1640 | NA | 0.15 B |
| MWEPA-2 | 10/20/2002 | 1260 J | NA | <10 | NA | 3.1 B | NA | 113 B | NA | <5 | NA | 0.5 B | NA | 142000 J | NA | 80.1 | NA | 3.3 B | NA | 4.7 B | NA | <10 | NA | 1860 | NA | <3 | NA | 45500 | NA | 317 | NA | <0.2 |
| MW-EPA-2 | 11/11/2003 | 1490 | NA | <10 | NA | <10 | NA | 105 B J | NA | <5 | NA | 1 B | NA | 154000 J | NA | 492 | NA | 5.4 B | NA | 9.4 B | NA | <10 | NA | 3320 | NA | <3 | NA | 47700 J | NA | 288 J | NA | <0.2 |
| MW-EPA-2 | 3/29/2004 | 2020 J E | NA | <10 | NA | <10 | NA | 129 B | NA | <5 | NA | 0.33 B | NA | 190000 | NA | 443 | NA | 6.4 B | NA | 13 B J | NA | <10 | <20 | 3610 | NA | <3 | NA | 62000 | NA | 350 J | NA | <0.2 |
| MW-EPA-2 | 11/4/2004 | 425 J | NA | <10 | NA | <10 | NA | 190 B | NA | <5 | NA | 1 B J | NA | 274000 | NA | 65.6 | NA | 3.9 B J | NA | 5.7 B | NA | <10 | NA | 868 | NA | <3 | NA | 87100 J | NA | 202 J | NA | <0.2 |
| MW-EPA-3 | 5/6/2001 | 1330 | NA | <10 | NA | <10 | NA | 71.9 B | NA | <5 | NA | 1.5 B | NA | 188000 | 274000 | 29.9 | NA | 2.8 B | NA | 11.2 B | NA | <10 | NA | 5540 | <100 | <3 | NA | 68900 | 94600 | 357 | NA | <0.2 |
| MW-EPA-3 | 11/13/2001 | 16400 | NA | <10 | NA | 14.1 | NA | 120 B | NA | 1.1 B | NA | 1.2 B | NA | 470000 J | 332000 J | 75.8 | NA | 14.5 | NA | 37.5 | NA | <10 | NA | 40500 | 2700 | 13.7 | NA | 175000 J | 123000 J | 1440 J | NA | <0.2 |
| MWEPA-3 | 10/17/2002 | 20800 | NA | <10 | NA | 23 | NA | 146 B | NA | 0.79 B | NA | 1.7 B | NA | 467000 J | NA | 117 | NA | 20.7 | NA | 41.5 | NA | <10 | NA | 51400 | NA | 20.6 | NA | 153000 J | NA | 1820 J | NA | <0.2 |
| MW-EPA-3 | 11/13/2003 | 4770 | NA | <10 | NA | 6.7 B | NA | 86.6 B J | NA | 0.83 B | NA | 0.76 B | NA | 414000 J | NA | 69.3 | NA | 7.1 | NA | 7 B | NA | <10 | NA | 16300 J | NA | 7.5 | NA | 118000 | NA | 1350 J | NA | <0.2 |
| MW-EPA-3 | 3/30/2004 | 19200 J | NA | <10 | NA | 22.2 | NA | 117 B | NA | 0.52 B | NA | 2.1 | NA | 464000 | NA | 143 | NA | 21 | NA | 50 | NA | <10 | NA | 55200 | NA | 20.5 | NA | 165000 | NA | 1720 J | NA | <0.2 |
| MW-EPA-3 | 11/4/2004 | 4240 J | NA | <10 | NA | 5.3 B | NA | 174 B | NA | <5 | NA | 2 J | NA | 305000 | NA | 22.8 | NA | 11.9 J | NA | 16.2 B | NA | <10 | NA | 8830 | NA | 2 B | NA | 108000 J | NA | 1120 J | NA | <0.2 |
| MW-EPA-4 | 5/8/2001 | <200 | NA | <10 | NA | <10 | NA | 235 | NA | <5 | NA | 0.31 B | NA | 269000 | 271000 | 37.7 | NA | 2.8 B | NA | <25 | NA | <10 | NA | 950 | <100 | <3 | NA | 63600 | 64000 | 352 | NA | <0.2 |
| MW-EPA-4 | 11/13/2001 | 41.7 B | NA | <10 | NA | <10 | NA | 114 B | NA | <5 | NA | <2 | NA | 157000 J | 136000 J | 130 | NA | 11.4 | NA | <25 | NA | <10 | NA | 8220 | 398 | <3 | NA | 40600 J | 35200 J | 284 J | NA | 0.16 B |
| MWEPA-4 | 10/18/2002 | <200 | NA | <10 | NA | <10 | NA | 87.9 B | NA | <5 | NA | <2 | NA | 120000 J | NA | 207 | NA | 4.1 B | NA | <25 | NA | <10 | NA | 1980 | NA | <3 | NA | 27900 J | NA | 157 J | NA | <0.2 |
| MW-EPA-4 | 11/16/2003 | <200 | NA | <10 | NA | <10 | NA | 165 B J | NA | <5 | NA | 1.1 B J | NA | 196000 J | NA | 37.2 J | NA | 6.6 B J | NA | 3.7 B J | NA | <10 | NA | 3340 | NA | <3 | NA | 48600 J | NA | 185 J | NA | <0.2 |
| MW-EPA-4 | 4/6/2004 | <200 | NA | <10 | NA | <10 | NA | 137 B J | NA | <5 | NA | <2 | NA | 182000 | NA | 64.6 | NA | 2.4 B | NA | <25 | NA | <10 | <20 | 1080 | NA | <3 | NA | 42400 J | NA | 193 | NA | <0.2 |
| MW-EPA-4 | 11/6/2004 | 120 B | NA | <10 | NA | <10 | NA | 169 B | NA | <5 | NA | <2 | NA | 201000 | NA | 36.1 | NA | 1.9 B | NA | 3.3 B | NA | <10 | NA | 1470 | NA | <3 | NA | 47300 | NA | 153 J | NA | <0.2 |
| Recovery Well | 7/29/2001 | NA | NA | <10 | NA | 39.6 | NA | 328 | NA | <5 | NA | 8.6 | NA | NA | NA | 264 | NA | 11.1 | NA | 4640 | NA | <10 | NA | NA | NA | 405 | NA | NA | NA | NA | NA | <0.2 |
| RWV20 | 4/6/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <5 | NA | NA | NA | NA | NA | NA | <20 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| UAW01-30 | 5/4/2001 | 82.1 B | NA | <10 | NA | 13 | NA | 339 | NA | <5 | NA | <2 | NA | 341000 | 358000 | 7.7 | NA | 2.2 B | NA | <25 | NA | 8 B | NA | 9970 | 150 | <3 | NA | 77200 | 84600 | 1240 | NA | <0.2 |
| UAW01-30 | 11/8/2001 | 81.8 B J | NA | <10 | NA | 5.1 B | NA | 164 B J | NA | 0.58 B | NA | 0.29 B | NA | 151000 J | 146000 J | 15.2 | NA | 14.8 | NA | <25 | NA | <10 | NA | 8940 | 7700 | <3 | NA | 31800 | 30900 | 569 | NA | 0.093 B |
| UAW01-30 | 10/17/2002 | <200 | NA | <10 | NA | 7.6 B | NA | 93.9 B | NA | <5 | NA | <2 | NA | 110000 J | NA | 32.8 | NA | 4.7 B | NA | <25 | NA | <10 | NA | 2830 | NA | <3 | NA | 25000 J | NA | 902 J | NA | <0.2 |
| UAW01-30 | 11/11/2003 | <200 | NA | <10 | NA | 5.9 B | NA | 109 B J | NA | <5 | NA | <2 | NA | 138000 J | NA | 32.1 | NA | <7 | NA | <25 | NA | <10 | NA | 1380 | NA | <3 | NA | 32500 J | NA | 180 J | NA | <0.2 |
| UAW01-30 | 3/24/2004 | <200 | NA | <10 | NA | 7.1 B | NA | 81.3 B J | NA | 0.8 B J | NA | <2 | NA | 109000 J | NA | 9.8 | NA | 1.4 B | NA | 6 B J | NA | <10 | NA | 1530 | NA | <3 | NA | 25700 J | NA | 276 J | NA | 0.082 B J |
| UAW01-30 | 11/3/2004 | <200 | NA | <10 | NA | 10.1 | NA | 206 | NA | <5 | NA | <2 | NA | 210000 | NA | 20.3 | NA | 2.7 B | NA | 3.2 B | NA | <10 | NA | 6590 | NA | <3 | NA | 48600 | NA | 777 | NA | 0.082 B |
| UAW01-80 | 5/4/2001 | 331 | NA | <10 | NA | 3.9 B | NA | 309 | NA | <5 | NA | <2 | NA | 117000 | 118000 | 2.4 B | NA | <7 | NA | <25 | NA | <10 | NA | 10600 | 3070 | <3 | NA | 30800 | 31900 | 563 | NA | <0.2 |
| UAW01-80 | 11/12/2001 | 105 B J | NA | <10 | NA | <10 | NA | 308 | NA | <5 | NA | <2 | NA | 112000 | 115000 | <5 | NA | <7 | NA | <25 | NA | <10 | NA | 9600 | 279 | <3 | NA | 29900 | 31000 | 527 | NA | <0.2 |
| UAW01-80 | 10/17/2002 | 98.7 B | NA | <10 | NA | 2.4 B | NA | 350 | NA | <5 | NA | <2 | NA | 113000 J | NA | 3.5 B | NA | <7 | NA | <25 | NA | <10 | NA | 10600 | NA | <3 | NA | 29200 J | NA | 527 J | NA | <0.2 |
| UAW01-80 | 11/11/2003 | <200 | NA | <10 | NA | 3.5 B | NA | 326 J | NA | <5 | NA | <2 | NA | 120000 J | NA | 2.7 B | NA | <7 | NA | <25 | NA | <10 | NA | 10100 | NA | <3 | NA | 30400 J | NA | 508 J | NA | <0.2 |
| UAW01-80 | 3/24/2004 | <200 | NA | <10 | NA | 5 B | NA | 346 J | NA | 0.77 B J | NA | 0.46 B | NA | 122000 J | NA | <5 | NA | <7 | NA | 5 B J | NA | <10 | NA | 10300 | NA | <3 | NA | 30700 J | NA | 527 J | NA | 0.046 B J |
| UAW01-80 | 11/2/2004 | <200 | NA | <10 | NA | 3.4 B | NA | 332 | NA | <5 | NA | 0.32 B | NA | 113000 | NA | <5 | NA | <7 | NA | <25 | NA | <10 | NA | 10000 | NA | <3 | NA | 28300 | NA | 499 | NA | 0.082 B |

# Summary of Inorganic Detections in Groundwater, Seep, and Surface Water Samples

Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | Aluminum | Aluminum-DISS | Antimony | Antimony-DISS | Arsenic | Arsenic-DISS | Barium | Barium-DISS | Beryllium | Beryllium-DISS | Cadmium | Cadmium-DISS | Calcium | Calcium-DISS | Chromium | Chromium-DISS | Cobalt | Cobalt-DISS | Copper | Copper-DISS | Cyanide, Total | Hexavalent Chromium | Iron | Iron-DISS | Lead | Lead-DISS | Magnesium | Magnesium-DISS | Manganese | Manganese-DISS | Mercury |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW07-20 | 5/8/2001 | NA | NA | <10 | NA | <10 | NA | 90.3 B | NA | <5 | NA | <2 | NA | 466000 | 453000 | 1.6 B | NA | <7 | NA | <25 | NA | <10 | NA | 270 | <100 | <3 | NA | 58000 | 57200 | NA | NA | <0.2 |
| UAW07-20 (Dup) | 5/8/2001 | NA | NA | <10 | NA | 4.6 B | NA | 95.8 B | NA | <5 | NA | 0.32 B | NA | 496000 | 479000 | <5 | NA | <7 | NA | <25 | NA | <10 | NA | 303 | <100 | <3 | NA | 61600 | 60400 | NA | NA | <0.2 |
| UAW07-20 | 11/15/2001 | NA | NA | <10 | NA | <10 | NA | 80.4 B | NA | <5 | NA | <2 | NA | NA | 421000 | <5 | NA | <7 | NA | 87.7 | NA | 3.1 B | NA | NA | <100 | <3 | NA | NA | 55200 | NA | NA | <0.2 |
| UAW07-20 | 10/20/2002 | 111 B J | NA | <10 | NA | 3 B | NA | 79.6 B | NA | <5 | NA | 0.39 B | NA | 374000 J | NA | 3.3 B | NA | <7 | NA | <25 | NA | <10 | NA | 174 | NA | <3 | NA | 48700 | NA | 729 | NA | <0.2 |
| UAW07-20 | 11/12/2003 | 280 | NA | <10 | NA | 4.9 B | NA | 83.9 B J | NA | 0.55 B | NA | <2 | NA | 391000 J | NA | 3.3 B | NA | <7 | NA | <25 | NA | <10 | NA | 787 J | NA | 3.7 | NA | 51400 | NA | 885 J | NA | <0.2 |
| UAW07-20 (Dup) | 11/12/2003 | 106 B | NA | <10 | NA | 3.4 B | NA | 70.6 B J | NA | <5 | NA | <2 | NA | 350000 J | NA | 1.8 B | NA | <7 | NA | <25 | NA | <10 | NA | 506 J | NA | <3 | NA | 45100 | NA | 781 J | NA | <0.2 |
| UAW07-20 | 4/5/2004 | 238 J | NA | <10 | NA | 2.6 B | NA | 40.3 B J | NA | <5 | NA | <2 | NA | 263000 | NA | 3.2 B | NA | <7 | NA | <25 | NA | <10 | NA | 1050 | NA | <3 | NA | 36600 J | NA | 1410 | NA | <0.2 |
| UAW07-20 | 11/4/2004 | 50.7 B | NA | <10 | NA | 2.9 B | NA | 75.4 B | NA | <5 | NA | <2 | NA | 408000 | NA | 2.1 B | NA | <7 | NA | <25 | NA | <10 | NA | 55.5 B | NA | <3 | NA | 48700 J | NA | 852 J | NA | <0.2 |
| UAW08-20 | 5/6/2001 | NA | NA | 3.8 B | NA | 36.2 | NA | 87.3 B | NA | <5 | NA | 0.44 B | NA | 810000 | 925000 | 15 | NA | 8.7 | NA | 13.8 B | NA | <10 | NA | 4680 | <100 | <3 | NA | 179000 | 203000 | NA | NA | <0.2 |
| UAW08-20 | 11/13/2001 | NA | NA | <10 | NA | 113 | NA | 144 B | NA | 0.96 B | NA | 0.61 B | NA | 969000 J | 935000 J | 67.6 | NA | 15 | NA | 41.9 | NA | <10 | NA | 22000 | 132 | 15.8 | NA | 141000 J | 129000 J | NA | NA | <0.2 |
| UAW08-20 | 10/20/2002 | 172 B J | NA | 6.8 B | NA | 88.4 | NA | 82 B | NA | <5 | NA | <2 | NA | 988000 J | NA | 28.3 | NA | 2 B | NA | <25 | NA | <10 | NA | 2670 | NA | <3 | NA | 142000 | NA | 596 | NA | <0.2 |
| UAW08-20 | 11/10/2003 | 31000 | NA | 7.8 B | NA | 200 | NA | 262 J | NA | 1.3 B | NA | 21.7 | NA | 1040000 J | NA | 173 | NA | 41.7 | NA | 333 | NA | <10 | NA | 95500 | NA | 79.2 | NA | 289000 J | NA | 2310 J | NA | <0.2 |
| UAW08-20 | 3/29/2004 | 193 B J | NA | 4.9 B | NA | 68.7 | NA | 73 B | NA | <5 | NA | <2 | NA | 955000 | NA | 24.3 | NA | 1.6 B | NA | 3.7 B J | NA | <10 | NA | 1020 | NA | <3 | NA | 141000 | NA | 550 J | NA | <0.2 |
| UAW08-20 | 11/4/2004 | 105 B J | NA | <10 | NA | 75.2 | NA | 84.9 B | NA | <5 | NA | 2.7 J | NA | 1020000 | NA | 27.7 | NA | 2.9 B J | NA | <25 | NA | <10 | NA | 1160 | NA | <3 | NA | 134000 J | NA | 632 J | NA | <0.2 |
| UAW09-20 | 5/5/2001 | 90.6 B | NA | <10 | NA | <10 | NA | 80.3 B | NA | <5 | NA | <2 | NA | 108000 | 106000 | <5 | NA | <7 | NA | <25 | NA | <10 | NA | <100 | <100 | <3 | NA | 31000 | 31500 | 12.4 B | NA | <0.2 |
| UAW09-20 | 11/9/2001 | <200 | NA | <10 | NA | <10 | NA | 78.7 B | NA | <5 | NA | <2 | NA | 109000 J | 101000 J | 10.4 | NA | 1.4 B | NA | <25 | NA | <10 | NA | 288 | 212 | <3 | NA | 25000 J | 23100 J | 17.1 J | NA | <0.2 |
| UAW09-20 | 10/16/2002 | <200 | NA | <10 | NA | <10 | NA | 84.7 B | NA | <5 | NA | 0.85 B | NA | 107000 J | NA | 24.8 | NA | 1.2 B J | NA | <25 | NA | <10 | NA | 130 | NA | <3 | NA | 24900 J | NA | 3.6 B J | NA | <0.2 |
| UAW09-20 | 11/11/2003 | <200 | NA | <10 | NA | <10 | NA | 95.8 B J | NA | <5 | NA | <2 | NA | 143000 J | NA | 21.2 | NA | <7 | NA | <25 | NA | <10 | NA | 76.4 B | NA | <3 | NA | 33500 J | NA | 1.1 B J | NA | <0.2 |
| UAW09-20 | 4/6/2004 | <200 | NA | <10 | NA | <10 | NA | 65.5 B J | NA | <5 | NA | <2 | NA | 110000 | NA | 22.5 | NA | <7 | NA | <25 | NA | <10 | NA | 62.5 B | NA | <3 | NA | 26300 J | NA | 1.4 B | NA | <0.2 |
| UAW09-20 | 11/6/2004 | <200 | NA | <10 | NA | 6.2 B | NA | 363 | NA | <5 | NA | <2 | NA | 103000 | NA | 4 B | NA | <7 | NA | 6.7 B | NA | <10 | NA | <100 | NA | <3 | NA | 34200 | NA | 121 J | NA | <0.2 |
| UAW09-60 | 5/5/2001 | 142 B | NA | <10 | NA | <10 | NA | 249 | NA | <5 | NA | <2 | NA | 91900 | 99300 | <5 | NA | <7 | NA | 13.7 B | NA | <10 | NA | 132 | <100 | <3 | NA | 31500 | 35300 | 348 | NA | <0.2 |
| UAW09-60 | 11/9/2001 | 30.4 B | NA | <10 | NA | <10 | NA | 268 | NA | <5 | NA | <2 | NA | 88100 J | 97800 J | <5 | NA | <7 | NA | <25 | NA | <10 | NA | <100 | <100 | <3 | NA | 31500 J | 34900 J | 226 J | NA | <0.2 |
| UAW09-60 | 10/16/2002 | <200 | NA | <10 | NA | 5.6 B | NA | 330 | NA | <5 | NA | <2 | NA | 82200 J | NA | <5 | NA | 1.4 B J | NA | <25 | NA | <10 | NA | 140 | NA | <3 | NA | 28700 J | NA | 298 J | NA | <0.2 |
| UAW09-60 | 11/11/2003 | <200 | NA | <10 | NA | 5 B | NA | 364 J | NA | <5 | NA | <2 | NA | 104000 J | NA | 2 B | NA | <7 | NA | <25 | NA | <10 | NA | 71.6 B | NA | <3 | NA | 34900 J | NA | 236 J | NA | <0.2 |
| UAW09-60 | 4/6/2004 | <200 | NA | <10 | NA | 9.7 B | NA | 411 J | NA | <5 | NA | <2 | NA | 112000 | NA | <5 | NA | <7 | NA | <25 | NA | <10 | NA | 149 | NA | <3 | NA | 36700 J | NA | 311 | NA | <0.2 |
| UAW09-60 | 11/6/2004 | <200 | NA | <10 | NA | <10 | NA | 73.4 B | NA | <5 | NA | <2 | NA | 110000 | NA | 8.5 | NA | <7 | NA | 3.8 B | NA | <10 | NA | <100 | NA | <3 | NA | 30500 | NA | <15 | NA | <0.2 |
| UAW10-50 | 10/12/2001 | 32800 | NA | <10 | NA | 19.2 | NA | 281 | NA | 1.9 B | NA | 0.97 B | NA | 271000 | 193000 | 46.7 | NA | 23.9 | NA | 61.6 | NA | 3 B | NA | 49200 | <100 | 21.3 | NA | 73100 | 54600 | 1210 | NA | <0.2 |
| UAW10-50 | 11/13/2001 | 318 | NA | <10 | NA | <10 | NA | 107 B | NA | <5 | NA | <2 | NA | 185000 J | 176000 J | <5 | NA | 2.2 B | NA | 12.3 B | NA | <10 | NA | 346 | <100 | <3 | NA | 55000 J | 52400 J | 469 J | NA | 0.095 B |
| UAW10-50 | 10/19/2002 | 3070 J | NA | <10 | NA | <10 | NA | 68.1 B | NA | <5 | NA | <2 | NA | 176000 J | NA | 12.1 | NA | 4.4 B | NA | 15.3 B | NA | 2.1 B | NA | 4490 | NA | 2.2 B | NA | 58500 | NA | 559 | NA | <0.2 |
| UAW10-50 | 11/10/2003 | 2350 | NA | <10 | NA | <10 | NA | 60.3 B J | NA | <5 | NA | <2 | NA | 196000 J | NA | 4.3 B | NA | 3.2 B | NA | 4.9 B | NA | <10 | NA | 2810 | NA | <3 | NA | 65200 J | NA | 490 J | NA | <0.2 |
| UAW10-50 | 3/30/2004 | 2610 J | NA | <10 | NA | 3 B | NA | 55.9 B | NA | <5 | NA | <2 | NA | 209000 | NA | 5 | NA | 3.6 B | NA | 10.1 B | NA | <10 | NA | 3600 | NA | <3 | NA | 60400 | NA | 356 J | NA | <0.2 |
| UAW10-50 | 11/5/2004 | 2020 | NA | <10 | NA | <10 | NA | 51.8 B | NA | <5 | NA | <2 | NA | 193000 | NA | 4.6 B | NA | 3.1 B | NA | 10.3 B | NA | <10 | NA | 2760 | NA | <3 | NA | 57200 | NA | 403 J | NA | <0.2 |
| UAW10-80 | 10/12/2001 | 1670 | NA | <10 | NA | 5.1 B | NA | 131 B | NA | <5 | NA | <2 | NA | 181000 | 191000 | 34.8 | NA | 6.3 B | NA | 10.1 B | NA | 2.6 B | NA | 4990 | 5360 | <3 | NA | 57700 | 61000 | 3360 | NA | <0.2 |
| UAW10-80 | 11/13/2001 | 503 | NA | <10 | NA | 6.1 B | NA | 118 B | NA | <5 | NA | 0.58 B | NA | 192000 J | 196000 J | <5 | NA | 3.5 B | NA | 5.8 B | NA | <10 | NA | 6130 | 190 | <3 | NA | 59700 J | 60900 J | 3560 J | NA | 0.091 B |
| UAW10-80 | 10/19/2002 | 4030 J | NA | <10 | NA | 13.3 | NA | 183 B | NA | <5 | NA | 0.36 B | NA | 117000 J | NA | 25.8 | NA | 5.5 B | NA | 6.5 B | NA | <10 | NA | 13200 | NA | 4.8 | NA | 37100 | NA | 972 | NA | <0.2 |
| UAW10-80 | 11/13/2003 | 11000 | NA | <10 | NA | 19.5 | NA | 279 J | NA | 1.1 B | NA | <2 | NA | 142000 J | NA | 171 | NA | 12 | NA | 16.5 B | NA | <10 | NA | 24100 J | NA | 9.5 | NA | 43100 | NA | 1040 J | NA | <0.2 |
| UAW10-80 | 3/30/2004 | 988 J | NA | <10 | NA | 11.5 | NA | 193 B | NA | <5 | NA | <2 | NA | 132000 | NA | 8.1 | NA | 3.3 B | NA | 5.8 B | NA | <10 | NA | 5710 | NA | <3 | NA | 40700 | NA | 691 J | NA | <0.2 |
| UAW10-80 | 11/5/2004 | 4210 | NA | <10 | NA | 13.6 | NA | 228 | NA | <5 | NA | <2 | NA | 145000 | NA | 16.2 | NA | 6.1 B | NA | 10.4 B | NA | <10 | NA | 12500 | NA | 5.4 | NA | 43800 J | NA | 789 J | NA | <0.2 |
| UAW11-10 | 5/8/2001 | <200 | NA | 1060 | NA | 176 | NA | 295 | NA | <5 | NA | <2 | NA | 224000 | 154000 | 249 | NA | 9.6 | NA | <25 | NA | 8.1 B | NA | 50000 | 34500 | 4.4 | NA | 41100 | 28400 | 8440 | NA | 0.21 |
| UAW11-10 | 11/10/2001 | 47.3 B | NA | 62.6 | NA | 62.9 | NA | 41.3 B | NA | <5 | NA | <2 | NA | 110000 J | 116000 J | 11.3 | NA | 1.5 B | NA | <25 | NA | 5.6 B | NA | 3900 | 3140 | <3 | NA | 45500 J | 49400 J | 470 J | NA | 0.13 B |
| UAW11-10 | 10/18/2002 | <200 | NA | 8 B | NA | 65.2 | NA | 29 B | NA | <5 | NA | <2 | NA | 181000 J | NA | 2.7 B | NA | 1.1 B | NA | <25 | NA | <10 | NA | 404 | NA | <3 | NA | 36600 J | NA | 2630 J | NA | <0.2 |

# Summary of Inorganic Detections in Groundwater, Seep, and Surface Water Samples

Morton International, Inc.

Reading, Ohio

**Units: µg/l**

| Sample Location | Sample Date | Aluminum | Aluminum-DISS | Antimony | Antimony-DISS | Arsenic | Arsenic-DISS | Barium | Barium-DISS | Beryllium | Beryllium-DISS | Cadmium | Cadmium-DISS | Calcium | Calcium-DISS | Chromium | Chromium-DISS | Cobalt | Cobalt-DISS | Copper | Copper-DISS | Cyanide, Total | Hexavalent Chromium | Iron | Iron-DISS | Lead | Lead-DISS | Magnesium | Magnesium-DISS | Manganese | Manganese-DISS | Mercury |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW11-10 | 11/16/2003 | 68.1 B J | NA | 4.7 B | NA | 32.6 | NA | 23.6 B J | NA | <5 | NA | 1.1 B J | NA | 148000 J | NA | 6.2 J | NA | 1.8 B J | NA | 2 B J | NA | <10 | NA | 270 | NA | <3 | NA | 29100 J | NA | 2800 J | NA | <0.2 |
| UAW11-10 | 4/6/2004 | 39.6 B J | NA | <10 | NA | 86.1 | NA | 26.8 B J | NA | <5 | NA | 1 B | NA | 183000 | NA | <5 | NA | 1.1 B | NA | 2.5 B | NA | <10 | NA | 554 | NA | <3 | NA | 36900 J | NA | 4230 | NA | <0.2 |
| UAW11-10 | 11/7/2004 | 78.7 B J | NA | <10 | NA | 80.3 | NA | 10.7 B | NA | <5 | NA | <2 | NA | 61000 | NA | <5 | NA | 1.2 B | NA | <25 | NA | <10 | NA | 183 | NA | <3 | NA | 13500 | NA | 1190 | NA | <0.2 |
| UAW11-40 | 5/8/2001 | 355 | NA | 2.3 B | NA | <10 | NA | 31.4 B | NA | <5 | NA | 0.61 B | NA | 361000 | 383000 | 6.7 | NA | 12.7 | NA | 13.7 B | NA | <10 | NA | 930 | <100 | <3 | NA | 81000 | 85100 | 1130 | NA | <0.2 |
| UAW11-40 | 11/12/2001 | 62 B J | NA | <10 | NA | <10 | NA | 24.4 B | NA | <5 | NA | 0.51 B | NA | 347000 | 335000 | 13 | NA | 13.2 | NA | 11.6 B | NA | <10 | NA | <100 | <100 | <3 | NA | 79100 | 76500 | 1150 | NA | <0.2 |
| UAW11-40 | 10/18/2002 | <200 | NA | <10 | NA | <10 | NA | 26.2 B | NA | <5 | NA | 0.34 B | NA | 318000 J | NA | 24 | NA | 11.6 | NA | 6.2 B | NA | <10 | NA | 245 | NA | <3 | NA | 72800 J | NA | 1040 J | NA | <0.2 |
| UAW11-40 | 11/16/2003 | <200 | NA | <10 | NA | <10 | NA | 24.5 B J | NA | <5 | NA | 1.3 B J | NA | 341000 J | NA | 54.6 J | NA | 10.4 J | NA | 9.4 B J | NA | <10 | NA | 650 | NA | <3 | NA | 73000 J | NA | 904 J | NA | <0.2 |
| UAW11-40 | 4/6/2004 | 65.4 B J | NA | <10 | NA | <10 | NA | 26.5 B J | NA | <5 | NA | 0.31 B | NA | 353000 | NA | 8.5 | NA | 9.3 | NA | 6 B | NA | <10 | <20 | 100 | NA | <3 | NA | 73300 J | NA | 966 | NA | <0.2 |
| UAW11-40 (Dup) | 4/6/2004 | 48.1 B J | NA | <10 | NA | <10 | NA | 25.9 B J | NA | <5 | NA | 0.41 B | NA | 346000 | NA | 7.7 | NA | 8.6 | NA | 4.9 B | NA | <10 | <20 | 92.8 B | NA | <3 | NA | 71200 J | NA | 903 | NA | <0.2 |
| UAW11-40 | 11/7/2004 | 91.1 B J | NA | <10 | NA | <10 | NA | 28.8 B | NA | <5 | NA | 0.62 B | NA | 340000 | NA | 2.3 B | NA | 11.9 | NA | 8 B | NA | <10 | NA | 56.7 B | NA | <3 | NA | 78600 | NA | 1050 | NA | <0.2 |
| UAW12-20 | 5/6/2001 | NA | NA | <10 | NA | 5.8 B | NA | 75.7 B | NA | <5 | NA | <2 | NA | 727000 | 679000 | 2.2 B | NA | <7 | NA | <25 | NA | <10 | NA | 3010 | 141 | <3 | NA | 54800 | 51300 | NA | NA | <0.2 |
| UAW12-20 | 11/15/2001 | NA | NA | <10 | NA | <10 | NA | 20.3 B | NA | <5 | NA | <2 | NA | NA | 648000 | <5 | NA | <7 | NA | 19.7 B | NA | 5 B | NA | NA | 114 | <3 | NA | NA | 55200 | NA | NA | <0.2 |
| UAW12-20 | 10/20/2002 | 102 B J | NA | <10 | NA | 8.9 B | NA | 18.1 B | NA | <5 | NA | <2 | NA | 742000 J | NA | 3.1 B | NA | <7 | NA | 1.8 B | NA | <10 | NA | 213 | NA | <3 | NA | 55400 | NA | 4940 | NA | <0.2 |
| UAW12-20 | 11/12/2003 | 63.1 B | NA | <10 | NA | 3.8 B | NA | 21.1 B J | NA | <5 | NA | <2 | NA | 660000 J | NA | 2.8 B | NA | <7 | NA | <25 | NA | <10 | NA | 296 J | NA | <3 | NA | 46100 | NA | 5220 J | NA | <0.2 |
| UAW12-20 | 3/28/2004 | 70.8 B J | NA | <10 | NA | <10 | NA | 26.2 B | NA | <5 | NA | 0.28 B | NA | 856000 | NA | <5 | NA | <7 | NA | 4.7 B J | NA | <10 | NA | 456 | NA | <3 | NA | 67900 | NA | 9570 J | NA | <0.2 |
| UAW12-20 | 11/4/2004 | <200 | NA | <10 | NA | <10 | NA | 21 B | NA | <5 | NA | <2 | NA | 538000 | NA | 2.5 B | NA | <7 | NA | <25 | NA | <10 | NA | 249 | NA | <3 | NA | 42600 J | NA | 6000 J | NA | <0.2 |
| UAW13-20 | 5/6/2001 | NA | NA | <10 | NA | 36.1 | NA | 21.2 B | NA | <5 | NA | <2 | NA | 818000 | 764000 | 3.4 B | NA | <7 | NA | <25 | NA | <10 | NA | 90.4 B | <100 | <3 | NA | 81900 | 87200 | NA | NA | <0.2 |
| UAW13-20 | 11/15/2001 | NA | NA | 4.2 B | NA | 83.1 | NA | 27.4 B | NA | <5 | NA | 0.28 B | NA | NA | 916000 | 315 | NA | <7 | NA | 597 | NA | 8.5 B | NA | NA | <100 | <3 | NA | NA | 103000 | NA | NA | 0.11 B |
| UAW13-20 | 10/23/2002 | <200 | NA | <10 | NA | 59.1 J | NA | 20.1 B | NA | <5 | NA | <2 | NA | 1030000 | NA | 110 | NA | <7 | NA | 4.2 B | NA | 2.6 B | NA | 143 | NA | <3 | NA | 96600 | NA | 2750 | NA | <0.2 |
| UAW13-20 | 11/12/2003 | <200 | NA | <10 | NA | 45.2 | NA | 13.8 B J | NA | <5 | NA | <2 | NA | 897000 J | NA | 49.4 | NA | <7 | NA | <25 | NA | <10 | NA | 142 J | NA | <3 | NA | 98800 | NA | 2760 J | NA | <0.2 |
| UAW13-20 | 3/28/2004 | 65.8 B J | NA | <10 | NA | 39.6 | NA | 9.1 B | NA | <5 | NA | <2 | NA | 875000 | NA | 56.3 | NA | <7 | NA | 15.9 B J | NA | <10 | NA | 102 | NA | <3 | NA | 108000 | NA | 3140 J | NA | <0.2 |
| UAW13-20 | 11/5/2004 | 55.9 B | NA | <10 | NA | 38.2 | NA | 12.9 B | NA | 0.79 B | NA | <2 | NA | 567000 | NA | 10.8 | NA | <7 | NA | <25 | NA | <10 | NA | <100 | NA | <3 | NA | 109000 J | NA | 2840 J | NA | <0.2 |
| UAW14-10 | 5/5/2001 | 286 | NA | <10 | NA | <10 | NA | 82.6 B | NA | <5 | NA | <2 | NA | 107000 | 108000 | <5 | NA | <7 | NA | 13.3 B | NA | <10 | NA | 294 | <100 | <3 | NA | 30600 | 32200 | 53.8 | NA | <0.2 |
| UAW14-10 | 11/9/2001 | 177 B | NA | <10 | NA | <10 | NA | 69.1 B | NA | <5 | NA | <2 | NA | 110000 J | 109000 J | <5 | NA | <7 | NA | <25 | NA | 1.8 B | NA | 453 | 387 | <3 | NA | 31700 J | 31400 J | 26.4 J | NA | <0.2 |
| UAW14-10 | 10/16/2002 | 359 | NA | <10 | NA | <10 | NA | 72 B | NA | <5 | NA | 0.41 B | NA | 100000 J | NA | 4.3 B | NA | 1.4 B J | NA | <25 | NA | <10 | NA | 881 | NA | <3 | NA | 29300 J | NA | 100 J | NA | <0.2 |
| UAW14-10 | 11/16/2003 | 57 B J | NA | <10 | NA | 6 B | NA | 73.7 B J | NA | <5 | NA | 1.3 B J | NA | 111000 J | NA | 5.5 J | NA | 1.8 B J | NA | 4 B J | NA | <10 | NA | 1850 | NA | <3 | NA | 30100 J | NA | 60.1 J | NA | <0.2 |
| UAW14-10 | 4/5/2004 | <200 | NA | <10 | NA | <10 | NA | 59.9 B J | NA | <5 | NA | <2 | NA | 115000 | NA | 10.9 | NA | <7 | NA | <25 | NA | <10 | NA | 2680 | NA | <3 | NA | 33000 J | NA | 72.5 | NA | <0.2 |
| UAW14-10 | 11/6/2004 | <200 | NA | <10 | NA | <10 | NA | 71.5 B | NA | <5 | NA | <2 | NA | 104000 | NA | <5 | NA | <7 | NA | <25 | NA | <10 | NA | 323 | NA | <3 | NA | 27800 | NA | 31.2 J | NA | <0.2 |
| UAW15-20 | 5/6/2001 | 147 B | NA | <10 | NA | <10 | NA | 221 | NA | <5 | NA | 0.49 B | NA | 237000 | 253000 | 2 B | NA | 21.4 | NA | 26.4 | NA | <10 | NA | 156 | <100 | <3 | NA | 61600 | 65300 | 397 | NA | <0.2 |
| UAW15-20 | 11/11/2001 | 271 J | NA | <10 | NA | <10 | NA | 330 | NA | <5 | NA | 0.48 B | NA | 311000 | 297000 | 8.7 | NA | 14.6 | NA | 4.9 B | NA | <10 | NA | 398 | <100 | <3 | NA | 77100 | 73700 | 231 | NA | <0.2 |
| UAW15-20 | 10/18/2002 | 85.5 B J | NA | <10 | NA | <10 | NA | 145 B | NA | <5 | NA | 0.5 B | NA | 148000 J | NA | 9.7 | NA | 15 | NA | 1.8 B | NA | <10 | NA | 273 | NA | <3 | NA | 37400 | NA | 16.1 | NA | <0.2 |
| UAW15-20 | 11/17/2003 | 104 B J | NA | <10 | NA | <10 | NA | 290 J | NA | <5 | NA | 1.2 B J | NA | 214000 J | NA | 24.6 J | NA | 7.6 J | NA | 5 B J | NA | 4.9 B | NA | 218 | NA | <3 | NA | 51900 J | NA | 60.3 J | NA | <0.2 |
| UAW15-20 | 4/7/2004 | 214 J | NA | <10 | NA | <10 | NA | 563 J | NA | <5 | NA | <2 | NA | 485000 | NA | 40.6 | NA | 10.1 | NA | 3 B | NA | <10 | NA | 571 | NA | <3 | NA | 115000 J | NA | 102 | NA | <0.2 |
| UAW15-20 | 11/7/2004 | 167 B J | NA | <10 | NA | <10 | NA | 335 | NA | <5 | NA | 0.63 B | NA | 229000 | NA | 13.6 | NA | 11.1 | NA | 3 B | NA | 6.3 B | NA | 160 | NA | <3 | NA | 58900 | NA | 104 | NA | <0.2 |
| UAW15-50 | 5/6/2001 | 147 B | NA | 14.4 | NA | 83.5 | NA | 1090 | NA | <5 | NA | <2 | NA | 257000 | 219000 | 3.1 B | NA | 13.7 | NA | <25 | NA | <10 | NA | 15600 | 407 | <3 | NA | 107000 | 89800 | 735 | NA | <0.2 |
| UAW15-50 | 11/11/2001 | 197 B J | NA | 16 | NA | 83 | NA | 960 | NA | <5 | NA | 0.29 B | NA | 250000 | 230000 | 1.9 B | NA | 11 | NA | <25 | NA | 4.3 B | NA | 16400 | 582 | <3 | NA | 108000 | 99000 | 653 | NA | 0.18 B |
| UAW15-50 | 10/18/2002 | 88.4 B J | NA | 12.2 | NA | 91.6 | NA | 766 | NA | <5 | NA | <2 | NA | 206000 J | NA | 1.6 B | NA | 4.1 B | NA | <25 | NA | <10 | NA | 13000 | NA | <3 | NA | 88700 | NA | 588 | NA | <0.2 |
| UAW15-50 | 11/17/2003 | 60.6 B J | NA | 8.5 B | NA | 71.4 | NA | 648 J | NA | <5 | NA | 1.2 B J | NA | 225000 J | NA | 5.4 J | NA | 4.2 B J | NA | 2.9 B J | NA | <10 | NA | 10400 | NA | <3 | NA | 90400 J | NA | 682 J | NA | <0.2 |
| UAW15-50 | 4/7/2004 | 62.3 B J | NA | 11.1 | NA | 77.1 | NA | 664 J | NA | <5 | NA | 0.53 B | NA | 196000 | NA | 2.5 B | NA | 7.8 | NA | <25 | NA | <10 | NA | 13600 | NA | <3 | NA | 75500 J | NA | 543 | NA | <0.2 |
| UAW15-50 | 11/7/2004 | 65 B J | NA | 8.7 B | NA | 62.6 | NA | 566 | NA | <5 | NA | 0.37 B | NA | 173000 | NA | <5 | NA | 5.4 B | NA | <25 | NA | <10 | NA | 9630 | NA | <3 | NA | 69300 | NA | 665 | NA | <0.2 |
| UAW15-50 (Dup) | 11/7/2004 | 62.6 B J | NA | 8.4 B | NA | 60.7 | NA | 553 | NA | <5 | NA | 0.46 B | NA | 168000 | NA | <5 | NA | 4.8 B | NA | <25 | NA | <10 | NA | 9420 | NA | <3 | NA | 67400 | NA | 644 | NA | <0.2 |

# Summary of Inorganic Detections in Groundwater, Seep, and Surface Water Samples

Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | Aluminum | Aluminum-DISS | Antimony | Antimony-DISS | Arsenic | Arsenic-DISS | Barium | Barium-DISS | Beryllium | Beryllium-DISS | Cadmium | Cadmium-DISS | Calcium | Calcium-DISS | Chromium | Chromium-DISS | Cobalt | Cobalt-DISS | Copper | Copper-DISS | Cyanide, Total | Hexavalent Chromium | Iron | Iron-DISS | Lead | Lead-DISS | Magnesium | Magnesium-DISS | Manganese | Manganese-DISS | Mercury |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW16-10 | 10/12/2001 | 98.3 B | NA | <10 | NA | 24.9 | NA | 55.5 B | NA | <5 | NA | <2 | NA | 223000 | 226000 | 7 | NA | 1.9 B | NA | <25 | NA | <10 | NA | 1300 | 1570 | <3 | NA | 38900 | 39900 | 2760 | NA | <0.2 |
| UAW16-10 (Dup) | 10/12/2001 | 98.6 B | NA | <10 | NA | 23.2 | NA | 55.1 B | NA | <5 | NA | <2 | NA | 221000 | 226000 | 6.9 | NA | 1.8 B | NA | <25 | NA | <10 | NA | 1250 | 1250 | <3 | NA | 38200 | 39400 | 2740 | NA | <0.2 |
| UAW16-10 | 11/13/2001 | 94.1 B | NA | 3.6 B | NA | 20.6 | NA | 49.6 B | NA | <5 | NA | <2 | NA | 277000 J | 243000 J | 4.3 B | NA | <7 | NA | 6.8 B | NA | <10 | NA | 1150 | 418 | <3 | NA | 45700 J | 40200 J | 2390 J | NA | <0.2 |
| UAW16-10 | 10/18/2002 | <200 | NA | <10 | NA | 8.9 B | NA | 56.5 B | NA | <5 | NA | <2 | NA | 410000 J | NA | 2.7 B | NA | 1.2 B | NA | <25 | NA | <10 | NA | 721 | NA | <3 | NA | 58300 J | NA | 4460 J | NA | <0.2 |
| UAW16-10 | 11/16/2003 | 57.3 B J | NA | <10 | NA | 5.1 B | NA | 38.4 B J | NA | <5 | NA | 1.1 B J | NA | 369000 J | NA | 5.7 J | NA | 1.7 B J | NA | 2.2 B J | NA | <10 | NA | 603 | NA | <3 | NA | 43100 J | NA | 3180 J | NA | <0.2 |
| UAW16-10 (Dup) | 11/17/2003 | 62.9 B J | NA | 3.1 B | NA | 4.7 B | NA | 40.4 B J | NA | <5 | NA | 0.97 B J | NA | 382000 J | NA | 5.8 J | NA | 1.6 B J | NA | 2.3 B J | NA | <10 | NA | 634 | NA | <3 | NA | 45100 J | NA | 3300 J | NA | <0.2 |
| UAW16-10 | 4/7/2004 | <200 | NA | <10 | NA | <10 | NA | 33.5 B J | NA | <5 | NA | <2 | NA | 329000 | NA | <5 | NA | <7 | NA | <25 | NA | <10 | NA | 529 | NA | <3 | NA | 36200 J | NA | 3130 | NA | <0.2 |
| UAW16-10 | 11/7/2004 | 63.3 B J | NA | <10 | NA | <10 | NA | 28 B | NA | <5 | NA | <2 | NA | 261000 | NA | <5 | NA | <7 | NA | <25 | NA | <10 | NA | 340 | NA | <3 | NA | 30100 | NA | 2520 | NA | <0.2 |
| UAW17-40 | 5/5/2001 | 955 | NA | <10 | NA | 7.6 B | NA | 216 | NA | <5 | NA | <2 | NA | 102000 | 102000 | 2 B | NA | <7 | NA | <25 | NA | <10 | NA | 3720 | <100 | <3 | NA | 31400 | 33200 | 242 | NA | <0.2 |
| UAW17-40 | 11/9/2001 | 395 | NA | <10 | NA | 16.2 | NA | 177 B | NA | <5 | NA | <2 | NA | 116000 J | 116000 J | 2.5 B | NA | <7 | NA | <25 | NA | <10 | NA | 4700 | 4760 | <3 | NA | 36900 J | 36900 J | 301 J | NA | <0.2 |
| UAW17-40 | 10/16/2002 | 333 | NA | <10 | NA | 17.9 | NA | 121 B | NA | <5 | NA | <2 | NA | 108000 J | NA | 1.6 B | NA | 1.7 B | NA | <25 | NA | <10 | NA | 3930 | NA | <3 | NA | 33700 J | NA | 268 J | NA | <0.2 |
| UAW17-40 | 11/16/2003 | 63.3 B J | NA | <10 | NA | 19.1 | NA | 117 B J | NA | <5 | NA | 1 B J | NA | 111000 J | NA | 4.5 B J | NA | 1.9 B J | NA | 2.9 B J | NA | <10 | NA | 3450 | NA | <3 | NA | 33000 J | NA | 241 J | NA | <0.2 |
| UAW17-40 | 3/31/2004 | 166 B | NA | <10 | NA | 10.9 | NA | 100 B | NA | <5 | NA | <2 | NA | 102000 J | NA | 4.6 B | NA | <7 | NA | <25 | NA | <10 | NA | 1510 | NA | <3 | NA | 30900 J | NA | 148 J | NA | <0.2 |
| UAW17-40 | 11/6/2004 | 27.6 B | NA | <10 | NA | 14.2 | NA | 135 B | NA | <5 | NA | <2 | NA | 110000 | NA | <5 | NA | <7 | NA | 2.5 B | NA | <10 | NA | 3030 | NA | <3 | NA | 33000 | NA | 250 J | NA | <0.2 |
| UAW18-20 | 10/12/2001 | 97.9 B | NA | <10 | NA | 12 | NA | 169 B | NA | <5 | NA | 0.31 B | NA | 73100 | 72200 | 1.5 B | NA | 2 B | NA | <25 | NA | 4.7 B | NA | 5340 | 5300 | <3 | NA | 13900 | 13800 | 1220 | NA | <0.2 |
| UAW18-20 | 11/13/2001 | 60.8 B | NA | <10 | NA | 11.7 | NA | 186 B | NA | <5 | NA | <2 | NA | 89100 J | 81900 J | <5 | NA | 1.8 B | NA | <25 | NA | 5.4 B | NA | 4800 | <100 | <3 | NA | 16800 J | 15600 J | 1130 J | NA | <0.2 |
| UAW18-20 | 10/18/2002 | <200 | NA | <10 | NA | 13.1 | NA | 49.5 B | NA | <5 | NA | <2 | NA | 23600 J | NA | 2 B | NA | 2.2 B | NA | <25 | NA | <10 | NA | 1570 | NA | <3 | NA | 6820 J | NA | 282 J | NA | <0.2 |
| UAW18-20 | 11/16/2003 | 70.5 B J | NA | <10 | NA | 17.8 | NA | 197 B J | NA | <5 | NA | 1 B J | NA | 99800 J | NA | 4.9 B J | NA | 1.8 B J | NA | 2.6 B J | NA | <10 | NA | 1710 | NA | <3 | NA | 39900 J | NA | 685 J | NA | <0.2 |
| UAW18-20 | 4/7/2004 | 40.6 B J | NA | <10 | NA | 8.2 B | NA | 299 J | NA | <5 | NA | <2 | NA | 216000 | NA | <5 | NA | <7 | NA | <25 | NA | <10 | NA | 3300 | NA | <3 | NA | 81500 J | NA | 1900 | NA | <0.2 |
| UAW18-20 | 11/7/2004 | 104 B J | NA | <10 | NA | 32.3 | NA | 759 | NA | <5 | NA | <2 | NA | 469000 | NA | <5 | NA | <7 | NA | <25 | NA | <10 | NA | 3370 | NA | <3 | NA | 105000 | NA | 5390 | NA | <0.2 |
| UAW19-80 | 5/6/2001 | 150 B | NA | <10 | NA | <10 | NA | 112 B | NA | <5 | NA | 0.33 B | NA | 194000 | 191000 | 1.4 B | NA | <7 | NA | <25 | NA | <10 | NA | 363 | <100 | <3 | NA | 58700 | 55400 | 117 | NA | <0.2 |
| UAW19-80 | 11/12/2001 | 1010 J | NA | <10 | NA | <10 | NA | 113 B | NA | <5 | NA | <2 | NA | 177000 | 186000 | 19.6 | NA | 1.4 B | NA | 12.4 B | NA | <10 | NA | 1700 | <100 | <3 | NA | 52700 | 55400 | 60.9 | NA | <0.2 |
| UAW19-80 (Dup) | 11/12/2001 | 65.4 B J | NA | <10 | NA | <10 | NA | 25.4 B | NA | <5 | NA | 0.62 B | NA | 358000 | 349000 | 11.8 | NA | 13.3 | NA | 12.1 B | NA | <10 | NA | <100 | <100 | <3 | NA | 81600 | 79200 | 1190 | NA | <0.2 |
| UAW19-80 | 10/17/2002 | 406 | NA | <10 | NA | <10 | NA | 107 B | NA | <5 | NA | <2 | NA | 197000 J | NA | 6.5 | NA | 0.84 B | NA | <25 | NA | <10 | NA | 592 | NA | <3 | NA | 57700 J | NA | 27.8 J | NA | <0.2 |
| UAW19-80 (Dup) | 10/17/2002 | 345 | NA | <10 | NA | <10 | NA | 110 B | NA | <5 | NA | <2 | NA | 194000 J | NA | 6.3 | NA | 0.89 B | NA | <25 | NA | <10 | NA | 544 | NA | <3 | NA | 57100 J | NA | 26.9 J | NA | <0.2 |
| UAW19-80 | 11/13/2003 | 76.3 B | NA | <10 | NA | <10 | NA | 88.9 B J | NA | 0.72 B | NA | <2 | NA | 196000 J | NA | 5.8 | NA | <7 | NA | <25 | NA | <10 | NA | 138 J | NA | <3 | NA | 56600 | NA | 17.5 J | NA | <0.2 |
| UAW19-80 | 3/30/2004 | 423 | NA | <10 | NA | <10 | NA | 95.7 B | NA | <5 | NA | <2 | NA | 213000 J | NA | 5.2 | NA | <7 | NA | <25 | NA | <10 | NA | 549 | NA | <3 | NA | 61100 J | NA | 28.4 J | NA | <0.2 |
| UAW19-80 | 11/5/2004 | 51.4 B | NA | <10 | NA | <10 | NA | 83.4 B | NA | <5 | NA | <2 | NA | 201000 | NA | <5 | NA | <7 | NA | <25 | NA | <10 | NA | 116 | NA | <3 | NA | 59000 J | NA | 12.8 B J | NA | <0.2 |
| UAW20-60 | 5/7/2001 | 200 | NA | <10 | NA | <10 | NA | 149 B | NA | <5 | NA | <2 | NA | 390000 | 482000 | 4.1 B | NA | 3 B | NA | 16.8 B | NA | <10 | NA | 268 | <100 | <3 | NA | 97400 | 122000 | 366 | NA | <0.2 |
| UAW20-60 | 11/14/2001 | <200 | NA | <10 | NA | <10 | NA | 26.5 B | NA | <5 | NA | 0.3 B | NA | 446000 | 430000 | <5 | NA | 2.3 B | NA | 5.8 B | NA | 2.9 B | NA | <100 | <100 | <3 | NA | 124000 J | 120000 J | 303 | NA | <0.2 |
| UAW20-60 (Dup) | 11/14/2001 | 70.6 B J | NA | 2.8 B | NA | <10 | NA | 26.1 B | NA | <5 | NA | 0.33 B | NA | 436000 | 431000 | <5 | NA | 2.2 B | NA | 5.3 B | NA | 1.9 B | NA | 175 | <100 | <3 | NA | 123000 J | 121000 J | 303 | NA | <0.2 |
| UAW20-60 | 10/19/2002 | 76.5 B J | NA | <10 | NA | <10 | NA | 20.8 B | NA | <5 | NA | 0.4 B | NA | 373000 J | NA | 6 | NA | 1.6 B | NA | <25 | NA | <10 | NA | 50.3 B | NA | <3 | NA | 104000 | NA | 179 | NA | <0.2 |
| UAW20-60 (Dup) | 10/19/2002 | 102 B J | NA | <10 | NA | 20.8 | NA | 69 B | NA | <5 | NA | <2 | NA | 242000 J | NA | 4.7 B | NA | 0.81 B | NA | <25 | NA | <10 | NA | 939 | NA | <3 | NA | 36600 | NA | 696 | NA | <0.2 |
| UAW20-60 | 11/13/2003 | <200 | NA | <10 | NA | <10 | NA | 19.9 B J | NA | 0.6 B | NA | <2 | NA | 377000 J | NA | 2.2 B | NA | 1.2 B | NA | <25 | NA | <10 | NA | <100 | NA | <3 | NA | 96900 | NA | 111 J | NA | <0.2 |
| UAW20-60 | 3/30/2004 | 59.4 B J | NA | <10 | NA | <10 | NA | 18.4 B | NA | <5 | NA | 0.57 B | NA | 385000 | NA | 43.3 | NA | 2.1 B | NA | 3.9 B | NA | <10 | NA | 333 | NA | <3 | NA | 99400 | NA | 96.3 J | NA | <0.2 |
| UAW20-60 | 11/5/2004 | <200 | NA | <10 | NA | <10 | NA | 18.5 B | NA | <5 | NA | <2 | NA | 422000 | NA | 1.9 B | NA | <7 | NA | <25 | NA | <10 | NA | <100 | NA | <3 | NA | 109000 J | NA | 95.3 J | NA | <0.2 |
| UAW21-30 | 5/5/2001 | 832 | NA | <10 | NA | <10 | NA | 125 B | NA | <5 | NA | <2 | NA | 153000 | 191000 | 1.5 B | NA | 1.3 B | NA | 9.9 B | NA | <10 | NA | 923 | <100 | <3 | NA | 40200 | 50200 | 82.8 | NA | <0.2 |
| UAW21-30 | 11/11/2001 | 3170 J | NA | 2.5 B | NA | <10 | NA | 55.4 B | NA | <5 | NA | <2 | NA | 109000 | 107000 | 670 | NA | 6.5 B | NA | 24.2 B | NA | 3.4 B | NA | 5520 | <100 | 2.7 B | NA | 27000 | 25400 | 152 | NA | <0.2 |
| UAW21-30 | 10/18/2002 | 1500 | NA | <10 | NA | <10 | NA | 51.6 B | NA | <5 | NA | <2 | NA | 105000 J | NA | 349 | NA | 18.7 | NA | 7.9 B | NA | <10 | NA | 4500 | NA | 2.1 B | NA | 28200 J | NA | 340 J | NA | <0.2 |
| UAW21-30 | 11/11/2003 | 4660 | NA | <10 | NA | 5.6 B | NA | 60.1 B J | NA | <5 | NA | <2 | NA | 121000 J | NA | 348 | NA | 8.5 | NA | 15.3 B | NA | <10 | NA | 8000 | NA | 4.8 | NA | 32200 J | NA | 174 J | NA | <0.2 |
| UAW21-30 | 3/27/2004 | 1570 J | NA | <10 | NA | 3.1 B | NA | 52 B | NA | <5 | NA | <2 | NA | 115000 | NA | 209 | NA | 4.9 B | NA | 15.8 B J | NA | <10 | NA | 3720 | NA | <3 | NA | 30800 | NA | 108 J | NA | <0.2 |

# Summary of Inorganic Detections in Groundwater, Seep, and Surface Water Samples

Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | Aluminum | Aluminum-DISS | Antimony | Antimony-DISS | Arsenic | Arsenic-DISS | Barium | Barium-DISS | Beryllium | Beryllium-DISS | Cadmium | Cadmium-DISS | Calcium | Calcium-DISS | Chromium | Chromium-DISS | Cobalt | Cobalt-DISS | Copper | Copper-DISS | Cyanide, Total | Hexavalent Chromium | Iron | Iron-DISS | Lead | Lead-DISS | Magnesium | Magnesium-DISS | Manganese | Manganese-DISS | Mercury |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW21-30 | 11/3/2004 | 1650 | NA | <10 | NA | <10 | NA | 51.6 B | NA | <5 | NA | <2 | NA | 105000 | NA | 172 | NA | 6.8 B | NA | 19.5 B | NA | <10 | NA | 4030 | NA | 4 | NA | 27500 | NA | 126 | NA | <0.2 |
| UAW21-80 | 5/5/2001 | 271 | NA | <10 | NA | 24.2 | NA | 258 | NA | <5 | NA | <2 | NA | 135000 | 127000 | <5 | NA | <7 | NA | <25 | NA | <10 | NA | 2020 | <100 | <3 | NA | 42800 | 42200 | 609 | NA | <0.2 |
| UAW21-80 | 11/11/2001 | 282 | NA | <10 | NA | 42.6 | NA | 231 | NA | <5 | NA | <2 | NA | 136000 J | 142000 J | 2.1 B | NA | <7 | NA | <25 | NA | <10 | NA | 2990 | <100 | <3 | NA | 44500 | 46300 | 728 | NA | <0.2 |
| UAW21-80 | 10/18/2002 | 486 | NA | <10 | NA | 45.5 | NA | 232 | NA | <5 | NA | <2 | NA | 143000 J | NA | 9.7 | NA | 2.2 B | NA | <25 | NA | <10 | NA | 3780 | NA | <3 | NA | 45400 J | NA | 787 J | NA | <0.2 |
| UAW21-80 | 11/11/2003 | <200 | NA | <10 | NA | 45.5 | NA | 230 J | NA | <5 | NA | <2 | NA | 162000 J | NA | 1.6 B | NA | <7 | NA | <25 | NA | <10 | NA | 2820 | NA | <3 | NA | 50200 J | NA | 791 J | NA | <0.2 |
| UAW21-80 | 3/27/2004 | 69.5 B J | NA | <10 | NA | 44.2 | NA | 222 | NA | <5 | NA | <2 | NA | 147000 | NA | <5 | NA | 1 B | NA | <25 | NA | <10 | NA | 2610 | NA | <3 | NA | 45800 | NA | 798 J | NA | <0.2 |
| UAW21-80 | 11/3/2004 | <200 | NA | <10 | NA | 41.7 | NA | 215 | NA | <5 | NA | <2 | NA | 144000 | NA | <5 | NA | <7 | NA | <25 | NA | <10 | NA | 2460 | NA | <3 | NA | 44700 | NA | 760 | NA | <0.2 |
| UAW22-20 | 10/13/2001 | 12100 | NA | <10 | NA | 14.3 | NA | 182 B | NA | 0.9 B | NA | 0.29 B | NA | 283000 | 229000 | 22.2 | NA | 8.5 | NA | 29.2 | NA | <10 | NA | 41400 | 169 | 12.2 | NA | 68000 | 46600 | 8260 | NA | <0.2 |
| UAW22-20 | 11/13/2001 | 14700 | NA | <10 | NA | 15.9 | NA | 174 B | NA | 1.1 B | NA | 0.47 B | NA | 351000 J | 244000 J | 27.1 | NA | 10.6 | NA | 34.4 | NA | 2.5 B | NA | 31600 | 253 | 15.4 | NA | 97200 J | 50200 J | 6960 J | NA | <0.2 |
| UAW22-20 | 10/20/2002 | 642 J | NA | <10 | NA | 22.3 | NA | 103 B | NA | <5 | NA | <2 | NA | 156000 J | NA | 1.8 B | NA | 2.2 B | NA | <25 | NA | <10 | NA | 5000 | NA | <3 | NA | 36500 | NA | 3350 | NA | <0.2 |
| UAW22-20 | 11/10/2003 | 478 | NA | <10 | NA | 7.4 B | NA | 189 B J | NA | <5 | NA | 0.41 B | NA | 352000 J | NA | 3.8 B | NA | 1.7 B | NA | 3 B | NA | <10 | NA | 12200 | NA | <3 | NA | 69200 J | NA | 10800 J | NA | <0.2 |
| UAW22-20 | 3/29/2004 | 1540 J | NA | <10 | NA | 5.3 B | NA | 182 B | NA | <5 | NA | 0.38 B | NA | 298000 | NA | 2.8 B | NA | 1.6 B | NA | 4.8 B J | NA | <10 | NA | 12900 | NA | <3 | NA | 65400 | NA | 9640 J | NA | <0.2 |
| UAW22-20 | 11/4/2004 | 128 B J | NA | <10 | NA | 4.4 B | NA | 145 B | NA | <5 | NA | 0.44 B J | NA | 363000 | NA | <5 | NA | 1.8 B J | NA | <25 | NA | <10 | NA | 11600 | NA | <3 | NA | 70000 J | NA | 11800 J | NA | <0.2 |
| UAW23-20 | 10/12/2001 | 117 B | NA | <10 | NA | <10 | NA | 29.6 B | NA | <5 | NA | <2 | NA | 408000 | 403000 | 6.9 | NA | <7 | NA | <25 | NA | <10 | NA | 154 | 109 | <3 | NA | 97200 | 96200 | 31.5 | NA | <0.2 |
| UAW23-20 | 11/14/2001 | <200 | NA | <10 | NA | <10 | NA | 25 B | NA | <5 | NA | <2 | NA | 394000 | 390000 | 5.6 | NA | 6.2 B | NA | <25 | NA | 2.1 B | NA | 1980 | 488 | <3 | NA | 90900 J | 90700 J | 227 | NA | <0.2 |
| UAW23-20 | 10/19/2002 | 128 B J | NA | <10 | NA | <10 | NA | 21.7 B | NA | <5 | NA | 0.56 B | NA | 305000 J | NA | 54.2 | NA | 6.7 B | NA | 2.5 B | NA | <10 | NA | 2860 | NA | <3 | NA | 68000 | NA | 88.1 | NA | <0.2 |
| UAW23-20 | 11/13/2003 | <200 | NA | <10 | NA | 3 B | NA | 19.9 B J | NA | <5 | NA | <2 | NA | 309000 J | NA | 32.4 | NA | 12.1 | NA | <25 | NA | <10 | NA | 3750 J | NA | <3 | NA | 66900 | NA | 155 J | NA | <0.2 |
| UAW23-20 | 3/28/2004 | 771 J | NA | <10 | NA | <10 | NA | 36.9 B | NA | <5 | NA | 0.79 B | NA | 322000 | NA | 932 | NA | 3.6 B | NA | 25.4 J | NA | <10 | NA | 8010 | NA | <3 | NA | 71000 | NA | 89.4 J | NA | <0.2 |
| UAW23-20 | 11/5/2004 | <200 | NA | <10 | NA | <10 | NA | 25.8 B | NA | <5 | NA | <2 | NA | 358000 | NA | 35.7 | NA | 1.3 B | NA | <25 | NA | <10 | NA | 562 | NA | <3 | NA | 75900 J | NA | 24.4 J | NA | <0.2 |
| UAW24-70 | 10/13/2001 | 251 | NA | <10 | NA | <10 | NA | 213 | NA | <5 | NA | <2 | NA | 128000 | 129000 | 2.1 B | NA | <7 | NA | <25 | NA | <10 | NA | 355 | 482 | <3 | NA | 39900 | 40500 | 115 | NA | <0.2 |
| UAW24-70 | 11/15/2001 | 358 J | NA | <10 | NA | <10 | NA | 145 B J | NA | <5 | NA | <2 | NA | 71500 J | 76500 J | 4 B | NA | <7 | NA | <25 | NA | 3.2 B | NA | 1030 | <100 | <3 | NA | 31500 | 31500 | 154 | NA | <0.2 |
| UAW24-70 | 10/17/2002 | 365 | NA | <10 | NA | 6.7 B | NA | 227 | NA | <5 | NA | <2 | NA | 83100 J | NA | 8.3 | NA | 1.6 B | NA | <25 | NA | <10 | NA | 1270 | NA | <3 | NA | 37300 J | NA | 245 J | NA | <0.2 |
| UAW24-70 | 11/16/2003 | <200 | NA | <10 | NA | 12 | NA | 167 B J | NA | <5 | NA | 1.2 B J | NA | 63300 J | NA | 6.5 J | NA | 2.2 B J | NA | 2.2 B J | NA | <10 | NA | 843 | NA | <3 | NA | 27400 J | NA | 162 J | NA | <0.2 |
| UAW24-70 | 4/5/2004 | <200 | NA | <10 | NA | 11.4 | NA | 249 J | NA | <5 | NA | <2 | NA | 86300 | NA | 2.1 B | NA | <7 | NA | <25 | NA | <10 | NA | 1310 | NA | <3 | NA | 33600 J | NA | 231 | NA | <0.2 |
| UAW24-70 | 11/6/2004 | <200 | NA | <10 | NA | 4.5 B | NA | 260 | NA | <5 | NA | <2 | NA | 106000 | NA | <5 | NA | <7 | NA | <25 | NA | <10 | NA | 998 | NA | <3 | NA | 36100 | NA | 204 J | NA | <0.2 |
| UAW25-20 | 10/13/2001 | 383 | NA | <10 | NA | 26.1 | NA | 171 B | NA | <5 | NA | 0.38 B | NA | 239000 | 239000 | 2.6 B | NA | 3 B | NA | 11.4 B | NA | <10 | NA | 3550 | 3530 | <3 | NA | 43200 | 43300 | 1000 | NA | <0.2 |
| UAW25-20 | 11/13/2001 | 60.2 B | NA | <10 | NA | 32.4 | NA | 162 B | NA | <5 | NA | <2 | NA | 223000 J | 200000 J | 10.5 | NA | 2.6 B | NA | 9 B | NA | <10 | NA | 6370 | 327 | <3 | NA | 41800 J | 37300 J | 914 J | NA | <0.2 |
| UAW25-20 | 10/18/2002 | <200 | NA | <10 | NA | 21.7 | NA | 186 B | NA | <5 | NA | <2 | NA | 232000 J | NA | 7.5 | NA | 1.5 B | NA | <25 | NA | 2.8 B | NA | 5760 | NA | <3 | NA | 49000 J | NA | 1100 J | NA | <0.2 |
| UAW25-20 | 11/12/2003 | <200 | NA | <10 | NA | 28.4 | NA | 250 J | NA | <5 | NA | <2 | NA | 277000 J | NA | 43 | NA | <7 | NA | 5.2 B | NA | <10 | NA | 11100 | NA | <3 | NA | 55000 J | NA | 1500 J | NA | <0.2 |
| UAW25-20 | 3/27/2004 | 246 J | NA | <10 | NA | 26.6 | NA | 176 B | NA | <5 | NA | <2 | NA | 199000 | NA | 505 | NA | 1.9 B | NA | 14.4 B J | NA | <10 | NA | 10400 | NA | <3 | NA | 40600 | NA | 1140 J | NA | <0.2 |
| UAW25-20 | 11/3/2004 | <200 | NA | <10 | NA | 14.3 | NA | 228 | NA | <5 | NA | <2 | NA | 277000 | NA | 6.2 | NA | 1.4 B | NA | 4.8 B | NA | <10 | NA | 7380 | NA | <3 | NA | 58500 | NA | 1670 | NA | 0.06 B |
| UAW26-70 | 4/6/2004 | 379 J | NA | <10 | NA | 5.1 B | NA | 443 J | NA | <5 | NA | <2 | NA | 163000 | NA | 2.8 B | NA | 1.4 B | NA | <25 | NA | <10 | NA | 3290 | NA | 1.7 B | NA | 49900 J | NA | 363 | NA | <0.2 |
| UAW26-70 | 11/6/2004 | <200 | NA | <10 | NA | 8.6 B | NA | 266 | NA | <5 | NA | <2 | NA | 140000 | NA | <5 | NA | <7 | NA | <25 | NA | <10 | NA | 3180 | NA | <3 | NA | 44300 | NA | 282 J | NA | <0.2 |
| UAW27-50 | 3/31/2004 | 40.7 B | NA | <10 | NA | <10 | NA | 138 B | NA | <5 | NA | <2 | NA | 236000 J | NA | 5.5 | NA | 1.5 B | NA | <25 | NA | <10 | NA | 291 | NA | <3 | NA | 67800 J | NA | 124 J | NA | <0.2 |
| UAW27-50 | 11/5/2004 | 169 B | NA | <10 | NA | <10 | NA | 104 B | NA | <5 | NA | <2 | NA | 199000 | NA | 4.8 B | NA | <7 | NA | 2.8 B | NA | <10 | NA | 85.3 B | NA | <3 | NA | 56900 | NA | 25.9 J | NA | <0.2 |
| LAW05-60 | 3/16/2002 | NA | NA | <10 | NA | <10 | NA | 87.5 B | NA | <5 | NA | <2 | NA | NA | NA | 1.6 B | NA | 3.2 B | NA | <25 | NA | <10 | NA | NA | NA | <3 | NA | NA | NA | NA | NA | <0.2 |
| LAW05-150 | 3/16/2002 | NA | NA | <10 | NA | 6.2 B | NA | 94.3 B | NA | 0.55 B | NA | <2 | NA | NA | NA | <5 | NA | <7 | NA | <25 | NA | <10 | NA | NA | NA | <3 | NA | NA | NA | NA | NA | 0.35 |
| LAW05-150 (Dup) | 3/16/2002 | NA | NA | <10 | NA | 4.6 B | NA | 94.7 B | NA | <5 | NA | <2 | NA | NA | NA | <5 | NA | <7 | NA | <25 | NA | <10 | NA | NA | NA | <3 | NA | NA | NA | NA | NA | 0.16 B |
| W12-60 | 10/13/2001 | NA | NA | <10 | NA | <10 | NA | 113 B | NA | <5 | NA | <2 | NA | 133000 | 128000 | 6.9 | NA | 2.5 B | NA | <25 | NA | <10 | NA | 888 | 621 | <3 | NA | 41200 | 39800 | NA | NA | <0.2 |
| LAW12-60 | 11/16/2001 | NA | NA | <10 | NA | <10 | NA | 127 B J | NA | <5 | NA | <2 | NA | 120000 J | 104000 J | 4.1 B | NA | <7 | NA | 10.7 B | NA | <10 | NA | 374 | <100 | <3 | NA | 46200 | 41000 | NA | NA | <0.2 |
| French Drain Sump @ 46 hr | 10/19/2002 | 87.2 B J | NA | 3.9 B | NA | 14.2 | NA | 256 | NA | <5 | NA | <2 | NA | 240000 J | NA | 5.5 | NA | 2.5 B | NA | 9.1 B | NA | <10 | NA | 1940 | NA | <3 | NA | 39800 | NA | 1550 | NA | <0.2 |

# Summary of Inorganic Detections in Groundwater, Seep, and Surface Water Samples

Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | Aluminum | Aluminum-DISS | Antimony | Antimony-DISS | Arsenic | Arsenic-DISS | Barium | Barium-DISS | Beryllium | Beryllium-DISS | Cadmium | Cadmium-DISS | Calcium | Calcium-DISS | Chromium | Chromium-DISS | Cobalt | Cobalt-DISS | Copper | Copper-DISS | Cyanide, Total | Hexavalent Chromium | Iron | Iron-DISS | Lead | Lead-DISS | Magnesium | Magnesium-DISS | Manganese | Manganese-DISS | Mercury |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| French Drain Sump @ 72 hr | 10/20/2002 | 191 B J | NA | 3.5 B | NA | 15.9 | NA | 261 | NA | <5 | NA | <2 | NA | 243000 J | NA | 4.1 B | NA | 1.9 B | NA | 16.8 B | NA | <10 | NA | 1800 | NA | <3 | NA | 40700 | NA | 1580 | NA | <0.2 |
| **Surface Water** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WS-1A | 3/25/2004 | NA | NA | NA | <10 | NA | <10 | NA | 56.6 B J | NA | 0.78 B J | NA | <2 | NA | NA | NA | <5 | NA | <7 | NA | 6.7 B J | <10 | NA | NA | NA | NA | <3 | NA | NA | NA | NA | NA |
| WS-2A | 3/26/2004 | NA | NA | <10 | NA | <10 | NA | 57.2 B J | NA | 0.7 B J | NA | <2 | NA | NA | NA | <5 | NA | <7 | NA | 6.3 B J | NA | <10 | NA | NA | NA | <3 | NA | NA | NA | NA | NA | 0.094 B J |
| WS-3A | 3/26/2004 | NA | NA | <10 | NA | <10 | NA | 59.2 B J | NA | 0.66 B J | NA | <2 | NA | NA | NA | <5 | NA | <7 | NA | 5.4 B J | NA | <10 | NA | NA | NA | <3 | NA | NA | NA | NA | NA | 0.077 B J |
| WS-4A | 3/26/2004 | NA | NA | <10 | NA | <10 | NA | 61.8 B J | NA | 0.67 B J | NA | <2 | NA | NA | NA | <5 | NA | <7 | NA | 6.2 B J | NA | <10 | NA | NA | NA | <3 | NA | NA | NA | NA | NA | 0.079 B J |
| WS-5A | 3/25/2004 | NA | NA | NA | <10 | NA | <10 | NA | 54.6 B J | NA | 0.74 B J | NA | <2 | NA | NA | NA | <5 | NA | 1.1 B | NA | 6.6 B J | <10 | NA | NA | NA | NA | <3 | NA | NA | NA | NA | NA |
| WS-6A | 3/25/2004 | NA | NA | NA | <10 | NA | <10 | NA | 53 B J | NA | 0.76 B J | NA | <2 | NA | NA | NA | <5 | NA | <7 | NA | 5.9 B J | <10 | <20 | NA | NA | NA | <3 | NA | NA | NA | NA | NA |
| WS-6A (Dup) | 3/25/2004 | NA | NA | NA | <10 | NA | 3.6 B | NA | 56 B J | NA | 0.69 B J | NA | <2 | NA | NA | NA | <5 | NA | 1.2 B | NA | 6.5 B J | <10 | <20 | NA | NA | NA | <3 | NA | NA | NA | NA | NA |
| **Seeps** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SS-1 (Seep) | 10/11/2001 | 48300 | 47.8 B | <10 | <10 | 25.7 | <10 | 494 | 73.8 B | 3.1 B | <5 | 1.7 B | <2 | 430000 | 361000 | 174 | <5 | 43.8 | <7 | 104 | <25 | <10 | NA | 90100 | <100 | 126 | <3 | 90100 | 45100 | 2150 | 2070 | <0.2 |
| SS-5 (Seep) | 10/11/2001 | 14300 | 112 B | <10 | <10 | 6.1 B | 4.7 B | 143 B | 233 | 1.2 B | <5 | 0.28 B | <2 | 417000 | 257000 | 36.7 | <5 | 10.4 | 12.4 | 31.9 | <25 | <10 | NA | 23800 | 734 | 24.2 | <3 | 67100 | 39000 | 2730 | 947 | 0.18 B |

# Summary of Inorganic Detections in Groundwater, Seep, and Surface Water Samples

Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | Mercury-DISS | Nickel | Nickel-DISS | Potassium | Potassium-DISS | Selenium | Selenium-DISS | Silver | Silver-DISS | Sodium | Sodium-DISS | Thallium | Thallium-DISS | Tin | Tin-DISS | Total Sulfide | Vanadium | Vanadium-DISS | Zinc | Zinc-DISS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Groundwater** | | | | | | | | | | | | | | | | | | | | | |
| DP53-12.5' | 3/11/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 2550 | NA | NA | NA | NA | NA | NA |
| MW-EPA-1 | 5/8/2001 | NA | 112 | NA | 12000 | 12000 | <5 | NA | <5 | NA | 472000 | 474000 | 7.6 B | NA | NA | NA | 2600 | 4.6 B | NA | <20 | NA |
| MW-EPA-1 | 11/15/2001 | NA | 32.1 B | NA | 17600 J | 15700 J | <5 | NA | <5 | NA | 642000 | 584000 | 5.6 B | NA | NA | NA | 7500 | 5.8 B | NA | <20 | NA |
| MW-EPA-1 | 10/20/2002 | NA | 20.5 B | NA | 15500 J | NA | <5 | NA | NA | NA | 643000 | NA | 5.3 B | NA | 2280 | NA | 17000 | 4.9 B | NA | 16.5 B | NA |
| MW-EPA-1 | 11/12/2003 | NA | 19.3 B | NA | 16000 J | NA | <5 | NA | <5 | NA | 754000 | NA | 8 B | NA | 3390 | NA | 51000 | 5.5 B | NA | 20.2 J | NA |
| MW-EPA1 | 3/28/2004 | NA | 19.7 B | NA | 16000 J | NA | <5 | NA | <5 | NA | 767000 | NA | <10 | NA | 3380 | NA | 29000 | 6.4 B | NA | 27.9 | NA |
| MW-EPA-1 | 11/4/2004 | NA | 7.6 B | NA | 13200 J | NA | <5 | NA | <5 | NA | 577000 | NA | 6.4 B | NA | 1340 | NA | 21000 | 3.1 B | NA | <20 | NA |
| MW-EPA-2 | 5/8/2001 | NA | 271 | NA | 15900 L | 3860 B | 5 | NA | <5 | NA | 480000 | 486000 | 10.4 | NA | NA | NA | 4500 | 85.2 | NA | 193 | NA |
| MW-EPA-2 | 11/14/2001 | NA | 369 | NA | 13300 | 2190 B | <5 | NA | <5 | NA | 336000 | 340000 | 10.8 | NA | NA | NA | 1100 | 91.7 | NA | 280 | NA |
| MWEPA-2 | 10/20/2002 | NA | 121 | NA | 2560 B J | NA | <5 | NA | NA | NA | 231000 | NA | 6.4 B | NA | <100 | NA | 620 B | 2.7 B | NA | <20 | NA |
| MW-EPA-2 | 11/11/2003 | NA | 132 | NA | 2770 B J | NA | <5 | NA | <5 | NA | 248000 | NA | 6 B | NA | 11.9 B | NA | <1000 | 4.9 B | NA | 20.6 J | NA |
| MW-EPA-2 | 3/29/2004 | NA | 225 | NA | 3090 B J | NA | 5.1 | NA | <5 | NA | 316000 | NA | 4.6 B J | NA | 9.5 B | NA | 730 B | 4.1 B | NA | 14.3 B | NA |
| MW-EPA-2 | 11/4/2004 | NA | 231 | NA | 3920 B J | NA | <5 | NA | <5 | NA | 427000 | NA | 5.3 B | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| MW-EPA-3 | 5/6/2001 | NA | 34.4 B | NA | 1770 B | 1500 B | <5 | NA | <5 | NA | 26300 | 31700 | 9.4 B | NA | NA | NA | <1000 | 2.4 B | NA | 71.3 | NA |
| MW-EPA-3 | 11/13/2001 | NA | 80.3 | NA | 6910 J | 1700 B J | <5 | NA | <5 | NA | 48000 J | 40400 J | <10 | NA | NA | NA | 1800 | 32.1 | NA | 163 J | NA |
| MWEPA-3 | 10/17/2002 | NA | 113 | NA | 8530 J | NA | <5 | NA | NA | NA | 36300 | NA | <10 | NA | <100 | NA | 300 B | 45.3 J | NA | 148 | NA |
| MW-EPA-3 | 11/13/2003 | NA | 72.2 | NA | 3490 B J | NA | <5 | NA | <5 | NA | 38000 | NA | <10 | NA | <100 | NA | <1000 | 10.4 | NA | 39.3 J | NA |
| MW-EPA-3 | 3/30/2004 | NA | 159 | NA | 6430 J | NA | <5 | NA | <5 | NA | 42800 | NA | 4.9 B | NA | <100 | NA | <1000 | 40.3 | NA | 147 | NA |
| MW-EPA-3 | 11/4/2004 | NA | 94.3 | NA | 3310 B J | NA | <5 | NA | <5 | NA | 40300 | NA | 7 B | NA | <100 | NA | 120000 | 7.9 | NA | 54.3 | NA |
| MW-EPA-4 | 5/8/2001 | NA | 140 | NA | 4830 B | 4740 B | <5 | NA | <5 | NA | 704000 | 684000 | 8.5 B | NA | NA | NA | <1000 | <7 | NA | <20 | NA |
| MW-EPA-4 | 11/13/2001 | NA | 910 | NA | 2430 B J | 2170 B J | <5 | NA | <5 | NA | 104000 J | 106000 J | <10 | NA | NA | NA | 1300 | <7 | NA | <20 | NA |
| MWEPA-4 | 10/18/2002 | NA | 256 | NA | 3200 B J | NA | <5 | NA | NA | NA | 79300 | NA | <10 | NA | <100 | NA | 940 B | 1.1 B J | NA | <20 | NA |
| MW-EPA-4 | 11/16/2003 | NA | 424 J | NA | 5540 J | NA | <5 | NA | <5 | NA | 250000 | NA | 7.7 B J | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| MW-EPA-4 | 4/6/2004 | NA | 198 | NA | 3980 B J | NA | <5 | NA | <5 | NA | 178000 | NA | 4.5 B | NA | <100 | NA | 5900 | <7 | NA | <20 | NA |
| MW-EPA-4 | 11/6/2004 | NA | 206 | NA | 5150 J | NA | <5 | NA | <5 | NA | 249000 | NA | <10 | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| Recovery Well | 7/29/2001 | NA | 311 | NA | NA | NA | <5 | NA | <5 | NA | NA | NA | <10 | NA | 1650 | NA | 2700 | 76 | NA | 1100 | NA |
| RWV20 | 4/6/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| UAW01-30 | 5/4/2001 | NA | 109 | NA | 13000 | 15900 | <5 | NA | <5 | NA | 315000 | 335000 | <10 | NA | NA | NA | <1000 | <7 | NA | <20 | NA |
| UAW01-30 | 11/8/2001 | NA | 802 | NA | 13900 J | 13500 J L | <5 | NA | <5 | NA | 243000 | 236000 | 7.1 B | NA | NA | NA | 2900 J | <7 | NA | <20 | NA |
| UAW01-30 | 10/17/2002 | NA | 237 | NA | 6750 J | NA | <5 | NA | NA | NA | 68000 | NA | <10 | NA | 23.5 B | NA | <1000 | <7 | NA | <20 | NA |
| UAW01-30 | 11/11/2003 | NA | 31.1 B | NA | 8590 J | NA | <5 | NA | <5 | NA | 166000 | NA | <10 | NA | 30.8 B | NA | <1000 | <7 | NA | <20 | NA |
| UAW01-30 | 3/24/2004 | NA | 36.6 B | NA | 7090 J | NA | <5 | NA | <5 | NA | 115000 | NA | <10 | NA | 14.9 B | NA | 900 B | <7 | NA | <20 | NA |
| UAW01-30 | 11/3/2004 | NA | 181 | NA | 13300 J | NA | <5 | NA | <5 | NA | 493000 | NA | <10 | NA | 22.4 B | NA | <1000 | <7 | NA | <20 | NA |
| UAW01-80 | 5/4/2001 | NA | 4.1 B | NA | 2140 B | 2390 B | <5 | NA | <5 | NA | 51900 | 53100 | <10 | NA | NA | NA | <1000 | <7 | NA | <20 | NA |
| UAW01-80 | 11/12/2001 | NA | <40 | NA | 2630 B | 2530 B | <5 | NA | <5 | NA | 50300 | 51300 | 10.1 J | NA | NA | NA | <1000 | <7 | NA | <20 | NA |
| UAW01-80 | 10/17/2002 | NA | 3.4 B | NA | 2340 B J | NA | <5 | NA | NA | NA | 51000 | NA | <10 | NA | <100 | NA | 460 B | <7 | NA | <20 | NA |
| UAW01-80 | 11/11/2003 | NA | 3.7 B | NA | 2370 B J | NA | <5 | NA | <5 | NA | 55300 | NA | 6.3 B | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| UAW01-80 | 3/24/2004 | NA | <40 | NA | 2530 B J | NA | <5 | NA | <5 | NA | 58900 | NA | <10 | NA | <100 | NA | 580 B | <7 | NA | <20 | NA |
| UAW01-80 | 11/2/2004 | NA | <40 | NA | 2020 B J | NA | <5 | NA | <5 | NA | 55300 | NA | <10 | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |

# Summary of Inorganic Detections in Groundwater, Seep, and Surface Water Samples

Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | Mercury-DISS | Nickel | Nickel-DISS | Potassium | Potassium-DISS | Selenium | Selenium-DISS | Silver | Silver-DISS | Sodium | Sodium-DISS | Thallium | Thallium-DISS | Tin | Tin-DISS | Total Sulfide | Vanadium | Vanadium-DISS | Zinc | Zinc-DISS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW02-20 | 5/7/2001 | NA | 27.1 B | NA | 6670 | 6130 | <5 | NA | <5 | NA | 496000 | 446000 | 7.2 B | NA | NA | NA | <1000 | 37.3 | NA | <20 | NA |
| UAW02-20 (Dup) | 5/7/2001 | NA | 47.2 | NA | 6600 L | 6280 L | <5 | NA | <5 | NA | 475000 | 452000 | 8.5 B | NA | NA | NA | 1800 | 39.2 | NA | <20 | NA |
| UAW02-20 | 11/10/2001 | NA | 35.9 B | NA | 2990 B | 2650 B | <5 | NA | <5 | NA | 140000 J | 124000 J | <10 | NA | NA | NA | <1000 | 16.6 | NA | <20 | NA |
| UAW02-20 | 10/17/2002 | NA | 94 | NA | 6600 J | NA | <5 | NA | NA | NA | 235000 | NA | 5.9 B | NA | 277 | NA | 940 B | 19.7 J | NA | 14.6 B | NA |
| UAW02-20 | 11/12/2003 | NA | 23 B | NA | 2410 B J | NA | <5 | NA | <5 | NA | 180000 | NA | <10 | NA | 95 B | NA | <1000 | 5.1 B | NA | <20 | NA |
| UAW02-20 | 3/26/2004 | NA | 22.5 B | NA | 4360 B J | NA | <5 | NA | <5 | NA | 337000 | NA | 9.8 B J | NA | 85.2 B | NA | <1000 | 3.3 B | NA | <20 | NA |
| UAW02-20 | 11/3/2004 | NA | 4.3 B | NA | 2190 B J | NA | <5 | NA | <5 | NA | 199000 | NA | <10 | NA | 50.1 B | NA | <1000 | <7 | NA | <20 | NA |
| UAW02-40 | 5/7/2001 | NA | 18.9 B | NA | 2420 B | 2340 B | <5 | NA | <5 | NA | 99900 | 99400 | <10 | NA | NA | NA | <1000 | <7 | NA | <20 | NA |
| UAW02-40 | 11/10/2001 | NA | 31.3 B | NA | 2900 B | 2860 B | <5 | NA | <5 | NA | 149000 J | 145000 J | 5.3 B | NA | NA | NA | <1000 | <7 | NA | <20 | NA |
| UAW02-40 | 10/17/2002 | NA | 13.3 B | NA | 2530 B J | NA | <5 | NA | NA | NA | 78400 | NA | <10 | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| UAW02-40 | 11/12/2003 | NA | 6.1 B | NA | 2150 B J | NA | <5 | NA | <5 | NA | 46200 | NA | <10 | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| UAW02-40 | 3/26/2004 | NA | 3.5 B | NA | 2550 B J | NA | <5 | NA | <5 | NA | 45000 | NA | 8.1 B J | NA | <100 | NA | 420 B | <7 | NA | <20 | NA |
| UAW02-40 | 11/3/2004 | NA | 4.4 B | NA | 2060 B J | NA | <5 | NA | <5 | NA | 43000 | NA | <10 | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| UAW03-20 | 5/7/2001 | NA | 39.4 B | NA | 8740 | 8150 | <5 | NA | <5 | NA | 308000 | 289000 | 10 | NA | NA | NA | 4000 | 148 | NA | 54.7 | NA |
| UAW03-20 | 11/11/2001 | NA | 39.5 B | NA | 6010 | 5920 | <5 | NA | <5 | NA | 165000 | 161000 | 9.2 B J | NA | NA | NA | 3700 | 36.4 | NA | <20 | NA |
| UAW03-20 | 10/23/2002 | NA | 59.6 | NA | 4200 B J | NA | <5 | NA | NA | NA | 187000 | NA | 6 B | NA | 1180 | NA | 3600 | 54.7 | NA | <20 | NA |
| UAW03-20 | 11/12/2003 | NA | 15.4 B | NA | 4230 B J | NA | <5 | NA | <5 | NA | 291000 | NA | <10 | NA | 2400 | NA | 15000 | 29.4 | NA | <20 | NA |
| UAW03-20 | 3/28/2004 | NA | 8.4 B | NA | 5550 J | NA | <5 | NA | <5 | NA | 604000 | NA | 5.5 B J | NA | 2350 | NA | 11000 | 25.7 | NA | <20 | NA |
| UAW03-20 | 11/4/2004 | NA | 5.2 B | NA | 2930 B J | NA | <5 | NA | <5 | NA | 143000 | NA | 8 B | NA | 296 | NA | 6100 | 7.6 | NA | <20 | NA |
| UAW03-20 (Dup) | 11/4/2004 | NA | 5.3 B | NA | 2870 B J | NA | <5 | NA | <5 | NA | 140000 | NA | 5.6 B | NA | 291 | NA | 5400 | 7.1 | NA | <20 | NA |
| UAW04-20 | 5/7/2001 | NA | 28.9 B | NA | 7590 | 7380 | <5 | NA | <5 | NA | 291000 | 285000 | 11.7 | NA | NA | NA | 1100 | 110 | NA | 14.8 B MBE | NA |
| UAW04-20 | 11/11/2001 | NA | 35.3 B | NA | 5790 | 5350 | <5 | NA | <5 | NA | 183000 | 171000 | 6.1 B J | NA | NA | NA | 1200 | 65.6 | NA | <20 | NA |
| UAW04-20 | 10/20/2002 | NA | 38.2 B | NA | 6210 J | NA | <5 | NA | NA | NA | 252000 | NA | <10 | NA | 2270 | NA | 1300 | 91.5 | NA | <20 | NA |
| UAW04-20 | 11/12/2003 | NA | 12.4 B | NA | 4380 B J | NA | <5 | NA | <5 | NA | 238000 | NA | <10 | NA | 1280 | NA | 260 B | 20.4 | NA | <20 | NA |
| UAW04-20 | 3/28/2004 | NA | 6.2 B | NA | 2850 B J | NA | <5 | NA | <5 | NA | 137000 | NA | <10 | NA | 591 | NA | 1000 | 7.9 | NA | 17.9 B | NA |
| UAW04-20 | 11/3/2004 | NA | <40 | NA | 1880 B J | NA | <5 | NA | <5 | NA | 124000 | NA | 6 B | NA | 901 | NA | 1100 | 5.7 B | NA | <20 | NA |
| UAW05-20 | 5/6/2001 | NA | 15 B | NA | 7020 | 7400 | <5 | NA | <5 | NA | 353000 | 395000 | 5.4 B | NA | NA | NA | <1000 | 6.6 B | NA | 108 MBD | NA |
| UAW05-20 | 10/10/2001 | NA | 57.3 | NA | 3900 B J | 4290 B J | <5 | NA | <5 | NA | 219000 | 245000 | 8.1 B | NA | 425 | NA | 4300 | 3 B | NA | <20 | NA |
| UAW05-20 | 11/12/2001 | NA | 24.9 B | NA | 4480 B L | 4270 B | <5 | NA | <5 | NA | 254000 | 236000 | 11.8 J | NA | NA | NA | 5000 | 3.1 B | NA | <20 | NA |
| UAW05-20 | 10/20/2002 | NA | 39.5 B | NA | 5230 J | NA | <5 | NA | NA | NA | 244000 | NA | <10 | NA | 569 | NA | 10000 | 5.8 B | NA | <20 | NA |
| UAW05-20 | 11/10/2003 | NA | 92 | NA | 3010 B J | NA | <5 | NA | <5 | NA | 106000 | NA | <10 | NA | 223 | NA | <1000 | 5.8 B | NA | <20 | NA |
| UAW05-20 | 3/28/2004 | NA | 4.3 B | NA | 2640 B J | NA | <5 | NA | <5 | NA | 149000 | NA | <10 | NA | 99.9 B | NA | 5000 | 0.81 B | NA | <20 | NA |
| UAW05-20 (Dup) | 3/28/2004 | NA | 7.6 B | NA | 2870 B J | NA | <5 | NA | <5 | NA | 162000 | NA | 5.2 B J | NA | 107 | NA | 2200 | 0.92 B | NA | <20 | NA |
| UAW05-20 | 11/4/2004 | NA | 26.1 B | NA | 3670 B J | NA | <5 | NA | <5 | NA | 249000 | NA | <10 | NA | 257 | NA | 12000 | 2.2 B | NA | <20 | NA |
| UAW06-20 | 5/6/2001 | NA | 29.6 B | NA | 7400 | 8270 | <5 | NA | <5 | NA | 218000 | 245000 | <10 | NA | NA | NA | <1000 | 127 | NA | 15.7 B MBE | NA |
| UAW06-20 | 10/10/2001 | NA | 25 B | NA | 6430 J | 5480 J | <5 | NA | <5 | NA | 309000 | 264000 | 5.6 B | NA | NA | NA | 2300 | 106 | NA | 22.8 | NA |
| UAW06-20 | 11/13/2001 | NA | 24.5 B | NA | 6820 J | 6190 J | <5 | NA | <5 | NA | 368000 J | 335000 J | <10 | NA | NA | NA | 7200 | 119 | NA | 21.9 J | NA |
| UAW06-20 | 10/20/2002 | NA | 28.3 B | NA | 5610 J | NA | <5 | NA | NA | NA | 407000 | NA | <10 | NA | 11100 | NA | 7800 | 76.4 | NA | 19 B | NA |
| UAW06-20 | 11/12/2003 | NA | 12.6 B | NA | 4920 B J | NA | <5 | NA | <5 | NA | 391000 | NA | <10 | NA | 6040 | NA | 11000 | 35.8 | NA | <20 | NA |
| UAW06-20 | 3/29/2004 | NA | 7.4 B | NA | 3870 B J | NA | <5 | NA | <5 | NA | 460000 | NA | <10 | NA | 3700 | NA | 6300 | 32.2 | NA | <20 | NA |
| UAW06-20 | 11/4/2004 | NA | 7 B | NA | 4900 B J | NA | <5 | NA | <5 | NA | 332000 | NA | 12.2 | NA | 2460 | NA | 6100 | 20.2 | NA | <20 | NA |

# Summary of Inorganic Detections in Groundwater, Seep, and Surface Water Samples

Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | Mercury-DISS | Nickel | Nickel-DISS | Potassium | Potassium-DISS | Selenium | Selenium-DISS | Silver | Silver-DISS | Sodium | Sodium-DISS | Thallium | Thallium-DISS | Tin | Tin-DISS | Total Sulfide | Vanadium | Vanadium-DISS | Zinc | Zinc-DISS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW07-20 | 5/8/2001 | NA | 2.5 B | NA | 11500 | 10800 | <5 | NA | <5 | NA | 413000 | 397000 | 10.6 | NA | 866 | NA | 5800 | 3.2 B | NA | 12.4 B | NA |
| UAW07-20 (Dup) | 5/8/2001 | NA | 2.3 B | NA | 12100 | 11600 | <5 | NA | <5 | NA | 432000 | 417000 | 8.3 B | NA | 1010 | NA | 7500 | 3.9 B | NA | <20 | NA |
| UAW07-20 | 11/15/2001 | NA | 2.3 B | NA | NA | 10800 | <5 | NA | <5 | NA | NA | 395000 | 9.6 B J | NA | 706 L | NA | 1600 | 3.1 B | NA | <20 | NA |
| UAW07-20 | 10/20/2002 | NA | <40 | NA | 11800 J | NA | <5 | NA | NA | NA | 374000 | NA | <10 | NA | 778 | NA | 14000 | 3.8 B | NA | <20 | NA |
| UAW07-20 | 11/12/2003 | NA | 4.2 B | NA | 11600 J | NA | <5 | NA | <5 | NA | 406000 | NA | <10 | NA | 591 | NA | 21000 | 2.5 B | NA | 31.3 J | NA |
| UAW07-20 (Dup) | 11/12/2003 | NA | 2.4 B | NA | 10100 J | NA | <5 | NA | <5 | NA | 362000 | NA | <10 | NA | 526 | NA | 25000 | 2.1 B | NA | <20 | NA |
| UAW07-20 | 4/5/2004 | NA | 2.5 B | NA | 5750 J | NA | <5 | NA | <5 | NA | 228000 | NA | 6.8 B | NA | 180 | NA | 11000 | 2.2 B | NA | <20 | NA |
| UAW07-20 | 11/4/2004 | NA | <40 | NA | 11100 | NA | <5 | NA | <5 | NA | 468000 | NA | 4.8 B | NA | 574 | NA | 22000 | 2.7 B | NA | <20 | NA |
| UAW08-20 | 5/6/2001 | NA | 30.5 B | NA | 17700 | 20200 | <5 | NA | <5 | NA | 523000 | 596000 | 9.8 B | NA | 3420 | NA | 3100 | 11.2 | NA | 45.1 MBD | NA |
| UAW08-20 | 11/13/2001 | NA | 53.4 | NA | 21300 J | 18900 J L | <5 | NA | <5 | NA | 401000 J | 400000 J | <10 | NA | 6090 | NA | 7900 | 27.1 | NA | 132 J | NA |
| UAW08-20 | 10/20/2002 | NA | 11.5 B | NA | 17400 J | NA | <5 | NA | NA | NA | 407000 | NA | 7.1 B | NA | 6110 | NA | 22000 | 13 | NA | 21.8 | NA |
| UAW08-20 | 11/10/2003 | NA | 118 | NA | 20900 J | NA | <5 | NA | <5 | NA | 539000 | NA | 5.9 B | NA | 4500 | NA | 69000 | 74.7 | NA | 352 J | NA |
| UAW08-20 | 3/29/2004 | NA | 8.5 B | NA | 18100 J | NA | <5 | NA | <5 | NA | 691000 | NA | <10 | NA | 6410 | NA | 16000 | 10 | NA | 20.5 | NA |
| UAW08-20 | 11/4/2004 | NA | 7.9 B | NA | 17700 J | NA | <5 | NA | <5 | NA | 493000 | NA | 8.4 B | NA | 5740 | NA | <1000 | 12 | NA | 14.3 B | NA |
| UAW09-20 | 5/5/2001 | NA | <40 | NA | 1720 B | 1850 B | <5 | NA | <5 | NA | 63200 | 62400 | <10 | NA | NA | NA | <1000 | <7 | NA | <20 | NA |
| UAW09-20 | 11/9/2001 | NA | 81.9 | NA | 2420 B | 2220 B | <5 | NA | <5 | NA | 92500 J | 84300 J | <10 | NA | NA | NA | 1800 | <7 | NA | <20 | NA |
| UAW09-20 | 10/16/2002 | NA | 10.8 B | NA | 2880 B J | NA | <5 | NA | NA | NA | 59500 | NA | 8.8 B | NA | <100 | NA | 970 B J | 0.82 B | NA | <20 | NA |
| UAW09-20 | 11/11/2003 | NA | 10.4 B | NA | 2130 B J | NA | <5 | NA | <5 | NA | 83800 | NA | <10 | NA | <100 | NA | <1000 | <7 | NA | 16.8 B J | NA |
| UAW09-20 | 4/6/2004 | NA | 6.6 B | NA | 1760 B J | NA | <5 | NA | <5 | NA | 65000 | NA | 5.7 B | NA | 18.5 B | NA | 960 B | <7 | NA | <20 | NA |
| UAW09-20 | 11/6/2004 | NA | 6.4 B | NA | 1370 B J | NA | <5 | NA | <5 | NA | 17900 | NA | <10 | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| UAW09-60 | 5/5/2001 | NA | 5.5 B | NA | 1400 B | 1610 B | <5 | NA | <5 | NA | 17600 | 14700 | <10 | NA | NA | NA | <1000 | <7 | NA | <20 | NA |
| UAW09-60 | 11/9/2001 | NA | <40 | NA | 1740 B | 1930 B | <5 | NA | <5 | NA | 22800 J | 24500 J | 6 B | NA | NA | NA | 1500 | <7 | NA | <20 | NA |
| UAW09-60 | 10/16/2002 | NA | 22.7 B | NA | 2020 B J E | NA | <5 | NA | NA | NA | 23900 | NA | <10 | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| UAW09-60 | 11/11/2003 | NA | 19.5 B | NA | 1970 B J | NA | <5 | NA | <5 | NA | 20600 | NA | <10 | NA | <100 | NA | 260 B | <7 | NA | <20 | NA |
| UAW09-60 | 4/6/2004 | NA | 9.4 B | NA | 1540 B J | NA | <5 | NA | <5 | NA | 16800 | NA | 5 B | NA | <100 | NA | 1100 | <7 | NA | <20 | NA |
| UAW09-60 | 11/6/2004 | NA | 6.1 B | NA | 1770 B J | NA | <5 | NA | <5 | NA | 56700 | NA | <10 | NA | <100 | NA | <1000 | <7 | NA | 39.1 | NA |
| UAW10-50 | 10/12/2001 | NA | 61.8 | NA | 13400 J | 4270 B J | <5 | NA | 2.5 B | NA | 67800 | 69300 | 7.9 B J | NA | NA | NA | <1000 | 65.2 | NA | 164 | NA |
| UAW10-50 | 11/13/2001 | NA | 15.3 B | NA | 4260 B J | 3900 B J | <5 | NA | <5 | NA | 60400 J | 54500 J | <10 | NA | NA | NA | 1500 | <7 | NA | 25.3 J | NA |
| UAW10-50 | 10/19/2002 | NA | 14.4 B | NA | 3740 B J | NA | <5 | NA | NA | NA | 47000 | NA | 5.5 B | NA | <100 | NA | 780 B | 5.8 B | NA | 28.1 | NA |
| UAW10-50 | 11/10/2003 | NA | 9.7 B | NA | 3350 B J | NA | <5 | NA | <5 | NA | 45700 | NA | <10 | NA | 7.9 B | NA | <1000 | 4.4 B | NA | 19.6 B J | NA |
| UAW10-50 | 3/30/2004 | NA | 12.8 B | NA | 3160 B J | NA | <5 | NA | <5 | NA | 55100 | NA | 6 B | NA | <100 | NA | <1000 | 4.4 B | NA | 20.6 | NA |
| UAW10-50 | 11/5/2004 | NA | 10.9 B | NA | 2900 B J | NA | <5 | NA | 1.1 B | NA | 50000 | NA | <10 | NA | <100 | NA | <1000 | 3.7 B | NA | 18.3 B | NA |
| UAW10-80 | 10/12/2001 | NA | 75.3 | NA | 5680 J | 5970 J | <5 | NA | <5 | NA | 40800 | 44300 | 7.5 B J | NA | NA | NA | <1000 | 2.9 B | NA | 30.3 | NA |
| UAW10-80 | 11/13/2001 | NA | 9.7 B | NA | 7990 J | 8200 J | <5 | NA | <5 | NA | 41000 J | 45600 J | <10 | NA | NA | NA | 2200 | <7 | NA | 38 J | NA |
| UAW10-80 | 10/19/2002 | NA | 36 B | NA | 3320 B J | NA | <5 | NA | NA | NA | 12700 | NA | 6.3 B | NA | <100 | NA | 620 B | 8.1 | NA | 29.2 | NA |
| UAW10-80 | 11/13/2003 | NA | 129 | NA | 4990 B J | NA | <5 | NA | <5 | NA | 14800 | NA | <10 | NA | <100 | NA | 260 B | 22 | NA | 55.9 J | NA |
| UAW10-80 | 3/30/2004 | NA | 16.4 B | NA | 2140 B J | NA | <5 | NA | <5 | NA | 14300 | NA | <10 | NA | <100 | NA | 890 B | 1.4 B | NA | <20 | NA |
| UAW10-80 | 11/5/2004 | NA | 19.2 B | NA | 2900 B | NA | <5 | NA | <5 | NA | 13800 | NA | 9.2 B | NA | <100 | NA | 800 B | 9.1 | NA | 31.6 | NA |
| UAW11-10 | 5/8/2001 | NA | 240 | NA | 8730 | 5660 | <5 | NA | <5 | NA | 2230000 | 1500000 | <10 | NA | NA | NA | 2700 | 113 | NA | 310 | NA |
| UAW11-10 | 11/10/2001 | NA | 39.3 B | NA | 7700 | 8050 | <5 | NA | <5 | NA | 440000 J | 454000 J | 7 B | NA | NA | NA | 1300 | 15.6 | NA | 22.4 J | NA |
| UAW11-10 | 10/18/2002 | NA | 12.2 B | NA | 5310 J | NA | <5 | NA | NA | NA | 201000 | NA | <10 | NA | 4060 | NA | 9200 | 12.6 J | NA | <20 | NA |

# Summary of Inorganic Detections in Groundwater, Seep, and Surface Water Samples

Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | Mercury-DISS | Nickel | Nickel-DISS | Potassium | Potassium-DISS | Selenium | Selenium-DISS | Silver | Silver-DISS | Sodium | Sodium-DISS | Thallium | Thallium-DISS | Tin | Tin-DISS | Total Sulfide | Vanadium | Vanadium-DISS | Zinc | Zinc-DISS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW11-10 | 11/16/2003 | NA | 7.9 B J | NA | 5510 J | NA | <5 | NA | <5 | NA | 293000 | NA | 8.6 B J | NA | 1450 | NA | 2900 | 5.9 B | NA | <20 | NA |
| UAW11-10 | 4/6/2004 | NA | 8.9 B | NA | 6450 J | NA | <5 | NA | <5 | NA | 484000 | NA | 5.9 B | NA | 1950 | NA | 9000 | 16 | NA | <20 | NA |
| UAW11-10 | 11/7/2004 | NA | <40 | NA | 2690 B J | NA | <5 | NA | <5 | NA | 198000 | NA | 5.3 B | NA | 1660 | NA | 14000 | 4.1 B | NA | <20 | NA |
| UAW11-40 | 5/8/2001 | NA | 49.4 | NA | 5680 | 5780 | <5 | NA | <5 | NA | 239000 | 248000 | 8.2 B | NA | NA | NA | 960 B | 0.91 B | NA | <20 | NA |
| UAW11-40 | 11/12/2001 | NA | 66.5 | NA | 5770 | 5530 | <5 | NA | <5 | NA | 253000 | 244000 | 7.8 B J | NA | NA | NA | <1000 | <7 | NA | <20 | NA |
| UAW11-40 | 10/18/2002 | NA | 73.2 | NA | 6200 J | NA | <5 | NA | NA | NA | 258000 | NA | 9.5 B | NA | 70.7 B | NA | <1000 | <7 | NA | <20 | NA |
| UAW11-40 | 11/16/2003 | NA | 86 J | NA | 6410 J | NA | <5 | NA | <5 | NA | 273000 | NA | 10.9 J | NA | 48.7 B | NA | <1000 | <7 | NA | <20 | NA |
| UAW11-40 | 4/6/2004 | NA | 53.1 | NA | 6040 J | NA | <5 | NA | <5 | NA | 285000 | NA | 7.3 B | NA | 62.2 B | NA | 640 B | <7 | NA | <20 | NA |
| UAW11-40 (Dup) | 4/6/2004 | NA | 49.3 | NA | 5920 J | NA | <5 | NA | <5 | NA | 278000 | NA | 7.3 B | NA | 51.7 B | NA | 800 B | <7 | NA | <20 | NA |
| UAW11-40 | 11/7/2004 | NA | 55.7 | NA | 6820 J | NA | <5 | NA | <5 | NA | 317000 | NA | 6.7 B | NA | 47.2 B | NA | <1000 | <7 | NA | <20 | NA |
| UAW12-20 | 5/6/2001 | NA | 18.2 B | NA | 10500 | 9700 | <5 | NA | <5 | NA | 485000 | 455000 | 14.4 | NA | 66.9 B | NA | <1000 | 2.8 B | NA | 29.8 MBD | NA |
| UAW12-20 | 11/15/2001 | NA | 5.3 B | NA | NA | 8090 | <5 | NA | <5 | NA | NA | 348000 | 12.1 J | NA | 82.9 B | NA | 2000 | 6 B | NA | <20 | NA |
| UAW12-20 | 10/20/2002 | NA | 3.2 B | NA | 10100 J | NA | <5 | NA | NA | NA | 356000 | NA | 8.1 B | NA | 255 | NA | 4800 | 5.2 B | NA | <20 | NA |
| UAW12-20 | 11/12/2003 | NA | 5.4 B | NA | 8310 J | NA | <5 | NA | <5 | NA | 632000 | NA | <10 | NA | 105 | NA | 7500 | 2.1 B | NA | 13.7 B J | NA |
| UAW12-20 | 3/28/2004 | NA | <40 | NA | 8250 J | NA | <5 | NA | <5 | NA | 765000 | NA | <10 | NA | 101 | NA | 1000 | 2.7 B | NA | <20 | NA |
| UAW12-20 | 11/4/2004 | NA | 2.5 B | NA | 9160 | NA | <5 | NA | <5 | NA | 589000 | NA | <10 | NA | 78.8 B | NA | 4200 | 2.5 B | NA | <20 | NA |
| UAW13-20 | 5/6/2001 | NA | 12.4 B | NA | 10400 | 9990 | <5 | NA | <5 | NA | 491000 | 488000 | 5 B | NA | 1060 | NA | 5800 | 14.8 | NA | 22.1 MBD | NA |
| UAW13-20 | 11/15/2001 | NA | 23.2 B | NA | NA | 13300 | <5 | NA | <5 | NA | NA | 948000 | 16.6 J | NA | 1930 | NA | 2800 | 16.4 | NA | 23.7 | NA |
| UAW13-20 | 10/23/2002 | NA | 19.2 B | NA | 12200 J | NA | <5 | NA | NA | NA | 947000 | NA | 5.5 B | NA | 2330 | NA | 14000 | 13.1 | NA | <20 | NA |
| UAW13-20 | 11/12/2003 | NA | 16.6 B | NA | 12600 J | NA | <5 | NA | <5 | NA | 757000 | NA | <10 | NA | 1710 | NA | 150000 | 12.3 | NA | <20 | NA |
| UAW13-20 | 3/28/2004 | NA | 12.2 B | NA | 10800 J | NA | <5 | NA | <5 | NA | 871000 | NA | <10 | NA | 1780 | NA | 8900 | 12.7 | NA | 16.7 B | NA |
| UAW13-20 | 11/5/2004 | NA | 16.5 B | NA | 11700 | NA | <5 | NA | <5 | NA | 578000 | NA | <10 | NA | 1870 | NA | 160000 | 13.9 | NA | 19.9 B | NA |
| UAW14-10 | 5/5/2001 | NA | 6.1 B | NA | 1270 B | 1300 B | <5 | NA | <5 | NA | 36500 | 35800 | <10 | NA | NA | NA | 1500 | <7 | NA | <20 | NA |
| UAW14-10 | 11/9/2001 | NA | 3.4 B | NA | 1530 B | 1510 B | <5 | NA | <5 | NA | 37900 J | 37500 J | <10 | NA | NA | NA | 1200 | <7 | NA | <20 | NA |
| UAW14-10 | 10/16/2002 | NA | 4 B | NA | 1620 B J | NA | <5 | NA | NA | NA | 31400 | NA | 8.9 B | NA | <100 | NA | <1000 | 1 B | NA | <20 | NA |
| UAW14-10 | 11/16/2003 | NA | 6.8 B J | NA | 1820 B J | NA | 4.1 B | NA | 1.3 B | NA | 30900 | NA | 15.3 J | NA | 4.7 B | NA | <1000 | <7 | NA | <20 | NA |
| UAW14-10 | 4/5/2004 | NA | 20.5 B | NA | 1120 B J | NA | <5 | NA | <5 | NA | 22900 | NA | <10 | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| UAW14-10 | 11/6/2004 | NA | 4.7 B | NA | 1370 B J | NA | <5 | NA | <5 | NA | 33000 | NA | <10 | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| UAW15-20 | 5/6/2001 | NA | 55.1 | NA | 2430 B | 2490 B | <5 | NA | <5 | NA | 421000 | 443000 | 6.2 B | NA | NA | NA | <1000 | <7 | NA | 23 MBD | NA |
| UAW15-20 | 11/11/2001 | NA | 102 | NA | 3060 B | 2840 B | <5 | NA | <5 | NA | 506000 | 480000 | 14 J | NA | NA | NA | <1000 | <7 | NA | <20 | NA |
| UAW15-20 | 10/18/2002 | NA | 57.5 | NA | 1930 B J | NA | <5 | NA | NA | NA | 281000 | NA | 7.4 B | NA | 261 | NA | <1000 | <7 | NA | <20 | NA |
| UAW15-20 | 11/17/2003 | NA | 66.3 J | NA | 4610 B J | NA | <5 | NA | <5 | NA | 990000 | NA | 11.7 J | NA | 131 | NA | <1000 | <7 | NA | <20 | NA |
| UAW15-20 | 4/7/2004 | NA | 374 | NA | 7100 J | NA | <5 | NA | <5 | NA | 1480000 | NA | 5.6 B | NA | 80.7 B | NA | 640 B | <7 | NA | 22.8 | NA |
| UAW15-20 | 11/7/2004 | NA | 155 | NA | 6590 J | NA | <5 | NA | <5 | NA | 1290000 | NA | <10 | NA | 104 | NA | <1000 | <7 | NA | <20 | NA |
| UAW15-50 | 5/6/2001 | NA | 130 | NA | 9520 | 7590 | <5 | NA | <5 | NA | 261000 | 218000 | 6.1 B | NA | NA | NA | <1000 | <7 | NA | 24.6 | NA |
| UAW15-50 | 11/11/2001 | NA | 102 | NA | 8780 | 7910 | <5 | NA | <5 | NA | 253000 | 234000 | 16.7 J | NA | NA | NA | <1000 | <7 | NA | <20 | NA |
| UAW15-50 | 10/18/2002 | NA | 76.4 | NA | 7280 J | NA | <5 | NA | NA | NA | 210000 | NA | 6.6 B | NA | 2400 | NA | 460 B | <7 | NA | <20 | NA |
| UAW15-50 | 11/17/2003 | NA | 84.7 J | NA | 7320 J | NA | <5 | NA | <5 | NA | 202000 | NA | 9.4 B J | NA | 2050 | NA | 1600 | <7 | NA | <20 | NA |
| UAW15-50 | 4/7/2004 | NA | 85.8 | NA | 6400 J | NA | <5 | NA | <5 | NA | 182000 | NA | 8.7 B | NA | 2110 | NA | 1100 | <7 | NA | 15.8 B | NA |
| UAW15-50 | 11/7/2004 | NA | 74.9 | NA | 6090 J | NA | <5 | NA | <5 | NA | 165000 | NA | 7.5 B | NA | 1950 | NA | 8400 | <7 | NA | 18.7 B | NA |
| UAW15-50 (Dup) | 11/7/2004 | NA | 72.6 | NA | 5940 J | NA | <5 | NA | <5 | NA | 160000 | NA | <10 | NA | 2010 | NA | 2000 | <7 | NA | <20 | NA |

# Summary of Inorganic Detections in Groundwater, Seep, and Surface Water Samples

Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | Mercury-DISS | Nickel | Nickel-DISS | Potassium | Potassium-DISS | Selenium | Selenium-DISS | Silver | Silver-DISS | Sodium | Sodium-DISS | Thallium | Thallium-DISS | Tin | Tin-DISS | Total Sulfide | Vanadium | Vanadium-DISS | Zinc | Zinc-DISS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW16-10 | 10/12/2001 | NA | 17.1 B | NA | 7420 J | 7400 J | <5 | NA | <5 | NA | 277000 | 276000 | 5.5 B J | NA | NA | NA | 3900 | 59.3 | NA | <20 | NA |
| UAW16-10 (Dup) | 10/12/2001 | NA | 17.5 B | NA | 7310 J | 7360 J | <5 | NA | <5 | NA | 275000 | 278000 | 8.6 B J | NA | NA | NA | 6300 | 59.1 | NA | <20 | NA |
| UAW16-10 | 11/13/2001 | NA | 12.7 B | NA | 9650 J | 8630 J | <5 | NA | <5 | NA | 281000 J | 244000 J | <10 | NA | NA | NA | 2500 | 29.1 | NA | <20 | NA |
| UAW16-10 | 10/18/2002 | NA | 24.3 B | NA | 10500 J | NA | <5 | NA | NA | NA | 367000 | NA | 8.9 B | NA | 741 | NA | 7800 | 5.7 B J | NA | <20 | NA |
| UAW16-10 | 11/16/2003 | NA | 17.1 B J | NA | 7040 J | NA | <5 | NA | 1.3 B | NA | 242000 | NA | 8.5 B J | NA | 665 | NA | 1800 | 4.1 B | NA | <20 | NA |
| UAW16-10 (Dup) | 11/17/2003 | NA | 18.3 B J | NA | 7290 J | NA | <5 | NA | 1.3 B | NA | 250000 | NA | 11.9 J | NA | 694 | NA | 1800 | 4.3 B | NA | <20 | NA |
| UAW16-10 | 4/7/2004 | NA | 15.3 B | NA | 6380 J | NA | <5 | NA | <5 | NA | 200000 | NA | 6.8 B | NA | 602 | NA | 1100 | 1.6 B | NA | <20 | NA |
| UAW16-10 | 11/7/2004 | NA | <40 | NA | 5150 J | NA | <5 | NA | <5 | NA | 127000 | NA | <10 | NA | 623 | NA | 4400 | 0.8 B | NA | <20 | NA |
| UAW17-40 | 5/5/2001 | NA | 12.5 B | NA | 1900 B | 2020 B | <5 | NA | <5 | NA | 17400 | 18300 | <10 | NA | NA | NA | <1000 | 1.5 B | NA | <20 | NA |
| UAW17-40 | 11/9/2001 | NA | 5 B | NA | 1720 B | 1750 B | <5 | NA | <5 | NA | 13100 J | 13300 J | <10 | NA | NA | NA | <1000 | 0.92 B | NA | <20 | NA |
| UAW17-40 | 10/16/2002 | NA | 5.3 B | NA | 1480 B J | NA | <5 | NA | NA | NA | 11100 | NA | <10 | NA | <100 | NA | 5400 | 1.2 B J | NA | <20 | NA |
| UAW17-40 | 11/16/2003 | NA | 6.9 B J | NA | 1330 B J E | NA | <5 | NA | <5 | NA | 10700 | NA | 12.7 J | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| UAW17-40 | 3/31/2004 | NA | 3.9 B | NA | 1390 B J E | NA | <5 | NA | <5 | NA | 11300 | NA | <10 | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| UAW17-40 | 11/6/2004 | NA | <40 | NA | 948 B J | NA | <5 | NA | <5 | NA | 10500 | NA | <10 | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| UAW18-20 | 10/12/2001 | NA | 28.8 B | NA | 6060 J | 6200 J | <5 | NA | <5 | NA | 1520000 | 1490000 | 5.8 B J | NA | NA | NA | 3100 | 1.7 B | NA | <20 | NA |
| UAW18-20 | 11/13/2001 | NA | 28.6 B | NA | 6120 J | 5510 J | <5 | NA | <5 | NA | 1720000 J | 1610000 J | <10 | NA | NA | NA | 2200 | <7 | NA | <20 | NA |
| UAW18-20 | 10/18/2002 | NA | 16.3 B | NA | 1830 B J | NA | <5 | NA | NA | NA | 487000 | NA | <10 | NA | 1670 | NA | 3000 | 1.8 B J | NA | <20 | NA |
| UAW18-20 | 11/16/2003 | NA | 37.6 B J | NA | 6240 J | NA | <5 | NA | 1.2 B | NA | 1040000 | NA | 12.5 J | NA | 2000 | NA | 800 B | 1.5 B | NA | <20 | NA |
| UAW18-20 | 4/7/2004 | NA | 33.4 B | NA | 6950 J | NA | <5 | NA | <5 | NA | 905000 | NA | 8.4 B | NA | 1710 | NA | 960 B | 1.2 B | NA | <20 | NA |
| UAW18-20 | 11/7/2004 | NA | 62.8 | NA | 7970 J | NA | <5 | NA | <5 | NA | 1200000 | NA | 5 B | NA | 2040 | NA | 4600 | 3.5 B | NA | <20 | NA |
| UAW19-80 | 5/6/2001 | NA | 11.7 B | NA | 1970 B | 1780 B | <5 | NA | <5 | NA | 53000 | 51200 | <10 | NA | NA | NA | 990 B | <7 | NA | 18.4 B | NA |
| UAW19-80 | 11/12/2001 | NA | 14.1 B | NA | 2020 B | 1850 B | <5 | NA | <5 | NA | 58700 | 59400 | 10.3 J | NA | NA | NA | <1000 | 1 B | NA | <20 | NA |
| UAW19-80 (Dup) | 11/12/2001 | NA | 66.3 | NA | 5960 | 5750 | <5 | NA | <5 | NA | 261000 | 254000 | 8.2 B J | NA | NA | NA | <1000 | <7 | NA | <20 | NA |
| UAW19-80 | 10/17/2002 | NA | 6.2 B | NA | 2130 B J | NA | <5 | NA | NA | NA | 60100 | NA | 7.6 B | NA | <100 | NA | 300 B | 1 B J | NA | <20 | NA |
| UAW19-80 (Dup) | 10/17/2002 | NA | 5.8 B | NA | 2090 B J | NA | <5 | NA | NA | NA | 59700 | NA | 5.9 B | NA | <100 | NA | 620 B | 1.1 B J | NA | <20 | NA |
| UAW19-80 | 11/13/2003 | NA | 10.8 B | NA | 1870 B J | NA | <5 | NA | <5 | NA | 59600 | NA | <10 | NA | <100 | NA | 420 B | <7 | NA | <20 | NA |
| UAW19-80 | 3/30/2004 | NA | <40 | NA | 1830 B J | NA | <5 | NA | <5 | NA | 62400 | NA | <10 | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| UAW19-80 | 11/5/2004 | NA | 3.4 B | NA | 1880 B | NA | <5 | NA | <5 | NA | 63900 | NA | <10 | NA | <100 | NA | 640 B | <7 | NA | <20 | NA |
| UAW20-60 | 5/7/2001 | NA | 18.4 B | NA | 4060 B | 3640 B | <5 | NA | <5 | NA | 128000 | 162000 | 7.4 B | NA | NA | NA | 960 B | <7 | NA | 14.4 B MBE | NA |
| UAW20-60 | 11/14/2001 | NA | 8.7 B | NA | 3640 B | 3530 B | <5 | NA | <5 | NA | 139000 | 134000 | 13.8 | NA | NA | NA | 1600 | <7 | NA | <20 | NA |
| UAW20-60 (Dup) | 11/14/2001 | NA | 8.9 B | NA | 3550 B L | 3610 B | <5 | NA | <5 | NA | 137000 | 137000 | 10.3 | NA | NA | NA | 1800 | <7 | NA | <20 | NA |
| UAW20-60 | 10/19/2002 | NA | 7.1 B | NA | 2350 B J | NA | <5 | NA | NA | NA | 114000 | NA | 5.5 B | NA | 15 B | NA | <1000 | <7 | NA | <20 | NA |
| UAW20-60 (Dup) | 10/19/2002 | NA | 38.2 B | NA | 4970 B J | NA | <5 | NA | NA | NA | 234000 | NA | 6.6 B | NA | 547 | NA | <1000 | 5.2 B | NA | <20 | NA |
| UAW20-60 | 11/13/2003 | NA | 7.1 B | NA | 2240 B J | NA | <5 | NA | <5 | NA | 99100 | NA | <10 | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| UAW20-60 | 3/30/2004 | NA | 21.6 B | NA | 2080 B J | NA | <5 | NA | <5 | NA | 103000 | NA | <10 | NA | 9 B | NA | 1400 | <7 | NA | <20 | NA |
| UAW20-60 | 11/5/2004 | NA | 6.5 B | NA | 2250 B | NA | <5 | NA | <5 | NA | 104000 | NA | 7.9 B | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| UAW21-30 | 5/5/2001 | NA | 17.7 B | NA | 5210 | 6420 | <5 | NA | <5 | NA | 284000 | 347000 | <10 | NA | NA | NA | <1000 | 0.95 B | NA | <20 | NA |
| UAW21-30 | 11/11/2001 | NA | 170 | NA | 3610 B | 2820 B | <5 | NA | <5 | NA | 53500 | 54100 | 6.7 B J | NA | NA | NA | <1000 | 6.4 B | NA | 30 | NA |
| UAW21-30 | 10/18/2002 | NA | 623 | NA | 3410 B J | NA | <5 | NA | NA | NA | 47800 | NA | 6.4 B | NA | <100 | NA | 460 B | 4.9 B J | NA | <20 | NA |
| UAW21-30 | 11/11/2003 | NA | 103 | NA | 4350 B J | NA | <5 | NA | <5 | NA | 48100 | NA | 9 B | NA | <100 | NA | <1000 | 9 | NA | 29.8 J | NA |
| UAW21-30 | 3/27/2004 | NA | 171 | NA | 3560 B J | NA | 8.7 | NA | <5 | NA | 37800 | NA | 7.3 B J | NA | <100 | NA | 1000 | 3 B | NA | <20 | NA |

# Summary of Inorganic Detections in Groundwater, Seep, and Surface Water Samples

Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | Mercury-DISS | Nickel | Nickel-DISS | Potassium | Potassium-DISS | Selenium | Selenium-DISS | Silver | Silver-DISS | Sodium | Sodium-DISS | Thallium | Thallium-DISS | Tin | Tin-DISS | Total Sulfide | Vanadium | Vanadium-DISS | Zinc | Zinc-DISS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW21-30 | 11/3/2004 | NA | 518 | NA | 3460 B J | NA | 4.3 B | NA | <5 | NA | 46200 | NA | <10 | NA | 19.4 B | NA | <1000 | 3.1 B | NA | 14.3 B | NA |
| UAW21-80 | 5/5/2001 | NA | 7.6 B | NA | 1190 B | 1210 B | <5 | NA | <5 | NA | 28600 | 26900 | <10 | NA | NA | NA | <1000 | <7 | NA | 13.8 B | NA |
| UAW21-80 | 11/11/2001 | NA | 7.5 B | NA | 1350 B | 1310 B | <5 | NA | <5 | NA | 30700 | 31900 | 9.2 B | NA | NA | NA | <1000 | <7 | NA | <20 | NA |
| UAW21-80 | 10/18/2002 | NA | 12.7 B | NA | 1380 B J | NA | <5 | NA | NA | NA | 31900 | NA | <10 | NA | <100 | NA | <1000 | 1.6 B J | NA | <20 | NA |
| UAW21-80 | 11/11/2003 | NA | 9.5 B | NA | 1300 B J | NA | <5 | NA | <5 | NA | 39800 | NA | <10 | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| UAW21-80 | 3/27/2004 | NA | 6.6 B | NA | 1040 B J | NA | 4.6 B | NA | <5 | NA | 38700 | NA | <10 | NA | <100 | NA | 410 B | <7 | NA | <20 | NA |
| UAW21-80 | 11/3/2004 | NA | 6.2 B | NA | 1130 B J | NA | <5 | NA | <5 | NA | 41700 | NA | 5.2 B | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| UAW22-20 | 10/13/2001 | NA | 56.4 | NA | 18400 J | 15500 J | <5 | NA | <5 | NA | 661000 | 673000 | <10 | NA | NA | NA | <1000 | 24 | NA | 86.8 | NA |
| UAW22-20 | 11/13/2001 | NA | 57.3 | NA | 16600 J | 12400 J | <5 | NA | <5 | NA | 706000 J | 676000 J | <10 | NA | NA | NA | 1800 | 29.6 | NA | 132 J | NA |
| UAW22-20 | 10/20/2002 | NA | 28 B | NA | 6330 J E | NA | <5 | NA | NA | NA | 381000 | NA | <10 | NA | 979 | NA | 1400 | 7.2 | NA | <20 | NA |
| UAW22-20 | 11/10/2003 | NA | 20.8 B | NA | 8380 J | NA | <5 | NA | <5 | NA | 996000 | NA | <10 | NA | 529 | NA | <1000 | 2.7 B | NA | 59.3 J | NA |
| UAW22-20 | 3/29/2004 | NA | 11.4 B | NA | 9510 J | NA | <5 | NA | <5 | NA | 921000 | NA | <10 | NA | 203 | NA | 410 B | 3.6 B | NA | <20 | NA |
| UAW22-20 | 11/4/2004 | NA | 15.4 B | NA | 7910 J | NA | <5 | NA | <5 | NA | 726000 | NA | 6.3 B | NA | 460 | NA | <1000 | 1 B | NA | <20 | NA |
| UAW23-20 | 10/12/2001 | NA | 12.8 B | NA | 26900 J | 26800 J | 6.1 | NA | <5 | NA | 167000 | 166000 | 8.9 B J | NA | NA | NA | 2000 | <7 | NA | <20 | NA |
| UAW23-20 | 11/14/2001 | NA | 296 | NA | 23200 | 23500 | 9.5 | NA | <5 | NA | 169000 | 169000 | 11.3 | NA | NA | NA | <1000 | <7 | NA | <20 | NA |
| UAW23-20 | 10/19/2002 | NA | 400 | NA | 19400 J | NA | 20.2 | NA | NA | NA | 126000 | NA | <10 | NA | <100 | NA | 300 B | <7 | NA | <20 | NA |
| UAW23-20 | 11/13/2003 | NA | 789 | NA | 21000 J | NA | 12.7 | NA | <5 | NA | 99500 | NA | <10 | NA | <100 | NA | 420 B | <7 | NA | <20 | NA |
| UAW23-20 | 3/28/2004 | NA | 214 | NA | 19900 J | NA | 18.2 | NA | <5 | NA | 105000 | NA | <10 | NA | <100 | NA | 730 B | 3.7 B | NA | <20 | NA |
| UAW23-20 | 11/5/2004 | NA | 81.4 | NA | 22400 | NA | 15.1 | NA | <5 | NA | 116000 | NA | <10 | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| UAW24-70 | 10/13/2001 | NA | 5.5 B | NA | 2150 B J | 2050 B J | <5 | NA | <5 | NA | 50500 | 55500 | <10 | NA | NA | NA | 2800 | <7 | NA | <20 | NA |
| UAW24-70 | 11/15/2001 | NA | 3.8 B | NA | 4220 B J | 3380 B J | <5 | NA | <5 | NA | 57200 | 79300 | 5 B | NA | NA | NA | 1100 | <7 | NA | <20 | NA |
| UAW24-70 | 10/17/2002 | NA | 16.9 B | NA | 4950 B J | NA | <5 | NA | NA | NA | 51100 | NA | 8.6 B | NA | <100 | NA | 460 B | 1.1 B J | NA | <20 | NA |
| UAW24-70 | 11/16/2003 | NA | 13.7 B J | NA | 9890 J | NA | <5 | NA | 2 B | NA | 54200 | NA | 14.7 J | NA | 7.8 B | NA | <1000 | <7 | NA | <20 | NA |
| UAW24-70 | 4/5/2004 | NA | 5.9 B | NA | 3100 B J | NA | <5 | NA | <5 | NA | 37400 | NA | <10 | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| UAW24-70 | 11/6/2004 | NA | <40 | NA | 3180 B J | NA | <5 | NA | <5 | NA | 46600 | NA | <10 | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| UAW25-20 | 10/13/2001 | NA | 27.7 B | NA | 3530 B J | 3540 B J | <5 | NA | <5 | NA | 338000 | 340000 | <10 | NA | NA | NA | 1500 | 1.2 B | NA | 99.2 | NA |
| UAW25-20 | 11/13/2001 | NA | 97.5 | NA | 3480 B J | 3160 B J | <5 | NA | <5 | NA | 328000 J | 296000 J | <10 | NA | NA | NA | 2200 | 5.2 B | NA | <20 | NA |
| UAW25-20 | 10/18/2002 | NA | 48.3 | NA | 11800 J | NA | <5 | NA | NA | NA | 395000 | NA | <10 | NA | 188 | NA | <1000 | <7 | NA | <20 | NA |
| UAW25-20 | 11/12/2003 | NA | 64.1 | NA | 6870 J | NA | <5 | NA | <5 | NA | 429000 | NA | <10 | NA | 150 | NA | <1000 | <7 | NA | <20 | NA |
| UAW25-20 | 3/27/2004 | NA | 128 | NA | 6970 J | NA | <5 | NA | <5 | NA | 320000 | NA | <10 | NA | 130 | NA | 1200 | 1.4 B | NA | <20 | NA |
| UAW25-20 | 11/3/2004 | NA | 80.8 | NA | 9500 J | NA | <5 | NA | <5 | NA | 406000 | NA | <10 | NA | 134 | NA | <1000 | <7 | NA | <20 | NA |
| UAW26-70 | 4/6/2004 | NA | 4.1 B | NA | 2290 B J | NA | <5 | NA | <5 | NA | 40600 | NA | <10 | NA | <100 | NA | 1100 | <7 | NA | <20 | NA |
| UAW26-70 | 11/6/2004 | NA | <40 | NA | 1610 B J E | NA | <5 | NA | <5 | NA | 35700 | NA | <10 | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| UAW27-50 | 3/31/2004 | NA | 33.2 B | NA | 2120 B J | NA | <5 | NA | <5 | NA | 37600 | NA | <10 | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| UAW27-50 | 11/5/2004 | NA | 8.4 B | NA | 2220 B J | NA | <5 | NA | <5 | NA | 32800 | NA | <10 | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| LAW05-60 | 3/16/2002 | NA | 18.7 B | NA | NA | NA | 5.3 | NA | <5 | NA | NA | NA | <10 | NA | <100 | NA | <1000 | 2 B | NA | 41.2 | NA |
| LAW05-150 | 3/16/2002 | NA | <40 | NA | NA | NA | <5 | NA | <5 | NA | NA | NA | <10 | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| LAW05-150 (Dup) | 3/16/2002 | NA | <40 | NA | NA | NA | <5 | NA | <5 | NA | NA | NA | <10 | NA | <100 | NA | <1000 | <7 | NA | 59.6 | NA |
| LAW12-60 | 10/13/2001 | NA | 14.2 B | NA | 10000 J | 9590 J | <5 | NA | <5 | NA | 61300 | 59200 | 5.5 B | NA | <100 | NA | 1500 | 2 B | NA | <20 | NA |
| LAW12-60 | 11/16/2001 | NA | 5.8 B | NA | 11100 J | 9780 J | <5 | NA | <5 | NA | 54900 | 49500 | <10 | NA | <100 | NA | <1000 | <7 | NA | <20 | NA |
| French Drain Sump @ 46 hr | 10/19/2002 | NA | 46.8 | NA | 5880 J | NA | <5 | NA | NA | NA | 304000 | NA | 6.3 B | NA | 2930 | NA | 8600 | 73.8 | NA | 22.4 | NA |

## Summary of Inorganic Detections in Groundwater, Seep, and Surface Water Samples

Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | Mercury-DISS | Nickel | Nickel-DISS | Potassium | Potassium-DISS | Selenium | Selenium-DISS | Silver | Silver-DISS | Sodium | Sodium-DISS | Thallium | Thallium-DISS | Tin | Tin-DISS | Total Sulfide | Vanadium | Vanadium-DISS | Zinc | Zinc-DISS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| French Drain Sump @ 72 hr | 10/20/2002 | NA | 47 | NA | 5950 J | NA | <5 | NA | NA | NA | 307000 | NA | <10 | NA | 3070 | NA | 9600 | 74.2 | NA | 67.9 | NA |
| **Surface Water** | | | | | | | | | | | | | | | | | | | | | |
| WS-1A | 3/25/2004 | <0.2 | NA | <40 | NA | NA | NA | <5 | NA | <5 | NA | NA | NA | <10 | NA | <100 | 900 B | NA | <7 | NA | 16.4 B |
| WS-2A | 3/26/2004 | NA | <40 | NA | NA | NA | <5 | NA | <5 | NA | NA | NA | <10 | NA | <100 | NA | <1000 | <7 | NA | 16.2 B | NA |
| WS-3A | 3/26/2004 | NA | <40 | NA | NA | NA | <5 | NA | <5 | NA | NA | NA | <10 | NA | <100 | NA | <1000 | <7 | NA | 14.5 B | NA |
| WS-4A | 3/26/2004 | NA | <40 | NA | NA | NA | <5 | NA | <5 | NA | NA | NA | <10 | NA | <100 | NA | 740 B | <7 | NA | 17.4 B | NA |
| WS-5A | 3/25/2004 | 0.064 B J | NA | <40 | NA | NA | NA | <5 | NA | <5 | NA | NA | NA | <10 | NA | <100 | <1000 | NA | <7 | NA | 16 B |
| WS-6A | 3/25/2004 | <0.2 | NA | <40 | NA | NA | NA | <5 | NA | <5 | NA | NA | NA | <10 | NA | <100 | <1000 | NA | <7 | NA | 15.3 B |
| WS-6A (Dup) | 3/25/2004 | 0.04 B J | NA | <40 | NA | NA | NA | <5 | NA | <5 | NA | NA | NA | 6.8 B | NA | <100 | 1400 | NA | <7 | NA | 23.1 |
| **Seeps** | | | | | | | | | | | | | | | | | | | | | |
| SS-1 (Seep) | 10/11/2001 | <0.2 | 214 | 22.3 B | 14200 J | 9600 J L | <5 | <5 | NA | NA | 149000 | 361000 | <10 | <10 | 782 | 121 | <1000 | 124 | 1.6 B | 411 | 12.6 B |
| SS-5 (Seep) | 10/11/2001 | <0.2 | 57.7 | 85.9 | 14100 J | 7180 J | <5 | <5 | NA | NA | 375000 | 159000 | <10 | <10 | 1340 | 348 | <1000 | 33.2 | 11.6 | 219 | 19.4 B |

Notes:

B = Estimated result; result is less than reporting limit
E = Matrix interference
J = Method blank contamination. The associated method blank contains the target analyte at a reportable level.
L = Serial dilution of a digestate in the analytical batch indicates that physical and chemical interferences are present.
MBB = This analyte is present at a reportable level in the associated method blank but is less than 5% of the sample amount.
MBD = This analyte is present in the associated method blank at an amount that is less than two times the reporting limit.
MBE = This analyte is present in the associated method blank.
NA indicates chemical was not on the target analyte list for that sample.
<5 = Indicates constituent not detected at or above indicated detection limit.
This table only includes target analytes detected in one or more Facility Investigation samples.
See Appendix B for the complete target analyte lists.

* = Indicates that Environmental Standards qualified the data as a "non-detect" as part of the 10% data validation. The analyte was detected in a field and/or laboratory blank at a similar level.
The only validation qualifiers that have been annotated into the summary tables are qualifications of detected compounds. Please refer to Appendix D for excerpts from the Quality Assurance Review (Envionmental Standards, 2004) and to review data qualification of "non-detect" results.

# REVISED
# Facility Investigation Report
# RCRA §3013 Administrative Order

Morton International, Inc. Facility
Reading, Ohio
EPA ID No. OHD. 000 724 138

*Prepared for:*

**The Rohm and Haas Co.**

*Prepared by:*

**Geomatrix Consultants, Inc.**
5725 Highway 290 West Suite 200B
Austin, Texas 78735

September 2004

Project No. 7168

**Volume 1 of 2**
**Text, Tables, Figures**

# Revised Facility Investigation Report
# RCRA §3013 Administrative Order

EPA ID No. OHD. 000 724 138
RCRA Docket No. R3013-5-00-001

Morton International, Inc. Facility
Reading, Ohio

Prepared for:

**The Rohm and Haas Co.**
Croydon, Pennsylvania

September 2004

Project No. 7168

**REVISED**
**Facility Investigation Report**
**RCRA §3013 Administrative Order**
**EPA ID No. OHD. 000 724 138**
**RCRA Docket No. R3013-5-00-001**
**Morton International, Inc. Facility**
**Reading, Ohio**

**Prepared by Geomatrix Consultants, Inc.**
**5725 Highway 290 West Suite 200B**
**Austin, Texas 78735**

**September 2004**
**Project No. 7168**

**Prepared in Compliance with Administrative Order**
**RCRA Docket No. R3013-5-00-001, Paragraph 67**

Certification by the Rohm and Haas Company

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: Bruce E Beiser

Name: BRUCE E BEISER

Title: PLANT MANAGER

Date: AUGUST 30, 2004

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## ACRONYMS AND ABBREVIATIONS

- µg/l - micrograms per liter
- 1,1-DCA - 1,1-dichloroethane
- 1,1-DCE - 1,1-dichloroethene
- 1,2-DCA - 1,2-dichloroethane
- 1,2-DCB - 1,2-dichlorobenzene
- AADD - Annual Average Daily Dose
- AO - Administrative Order
- App. IX-TAL - Appendix IX Target Analyte List
- bgs - below ground surface
- BHC- Benzene Hexachloride
- BKG-TAL - Background Target Analyte List
- BTEX - benzene, toluene, ethylbenzene, and xylenes
- BRA – Baseline Risk Assessment
- CCR – Current Conditions Report
- CDM - Camp Dresser & McKee Inc.
- CLP-TAL - Contract Laboratory Program Target Analyte List
- CSOs - Combined Sewer Outfalls
- CSS - Combined Sewer System
- DDD – Dichlorodiphenyldichloroethane
- DDE – Dichlorodiphenyldichloroethylene
- DDT - Dichlorodiphenyltrichloroethane
- DPT - direct push technique
- EDQL – Environmental Data Quality Limit
- E&E - Ecology and Environment, Inc.
- EM61 - the Geonics EM61 time domain electromagnetic metal detector, a type of electromagnetic survey instrument

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## ACRONYMS AND ABBREVIATIONS
## (Continued)

- EM31 - the Geonics EM31 terrain conductivity meter, a type of electromagnetic survey instrument
- FI - Facility Investigation
- ft/day - feet per day
- ft/ft - feet per foot
- K - hydraulic conductivity
- LAW - Lower Aquifer Well
- mg/kg - milligrams per kilogram
- MON-TAL – Monitoring Target Analyte List
- MSD - Metropolitan Sewer District
- NPDES - National Pollution Discharge Elimination System
- NPL - National Priorities List
- OEPA - Ohio Environmental Protection Agency
- PAHs - polycyclic aromatic hydrocarbons
- PCBs - polychlorinated biphenyls
- PCE - tetrachloroethene
- PID - photoionization detector
- PRP - Potentially Responsible Party
- PVC - polyvinyl chloride
- QA/QC - quality assurance/quality control
- QAPP - Quality Assurance Project Plan
- RCRA - Resource Conservation and Recovery Act
- RFA - RCRA Facility Assessment
- RFI - RCRA Facility Investigation
- SERA - Screening-Level Ecological Risk Assessment

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## ACRONYMS AND ABBREVIATIONS
## (Continued)

- SS-TAL - Sediment Target Analyte List
- STL - Severn Trent Laboratories
- SVOCs - Semivolatile Organic Compounds
- SWMUs - Solid Waste Management Units
- T - transmissivity
- TCA - 1,1,1-trichloroethane
- TCE - trichloroethene
- TDS - Total Dissolved Solids
- TSS - Total Suspended Solids
- UA - Upper Aquifer
- UAW - Upper Aquifer Well
- USCS - Unified Soil Classification System
- USEPA - U.S. Environmental Protection Agency
- VOCs - Volatile Organic Compounds

# 1.0 INTRODUCTION

On August 18, 2000, the U.S. Environmental Protection Agency (USEPA) Region 5 issued a Resource Conservation and Recovery Act (RCRA) §3013 Administrative Order (AO) to Morton International, Inc. (Morton). Morton is a wholly-owned subsidiary of the Rohm and Haas Co. (Rohm and Haas) and the owner and operator of a facility at 2000 West Street, Reading, Ohio [EPA ID No. OHD 000 724 138]. This facility is herein referred to as the Morton Facility and is the subject of the AO. Geomatrix Consultants, Inc. (Geomatrix) is the consulting firm commissioned by Rohm and Haas to assist their Project Coordinator.

The stated basic objective of the AO is to "ascertain the nature and extent of the hazard posed by the hazardous wastes that are present at or that may have been released from the study areas at the Morton Facility." Specific areas of suspected environmental impact (i.e., study areas) are identified in the AO; these and additional areas are referenced in the Current Conditions Report (CCR) (Geomatrix, 2000a) and the Facility Investigation (FI) Work Plan (Geomatrix, 2000b).

Since the submittal of the FI Work Plan (Geomatrix, 2000b) to the USEPA in November 2000, Rohm and Haas has been actively addressing the AO objectives. Rohm and Haas has also submitted Quarterly Progress Reports to the USEPA documenting the various activities. Following is a summary of major milestones associated with the Morton Facility FI:

- On March 2, 2001, the USEPA conditionally approved the FI Work Plan (Geomatrix, 2000b).
- On March 31, 2001, Rohm and Haas submitted Revision 01 of the FI Work Plan, which primarily addressed USEPA questions and comments on field procedures and approach.

- On August 15, 2001, Rohm and Haas submitted Revision 02 of the FI Work Plan, which addressed USEPA questions and comments on ecological and human health risk assessment.
- On March 6, 2001, Geomatrix mobilized to the Morton Facility and commenced the Facility Investigation. Field work was performed in a phased approach and continued through March 2002.
- On January 23, 2002, a meeting was held at USEPA Region 5 offices. The goal for the meeting, which was to explain the general findings to date and determine what, if any, data gaps exist relative to meeting the Administrative Order (AO). Additional field work resulting from this meeting included sampling in Mill Creek and sampling of Lower Aquifer groundwater in the vicinity of the UAW05 and UAW06 locations.
- In June 2002, the FI findings were submitted to the USEPA in the FI Report (Geomatrix, 2002a).
- In September 2002, Rohm and Haas submitted the French Drain Pumping Test Work Plan (Geomatrix, 2002c) to the USEPA.
- In October 2002, Geomatrix performed groundwater sampling and water level measurements of all Upper Aquifer monitoring wells.
- In October 2002, Geomatrix performed the scope of work outlined in the French Drain Pumping Test Work Plan.
- On November 22, 2002, Rohm and Haas received the USEPA comments on the FI Report and Baseline Risk Assessment (BRA) via electronic mail. The hard copy comments were received on December 3, 2002.
- On December 6, 2002, a Conference Call with representatives from the USEPA, Booz Allen Hamilton, Rohm and Haas, and Geomatrix was held. The purpose of the call was to discuss the schedule and format for addressing the USEPA comments on the FI Report.
- On January 14, 2003, Rohm and Haas submitted a report summarizing the French drain pumping test results to the USEPA.

- On January 14, 2004, a Conference Call with representatives from USEPA, Booz Allen Hamilton, Rohm and Haas and Geomatrix was held to discuss comments on the BRA.
- On January 22, 2003, a meeting was held to discuss the EQUIS data management plan with representatives from USEPA, Rohm and Haas and CH2M Hill.
- On January 24, 2003, a meeting was held with representatives from USEPA, Booz Allen Hamilton, Rohm and Haas, and Geomatrix to address USEPA's comments on the FI Report.
- On January 30, 2003, USEPA submitted additional comments on these documents.
- On February 14, 2003, at the request of Rohm and Haas, USEPA provided clarification to the additional comments of January 30, 2003.
- On February 21, 2003 Morton submitted responses to the USEPA Comments on the FI Report and BRA.
- On March 7, 2003, Morton submitted responses to the additional USEPA comments of January 30, 2003.
- On March 19, 2003, USEPA submitted a letter to Morton acknowledging receipt of the responses and requesting that Morton submit a work plan for the additional Facility Investigation work within 60 days. Through subsequent emails between Morton and USEPA, a due date of May 19, 2003 was established for this work plan.
- On May 9, 2003, Rohm and Haas submitted a Supplemental FI Work Plan to the USEPA.
- On October 9, 2003, USEPA responded to Rohm and Haas with the following documents:
    - Conditional Approval of Supplemental Facility Investigation Work Plan and Request for Additional Work
    - Comments on the Supplemental Facility Investigation Work Plan.

- On October 9, 2003, USPEA emailed to Rohm and Haas the Documentation of Environmental Indicators for the "Determination Migration of Contaminated Groundwater Under Control" and for "Current Human Exposures Under Control." Rohm and Haas is currently reviewing this documentation.
- On October 9, 2003, the USEPA emailed comments on the January 14, 2003, French Drain Pumping Test Results Report to Rohm and Haas.
- On October 28, 2003, a meeting was held at the Morton Facility in Reading, Ohio to discuss the issues raised in the USEPA October submittals to Rohm and Haas (listed above). The site visit and meetings were attended by representatives from Rohm and Haas, USEPA, Geomatrix, Booz Allen Hamilton, the U.S. Geological Survey, and Ohio Environmental Protection Agency. Attendees walked the site, viewed Mill Creek, and discussed the status of current and planned environmental work.
- In November 2003, Geomatrix performed groundwater sampling and water level measurements at all Upper Aquifer monitoring wells
- On November 14, 2003, representatives from USEPA, Rohm and Haas, and Geomatrix participated in a conference call to discuss the status of assessment activities at the site. In particular, the call focused on human health risk issues, exposure pathways, and remaining assessment activities.
- On November 18, 2003, Geomatrix submitted an email to the USEPA, responding to a USEPA request from the November 14 conference call, that summarized the facility investigation findings from the dioxin/furan analysis and justification for the exclusion of further dioxin/furan sampling of Mill Creek surface water and sediments. On November 19, 2003, USEPA responded to this email and agreed that dioxin and furans would be excluded from the list of parameters for sampling in Mill Creek.
- On December 5, 2003, Rohm and Haas responded to each of the USEPA's comments and resubmitted both their responses and a revised Supplemental FI Work Plan to the USEPA.

- On February 6, 2004, USEPA conditionally approved the Supplemental FI work Plan with conditions.
- In March and April 2004, Rohm and Haas performed the field activities specified in the Supplemental FI Work Plan.

This submittal is intended to address the reporting requirements specified in Section 6.0 of the Supplemental FI Work Plan.

## 2.0 BACKGROUND INFORMATION

Available information regarding the operations, history, and environmental conditions at the Morton Facility is summarized in the Current Conditions Report prepared by Geomatrix and submitted to the USEPA in September 2000. The Current Conditions Report also describes Interim Measures implemented prior to 2000 to address any potential immediate threat to human health and the environment. Additional Interim Measures have been performed subsequent to the issuance of the Current Conditions Report, and are described in this Report. The FI Work Plan and Supplemental FI Work Plan address project objectives, anticipated phases of field work, sampling locations, general field operating procedures, schedules, and submittals. These Work Plans are supported by the Quality Assurance Project Plan (QAPP), which outlines the quality assurance requirements for all phases of the Work.

Although more complete information regarding the Morton Facility and its setting is available in these documents, a summary of pertinent background information is provided below.

### 2.1 SETTING

The Morton Facility is located at 2000 West Street, Reading, Hamilton County, Ohio (Figure 2-1). The City of Reading is a northern suburb of Cincinnati, Ohio. The Morton Facility consists of a single tract of land totaling 34 acres. Of these, approximately 27 acres comprise the fenced, operational area of the facility. Figure 2-2 shows the layout of the buildings, the surface materials and areas with secondary containment. The remaining 7 acres contain baseball/soccer fields; Morton provides the use of these fields to the City of Reading for youth sports.

Since approximately 1950, the Morton Facility (under several owners) has been engaged in the manufacturing of chemical products. The raw materials used to manufacture these

products include metallic tin, chloromethane, chlorine, ammonia, 2-mercaptyl ethanol, tall oil fatty acid, 2-ethyl hexanol, thioglycolic acid, ethylene diamine, stearic acid, paraffin waxes, chloroethane, benzyl chloride, triphenyl phosphene, and others. Chemical intermediates produced on-site include stannic chloride, dimethyl tin dichloride, esters, and glycolates.

Land use in the area of the Morton Facility is mixed, with industrial, commercial, recreational, and residential uses all present within 0.5 miles of the facility boundary. The Morton Facility is bounded:

- On the north by a drum recycling facility owned and operated by Cincinnati Drum Service (Cincinnati Drum), and by the Pristine Superfund Site (Pristine). Further to the north, the property is owned by the City of Reading. This property was formerly used as a municipal water supply well field, and for the disposal of foundry sand and fly ash from the City of Reading incinerator (CDM, 1986).

- On the east by a Conrail railroad track. Further to the east lie a grain elevator, various small commercial/industrial facilities, and residential areas. The nearest residential area in this direction lies approximately 600 feet from the Morton Facility's eastern boundary.

- On the south by an abrasives grinding and polishing facility operated by Rosemont Industries, and recreational facilities operated by the City of Reading. The recreational areas include baseball fields (actually on property owned by Rohm and Haas, as noted above), a swimming pool, and a track and field area. Further to the south lie a residential area and a cemetery. The residential area lies approximately 350 feet from the southernmost property boundary of the Morton Facility.

- On the west by a City of Reading hike and bike trail. Immediately to the west of this trail lies Mill Creek, a tributary of the Ohio River. A small portion of the Morton Facility property, at its northwest corner, extends across Mill Creek. The area across Mill Creek to the west is occupied by an aircraft engine manufacturing facility operated by General Electric and by an asphalt plant.

Most Pristine documents, for example, refer to the Upper Aquifer Sands as the "outwash lenses."

The Upper Aquifer consists predominantly of clayey sediments, with variable numbers of saturated sand interbeds. For any given location within the Morton Facility, from one to four sand or gravelly sand interbeds may be present. As discussed further in Section 5.1 of this report, Rohm and Haas designates a shallow, laterally continuous sand interbed as the "Shallow Upper Aquifer (UA) Sand" and all deeper interbeds as "Deep UA Sands." The depth to saturation within the Shallow UA Sand is as shallow as 5 to 10 feet in the vicinity of the Morton Facility. Historic data suggest that the Shallow UA Sand is likely in hydraulic communication with Mill Creek.

Underlying the Upper Aquifer, the Lower Aquifer is a thick sequence comprising predominantly sand and gravels. Its upper portion predominantly comprises silty sand, and is reportedly not widely used for local water supply. The lower portion is typically screened by local production wells for large commercial and municipal users. The former Reading municipal supply wells, located north and south of the Morton Facility, did produce from this zone. These wells were closed in the 1990s, however, due to impact from Pristine constituents, especially 1,2-dichloroethane (1,2-DCA) and other chlorinated ethanes and methanes. The Lower Aquifer is not thought to be widely used for domestic supply in Hamilton County, based on the prevalence of public supply (E&E, 1991).

Site-specific observations from the FI regarding Upper Aquifer and Lower Aquifer hydrology and hydrogeology are discussed in Section 5.1 of this report.

## 2.2 SURFACE WATER HYDROLOGY

Mill Creek is the only body of surface water in the vicinity of the Morton Facility. Mill Creek is a tributary of the Ohio River, and the confluence of the two streams is located approximately 14 miles, measured along the Mill Creek channel, south of the Morton Facility.

Mill Creek currently lies 80 to 100 feet west of the Morton Facility property boundary. Before about 1950, however, aerial photographs indicate that, in the vicinity of the Morton Facility, the creek lay about 300 feet to the west of its current location. The change is believed to be part of drainage and flood control improvements performed by the U.S. Army Corps of Engineers around 1950.

A contributing stream enters Mill Creek from the General Electric property to the northwest of the Morton Facility, and surface drainages also enter Mill Creek from the Cincinnati Drum and Pristine properties, upstream of the Morton Facility. In addition, treated water from the Pristine groundwater recovery and treatment system is discharged to Mill Creek.

Drainage from the Morton Facility does not enter Mill Creek under typical conditions. Instead, this drainage enters the facility's sewers, discharging into the combined sewer system operated by the Metropolitan Sewer District (MSD). Facility runoff does periodically enter Mill Creek during major storm/flooding events. Runoff and wastewaters from local facilities have entered Mill Creek through documented on-going failures in the MSD sewer system (Thiokol, 1981).

Mill Creek is not used for drinking water supply or agricultural watering in Hamilton County (PRC, 1993), and no surface water intakes are located within three miles of the Morton Facility (TechLaw, 1998). The creek has been, however, reported to be

occasionally used for recreational purposes (U.S. Army Corps of Engineers, 1990; CDM, 1986).

## 2.3 REGIONAL GEOLOGY AND HYDROGEOLOGY

Hamilton County is located on the west flank of the regional anticline termed the Cincinnati Arch. The Morton Facility is located within the Mill Creek Valley, which is one of a series of buried glacially-incised valleys in the region. The Mill Creek Valley is a buried valley of the Deep Stage Cincinnati River.

In general, the lower portion of this valley is formed of the Ordovician Kope Formation, comprising limey shales with limestone interbeds (Osborne, 1968; Osborne, 1974). The valley is filled predominantly with glacial outwash deposits, with lesser amounts of moraine deposits and alluvial deposits from the valley walls.

Sand and gravel deposits within the outwash facies filling the buried valleys form a generally prolific aquifer system, referred to as the Buried Valley Aquifer System (E&E, 1991). This aquifer system is the primary source of groundwater for the Cincinnati area (ODNR, 1989), and is widely used for municipal and industrial supply. As discussed in the Current Conditions Report, the shale bedrock underlying the outwash deposits is not considered a significant source of groundwater in the area of the Morton Facility.

Previous drilling in the vicinity of the Morton Facility (primarily for Pristine investigations) indicated typical local thicknesses for the outwash deposits ranging from 130 to 160 feet. To the east of the Morton Facility, these deposits thin and pinch out against the eastern edge of the Mill Creek Valley.

Previous work at this and neighboring facilities have divided the outwash deposits into two aquifers for the purposes of investigation and remediation. These are generally referred to as the Upper and Lower Aquifers, although terminology varies.

## 2.4 SUSPECTED SOURCE AREAS

### 2.4.1 On-Site

Paragraphs 16 through 23 of the AO identified several areas for investigation. Most of these areas correspond to single or multiple solid waste management units (SWMUs) identified in the 1998 RCRA Facility Assessment (RFA) (TechLaw, 1998) performed by a USEPA contractor. A listing of the study areas referenced in the AO, and their corresponding SWMU designations where appropriate, is provided in Table 2-1. In addition, the Current Conditions Report identifies several areas of reported historic waste burial or potential waste management:

- Seven suspected waste burial areas,
- One ignitable waste storage tank,
- One reactive waste storage tank, and
- One wastewater treatment tank.

As described in Sections 4.0 and 5.0 of this FI Report, each of these areas was addressed as part of the investigation.

### 2.4.2 Off-Site

As discussed in Section 2.1, the Morton Facility lies in an area that has been heavily industrialized for several decades. Like the Morton Facility, a number of the neighboring and nearby properties or historic operations represent potential or known sources of environmental impact. The purpose of this section is to discuss known or likely off-site sources that may be pertinent to the evaluation of impact at the Morton Facility. Transport mechanisms that would potentially apply to the movement of contaminants from off-site sources to Morton Facility media include, but are not limited to:

- Surface runoff from neighboring properties located north and east of the Morton Facility. As shown on Figure 2-7 of the CCR, the surface drainage feature, which runs parallel to the north property boundary of the Morton property, is not very wide or deep. The degree to which it was historically present between the Morton

Facility and areas to the north is not clearly known. Currently it is an earthen swale with plant growth, which is not sufficiently sized to prevent runoff from entering the Morton Facility. After a heavy rain, it is not uncommon to find that drums from the Cincinnati Drum Facility (presumably empty) have been carried by surface runoff to the chain link fence located on the Morton property. It is believed that historic and current rainfall run-off patterns are capable of transport onto the Morton Facility.

- Fugitive dust emissions from adjacent properties, including the neighboring railroad, and City of Reading property formerly used for the disposal of foundry sand and fly ash from the municipal incinerator.
- Air emissions/incinerator ash resulting from current and historical neighboring waste combustion activities.
- Lateral spreading of contaminants in the unsaturated zone (i.e., flow in localized perched zones, spreading due to capillary forces).
- Lateral groundwater flow in the Upper Aquifer and Lower Aquifer.
- Downstream migration of surface water and sediment from upstream sources.

#### *2.4.2.1 The Pristine Superfund Site*

The Pristine Superfund Site (Pristine) is located adjacent to the northeast portion of the Morton Facility, and comprises approximately 5 acres; the two properties share approximately 220 feet of common boundary (Figure 2-3). Pristine also shares a common boundary with Cincinnati Drum, and the two properties are owned by the same party. Both the Pristine and Cincinnati Drum properties were originally operated by International Minerals and Chemicals, Inc.; the Pristine area was formerly part of a sulfuric acid manufacturing facility, while the Cincinnati Drum area was formerly used for fertilizer manufacture.

Pristine, Inc., utilizing the Pristine property under lease, began licensed liquid waste disposal in 1974. The operation received a permit to operate a liquid waste incinerator in 1977. Ohio Environmental Protection Agency (OEPA) inspections in 1979 noted the presence of an estimated 8,000 to 10,000 drums on the 5-acre site. After frequent complaints by neighboring properties and the City of Reading, and numerous violations

noted by state and federal regulatory personnel, the waste management activities were terminated under the terms of a Consent Agreement in September 1981.

A removal action was performed during the period June 1980 to July 1984. USEPA contractors removed most of the on-site waste and approximately 620 to 725 cubic yards of on-site sludges; materials removed included "paint sludges, lab packs, flammable solvents, cyanide wastes, pesticides, chlorinated solvent sludge, DDT, 'neutralized' acid sludge, PCB-contaminated soils, incinerator ash, solvent/sludge mixture and unknown waste mixtures . . . "(CDM, 1986).

Pristine was placed on the National Priorities List (NPL) in December 1982. Initial activities, including the Remedial Investigation, were performed by USEPA contractors and consultants. During the 1990s, a Potentially Responsible Party (PRP) Steering Committee assumed primary responsibility for site activities, under USEPA oversight. The site is currently under the management authority of the Pristine Facility Trust Fund.

Although the initial RI activities occurred during the mid-1980s, a great deal of supplemental assessment, especially focusing on groundwater impact in, and the character of, the Lower Aquifer was performed during the 1990s. The primary consultant during this period was Conestoga-Rovers & Associates (Conestoga-Rovers) of Waterloo, Canada. It should be noted that most of the Upper Aquifer subsurface investigation was focused on the Pristine and Cincinnati Drum properties. Pristine investigations of the Upper Aquifer did not extend onto the Morton Facility, although impacted Upper Aquifer groundwater appears to have been flowing from Pristine onto the Morton Facility (CDM, 1986). Pristine assessments of the Lower Aquifer, in contrast, did include the installation of several single and cluster monitoring wells on the Morton Facility (Figure 2-3).

Assessment of sediment, surface and subsurface soils, surface water, and groundwater identified Pristine-related impact by a wide suite of volatile and semivolatile organics, pesticides, polychlorinated biphenyls (PCBs), furans and dioxins, metals, and other chemical types.

The constituents observed in shallow environmental media (i.e., surface and near-surface soils, sediment, and surface water) included:

- Volatile Organic Compounds (VOCs)—benzene, chlorobenzene, 1,1-dichloroethene (1,1-DCE), 1,2-DCA, 1,2-dichloropropane, 2-hexanone, 4-methyl-2-pentanone, methylene chloride, trichloroethene (TCE), 1,1,1-trichloroethane (TCA), tetrachloroethene (PCE), styrene, toluene, vinyl acetate, xylenes.

- Polycyclic Aromatic Hydrocarbons (PAHs): benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene, fluorene, fluoranthene.

- Other Semivolatile Organic Compounds (SVOCs): phenol, aniline, 1,2-dichlorobenzene,1,4-dichlorobenzene, 2-methylphenol, 4-methylphenol, 2-nitrophenol, N-nitrosodiphenylamine, benzoic acid, pentachlorophenol, di-n-butylphthalate, bis(2-ethylhexyl)phthalate.

- Pesticides: aldrin, lindane, dieldrin, 4,4'-DDE, 4,4'-DDD, 4,4'-DDT, endrin ketone, heptachlor, chlordane.

- Metals (apparently elevated): arsenic, chromium, cadmium, lead, mercury, vanadium, zinc.

Upper Aquifer groundwater impact reported in the 1986 RI Report (CDM, 1986) included:

- VOCs—acetone, benzene, 2-butanone, chloroform, chlorobenzene, 1,1-dichloroethane (1,1-DCA), 1,1-DCE, 1,2-DCA, 1,2-dichloropropane, 2-hexanone, 2-methyl-4-hexanone, methylene chloride, TCE, TCA, PCE, styrene, toluene, vinyl chloride, xylenes.

- SVOCs: hexachloroethane, 1,2- dichlorobenzene, 1,4-dichlorobenzene, 2,4-dimethylphenol, 2- methylphenol, 4-methylphenol, 2,6-dinitrotoluene.

- Pesticides: aldrin, lindane, 4,4'-DDD, toxaphene, beta-BHC, delta-BHC.

Summaries of groundwater analyses from groundwater monitoring from the early 1990s through the present are provided in Table 4-1 of the Current Conditions Report

(Geomatrix, 2000a). During this period, the primary focus of monitoring and remediation has been on several dissolved VOCs, especially chloroform and 1,2-DCA. Lower Aquifer impact from these dissolved VOCs extends approximately one mile from Pristine to the south.

Remedial action was resumed at the Pristine site in various stages during the late 1990s (Conestoga-Rovers, 2000). Approximately 13,000 tons of soil were excavated and thermally treated, and an engineered cap was constructed over soils remaining in place. Soil contamination that could not be practicably removed is being addressed through the operation of a total fluids (water and vapor) extraction system. This extraction system is believed to be generally dewatering approximately the upper 35 feet of the Upper Aquifer (Conestoga-Rovers, 2000) at Pristine. This dewatering is likely to have modified local groundwater gradients within this zone.

Groundwater in the Lower Aquifer is being hydraulically controlled through the installation and operation of several groundwater extraction wells. Three of these wells (EW-1, -2, and -3) are located on or immediately adjacent to the Morton Facility (Figure 2-3); the zone of capture from these wells in the Lower Aquifer extends across the entire Morton Facility. The groundwater extraction system collects groundwater at a typical rate of 500,000 to 800,000 gallons per day, and transfers it via underground piping to a treatment system located on the Pristine site. The treated groundwater is then discharged to Mill Creek under the terms of a USEPA National Pollution Discharge Elimination System (NPDES) Interim Effluent Limitation.

In conclusion, the Pristine Superfund Site must be considered a known source of impact to groundwater at the Morton Facility. Pristine has historically been immediately upgradient of the Morton Facility, both for the Lower Aquifer and the primary transmissive portions of the Upper Aquifer. Lower Aquifer groundwater at the Morton Facility contains constituents derived from Pristine, and is being addressed by the Pristine

remedial action. Upper Aquifer groundwater is documented to have flowed on-site from Pristine waste management areas immediately adjacent to the Morton Facility boundary (CDM, 1986). A 1992 assessment by a USEPA contractor identified elevated metals and SVOCs in a surface soil sample from the northeast corner of the Morton Facility, near the Pristine boundary (PRC, 1993). This assessment concluded that "the results of [this sample] indicate that some of the contaminants in surficial soils at [the Morton Facility] could have originated off site . . . ."

A ditch is currently present along the property line between Pristine and the Morton Facility. It is not likely, however, that the current ditch would have precluded historical contaminant movement across this part of the property boundary, based on the following:

- The ditch lies on the Pristine side of the property, which has been extensively regraded during the course of remedial actions at that site. The current presence of the ditch does not indicate that such a ditch was present 20 to 25 years ago when Pristine was actively managing wastes. It is more likely that the ditch was constructed as part of drainage improvements following the soil removal response actions and remedial construction of the 1990's.
- Between Morton and Pristine, the ditch is a relatively low-profile, shallow feature (typically less than 1 to 2 feet deep). Assuming it was present during Pristine operations, it would have been relatively easy to overwhelm a drainage feature of this size, either with any of the larger releases documented to have occurred at Pristine, or with a large storm event. In short, it would not be a significant barrier to overland flow, even if it existed prior to response actions and remediation.
- Records from the Pristine site document the presence of waste drums (8000 to 10,000) and other containers densely stacked across the entire site including the area immediately adjacent to the common fence line. Under such circumstances, the ditch would be of little utility in protecting the Morton property.
- Many of the large releases documented at Pristine were airborne in nature, which would not be contained by a ditch, and could potentially affect shallow soils across the entire Morton site. The same would be true for subsurface migration along a perched zone or via capillary spreading.

#### *2.4.2.2 Cincinnati Drum Facility*

The Cincinnati Drum property was formerly part of an International Minerals and Chemicals fertilizer/sulfuric acid manufacturing facility. Cincinnati Drum accepts used drums and recycles them for reuse; these activities have been performed since at least the late 1970s. [Note: Geomatrix and Rohm and Haas pursued access to the Cincinnati Drum and Pristine sites as a part of the initial FI (2001/2002), but this access was not granted.]

Environmental conditions at the Cincinnati Drum facility have been examined to a limited extent as a part of Pristine assessments. This has included the installation of Upper Aquifer wells (Figure 2-3), and the sampling of sediment, soils, surface water, and groundwater. This assessment has identified pervasive impact by Pristine constituents. A 1980 assessment by an OEPA contractor (E&E, 1982), which included limited sampling on the Cincinnati Drum facility, identified elevated metals, PCBs, and various organics in shallow samples from that facility.

Minimal information was identified regarding historic waste and chemical management at the Cincinnati Drum facility. OEPA regulatory files on the facility are very limited. A 1960 aerial photograph shows the presence of a large pond or surface impoundment (approximately 7,500 square feet) on the Cincinnati Drum facility, approximately 100 feet north of the former Morton Facility surface impoundments. Impacted seepage has been historically identified along the eastern bank of Mill Creek, west of Cincinnati Drum.

In summary, Cincinnati Drum should be considered a potential source of impact to Morton Facility groundwater. It is immediately upgradient to the Morton Facility with respect to the Lower Aquifer, and previous assessments have identified evidence of shallow impact on the Cincinnati Drum facility. Minimal information is available on historic waste management activities, but aerial photographs indicate surface impoundment use.

#### *2.4.2.3 Undifferentiated Sources of Impact North Along Mill Creek*

Previous studies have identified pervasive industrial and non-point source type impact to Mill Creek throughout its lower 17 miles (the Morton Facility lies approximately 14 miles upstream from Mill Creek's terminus). Surface water, stream sediments, and creek flora and fauna in Mill Creek are known to be impacted. Sources upstream of the Morton Facility are or have been contributing to this anticipated impact. During a 1980 assessment by an OEPA contractor, for example, elevated concentrations of both carbon tetrachloride (47 micrograms per liter, or μg/l) and TCA (450 μg/l) were detected in surface water upstream of both the Morton and Cincinnati Drum facilities (E&E, 1982).

#### *2.4.2.4 City of Reading*

Two areas of historic waste disposal are located on City of Reading property in the immediate vicinity of the Morton Facility. These are:

- The former municipal well field located immediately north of Cincinnati Drum, which was formerly used for the disposal of fly ash and foundry sand from the City incinerator (CDM, 1986). 1980 surface soil sampling at the well field identified low concentrations of various chlorinated organics and possibly elevated mercury. A 1992 assessment by a USEPA contractor (PRC, 1993) observed approximately 15 discarded, crushed, and corroded drums on the property. The only legible drum label was for methylene chloride.

- Soil piles located on City of Reading property adjacent to the southwest Morton Facility property boundary, east of Mill Creek. An assessment by a USEPA contractor (PRC, 1993) found that the soil piles contained various analytes (primarily PAHs and metals), but at concentrations below or comparable to those measured in background sampling. These soil piles have been removed, presumably by the City, since that assessment.

## 3.0 PURPOSE AND OBJECTIVES OF THE INVESTIGATION

As presented in Section 1.0 of this FI Report, the basic objective of the AO is to "ascertain the nature and extent of the hazard posed by hazardous wastes or materials that are present at or have been released from the Morton Facility." It should be noted that this objective does not extend to hazardous wastes or materials emanating from other, non-facility sources (such as those discussed in Section 2.4.2), and the FI did not attempt to delineate, fully characterize, or account for constituents from such sources.

This basic objective was utilized to identify more detailed objectives or investigation goals, and the specific information needs relating to each of those objectives. These objectives were specified in the EPA-approved FI Work Plan (Geomatrix, 2000b), the Supplemental FI Work Plan (Geomatrix, 2003b) and in FI-related discussions and correspondence between Rohm and Haas and the USEPA.

The specific goals and pertinent information needs were identified for the FI by consensus of the USEPA, Rohm and Haas, and their respective consultants. In part, these goals and information needs are based on the two Environmental Indicators developed by the USEPA to evaluate facilities' progress toward RCRA Corrective Action goals on a national basis. These Environmental Indicators measure whether current human exposures and migration of contaminated groundwater are under control. Given this, the specific goals and pertinent information needs developed for the FI are:

**Goal 1—Evaluate whether the migration of impacted groundwater is under control. Primary information needs identified to address this Goal were:**

- The character and extent of impact to the Upper Aquifer.
- The presence of impact to those areas of the Lower Aquifer most likely to have been impacted by Morton Facility constituents.

- The effectiveness of the French drain and the slurry wall.
- The nature of horizontal and vertical groundwater flow within the Upper Aquifer system.
- The nature of flow between the Upper Aquifer and the Lower Aquifer.
- The identification of any past or continuing releases to groundwater and soils from Morton Facility sources identified in the AO or the Current Conditions Report.

**Goal 2—Evaluate whether current risks to human health and the environment are within acceptable limits. Primary information needs identified to address this Goal were:**

- The character and extent of impact to seeps in the east bank of Mill Creek, and to sediments within the creek.
- The character and extent of impact to on-site shallow (<15 ft.) soils.
- The character and extent of any buried wastes.
- The presence, location, and character of human and ecological receptors.

[Note: the USEPA completed their evaluation of EIs for the Morton facility in 2003 (USEPA, 2003a, USEPA 2003b), and concluded that the migration of contaminated groundwater is under control, and that current risks to human health and the environment are within acceptable limits.]

Section 4.0 of this report details the investigation activities undertaken, such as drilling and soil sampling, groundwater sampling, and sampling at Mill Creek, to gather the information required to fulfill the FI goals. The findings from the investigation activities are detailed in Section 5.0. Section 6.0 describes the achievement of Goals 1 and 2 discussed above and of the quality-related objectives. Section 7.0 provides the primary conclusions of the FI. The evaluation of human and ecological risks was evaluated in a

supporting document termed the Baseline Risk Assessment (Geomatrix, 2002b), submitted under separate cover. The USEPA has provided comments on this document, which will be revised and resubmitted after the finalization and approval of the FI.

## 4.0 METHODS OF THE INVESTIGATION

Initial field activities conducted under this FI were performed between the months of March 2001 and March 2002. Geomatrix structured these activities in three phases, in order to allow FI activities to be modified as new site-specific data was acquired. Phase 1 of the initial field activities was performed from March to June 2001, Phase 2 was performed from July to November 2001, and Phase 3 was performed from December 2001 to March 2002.

Since the submittal of the original Facility Investigation Report in June 2002, additional field investigation work has been performed, in part, at the request of USEPA. In October 2002 and November 2003, Rohm and Haas performed groundwater monitoring of the Upper Aquifer wells. In October 2002, a pumping test was performed to evaluate the effectiveness of the French Drain. Both the monitoring and the pumping test were performed proactively by Rohm and Haas (i.e., these monitoring events were not required by the USEPA or the AO).

As explained in earlier sections, supplemental investigation field activities were performed in March, April, and May of 2004. The Supplemental FI was performed to resolve issues identified as potential data gaps by the USEPA.

The 2001/2002 FI activities consisted of the following field investigation activities (Figures 4-1 and 4-2):

- Installation of 32 Upper Aquifer wells
- Installation of 3 Lower Aquifer wells
- Plugging and abandonment of 14 existing Upper Aquifer monitoring wells
- Drilling of 11 stratigraphic borings into the Lower Aquifer or to bedrock

- Advancement of 46 on-site direct-push technique (DPT) borings
- Advancement of 10 off-site DPT borings
- Performance of aquifer testing
- Performance of sewer video camera survey
- Collection of 12 creek bank sediment samples (excluding duplicates and QA/QC samples)
- Collection of 8 creek bed sediment samples (excluding duplicates and QA/QC samples)
- Collection of 2 seep samples (excluding duplicates and QA/QC samples)
- Collection of 166 soil samples (excluding duplicates and QA/QC samples)
- Collection of 80 groundwater samples (excluding duplicates and QA/QC samples)
- Performance of optical brightener testing at 11 of the stream stations
- Performance of 7 surface geophysical surveys
- Performance of ecological surveys of the site and Mill Creek
- Excavation of 8 exploratory trenches.

The October 2002 Groundwater Monitoring consisted of the following field investigation activities:

- Collection of 36 groundwater samples (excluding duplicates and QA/QC samples)
- Collection of 2 groundwater samples from the French drain sump
- Measurement of groundwater elevations.

The October 2002 French drain pumping test consisted of the following activities:

- Installation of 8 temporary piezometers
- Pumping groundwater from the French drain.

- Collection of water level measurements at the temporary piezometers and existing wells throughout the pumping test.
- Chemical analysis of the extraction water.

The November 2003 Groundwater Monitoring consisted of the following field investigation activities:

- Collection of 36 groundwater samples (excluding duplicates and QA/QC samples)
- Collection of site-wide groundwater level measurements.

The Supplemental FI consisted of the following field investigation activities (Figure 4-3):

- Installation of two on-site Upper Aquifer wells completed in the Deep Upper Aquifer Sands
- Advancement of 3 on-site stratigraphic borings into the Deep Upper Aquifer Sands, or through these sands to the Lower Aquifer
- Advancement of 42 on-site DPT borings
- Advancement of 10 on-site shallow hand auger borings
- Analysis of 6 creek bed sediment samples from Mill Creek (excluding duplicates and QA/QC samples)
- Analysis of 6 surface water samples from Mill Creek (excluding duplicates and QA/QC samples)
- Analysis of 38 soil samples (excluding duplicates and QA/QC samples)
- Analysis of one DPT groundwater sample
- Analysis of 39 groundwater samples (excluding duplicates and QA/QC samples).

Concurrently with the Supplemental FI, soils exhibiting elevated metal levels at the T-1 trench location, which had been identified during the initial FI activities, were excavated and removed. This Interim Measure was performed proactively by Rohm and Haas to remove soils exhibiting the highest known levels of metals at the Morton Facility, thereby mitigating potential risks to construction or on-site workers. The field work associated

with these activities included the excavation and off-site disposal to a non-hazardous landfill of approximately 130 cubic yards of soils. Following the completion of the soil excavation, 9 confirmation soil samples were collected, one soil sample was collected from what appeared to be buried drum contents, and a sample was collected and analyzed of the material used to backfill the excavation.

The field investigation and related activities were performed in a manner generally consistent with the specifications of the FI Work Plan. Any exceptions were documented as variances and non-conformances; none of these exceptions affected the achievement of the overall FI objectives discussed in Section 3.0. The achievement of the FI objectives is discussed in Section 6.0.

The following prefixes are used to describe sample locations in this FI:

- B – Off-site Background Soil Sample Location
- CS – Creek Bed Sediment Sample Location
- DP – On-site Soil Sample Location (DPT)
- HA – On-Site Shallow Hand Auger Location
- LAW – Lower Aquifer Monitoring Well Location
- SS – Seep and/or Creek Bank Sediment Sample Location
- STR – Stratigraphic Boring Location (rotasonic)
- T – Trench Location
- UAW – Upper Aquifer Monitoring Well Location
- WS – Surface Water Sample Location

## 4.1 SOIL BORINGS

Geomatrix advanced a total of 130 on-site and 10 off-site borings during the initial (2001-2002) FI field activities (Figures 4-1 and 4-2). As part of the Supplemental FI activities in 2004, Geomatrix advanced 55 on-site borings at locations where the USEPA had requested additional characterization or delineation data (Figure 4-3). For both periods of field activities, a rotasonic rig was used for monitoring well installation, and for all deep soil borings (i.e., those reaching the Deep Upper Aquifer Sands or Lower Aquifer).

Direct-push technique (DPT) was employed for shallow borings and related soil sampling. A hand auger was employed for shallow (typically less than 2 feet bgs) borings. Borings were logged using techniques and terminology in general accordance with the Unified Soil Classification System (USCS), and these logs are provided in Appendix A.

### 4.1.1 Rotasonic Drilling

The stratigraphic borings (STR01 through STR14) were advanced using a rotasonic rig, and used primarily to develop an improved understanding of subsurface stratigraphy (Figure 4-1). The borings ranged from 39 to 139.5 feet below ground surface (bgs). Other borings (UAW and LAW series) advanced with rotasonic techniques were used primarily for the installation of monitoring wells, as described in Section 4.2. These borings ranged from 15 feet to 155 feet bgs. Soil samples collected from the stratigraphic and monitoring well borings were analyzed for geochemical and geotechnical parameters, as described in Section 4.5. All drilling and soil sampling equipment that came in contact with soils or groundwater was decontaminated prior to each use.

Rotasonic borings not used for monitoring well installation were grouted from approximately the total depth to the ground surface using a bentonite-Portland cement grout. Grout was emplaced via tremie into the lower portion of the borehole.

Bowser-Morner, Inc., based in Dayton, Ohio, performed rotasonic drilling activities in Phase 1. In Phases 2 and 3, Boart Longyear, Inc., based in Indianapolis, Indiana, performed rotasonic drilling. Boart Longyear, Inc. also performed the rotasonic drilling for the Supplemental FI.

### 4.1.2 Direct Push Technique and Hand Auger Borings

DP and B borings (DP01 through DP80, B-01 through B-10) were advanced using DPT, and ranged in total depth from 1.5 to 25 feet bgs (Figures 4-1 and 4-2). Hand auger

borings (HA01 through HA10) were advanced using a stainless steel hand auger to depths of 1.5 feet bgs. These borings were used primarily to improve the understanding of shallow stratigraphy, and/or to collect soil samples for geochemical analysis.

These borings are broken down into the following categories:

- **10 Exploratory Borings** – DP04, DP06, DP11, DP21, DP22, DP23, DP24, DP26, DP27, and DP28

  These borings were completed in the northeast portion of the Morton Facility to gain a better understanding of the shallow (<25 feet bgs) site stratigraphy, particularly the boundaries of the shallowest Upper Aquifer sand. Two soil samples from DP23 were submitted for chemical analysis because of field indications of chemical impact in that boring. These two samples were analyzed for the Contract Laboratory Program (CLP)-Target Analyte List (TAL) (Note: FI Target Analyte Lists are summarized in Appendix B).

- **7 Solid Waste Management Unit (SWMU) and Former Wastewater Tank Borings** – DP01, DP02, DP03, DP05, D12, DP25, and DP29

  These borings were advanced in the vicinity of several former wastewater treatment and storage tanks, including those classified as SWMU 2 and 5, located in the northeastern portion of the plant. These borings were used to evaluate the potential presence of chemical impact from these tanks. All soil samples collected from these locations were analyzed for the CLP-TAL.

- **42 Former Surface Impoundment (SWMU 1) Borings** – DP10, DP13, DP14, DP15, DP16, and DP17 (in 2001/2002) and DP56, DP56A, DP57, DP58, DP58A, DP59, DP60, DP60A, DP61, DP61A, DP62, DP63, DP64, DP64A, DP65, DP66, DP66A, DP67, DP67A, DP68, DP69, DP70, DP70A, DP71, DP72, DP72A, DP73, DP73A, DP74, DP75, DP76, DP77, DP78, DP78A, DP79, DP79A (in 2004).

  These borings were advanced to evaluate the potential presence of chemical impact within the former surface impoundments. For the 6 borings advanced in 2001/2002, two samples from each boring were analyzed for the Appendix IX-TAL.

  The 2004 DPT borings were advanced on an approximate 30-foot grid across the surface impoundment system. At each of 24 DPT locations, the soil was continuously sampled to a depth of 15 feet bgs. The only exceptions were DP68 and DP74, where DPT refusal was encountered at 11 and 12 feet bgs,

respectively. Borings were advanced to below the water table at all 24 locations. Five soil samples were collected from each DPT boring for a total of 120 soil samples; these samples were biased towards field indications of impact. All samples were tested in the field for head space vapors using a PID. Twelve of the 120 sample locations were selected for re-sampling and subsequent laboratory analysis. The twelve samples were selected from locations distributed across the surface impoundments. Nine were selected based on field indications of impact – elevated organic vapor reading or obvious staining and/or odors. Three samples were collected from soils with lower or no obvious field indications of impact, to allow representation of the range of conditions present in these soils. All 12 samples were analyzed for the CLP-TAL.

- **Three Geophysical Anomaly Borings** – DP18, DP19, and DP20

  These borings were completed north of Building 40 to investigate anomalies F, G, and H identified by Phase 1 geophysical surveys at suspected Waste Burial Area B. These samples were analyzed for the CLP-TAL analytical parameters.

- **Three Combined Sewer System (CSS) Borings** – DP07, DP08, and DP09

  These borings were completed adjacent to specific areas of concern in the CSS, to evaluate the potential presence of chemical impact. Samples were collected adjacent to the 22-inch sewer main near the main facility entrance, at depths of approximately 5 feet below the invert sewer elevation. These samples were analyzed for CLP-TAL.

- **Ten Background Borings**

  Twenty background soil samples were collected using DPT from ten off-site locations that could not reasonably have been affected by current or historic Morton Facility releases. Borings B-01 to B-05 were located south of the Morton Facility fenceline, including locations on recreational use portions of the Morton property. Borings B-06 to B-10 were located at the former City of Reading Municipal Well Field, north of the Morton Facility, Cincinnati Drum, and Pristine. Although efforts were made as part of the initial (2001/2002) FI activities to gain access to all of the properties near the Morton Facility, access for off-property sampling could only be obtained from the City of Reading property. At each location, one soil sample was collected from shallow surface soils (<2 feet bgs) and one soil sample was collected from subsurface soils (approximately 9 to 11 feet bgs). The background samples were analyzed for the CLP- TAL plus aniline, isodrin, and tin; this modified CLP TAL is termed the Background TAL (see Appendix B).

- **Nine Former Swale Area (SWMU 10) Borings** – DP30 to DP38

  These borings were advanced in the Former Swale Area in the employee parking lot to supplement trenching activities at this SWMU. Soil samples were analyzed for the Appendix IX-TAL.

- **Four Trench-1 (T-1) Characterization Borings** – DP39 to DP42

  These borings were advanced around and beneath T-1 to assess the vertical and horizontal extent of elevated metals observed in T-1 samples. Samples were analyzed for metals only.

- **Four UAW21-30 Borings** – DP43 to DP46

  These borings were completed at locations surrounding monitoring well UAW21-30, to evaluate the extent of elevated metals observed in surface soils at that well. Samples were analyzed for CLP TAL metals.

- **39 French Drain and Slurry Wall Exploration Borings**

  These borings (not named) were advanced in attempts to confirm locations of the French drain and slurry wall. They ranged in depth from 4 to 16 feet bgs. No samples were collected for geochemical or geotechnical analysis.

- **UAW17-40 Area (Supplemental FI)** – DP47, DP48, DP49

  These borings were advanced to delineate the extent of the elevated lead that had been observed in soils at UAW17-40. The borings were advanced to depths ranging from 12 to 15 feet bgs using DPT, at locations approximately 25 feet from UAW17-40. Field evidence of impact was not observed in these borings. Therefore, in accordance with the Supplemental FI Work Plan, one sample was collected and analyzed from an approximate depth of 5 feet bgs in each boring for lead and tin. Additionally, a soil sample was collected from each boring at 10 feet bgs and held pending the analytical results from the lead analysis of the shallower samples. The sample from DP47 at 5 feet had the highest concentration of lead, so the DP-47 sample at 10 feet was also analyzed for lead.

- **UAW04-20 Area (Supplemental FI)** -- DP50, DP51, DP52

  These borings were advanced to delineate the extent of elevated toluene that had been observed in soils at UAW04-20. The borings were advanced at locations approximately 25 feet from UAW04-20. Based on field screening performed with a PID, a sample was retained at five feet from DP52. Signs of impact were absent in DP50 and DP51. In accordance with the Supplemental Work Plan, the default

sampling depth in these boring was 10 feet bgs. All three soil samples were analyzed for toluene.

- **Chromium Speciation (Supplemental FI)** – DP54 and DP55

  These two borings were advanced as part of the chromium speciation study. Soil samples were collected adjacent to previously sampled locations and analyzed for total chromium and hexavalent chromium.

- **Southeast Portion of the Facility (Supplemental FI)** – HA1 to HA10

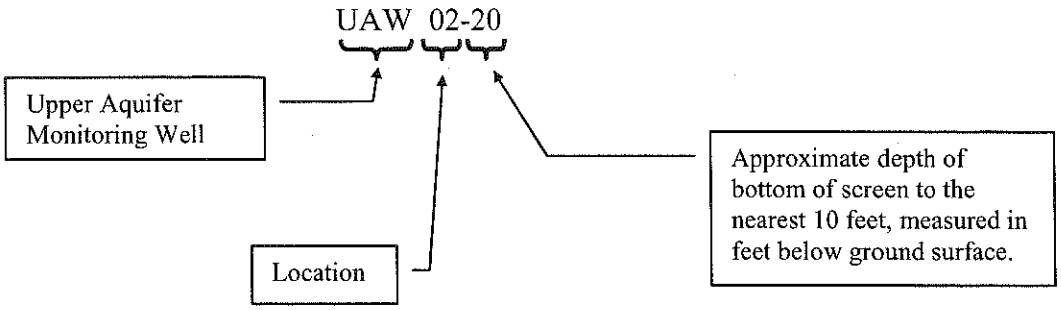
  These borings were advanced to characterize and delineate tin in surface soils. These borings correlated generally to locations with elevated tin concentrations in the 1970s sampling. Samples from a depth of 1.5 feet bgs from all borings were analyzed for tin.

DPT and hand auger borings were generally sealed using bentonite chips, with restoration of concrete or asphalt surfaces in paved locations. At locations with greater than approximately 3 feet of soil collapse, the DPT probe was reinserted to the total depth of the original boring. The boring was then sealed by injecting bentonite-Portland cement grout through the DPT rods. All DPT and soil sampling equipment that contacted soils or groundwater was decontaminated prior to each use.

HC Nutting, Inc., based in Cincinnati, Ohio, performed all DPT borings.

## 4.2 MONITORING WELL INSTALLATION AND DEVELOPMENT

Geomatrix installed a total of 35 monitoring wells during the initial (2001/2002) FI field activities and 2 monitoring wells during the Supplemental FI (2004) (Figures 4-1 and 4-3). Thirty-four wells were installed in the Upper Aquifer, and are designated with a UAW (Upper Aquifer Well) prefix. Three wells were completed in the Lower Aquifer, and are designated with a LAW (Lower Aquifer Well) prefix. The details of monitoring well construction are summarized in Table 4-1. FI monitoring well nomenclature is explained below:




Monitoring wells installed for the FI may be categorized as follows:

- **17 Perimeter Upper Aquifer Wells** – UAW01-30, UAW01-80, UAW02-20, UAW02-40, UAW09-20, UAW09-60, UAW10-50, UAW10-80, UAW14-10, UAW17-40, UAW19-80, UAW20-60, UAW21-30, UAW21-80, UAW23-20, UAW24-70, and UAW25-20

  These monitoring wells were installed to evaluate water quality migrating both onto and beyond the Morton Facility boundaries.

- **Eight French Drain and Slurry Wall Wells/Perimeter Upper Aquifer Wells** – UAW03-20/UAW04-20, UAW05-20/UAW06-20, UAW07-20/UAW08-20, and UAW12-12/UAW13-20

  These perimeter monitoring wells were installed in pairs to evaluate the effectiveness of the French drain and slurry wall. One well of each pair was installed on either side of the French drain or slurry wall. These wells are also used to evaluate water quality migrating both onto and beyond the Morton Facility boundaries.

- **Six Operational Area Upper Aquifer Wells** – UAW11-10, UAW11-40, UAW15-20 , UAW15-50, UAW26-70, UAW27-50

  These monitoring wells were completed to monitor shallow groundwater in areas downgradient of primary facility operational areas.

- **Three Combined Sewer System (CSS) Upper Aquifer Wells** – UAW16-10, UAW18-20, UAW22-20

  These monitoring wells were installed downgradient of the most dense portion of the CSS, in order to support the evaluation of that system.

- **Three Lower Aquifer Wells** – LAW05-60, LAW05-150, LAW12-60

  These monitoring wells were completed to evaluate the potential for Morton Facility constituents to reach the Lower Aquifer.

All wells were constructed of threaded-joint nominal 4-inch diameter polyvinyl chloride (PVC) riser and stainless-steel screen, with the exception of LAW05-60 and LAW05-150, which were nominal 2-inch diameter PVC riser and stainless-steel screen.

All wells were constructed in borings advanced using rotasonic methods. Wells were constructed within the outer drive casing as that casing was withdrawn from the boring. The annular space surrounding the well screen was filled with a filter pack of uniform high-silica sand. The filter pack typically extended 1 to 2 feet above the screen. The annular space above the filter pack was sealed with a filter pack seal consisting of 3/8-inch bentonite chips, and with an annular seal consisting of bentonite-Portland cement grout (2 to 5 percent bentonite by dry weight).

All Lower Aquifer wells were installed through surface casing to reduce the potential for shallow impact within the Upper Aquifer to be transferred to the Lower Aquifer. Surface casings were constructed of 8-inch nominal diameter carbon steel pipe installed within 14-inch nominal diameter boreholes, and were grouted in place prior to drilling into deeper soils. Hollow-stem auger drilling methods were used to advance the borehole used for surface casing installation, which extended approximately 30 feet into the clay layer.

All wells were developed following installation, in order to remove construction-related fluids and improve the hydraulic communication between the well and the formation. Wells were developed using an alternating sequence of surging or bailing to suspend fine sediments, followed by pumping. Development was continued until field parameters measured during pumping reached a point of stability. Further, as well yields permitted, development continued until the volume of water removed during development was at

least twice the volume of water lost to the formation during drilling.

## 4.3 GEOPHYSICAL EVALUATION

The geophysical survey was conducted during the week of March 19, 2001 and the findings were reported in a Geomatrix Memorandum dated June 21, 2001. The survey addressed the Former Swale Area (SWMU 10) and six areas of suspected waste burial, designated Reported Waste Burial Areas A, B, C, D, E, and F (Figure 4-1). Based on the anticipated depth and character of suspected buried waste materials, the Former Swale Area was surveyed with both time (EM61) and frequency (EM31) domain electromagnetic tools. The EM61 unit is a high sensitivity and high resolution metal detector that can detect both ferrous and nonferrous metallic objects to an approximate depth of 10 feet bgs. The EM31 unit measures ground conductivity and metallic objects to an approximate penetration depth of 12 to 15 feet bgs. Reported Waste Burial Areas A, B, C, D, E, and F were anticipated to be shallower, and so were surveyed with the EM61 device only. Areas B and C were surveyed together, as part of a single grid area, due to the proximity of the two sites. The EM61 survey was conducted along transects spaced 3 feet apart, and the EM31 survey was conducted along transects spaced 12 feet apart.

During the survey of the Former Swale Area, the nearby parking lot was closed so the presence of metal vehicles would not interfere with the surveys. In addition, Rohm and Haas removed a metal fence that surrounded the parking lot in the area of the geophysical survey.

All survey grids were marked with paint according to a survey-specific coordinate system.

## 4.4 MILL CREEK RECONNAISSANCE

Geomatrix representatives performed a visual reconnaissance of Mill Creek at least once per calendar quarter during 2001, to check for the presence of active seeps or any apparent sign of chemical impact. In October 2003 representatives from USEPA and other government agencies participated in a reconnaissance trip to Mill Creek. Geomatrix representatives also performed a visual reconnaissance of Mill Creek as part of the Supplemental FI in March 2004. The following sections summarize Mill Creek reconnaissance activities performed:

- **First Quarter 2001 Reconnaissance**: March 21, 2001, by representatives of Geomatrix and Rohm and Haas. This reconnaissance was performed within 48 hours of a rainfall event. Access to the creek bank was marginal due to its steep slopes, slippery footing, and heavy brush cover. Despite this, the reconnaissance team was able to directly view an estimated 80 percent of the bank lying west of the Morton Facility.

- **Second Quarter 2001 Reconnaissance:** April 18 and again on May 29 and 30, by representatives of Geomatrix and Rohm and Haas. During the May 30th reconnaissance, 11 wellpoints with sorbent cotton pads were installed along the east bank of Mill Creek to check for the presence of optical brighteners. An ecological survey was also performed on May 29 and 30, 2001. The survey consisted of a visual evaluation of Mill Creek and the Morton Facility vicinity by an ecological risk assessor (see Section 4.13).

- **Third Quarter 2001 Reconnaissance:** August 22, 2001, by representatives of Geomatrix. Small seeps were identified near the northwest property corner of the Morton Facility and at a location about 300 feet south of the northwest property corner. Also during this quarter, the absorbent pads installed on May 30, 2001 were removed from the well points along the east bank of Mill Creek and analyzed for the presence of optical brighteners. This analysis is discussed in Section 5.3.3.

- **Fourth Quarter 2001 Reconnaissance:** December 6, 2001, by representatives of Geomatrix. A stream gauge was installed on the west bank of Mill Creek, near the north (upstream) Morton Facility boundary across from the SS-1 stream station location. An initial stream level reading was collected, followed by a second water level reading after a rainfall event that same day.

- **First Quarter 2002 Reconnaissance:** March 6, 2002, by representatives of Geomatrix. During this reconnaissance the stream level was recorded. The seeps

observed during the Third Quarter 2001 Reconnaissance were no longer visible. Creek sediment samples were collected along Mill Creek at locations upstream, downstream, and adjacent to the Morton Facility. This sampling event is detailed in Section 4.7.

- **October 2003 Reconnaissance** – On October 28, 2003 a meeting was held at the Morton Facility. Part of the meeting included a viewing of Mill Creek. Attendees included representatives from Rohm and Haas, USEPA, Geomatrix, Booz Allen Hamilton, the U.S. Geological Survey, and Ohio Environmental Protection Agency.

- **March 2004 Reconnaissance:** March 25, 26, and 27 by representatives of Geomatrix. During this reconnaissance, 6 creek bed samples and 6 surface water samples were collected at locations downstream and adjacent to the Morton Facility. This sampling event is detailed in Section 4.7.

## 4.5 SOIL SAMPLING

Soil samples were utilized to characterize subsurface lithology and stratigraphy, measure geotechnical characteristics of various site strata, and measure levels of chemical impact. For sampling during the initial FI field activities (2001/2002) one soil sample was typically retained for geochemical analysis (i.e., for the CLP-Target Analyte List or Appendix IX-Target Analyte List) from the upper 3 feet to represent surface soils. A second sample was typically retained for analysis from the interval from 3 to 15 feet bgs, at a depth selected based on the following criteria in descending order of priority:

1. The soils exhibiting the greatest field indication of chemical impact.
2. The soils from the apparent depth of the water table.
3. The soils at 15 feet bgs.

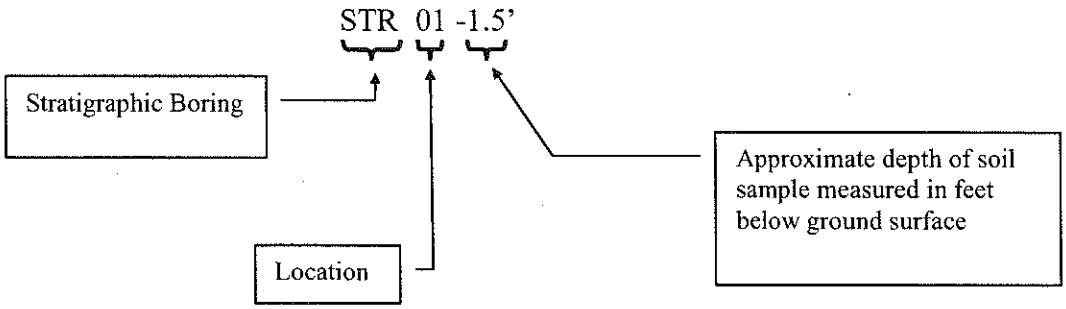
If soils below 15 feet bgs exhibited some characteristic of particular interest (e.g., staining or odor), these were also selected for analysis. Samples were also retained from selected stratigraphic borings (STR01, STR02, STR03, STR04, STR06, STR08, and STR11) for geotechnical analysis. One geotechnical sample was typically retained from each of the major strata observed in each boring. Table 4-2 summarizes the soil samples

and the requested geochemical and geotechnical analyses.

Soil sample retention during the Supplemental FI field activities varied from location to location, depending on the specific objectives for each area. The sample retention strategies utilized were specified prior to the work in the approved Supplemental FI Work Plan (Geomatrix, 2003b)

Geomatrix screened the samples for the presence of chemical impact in the field. The field screening procedure consisted of an examination for staining or other visible evidence of impact, and the measurement of organic vapors. The measurement of organic vapors was performed using a photoionization detector (PID). This measurement was performed both directly on recovered samples, and on the headspace of samples placed in plastic storage bags. Field screening results, lithologic descriptions, and pertinent observations regarding drilling are presented on the boring and monitoring well construction logs included as Appendix A.

An explanation of the nomenclature used for soil samples is as follows:




Soil samples were collected from rotasonic-drilled borings (STR and UAW series) using the drilling rig's nominal 4-inch diameter inner drive barrel. DPT soil samples were collected using a 4-feet length by 1.875-inch ID core barrel or 1¼-inch ID dual-tube inner sampler with new acetate liners. A hand auger was used to collect soil samples at

locations where access restrictions prohibited rig entry (DP29-5') and where sample intervals were shallow.

In addition to soil samples from borings, soil samples were collected from trenches excavated with the use of a backhoe. Samples from trenches were collected from zones of noticeable impact, or from areas that were proximal to the geophysical anomaly being investigated. The backhoe bucket was used to obtain a large body of soil from the targeted location, and the soil sample was then collected directly from the central portion of the backhoe bucket (i.e., away from the soils in direct contact with the bucket).

Aliquots of soil samples retained for VOC analysis were containerized using the EnCore™ Sampling System. Three 5-milligram EnCore™ vials were retained for each discrete VOC sampling location. The coring action of the EnCore™ vials was not effective in any soils that contained gravel-sized particles. For these types of soils, it was therefore routinely necessary to manually pack a portion of the sample aliquot into the EnCore™ vials. All manual contact with soils was performed using new disposable nitrile gloves.

All sampling equipment was decontaminated prior to the collection of each sample.

As noted above, soil samples were analyzed for a variety of analyte lists, depending on the purpose and location of the sample (Table 4-2). Soil analyses and the various analytical lists are discussed in Section 4.9.

## 4.6 GROUNDWATER SAMPLING

Prior to submittal of the original Facility Investigation Report, groundwater samples were collected at various groups or sets of monitoring wells during five groundwater sampling events:

- April/May 2001

- July 2001
- October 2001
- November 2001
- March 2002

There were three site-wide monitoring events performed subsequent to the submittal of the Facility Investigation Report (Geomatrix, 2002a) to the USEPA:

- October 2002
- November 2003
- March and April 2004

The wells sampled in these events included both existing monitoring wells and those installed for the FI and Supplemental FI. All wells sampled were on the Morton Facility. Access to sample selected upgradient off-site Pristine wells was sought but not gained for the initial (2001/2002) FI.

During the first event (April/May 2001), Geomatrix sampled 4 existing and 24 new monitoring wells installed as part of Phase 1 of the initial FI field activities. Of the 28 wells sampled during this event, 23 wells were sampled using low-flow purging techniques. Five wells (UAW05-20, UAW06-20, UAW08-20, UAW21-30, MW-EPA-2) could not be sampled using low-flow purging techniques because of insufficient well yield; these were instead sampled with new disposable bailers.

The second event (July 2001) consisted of sampling the single recovery well, RW-1, operated by the Morton Facility. This well is located approximately 100 feet from the northwest corner of the parking lot, and pumps groundwater from the uppermost sand within the Upper Aquifer. Due to wellhead construction, it was not possible to place a sample pump down the well. The well was therefore sampled with a new disposable bailer.

During the third sampling event (October 2001), Geomatrix sampled nine new Phase 2 and three Phase 1 monitoring wells. Wells UAW05-20, UAW06-20, and UAW01-80 were re-sampled to verify the Phase 1 analytical results. The new Phase 2 wells included the sampling of Lower Aquifer monitoring well LAW12-60. During this sampling event, three wells (UAW10-50, UAW10-80, and UAW22-20) could not be sampled using low-flow purging techniques because of insufficient well yield; these were instead sampled with new disposable bailers.

During the fourth sampling event (November 2001), Geomatrix sampled 4 existing monitoring wells and 33 wells installed as part of Phases 1 and 2 of the FI. Eight wells (UAW05-20, UAW06-20, UAW08-20, UAW10-50, UAW10-80, UAW21-30, UAW22-20, and MW-EPA-2) could not be sampled using low-flow purging techniques because of insufficient well yield; these were instead sampled with new disposable bailers.

During the fifth sampling event (March 2002), Geomatrix sampled two Lower Aquifer wells (LAW05-60 and LAW05-150) installed as part of the Phase 3 activities. Both wells were sampled using low-flow purging techniques.

During the sixth sampling event (October 2002), Geomatrix sampled 4 existing monitoring wells and 32 wells installed as part of Phases 1 and 2 of the FI. Seven wells (UAW05-20, UAW06-20, UAW08-20, UAW10-50, UAW21-30, UAW22-20, and MW-EPA-2) could not be sampled using low-flow purging techniques because of insufficient well yield; these were instead sampled with new disposable bailers.

During the seventh sampling event (November 2003), Geomatrix sampled 4 existing monitoring wells and 32 wells installed as part of Phases 1 and 2 of the FI. Seven wells (UAW05-20, UAW06-20, UAW08-20, UAW10-50, UAW10-80, UAW21-30, and MW-

EPA-2) could not be sampled using low-flow purging techniques because of insufficient well yield; these were instead sampled with new disposable bailers.

During the eighth sampling event (March/April 2004), Geomatrix sampled 4 existing monitoring wells and 32 wells installed as part of the original FI and 2 wells installed during the Supplemental FI. One grab sample was also collected from DP53 located at Trench 1 (T-1). Seven wells (UAW06-20, UAW08-20, UAW10-50, UAW10-80, UAW21-30, UAW22-20, and MW-EPA-2) could not be sampled using low-flow purging techniques because of insufficient well yield; these were instead sampled with new disposable bailers.

All monitoring wells were purged prior to sampling. Low-flow purging was performed by pumping from near the center of the saturated portion of the well screen using a Grundfos RediFlo-2 electrical submersible pump. Drawdown during purging was limited to a maximum of two feet. Flow rates during low-flow purging typically ranged from 500 to 900 milliliters per minute. Field parameters, including pH, specific conductance, temperature, dissolved oxygen, and turbidity, were measured during the purging process using a flow-through cell with a YSI Model 610-D/600-R water parameter instrument. Low-flow purging was considered complete when field parameters had stabilized. Samples were then collected directly from the pump discharge stream.

As noted above, certain wells could not support the minimal well yields needed for low-flow purging. These wells were bailed dry, allowed to recover, then sampled with disposable bailers. All wells were sampled within 24 hours of purge completion. All non-disposable sampling equipment was decontaminated prior to each use.

Groundwater samples were analyzed for a variety of analyte lists, depending on the purpose and location of the sample (Table 4-3). Groundwater analyses and the various analytical lists are discussed in Section 4.9.

## 4.7 SEEP AND SEDIMENT SAMPLING

As part of the FI, twelve stream stations were established along the east bank of Mill Creek, generally along the western boundary of the Morton Facility. The northernmost (extreme upstream) station is located at the north property boundary of the Morton Facility, which is shared with Cincinnati Drum. The remaining stations are spaced at approximate 100-foot intervals and continue downstream approximately 1,200 linear feet along the Mill Creek bank. The stream station locations, designated SS-1 (upstream, north) to SS-12 (downstream, south), were used as reference points for sediment and seep sampling (Figure 4-2).

During the initial FI field activities, the evaluation of Mill Creek was performed in phases, with at least one major reconnaissance performed during each calendar quarter from first quarter 2001 through first quarter 2002. As data was gathered, the need for additional sampling was evaluated and data gaps were addressed. Based on the identification of active seeps during the Third Quarter Reconnaissance of Mill Creek, these seeps were sampled. Based on the analytical results from seep and bank sediment sampling performed in October 2001, creek bed sediment samples were collected in March 2002. The details of the phased sampling are summarized in Table 4-4 and described below. In summary, the objective of the sediment and seep sampling was to evaluate the presence and character of any impact to Mill Creek from current or historical Morton Facility releases.

In October 2001, twelve bank sediment samples were collected adjacent to stream monitoring stations SS-1 to SS-12, typically within one foot vertically of the creek waterline. These samples were collected by first removing the upper few inches of surface material, then using a clean stainless steel trowel to collect the sample.

On March 6, 2002, eight creek bed sediment samples were collected from areas upstream, adjacent to, and downstream from the Morton Facility (Figure 4-2). As discussed in

Section 5.2, there was very little fine-grained or natural sediment in the Mill Creek bed near the Morton Facility. Even in the deeper, slower flowing portions of the creek, the bed was comprised predominantly of rock and concrete rubble, ranging from sand to boulder size. Samples were collected from areas within the Mill Creek bed where accumulations of sediment were large enough to allow sampling. Two downstream samples (CS1 and CS2) were collected at approximately 450 and 780 feet south of the Morton Facility southern boundary, respectively. Four samples (CS3, CS4, CS5, and CS6) were collected from the creek adjacent to the Morton facility; CS4 and CS6 were collected just downstream of the SS-1 and SS-5, respectively, seep locations identified above. Sample CS7 was collected approximately 9 feet upstream of the north Morton Facility boundary, and CS8 was collected approximately 300 feet upstream of that boundary. Geomatrix personnel collected these samples with a polyethylene scoop mounted on a six-foot pole. The samples were transferred from the sampler to a stainless steel bowl, then placed into individual sample containers.

Aliquots of sediment samples retained for VOC analysis were containerized using the EnCore™ Sampling System. Three 5-milligram EnCore™ vials were retained for each discrete VOC sampling location. The coring action of the EnCore™ vials was not effective in any sediments that contained gravel-sized particles. For these types of sediments, it was therefore routinely necessary to manually pack a portion of the sample aliquot into the EnCore™ vials. All manual contact with sediments was performed using new disposable nitrile gloves.

Two days prior to the bank sediment sampling in October 2001, well points were installed at previously identified seep locations to allow accumulation of seep water. These seeps were adjacent to stream station locations SS-1 and SS-5. Both well points at SS-1 and SS-5 were purged dry with a dedicated disposable bailer prior to collection of seep samples.

With the concurrence of USEPA, sediments collected in 2001 were analyzed for all constituents detected within shallow groundwater at the Morton Facility, with the exception of chlorinated compounds interpreted to originate from an off-site source. This analyte list for sediments is termed the Sediment TAL. Analyte lists and sediment analysis are discussed in Section 4.9.

For the optical brightener evaluation, 24-inch nominal length well points were installed at 11 of the stream stations (all stations except SS-2, where a wellpoint could not be advanced into the concrete rip-rap of the stream bank). Adsorbent cotton pads were suspended within these well points on May 20, 2001. The adsorbent pads were left in place for several months to allow them to absorb optical brightener compounds present in shallow groundwater seeping through the lower creek bank sediments. These pads were then removed, dried, and checked for fluorescence under ultraviolet light. Such fluorescence is an indication of the presence of optical brighteners. The methodology for this evaluation was based on recommendations in Sargent and Castonguay (1998). The findings of this qualitative test for optical brighteners are discussed in Section 5.3.3.

## 4.8 SUPPLEMENTAL FI SAMPLING OF MILL CREEK

Supplemental investigation of Mill Creek focused on addressing USEPA's request for characterization of creek bed sediments and surface water at locations adjacent to the Rohm and Haas Plant. As discussed above, the prior investigation of Mill Creek included the sampling of seeps, creek bank sediments and creek bed sediments (Section 4.7). As a part of Supplemental FI activities, the USEPA requested that additional creek bed sediment samples be collected, as well as samples of surface water from Mill Creek. Although Rohm and Haas agreed to collect these surface water samples, it was with the expressed belief that such surface water sampling would have little relevance to the Morton Facility. This belief was based upon the overwhelming dominance of surface water flow over groundwater discharge as a source of Mill Creek water. Given this, it is Rohm and Haas' opinion that water samples from the creek would be highly representative of conditions upstream of the Morton Facility, rather than those at the Morton Facility.

As discussed in Section 4.7 the bottom of Mill Creek is comprised predominantly of rock and concrete rubble, ranging from sand to boulder size, and there are limited areas of true sediment deposition. Creek bed sediments were collected from locations adjacent to the Morton Facility and the park area to the south. To the extent possible, the creek bed sediment samples were collected adjacent to the prior sediment sample locations (samples collected March 6, 2002). Please note that the nomenclature for 2004 sampling does not perfectly match that of the 2002 samples: CS-1A was collected adjacent to CS-2 and CS-2A was collected adjacent to CS-1A. Both these samples are south (downstream) of the Morton Facility. Sample CS-6A is located at the north property boundary and CS-3A is located at the south property boundary. Geomatrix personnel collected all samples with a pole-mounted polyethylene scoop. The sediment samples were transferred from the sampler to a stainless steel bowl, and placed into individual sample containers.

Aliquots of sediment samples retained for VOC analysis were containerized using the EnCore™ Sampling System. Three 5-milligram EnCore™ vials were retained for each discrete VOC sampling location. The coring action of the EnCore™ vials was not effective in any sediments that contained gravel-sized particles. For these types of sediments, it was therefore routinely necessary to manually pack the sample aliquot into the EnCore™ vials. All manual contact with sediments was performed using new disposable nitrile surgical gloves.

At each of the sediment sampling locations, a surface water sample was collected. Surface water samples were collected using a pole-mounted polyethylene dipper. Surface water samples were poured directly from the dipper into individual sample containers provided by the laboratory, except for aliquots intended for dissolved metals analysis. Dissolved metals aliquots were field filtered before being placed in the sample container provided by the laboratory.

As summarized in Table 4-4, creek bed sediment and surface water samples were analyzed for the Appendix IX –TAL VOCs, SVOCs, Pesticides, PCBs, Metals + Tin.

## 4.9 SAMPLE ANALYSIS

Samples of environmental media were collected to meet the objectives of the FI. These samples were sent to Severn Trent Laboratories (STL) for analysis. STL analyzed samples in accordance with the analytical techniques specified in the FI Work Plan and its appendices (Geomatrix, 2000b).

For the original FI, four analyte lists were used to characterize chemical impact in environmental media:

- Appendix IX Target Analyte List (App. IX-TAL)—the analyte list provided in 40 Code of Federal Regulations 264, Appendix IX, with slight modifications based on discussions and agreements between Rohm and Haas, Geomatrix, and the USEPA. The App. IX-TAL is summarized in Table A1-2 of Appendix A (the QAPP) of the FI Work Plan (Geomatrix, 2000b), and includes VOCs, SVOCs, pesticides, PCBs, dioxins and furans, and metals and other inorganic parameters. A copy of the referenced QAPP Table A1-2 is included in Appendix B of this FI.

- Contract Laboratory Program Target Analyte List (CLP-TAL)—the USEPA's target analyte and compound lists under its Contract Laboratory Program. The CLP-TAL (Table A1-1 of the QAPP) includes VOCs, SVOCs, pesticides, PCBs, and metals and other inorganic parameters. A copy of the referenced QAPP Table A1-1 is included in Appendix B of this FI.

- Background Target Analyte List (BKG-TAL)—This consisted of all compounds observed in on-site soils and groundwater, including VOCs, SVOCs, pesticides, PCBs, and metals and other inorganic parameters. This TAL was developed during the course of the FI with the concurrence of USEPA. A tabulation of this TAL is included in Appendix B of this FI.

- Sediment Target Analyte List (SS-TAL)—This consisted of all compounds observed in shallow Upper Aquifer groundwater at the Morton Facility, in addition to their potential degradation products. Compounds included VOCs, SVOCs, pesticides, PCBs, and metals and other inorganic parameters. This TAL excluded chlorinated compounds interpreted to originate from an off-site source, and was developed during the course of the FI with the concurrence of USEPA. A tabulation of this TAL is included in Appendix B of this FI.

- General Water Quality Parameters (WQ-TAL) Selected groundwater samples were analyzed for General Water Quality parameters, which consisted of the following: Alkalinity (bicarbonate/carbonate), Ammonia, Nitrate/Nitrite, Phosphate, Phosphorus, Calcium, Total Iron, Magnesium, Potassium, Sodium, Chloride, Total Dissolved Solids (TDS), Total Suspended Solids (TSS).

For the 2002 Groundwater Monitoring, Rohm and Haas adopted the SS-TAL compound list as the Monitoring or Monitoring Target Analyte List (MON-TAL). Based on subsequent discussions with the USEPA, this was the only time this abbreviated list was used for analysis of groundwater samples.

For the 2003 Groundwater Monitoring and the Supplemental FI performed in 2004, four target compound lists were utilized to characterize chemical impact in environmental media:

- CLP-TAL - VOCs, SVOCs + Aniline, Pesticides, PCBs, Metals +Tin (termed "CLP-TAL+") - This compound list is identical to the CLP-TAL, but includes the compounds aniline and tin.

- APP IX – TAL - VOCs, SVOCs, Pesticides, PCBs, Metals +Tin (termed "APP IX-TAL+") – This compound list is identical to the APP IX – TAL, with two exceptions: Tin is added. Dioxins/Furans are excluded.

- Chromium Speciation - At locations where chromium speciation was specified, the sample was analyzed for hexavalent chromium and total chromium.

- Alkalinity/Chloride/Sulfate–13 monitoring wells distributed across the site were selected for the additional analysis for Total Alkalinity, Sulfate and Chloride during the 2003 groundwater monitoring. This data, in addition to basic metals analysis, was used for an evaluation of anion and cation trends.

In addition, field parameters specified in Table A1-4 of the QAPP were measured during various field operations. Field and laboratory analytical methods are described in the following sections. Analytical results are discussed in Section 5.3 of this FI Report.

### 4.9.1 Soil Analysis

Soil samples collected for geochemical analysis were analyzed by STL for one or more of the target analyte lists.

In addition to geochemical analysis, field personnel selected soil samples for geotechnical analysis. Geotechnical parameters consisted of the following, as specified in Table A1-3 of the QAPP (Geomatrix, 2000b):

- Total organic carbon
- Cation exchange capacity
- Grain size distribution
- Moisture content
- Atterberg limits
- PH.

Field analysis for total organic vapors, using a portable photoionization meter, was performed on soil samples in accordance with the Field Operating Procedure. The results are summarized in the field documentation, including boring logs.

### 4.9.2 Groundwater Analysis

Groundwater samples collected for geochemical analysis were analyzed by STL for one or more of the target compound lists.

Turbidity, dissolved oxygen, temperature, pH, and specific conductance were analyzed in the field for each aqueous sample in accordance with the Field Operating Procedures.

The results are summarized in the field documentation.

### 4.9.3 Seep, Sediment and Surface Water Analysis

As part of the original FI, all seep and Mill Creek sediment samples (creek bank and creek bed) were analyzed for the SS-TAL. In addition, seep samples were analyzed for the General Water Quality parameters, and one sediment sample was analyzed for the geotechnical parameters described in Section 4.9.1.

For the Supplemental FI surface water and creek bed sediment samples were analyzed for the APP IX –TAL+.

## 4.10 GROUNDWATER ELEVATION MEASUREMENTS

Groundwater elevations were measured in monitoring wells during each groundwater sampling event and on six separate one-day events (April 30, 2001, November 16, 2001, March 5, 2002, October 15, 2002, March 23, 2004, and May 27, 2004) in order to evaluate the site-specific vertical and horizontal groundwater gradients. Water levels were measured to an accuracy of 0.01 feet in all new and existing monitoring wells, using an electric water sounder (e-line). The e-line was decontaminated with distilled water and non-phosphate detergent prior to each use.

## 4.11 AQUIFER TESTING

During this field investigation, aquifer tests were performed in order to characterize the hydraulic properties of the Upper and Lower Aquifers, and the degree of hydraulic connection between the two aquifers. The test methods utilized were step-drawdown pumping and recovery tests, and water level monitoring during the termination and restart of the Pristine recovery system. In addition, a pumping test was performed on the French drain.

### 4.11.1 Step-Drawdown Testing

Step-drawdown tests were conducted in three wells (UAW 02-20, UAW02-40, and UAW20-60). Observation wells were located within clusters that included the pumping wells, with pairs of wells screened within different hydrogeologic units. These clusters are located in the northeast corner and along the western boundary of the plant (Figure 4-1).

The tests were performed after the wells had been developed to remove sediment and cuttings from the screen, filter pack, and the water-bearing formation. The step-drawdown testing procedure generally consisted of pumping the wells at three or more different flow rates, increasing the flow in each successive step of the test. Water levels were measured within the pumping well and at the other well within the well pair.

Analysis of the data generally consisted of:

1. Determining the specific capacity (discharge rate per unit of drawdown) at each of the wells.
2. Estimating transmissivity (T) of the water-bearing unit based on the specific capacity.
3. Estimating hydraulic conductivity (K) of the water-bearing unit based on the estimated transmissivity from the step-drawdown testing and the saturated thickness of the unit from drilling information.

The calculation of transmissivity from specific capacity is subject to errors caused by well inefficiency. Well inefficiency may be caused by incomplete well development, resulting in sediment or other fine materials remaining in the gravel pack or on the wall of the borehole. These artifacts of the drilling process result in reduced permeability of the filter pack or formation face (well "entrance friction" or "skin effect") that causes additional drawdown of the water level during pumping. The additional drawdown causes a reduction in the observed specific capacity, resulting in underestimation of transmissivity and hydraulic conductivity of the water-bearing unit. However, the wells

utilized in these tests were subjected to aggressive well development procedures (see Section 4.2), and it is believed that potential well losses have been minimized in these new wells.

A second condition that can cause underestimation of the true formation transmissivity and hydraulic conductivity is partial penetration of the water-bearing zone. Partial penetration causes additional drawdown compared to a fully penetrating well in the same aquifer, reflecting the fact that head losses occur as some groundwater travels vertically from the unpenetrated part of the formation to reach the well screen. The estimation of transmissivity from specific capacity assumes the well is fully penetrating. When a well is partially penetrating, the specific capacity of the well is smaller than if the well had been fully penetrating, resulting in underestimation of transmissivity. Two of the tested wells were partially penetrating, and the transmissivities estimated from pumping these wells should be considered to be a lower limit on the actual transmissivity.

Although the specific capacity of a well depends on the transmissivity of the aquifer, it is also dependent on the time of pumping, the well radius, and the storativity of the aquifer. Also, the specific capacity of a confined aquifer is essentially constant at any drawdown, while the specific capacity of an unconfined aquifer declines with increased drawdown since the saturated thickness at the well is reduced as the flow rate is increased.

The specific capacity data collected from wells in unconfined aquifers were used to determine the "maximum" specific capacity of the well. The specific capacities were plotted versus their corresponding flow rates, and a trend line through the data was extended to zero flow rate to find the maximum specific capacity.

After the specific capacities of the wells were determined, transmissivity was estimated using the method of Walton (1970). The method assumes that the aquifer is

homogeneous, isotropic, nonleaky, infinite in areal extent, and fully penetrated by a frictionless well.

The results of the step-drawdown testing are discussed in Section 5.1. Details of the analyses are given in Appendix C.

### 4.11.2 Aquifer Response to Water Recovery Well Operation

As discussed in Section 2.4.2.1, a large scale groundwater recovery and treatment system is operated to hydraulically control dissolved constituents from Pristine. This system includes Lower Aquifer pumping wells at Pristine, in the southeastern portion of the Morton Facility, and at locations south of the Morton Facility. Pristine evaluations indicate that the Lower Aquifer capture zone of this system encompasses the entire Morton Facility property. In addition to the Lower Aquifer pumping wells, a total fluids extraction system is operated in the upper 30 to 40 feet of the Upper Aquifer; this system is located entirely within the Pristine site boundaries.

The Pristine Lower Aquifer recovery systems are routinely shut down annually for maintenance purposes. According to discussions with representatives of Conestoga Rovers (CRA) who are responsible for the operation of the Pristine groundwater recovery system, there are two systems:

- The 150 gpm system is comprised of 3 Lower Aquifer extraction wells (EW1, EW2, and EW3 located south of Morton) pumping at approximately 145 gpm and one well in the "upper outwash lens" (CRA's term for the shallowest Upper Aquifer sand at Pristine), which pumps at approximately 5 gpm.
- The 300 gpm system is comprised of 2 Lower Aquifer extraction wells (EW4 and EW5 located near the cemetery, south of the Morton Plant).

During the 2001 maintenance shutdown, CRA turned off the 150 gpm system at approximately 8:30 am on June 3, 2001 and the 300 gpm system on the morning of June 6, 2001. CRA started both systems again the morning of June 14, 2001.

Groundwater levels within the Lower Aquifer were anticipated to rebound when pumping was terminated, then draw back down when pumping was resumed approximately two weeks later. In order to assess the degree of hydraulic communication between the Upper and Lower Aquifers, Geomatrix installed pressure transducer probes with data acquisition capability (i.e., Trolls) within selected Upper Aquifer wells (UAW09-20, UAW13-20, UAW17-40, UAW02-40, UAW15-50, UAW09-60, UAW19-80, and UAW21-80). These wells were selected to represent a range of depths and locations across the Morton Facility. Well clusters were utilized where practicable, to allow the observation of responses at different depths for a single location.

Data acquisition was begun in the selected wells during the week prior to the Pristine system shutdown to establish baseline data, and continued until several days after pumping was resumed. Geomatrix operated the transducer recorders from May 30 to June 26, 2001, and, as stated above the Pristine system was shut down for annual maintenance during the period of June 3, 2001 to June 14, 2001. Water level data acquisition occurred every five minutes; a chart summarizing the transducer readings is included in Appendix C.

Results of this response testing are discussed in Section 5.1.

### 4.11.3 French Drain Pumping Test

In October 2002, Geomatrix completed a pumping test of the French drain that was installed along the western property boundary to capture shallow groundwater and minimize off-site groundwater flow. The objective of the pumping test was to further define the performance characteristics and effectiveness of the French drain. Specifically, it was to evaluate whether the French Drain could be operated in a manner that would effectively contain the migration of contaminated groundwater beyond the western boundary of the Morton Facility. The scope of work included:

- Temporary Piezometer Installation – Installation of eight temporary piezometers to improve measurement of natural and induced hydraulic gradients in the vicinity of the French drain during the pumping test. All piezometers were constructed of ¾-inch polyvinyl chloride (PVC) with five feet of 0.02-inch slot width mill slotted screen. The installation depth of the piezometer screen was adjusted at each location depending on the saturated thickness of the Shallow Upper Aquifer Sand. At each location, the screen was installed 1 to 2 feet into the clay underlying this sand, in order to obtain maximum submergence for the Troll data loggers.
- Pumping and Measurements –The French drain system was pumped at various pumping rates in an attempt to determine the maximum sustainable rate. Water levels were measured using either Troll transducers/data loggers or electronic water level indicator (e-line). Trolls were placed in the French drain sump and selected monitoring wells and temporary piezometers.
- Extraction Water Sampling – Collection and analysis of samples of water produced by the French drain during pumping, to evaluate water quality parameters. Water quality data was used to evaluating options for use, treatment, discharge and/or disposal of collected extraction water.

The results of the French drain pumping test are summarized in the Geomatrix letter report of January 14, 2003 (Geomatrix, 2003a) and in Section 5.1.1.

## 4.12 COMBINED SEWER SYSTEM INVESTIGATION

The investigation of the CSS consisted of four elements:

- Completion of an inventory of the locations, types, and inputs of all inlets and access points to the CSS (Table 4-5).
- Performance of a video camera survey of those portions of the CSS known or suspected to have transported waste materials.
- Collection of soil samples from locations adjacent to the CSS.
- Groundwater monitoring at locations adjacent to the CSS.

As stated in the approved FI Work Plan, the purpose of this survey was to identify and locate major breaches in the CSS integrity.

Televac Environmental performed a camera survey of approximately 3200 linear feet of the CSS. Using a robotic self-propelled video camera, the CSS lines were viewed real-time and videotaped to document the survey findings. A large percentage of the CSS could not be effectively viewed, however, using this technique. The robotic carriers for the video camera require a relatively clear interval of pipe with smooth pipe surfaces. Several intervals of pipe were partially clogged with wastewater precipitates, gravel, and debris, and some intervals of pipe had lower surfaces in poor repair.

The camera surveys were performed in a manner consistent with industry standards for such operations, and the results are discussed in Section 5.6.5.

Three soil borings, DP07, DP08, and DP09, were completed adjacent to an area of identified poor integrity in the CSS. Soil samples were collected adjacent to the 22-inch southern sewer main located by the main facility entrance, at depths of approximately 5 feet below the invert sewer elevation. Samples were analyzed for the CLP-TAL. Analytical data from these soil samples is discussed in Section 5.6.5.

Three upper aquifer wells, UAW16-10, UAW18-20, UAW22-20, were installed specifically to monitor water quality downgradient of the main portions of the CSS, in order to supplement the camera survey work described above. Discussions of the analytical data from these and other pertinent monitoring wells relative to the probable condition of the CSS are discussed in Section 5.6.5.

## 4.13 ECOLOGICAL RECONNAISSANCE

A field reconnaissance survey was performed at the site as part of the Screening-Level Ecological Risk Assessment (SERA) specified in the FI Work Plan (Geomatrix, 2000b). The field reconnaissance survey was performed on May 29 and 30, 2001 to meet the following objectives:

- Locate, map, and describe plant communities and aquatic resources on and adjacent to the site.
- Observe wildlife species.
- Identify significant ecological resources.
- Observe evidence of stress to plants and animal, if any, from site- related chemical contamination.

During the ecological reconnaissance the ecological risk assessor surveyed the 27 acres of the Morton Facility and the adjacent properties. To fully assess the environmental setting, the risk assessor also surveyed approximately 1,500 feet of Mill Creek adjacent to the site via canoe. The findings of the ecological reconnaissance are detailed in Sections 5.0 and 6.0 of this FI report and also in the Baseline Risk Assessment (Geomatrix, 2002b).

## 4.14 MONITORING WELL PLUGGING AND ABANDONMENT

Monitoring wells have been installed at the Morton Facility during a number of investigations, commencing in the early 1980s. Several of these did not meet current regulatory and industry standards, or had been damaged. These were identified as representing a potential migration pathway from the surface or shallow subsurface into saturated portions of the Upper Aquifer. Given this, and the potential that the construction of these wells might not allow the collection of representative groundwater samples, Geomatrix plugged and abandoned several of these existing wells. The plugged and abandoned monitoring wells were:

| | |
|---|---|
| MW-1 | MW-7 |
| MW-2 | MW-12 |
| MW-4 | MW-15 |
| MW-5 | MW-16 |
| MW-6 | MW-E1 |

| | |
|---|---|
| MW-E2 | KV-1 |
| MW-E3 | KV-2. |

In addition, several documented existing wells could not be located, typically because of paving or new building construction, and are presumed destroyed. These are:

| | |
|---|---|
| MW-3 | MW-11 |
| MW-8 | MW-13 |
| MW-9 | MW-14. |
| MW-10 | |

Of the existing monitoring wells at the Morton Facility (exclusive of Pristine wells), MW-EPA-1, MW-EPA-2, MW-EPA-3, and MW-EPA-4 were considered to meet appropriate construction standards, and were retained for use in the FI.

Plugging and abandonment was performed by overdrilling the well with nominal 8-inch OD hollow-stem augers to destroy and disrupt the grout seal and maximize removal of well construction materials from the borehole. Following the removal of the well materials, the resulting borehole was grouted with a cement-bentonite grout from the bottom of the borehole to the ground surface. All well materials, soils, and fluids removed from the subsurface during plugging and abandonment were managed as investigation-derived waste.

## 4.15 SURVEYING

Land surveying was performed to improve understanding of site topography and layout, and to obtain locations and elevations for pertinent sampling and measurement points. All borings and monitoring wells were surveyed for location (x, y) and ground elevation (z). Monitoring wells were also surveyed for top of riser (casing) elevation. Abercrombie & Associates, an Ohio-licensed professional surveyor based in Cincinnati,

performed all surveying. Survey data was provided to Geomatrix and Rohm and Haas using the three coordinate systems identified below:

1. **UTM-NAD83:** Coordinate System = Universal Transverse Mercator, Zone 16 North, Horizontal Datum = NAD 83 (Continental United States) – Meters, Vertical Datum = none

2. **State Plane:** Coordinate System = Ohio State Plane Coordinate System, South Zone, Horizontal Datum = NAD 83 (Continental United States) - U.S. Survey Feet, Vertical Datum = NAVD 1929

3. **Local**: Coordinate System = Random, Horizontal Datum = Random, U.S. Survey Feet, Vertical Datum = NAVD 1929.

# 5.0 FINDINGS OF INVESTIGATION

This section of the FI Report describes the primary technical findings of the FI. The manner in which these findings and other available information meet the pertinent information needs described in Section 3.0 for FI goals and objectives is then discussed in Section 6.0 of the FI Report.

## 5.1 SITE HYDROGEOLOGY

The hydrogeologic setting of the Morton Facility has been extensively characterized by previous geologic, hydrologic, and environmental investigations, and is discussed in Section 2.3 of this report. In general, hydrogeologic conditions observed during the FI were consistent with the setting described by these other investigations, with some exceptions discussed below.

Observations confirmed previous local studies regarding the presence and general character of the two fundamental hydrogeologic units within Mill Creek Valley sediments. These are termed the Upper and Lower Aquifers (some studies refer to the Upper Aquifer sands as "the outwash lenses").

### 5.1.1 Upper Aquifer

Observations made during this investigation indicate that the Upper Aquifer is typically comprised of clays and silts with interbeds of sand, and varies in thickness from approximately 50 feet in the northwestern portion of the Morton Facility, to over 120 feet in the eastern area. The presence, depth, and character of sand beds within the Upper Aquifer is quite variable, even within the Morton Facility boundaries. Only a single sand bed was observed in the thinner portions of the Upper Aquifer, while three or more of these beds were observed in thicker portions. In the northeastern corner of the site, the deeper sands within the Upper Aquifer thicken substantially, such that the Upper Aquifer consists predominantly of sands.

A single shallow sand bed, termed here the Shallow UA Sand, was observed at typical depths of 10 to 20 feet bgs across most of the Morton Facility; this sand is absent only in the northeastern corner. In this area, it transitions to thin stringers and lenses of sand, rather than a continuous bed. The lateral extent of this sand on the Morton Facility is shown on Figure 5-1. Hydrogeologic cross-sections generated from FI, Pristine, and other data (Figures 5-2 through 5-11) illustrate the subsurface character of this sand.

Depth to groundwater within the Shallow UA Sand is typically 10 to 20 feet bgs, and groundwater was present under unconfined (water table) conditions. Water levels in this sand have been relatively stable through time, typically varying by 1 to 3 feet over the period of April 2001 through May 2004 (Table 5-1). Gradient data consistently indicated groundwater flow is generally from the east and northeast of the Morton Facility, across the site toward the west and west-southwest (Figure 5-1) to Mill Creek. Gradients within this sand ranged from 0.017 to 0.03 feet per foot (ft/ft), and step-drawdown testing within a Shallow UA Sand well (UAW02-20) derived an estimated hydraulic conductivity (K) of 106 feet per day (ft/day). A pumping test performed on the French drain, however, suggests that the value of K, at least in the western portion of the Morton facility, is significantly lower (Geomatrix, 2002c). Anticipated yields based on the 106 ft/day value for K were approximately 60 gallons per minute (gpm). Actual yields from the pumping test were below 10 gpm, suggesting that a more representative value of K may be in the range of 15 to 20 ft/day. *(Note: the French drain test was not intended to quantitatively test the Shallow UA Sand hydraulic characteristics. Other explanations of the low yield are recognized to be possible, including damage to the French drain.)* Using K values of 15 and 106 ft/day and a typical gradient value of 0.019 ft/ft yields a groundwater velocity range of 1 to 8 ft/day. Aquifer test analyses and calculations of transmissivity, hydraulic conductivity, and velocity are provided in Appendix C.

The Shallow UA Sand appears to be generally isolated hydraulically from both deeper Upper Aquifer Sands and the Lower Aquifer. Water levels were monitored in three Shallow UA Sand wells (UAW09-20, UAW13-20, and UAW17-20) during the termination and restart of the Pristine pumping system.

The three Shallow UA Sand wells exhibited very gradual increases in water level over the monitoring period (0.3 to 0.4 feet rise over 25 days). These increases could either be interpreted to be an effect of the Pristine shutoff, or to be normal changes in water level, typical for a shallow aquifer strongly affected by surficial recharge. Geomatrix does not believe the data support a causal relationship with the Pristine shutoff and hydraulic communication between these wells and the Lower Aquifer.

For one of the Shallow UA Sand wells (UAW13-20), the water level rise had actually started prior to the Pristine shutoff. Water levels in another well (UAW09-20) actually fell slightly, rather than rebounding, for three to four days after Pristine was shut down. The level in the third well (UAW17-40) fell, then rose, then fell again during the shut down period.

Unlike the Deep UA Sand wells, none of the wells showed any decline during the two weeks following the resumption of Pristine pumping. We recognize that hydraulic responses can be delayed when two zones are not in close communication. This is not a plausible explanation for the absence of any observed decline in the Shallow UA Sand wells, however, since such delays should have been observable in water level rises as well. As discussed above, the water level rises observed in the three wells cannot reasonably be related to the cessation of Pristine pumping. If these rises were hypothetically related to Pristine shutdown, however, then their timing would indicate the time lag between pumping and response inherent in the hydraulic system at the site. In other words, one would expect that a response from the Pristine pumping restart would be delayed by roughly the same time period as any response to the Pristine pumping

shutdown. This was not the case, although the wells were monitored for 12 days after pumping was resumed. The referenced water level response data is provided in Appendix C.

The Shallow UA Sand is in hydraulic communication with Mill Creek. As shown in Figure 5-6, the sand outcrops in the lower portions of the Mill Creek channel. The presence of seeps and related chemical data discussed in Section 5.3 indicate that shallow groundwater within this sand is discharging to the creek. The magnitude of this discharge has not been quantified, but is believed to be reduced by the pumping of the French drain along the western boundary of the Morton Facility.

The Shallow UA Sand is locally important for a number of reasons. It is the hydrogeologic unit most likely to be affected by surface releases at the Morton Facility and on neighboring properties. It is in hydraulic communication with Mill Creek on the downgradient (west) side of the Morton Facility and neighboring properties. As discussed in the Baseline Risk Assessment (Geomatrix, 2002b), it is sufficiently shallow to pose a potential exposure risk to site workers. Finally, unlike deeper sands, it does not appear to be affected by Pristine Lower Aquifer remedial pumping systems.

Multiple sand layers, termed Deep UA Sands for the purposes of this report, were observed at greater depths in the southern and eastern portions of the Morton Facility. As illustrated in the hydrogeologic cross sections in Figures 5-3 through 5-11, these strata vary considerably in thickness, lateral continuity, and hydraulic conductivity. Several of the Deep UA Sands appear to be stratigraphically continuous with the upper portion of the Lower Aquifer. Others are apparently isolated sand lenses.

Depth to groundwater within the Deep UA Sands varies from 12 to 39 feet bgs. These sands are typically saturated for their entire thickness, indicating the presence of confined conditions. The single exception was UAW20-60, in the northeast portion of the Morton

Facility. The water level in this well was below the upper surface of the sand screened by this well, indicating this sand was under unconfined or water table conditions at this location. The water level in this sand may be affected, however, by Pristine pumping. Note that the water level measurement in UAW09-60 for November 2001 is considered suspect. This datum is not consistent with either other water level measurements or pressure transducer data from this well, and is not utilized in the hydrogeologic evaluation of the site.

At any given location, water levels in Deep UA Sands typically varied by one to three feet during the observation period of March 2001 through May 2004 (Table 5-1). The observed gradient in these sands is relatively flat, with a slight slope from the east and west margins of the site toward the central area of the site (Figure 5-1). This area of the site is where several Deep UA Sands appear to be hydraulically connected to the Lower Aquifer (see cross sections in Figures 5-2 through 5-11, especially Figures 5-3, 5-4, 5-7, and 5-8). This is supported by measured water levels in the Deep UA Sands, which are generally consistent with those in Lower Aquifer wells. In addition, water levels were monitored in several Deep UA Sand wells (UAW02-40, UAW09-60, UAW15-50, UAW19-80, and UAW21-60) during the termination and restart of the Pristine pumping system. All of these wells exhibited a clear response to the Pristine activities. Since the gradient in these sands is generally toward the areas expected to be in greatest communication with the Lower Aquifer, groundwater flow is believed to be strongly controlled by the Pristine Lower Aquifer groundwater recovery system.

Pristine pumping effects within the Lower Aquifer are known to extend across the entirety of the Morton Facility (Conestoga-Rovers, 2000).

Step-drawdown testing within two Deep UA Sand wells (UAW02-40 and UAW20-60) derived the widely varying estimated hydraulic conductivity values of 1.7 and 317 ft/day. This variability is consistent with field observations during well development and

purging. Several Deep UA Sand wells produced large quantities of groundwater with minimal drawdown during these activities, while others could not provide sufficient water to support low-flow purging techniques. Given the relatively flat gradient, flow velocities are suspected to be very low, even in those sands with higher K values. Aquifer test analysis and calculations of transmissivity, hydraulic conductivity, and velocity are provided in Appendix C.

Two Deep UA Sand locations merit specific discussion:

- In the extreme northeast corner of the Morton Facility, along the boundary shared with Pristine, the Deep UA Sands are unusually thick, and the clays between these sands and the Lower Aquifer are unusually thin (Figure 5-3).

- In the central area of the Morton Facility, well UAW15-50 is screened across a localized sand lens at an approximate depth of 50 feet bgs. Chemical, hydrologic, and stratigraphic data indicate this sand is not in hydraulic communication with the overlying Shallow UA Sand at the UAW15 location. Chemical impact in the deeper sand, for example, is quite dissimilar to that in the overlying sand. In general, the chemicals observed in the deeper well, such as toluene, acetone, and tin, are more characteristic of the site-wide nature Shallow UA Sand. Hydraulically, however, the water levels and response to Pristine pumping at this well are similar to other Deep UA Sands. It is possible that this sand may be in limited hydraulic communication with the Shallow UA Sand in the northeast and/or southeastern portions of the Morton Facility, and with Deep UA Sands that extend to the north under Pristine.

The groundwater elevations in the Shallow UA Sand and the Deep UA Sands exhibit a head difference of several feet (Figure 5-1). This indicates the presence of a vertical gradient, but also indicates that the intervening clayey strata are functioning effectively as hydraulic barriers, restricting vertical flow.

### 5.1.2 Lower Aquifer

The Lower Aquifer is a major source of water supply for municipal and commercial users along the Mill Creek Valley. The Lower Aquifer was observed in a number of FI borings, although it was only completely penetrated in two. Most of the borings reaching

the Lower Aquifer only penetrated into the upper 20 to 30 feet. At the fully penetrating locations, observations regarding the Lower Aquifer were:

- At LAW05-150, along the northwest margin of the site, the Lower Aquifer was encountered at a depth of 50 feet bgs and extended to a depth of 150 feet.
- At STR06, in the east-central portion of the site, the Lower Aquifer was wholly absent. Drilling transitioned directly from Upper Aquifer clays to shaley bedrock at a depth of approximately 139 feet. Thin sands observed at a depth of approximately 50 feet, however, appear to be laterally connected to the Lower Aquifer.

At all locations where it was present, the Lower Aquifer comprised sands and gravels, generally coarsening with depth.

Although the natural Lower Aquifer groundwater gradient is generally to the south, along the Mill Creek valley, the gradient is locally affected by pumping activities. At the Morton Facility, data from Conestoga-Rovers indicates that the entire facility lies within the capture zone of the Pristine Lower Aquifer groundwater recovery system (Conestoga-Rovers, 2000).

## 5.2 CHARACTERIZATION OF MILL CREEK

Geomatrix and subcontract personnel performed multiple reconnaissances of Mill Creek, as described in Section 4.4. The following observations were made during the course of those reconnaissance actions:

- The creek is typically shallow (less than 24 inches), with intermittent rapids and pools; pools in the vicinity of the Morton Facility exhibited depths up to 5 feet (all depths based on normal, non-flooding conditions). Water levels and flow were consistent for all FI observations performed during the period 2001 through 2004.
- The bed of the creek is comprised predominantly of rock and concrete debris, probably reflecting the materials used during the U.S. Army Corps of Engineers rechannelization (see Section 2.2). Sediment is completely absent through most of the streambed, with small accumulations (typically less than 1 inch thick)

downstream of larger rocks. Although one large area of streambed sediment was observed to the west of the Morton Facility, this is believed to represent the remains of a major bank collapse associated with flooding in July 2001. During the period of 2001 through 2004, most of this bank collapse material has been transported downstream.

- The banks are heavily vegetated with tree and brush, but there is relatively little aquatic vegetation. No invertebrate aquatic macrofauna was observed during any reconnaissance, either upstream or downstream of the Morton Facility. Fish, tentatively identified as common carp, were observed on one occasion.

- Water clarity is high, and the water was observed to have a septic or sewage odor during reconnaissance.

- At least three Combined Sewer Outfalls (CSOs), in addition to a number of storm water outfalls, are present in Mill Creek at or immediately adjacent to the Morton Facility. None of these outfalls belong to the Morton Facility. Outfall locations in the vicinity of the Morton Facility are shown on Figure 4-3.

As discussed in Section 5.1, the uppermost saturated sand underlying the Morton Facility (the Shallow UA Sand), is in hydraulic communication with Mill Creek, and is discharging groundwater through the banks and bed of the creek. Apparently-impacted seeps were visible along the portions of the creek bordering the Morton Facility and Cincinnati Drum. Chemical impact to Mill Creek sediments and seeps near the Morton Facility is discussed in Section 5.3.3 and 5.3.4.

## 5.3 CHEMICAL IMPACT TO ENVIRONMENTAL MEDIA

The following sections summarize the character and extent of chemical impact identified by the FI on a media-specific basis; i.e., for soils, groundwater, surface water, and Mill Creek sediments. In summary, the FI identified low levels of impact (i.e., not generally indicative of concentrated source materials, or "hot spots," such as wastes or separate-phase liquids) by metals and organics to shallow soils and shallow groundwater across the site. Much of this impact is assumed to be derived from historical on-site releases, with some possible on-going contribution from CSS leakage. Shallow soils and Upper Aquifer groundwater are also impacted by constituents from off-site sources.

Groundwater deeper within the Upper Aquifer predominantly exhibits impact from off-site sources, with localized possible exceptions (i.e., in the vicinity of UAW15-50). Lower Aquifer groundwater does not exhibit impact from the Morton Facility.

Specifically, Geomatrix considered the following to be strong evidence of off-site origin for soil and groundwater contaminants:

Compounds were concluded to be derived from off-site sources only if there was a known or reasonable off-site source for them, there was not a known on-site release of those compounds, and the physical evidence derived from the FI was more consistent with an off-site origin. Specifically, Morton considered any of the following to be strong evidence of off-site origin:

- Absence or near absence in the Shallow Upper Aquifer Sand groundwater, with presence primarily in deeper groundwater.
- Distribution in shallow groundwater reflecting highest concentrations near the Pristine Superfund Site, with generally declining concentrations moving west and south across the site.
- Occurrence in on-site soils primarily in the immediate vicinity of the Pristine Superfund site.
- Presence in on-site soils only at very low concentrations, and either in only a few scattered samples or widely distributed across the site primarily occurring in shallow soils. Occurrence only or primarily within a localized group of samples would not meet this criterion, and would be considered suggestive of an on-site potential source.

Shallow groundwater impact from the site has migrated beyond the western Morton Facility boundary, and is reaching points of groundwater discharge along and within Mill Creek. Low concentrations of suspected Morton Facility constituents have been detected in seep waters and creek sediments in the vicinity of the Morton Facility.

### 5.3.1 Soils

Soil impact by both organics and metals was detected at locations across the Morton Facility, as summarized in Figures 5-12 through 5-19 and Tables 5-2 through 5-5. Generally speaking, however, concentrations were relatively low, with relatively few exceedances of risk screening levels (see Section 5.4), and minimal observations of sludges, oils, separate-phase liquids, etc. It should be noted that dioxins were not detected in any sample, only qualified detections of furans were detected, and that many of the observed constituents may have originated from off-site sources (see Section 2.4.2). Areas of note were:

The Former Surface Impoundments (SWMU 1) – Dark staining described in previous investigation findings was observed in soils within and around the former impoundment locations, to a typical depth of approximately 15 to 20 feet (Figure 5 – 11). This staining did not typically correlate with highly elevated organics, however, suggesting that it may be at least partially related to sulfides or reduced iron. Isolated lenses and small pockets of possible sludge materials, sometimes exhibiting a possible sheen in the field, were observed and sampled during the March/April 2004 field activities. These materials, however, represented a very small fraction of the impoundment fill.

Constituents observed in this area (Figure 5-16 through 5-19) included benzene, toluene, ethyl benzene, and xylenes (BTEX), acetone, carbon disulfide, chlorobenzene and dichlorobenzenes, aniline, bis(2-ethylhexyl) phthalate, various PAHs, chromium, tin, and lead. Most or all of these constituents are believed to originate primarily from historical wastewater treatment and disposal operations at these impoundments. Given the location of these impoundments along the north property boundary, it is impossible to rule out some degree of historical contribution from nearby off-site source areas.

The T-1 Area—Geophysical surveys in the vicinity of a reported drum burial area at Area F, near the fuel tanks south of Building 32, in the west central part of the Morton Facility (Figure 4-1) detected multiple metal anomalies. Subsequent trenching in 2001 (Trench T-1) identified these anomalies as the remains of two metal drums, which were both removed at the time of trenching. Soils in the vicinity of these drums exhibited elevated levels of metals, particularly tin, arsenic, chromium, and lead. Low levels of organics, including iodomethane, chloromethane, and dibenzofuran, were also observed. Subsequent DPT sampling of the area, in addition to sampling in other nearby trenches, confirmed that elevated metals levels were confined to the immediate area of the former drum location.

In order to reduce the high metals concentrations observed at Trench T-1, a soil removal Interim Measure was performed at this location in March 2004. The proposed approach to this soil removal was submitted to the USEPA on June 11, 2003 as the Trench T-1 Work Plan.

Approximately 130 cubic yards of soils were excavated from the Trench T-1 area; this excavation extended to a maximum depth of approximately 8 feet. Excavated soils were transported to an off-site landfill for appropriate disposition. During the course of excavation, three additional drums were identified and removed. Six confirmation samples were collected from the sidewalls of the excavation, and two were collected from the base. As specified in the Trench T-1 Work Plan, the four confirmation samples collected at the south and center of the excavation were analyzed for metals. The four confirmation samples located nearest the newly-discovered drums were analyzed for the full CLP-TAL. Excavated soils were transported off site to a licensed disposal facility.

This excavation was successful in significantly reducing the maximum concentrations of several metals, including arsenic, chromium, lead, and tin (see also Section 5.6.4). The results of confirmation sampling are summarized in Tables 5-2 through 5-5 and Figure 5-20. Data representing soil sample locations (T-1-4, T-1-6, T-1DC-4-5') that have now been excavated have been deleted from the summary analytical tables

(Tables 5-2 through 5-5), since these data are no longer representative of conditions present at the site. The deleted data are summarized in Table 5-6. These data have been replaced in the summary tables with the results of confirmation sampling at the boundaries of the excavation.

The T-1 excavation was backfilled with soil obtained from an off-site source. Prior to use, the soil was analyzed for the CLP-TAL. No organics were detected other than a low qualified level of acetone, and levels of metals were consistent with or lower than background. Analytical results for fill soils are summarized in Table 5-6.

The Former Swale Area (SWMU 10)—Geophysical surveys confirmed the physical location of this feature, which is predominantly beneath the parking lot in the southern end of the fenced portion of the Morton Facility. It also identified a small number of metallic anomalies, both within the Former Swale Area and in the surrounding soils. Several of these anomalies were assessed using a combination of trenching and DPT. Although the remains of a single drum was observed during this effort, no evidence of the large scale drum disposal anecdotally reported at this site was observed. Other materials observed within the Former Swale include bottles, concrete rubble, scrap metal, diatomaceous earth, and a small pocket of lime sludge. The presence of these types of materials was consistent with the findings of the geophysical survey (Geomatrix, 2001). Certain VOCs, including acetone, PCE, BTEX, and chlorobenzene, were observed in some soil samples (including sample T-6 7.5' from the pocket of lime sludge), and dark staining was present at approximately the depth of the water table. PAHs were also detected at low levels in some samples. In general, however, no evidence of significant or pervasive impact, or of concentrated source materials, was observed at this location.

UAW21 Area—Surface soil samples from the wells at this location, at the southeast corner of Building 40, identified elevated concentrations of lead. Concentrations of

lead at a depth of 10 feet at this location, however, did not appear to be elevated. Subsequent DPT surface soil sampling at locations offset from the UAW21 cluster exhibited lower, but still elevated, lead concentrations. Shallow groundwater lead levels were not elevated. This area was landscaped approximately two years ago, with imported fill soils used to build up a landscaped berm. Given the absence of any known process or waste management activities at this location, its distance from active process and chemical handling areas, and the presence of impact in localized surface soils only, the imported fill soils are currently considered the most likely source of the elevated metals.

UAW17-40 Area – The 2001 investigative work identified elevated lead (128 mg/kg) in a soil sample at 5 feet bgs depth from the UAW17-40 boring. This sample coincided with the presence of a thin layer of fill containing scrap metal and possibly glass. Lead is not elevated in groundwater from this well. The USEPA directed Rohm and Haas to perform additional delineation of this location, to verify that elevated lead in soils was localized to the UAW17-40 location. Geomatrix collected soil samples from three borings (DP47, 48, and 49) surrounding UAW17-40 (Figures 4-3 and 5-15). Lead concentrations in these samples ranged from 2.7 (B,J) to 15.5 mg/kg. These concentrations are consistent with, or lower than, lead levels observed in soils across the facility, as well as soil at background (off-site) locations.

Southeast Morton Facility Area – Historic facility correspondence (Cincinnati Milacron, June 1979) had identified the occurrence of spills and releases of tin-bearing solutions to surface soils in the southeast portion of the facility, near Building 18. This correspondence, which is included as Appendix E of this report, also documented the removal of surface soils with elevated tin in this area. The USEPA directed Rohm and Haas to assess the soils in this area, to provide current data on the presence and extent of any elevated tin.

Geomatrix performed 12 shallow soil borings (HA1 through HA12) in this area (Figures 4-3 and 5-15), analyzing samples for metals including tin. In addition, the three borings surrounding the UAW17-40 location (see above) were also analyzed for metals including tin. Observed tin concentrations across the southeast part of the facility were typically low (<20 mg/kg), with the exception of location HA-9 (12,700 [J] mg/kg) at the south end of Building 12. The data indicate that some areas of elevated tin are still present in this part of the facility, but that they are apparently localized and infrequent.

Chromium Speciation in Soils

Elevated chromium concentrations were observed in several soil samples collected during 2001 field activities. Although historical activities at the site did not indicate any likelihood that this chromium would be in the hexavalent form, the USEPA expressed concern that chromium had not been speciated as trivalent vs. hexavalent.

Geomatrix analyzed four soil samples collected in March-April 2004 for hexavalent chromium. As shown in Table 5-7, this sampling has confirmed that the chromium observed at the facility is present almost exclusively in the trivalent form. Hexavalent chromium was observed in only two samples, DP54-1-1.5' and DP55-9', at qualified and low concentrations (0.35 [B] and 0.56 [B] mg/kg, respectively). Trivalent chromium in these same samples was measured at 217 (J) and 6.3 (J) mg/kg, respectively.

UAW04-20 Area

A soil sample collected at 10 feet bgs from the UAW04-20 boring in 2001 exhibited a toluene concentration of 160 mg/kg. This was the highest observed concentration of toluene in soils at the Morton Facility, and the USEPA directed Rohm and Haas to perform additional soil delineation in the vicinity of this sample. Geomatrix advanced three additional borings (DP50, 51, and 52) at locations surrounding

UAW04-20 (Figures 4-3 and 5-15). Toluene in samples from these locations ranged from only 0.0018 (J,B) to 0.0025 (J,B) mg/kg, and no field indications of waste or separate-phase liquids was observed in the field. Based on this, the UAW04-20 toluene detection is believed to be a highly-localized occurrence.

### 5.3.2 Groundwater

Groundwater impact at the Morton Facility may be subdivided into three categories on the basis of hydrogeology and suspected sources:

1. The uppermost saturated sand within the Upper Aquifer, termed the Shallow UA Sand,
2. Deeper saturated sands within the Upper Aquifer, termed the Deep UA Sands, and
3. The Lower Aquifer.

The hydrogeology and occurrence of these units at the Morton Facility is discussed in Sections 2.3 and 5.1. Chemical impact within these strata is summarized in Figures 5-21 through 5-24 and Tables 5-8 through 5-12, discussed below.

<u>Shallow UA Sand</u>

Groundwater within this zone is generally flowing from the northeast and east of the Morton Facility, toward the west and west-southwest, with discharge into Mill Creek. Impact from VOCs, SVOCs, and from metals is observed in this groundwater across most of the Morton Facility. Although this impact is typically present at low levels, higher levels, including observations of a floating separate phase liquid, were present in the west-central portion of the plant.

Constituents observed include:

- Chlorobenzenes—chlorobenzene, 1,2-dichlorobenzene, and 1,4-dichlorobenzene
- Chloromethanes—chloroform, methylene chloride, dichlorodifluoromethane

- Chloroethanes—1,1,1-trichloroethane, 1,1,2-trichloroethane, 1,1-dichloroethane, 1,2-dichloroethane, 1,1,2-trichloro-1,2,2-trifluoroethane
- Chloroethenes—PCE, TCE, 1,1-dichloroethene, cis- and trans-1,2-dichloroethene, vinyl chloride
- Ketones—acetone, 2-butanone, 2-methyl-4-pentanone
- Non-chlorinated aromatics—benzene, toluene, ethylbenzene, and xylenes (BTEX)
- Phenols—phenol, 4-methylphenol, 2-chlorophenol
- PAHs—acenaphthene, fluorene
- Other organics—including carbon disulfide, aniline, caprolactum, various phthalates, pesticides, PCBs
- Metals—arsenic, chromium, lead, tin, and vanadium (note—although other metals were detected, these metals appear elevated). Elevated tin was observed in the Shallow UA Sand across the central and northwestern areas of the Morton Facility.
- Inorganics—notably chloride, ammonia, nitrate.

It should be noted that dioxins and furans were not detected in any groundwater sample. Of the compounds observed, Geomatrix has concluded that the chloroethanes, chloroethenes, and chloroform are derived predominantly or entirely from off-site sources. This conclusion is based on the following:

- The highest concentrations of these constituents, and in many cases their only detections, are along the northern boundary of the Morton Facility. This area is adjacent to off-site potential source areas discussed in Section 2.4.2, and also represents the furthest upgradient portion of the Shallow UA Sand and correlating sand stringers.
- These constituents are known to be among the contaminants released at adjacent off-site source areas, and are not associated with any documented Morton Facility release.

- Concentrations observed on the Morton Facility, as well as the distribution of these chemicals, including within shallow soils, are not consistent with levels expected for a source area.

In summary, an off-site origin for these species is considered likely.

Geomatrix concludes that PAHs, PCBs, and pesticides are also likely to have been derived from off-site sources. At a minimum, there is no indication of a regulated discharge of these chemicals on the Morton Facility. Such a discharge would result in localized, high concentrations of these constituents in soils and shallow groundwater. Instead, the observed data exhibits a pattern of widespread, low concentrations. In addition, these constituents are present at generally similar levels in several of the background soil samples (see discussion of background in Section 5.7). This is more consistent with either off-site sources for these compounds, or with area-wide impact from aerosols or airborne particulates containing these constituents.

Although off-site sources cannot be ruled out for the remaining compounds, most or all of these constituents are likely derived from historical releases on the Morton Facility. The highest levels of these compounds, primarily chlorobenzenes, ketones, BTEX, and various metals, are observed in the central, western, and northwest portions of the site. Most of these constituents, with the possible exception of the ketones and certain inorganics, are not present at concentrations consistent with recent releases or highly concentrated localized source areas (i.e., "hot spots"). The single exception is the Morton Facility's only confirmed occurrence of phase-separated material (a floating layer less than ¼-inch thick) intermittently present at well UAW11-10. This portion of the Morton Facility contains several former waste management areas, and is downgradient of both the historic process areas and most of the process-related portions of the CSS. As discussed in Section 5.6, the only one of these considered a likely source of on-going releases is the CSS. In particular, the CSS is believed to be the likely source of the elevated toluene observed at UAW04-20 and UAW08-20. In general, and again excepting the ketones and inorganics and the area near UAW11-10, most of the impact

observed to the Shallow UA Sand groundwater is probably leaching gradually from shallow soils, and should not either increase or decrease significantly in the near future. Examples would include the chlorobenzenes observed in the MW-EPA-1 groundwater samples, in the northwest area of the site.

The extent of groundwater impact in the Shallow UA Sand has generally been delineated by the FI sampling. As discussed in Section 5.1.1, groundwater within this zone is flowing to the west and west-southwest, toward discharge points in Mill Creek (Figure 5-1). This means that the western fenceline is the primary downgradient boundary for the Morton Facility. The eastern boundary is upgradient of all on-property potential sources, the southern boundary is cross-gradient from these areas, and the northern boundary is either upgradient or cross-gradient, depending on the specific location. In addition, the sand is interrupted by the slurry wall along the western portion of the northern boundary (Figure 4-1).

The southern boundary is of particular concern, given the presence of nearby residential and recreational areas to the south. Shallow groundwater impact along this boundary, however, is virtually absent; there is no indication that impacted groundwater is moving off-site toward these areas in the uppermost sand of the Upper Aquifer.

Impacted groundwater is moving beyond the downgradient, western boundary of the Morton Facility in the Shallow UA Sand, and reaching points of discharge at and within Mill Creek. This is evidenced by observed concentrations of chlorobenzenes, acetone, and other constituents in shallow groundwater at the fenceline (outside of the French drain system), and the presence of chlorobenzene at low levels in seeps and sediments along Mill Creek (see discussions in Sections 5.3). Some reduction in this migration is apparently being affected by the French drain along the western boundary, but this reduction is not complete (see discussion of French drain in Section 5.8).

As part of the Supplemental FI, the USEPA requested additional investigation of Shallow UA Sand groundwater at Trench T-1. The objective of this sampling was to assess for the possible presence of elevated metals in groundwater derived from the elevated metals observed in soils. Of the metals detected, only tin appeared to be clearly elevated (2550 μg/l), at levels that are within the range of those observed in Shallow UA Sand groundwater across the central and northwest portion of the Morton Facility. As discussed in Section 5.3.1, soils exhibiting elevated metals at Trench T-1 have now been excavated and removed for off-site disposal.

Deep UA Sands

These other sand strata within the Upper Aquifer are present at a range of depths, from approximately 40 feet to over 100 feet bgs. As noted in the hydrogeology discussion (Section 5.1), the Upper Aquifer is relatively thin (~50 feet) in the northwestern portion of the Morton Facility; Deep UA Sands are not present in this part of the site.

In general, groundwater in the Deep UA Sands is most impacted in the northeastern portion of the Morton Facility. At this location and across the Morton Facility, impact in these sands is primarily in the form of chloroform, chloroethanes, and chloroethenes. As discussed immediately above, these constituents are believed to have been derived from off-site sources.

The single area that represents an exception to this trend is in the central portion of the main process area, at well UAW15-50. This well exhibited relatively high concentrations of acetone in 2001, with lower levels of chlorobenzene, toluene, ammonia, and possibly methylene chloride. Acetone concentrations have since dropped below detectable levels, although chlorobenzene and toluene have remained at similar levels. Tin levels are also elevated. The source of the UAW15-50 impact is apparently not in the immediate vicinity of the well, since the shallower well in the same cluster (UAW15-20) contains no detectable acetone or chlorobenzene, relatively low tin levels, and only trace amounts of

toluene and ammonia. This sand lens may be in hydraulic communication with the Shallow UA Sand in the northern or southern portions of the Morton Facility. It may also (or alternatively) be in communication with the Deep UA Sands that extends beyond the site to the north, in the eastern portion of the facility. As discussed in Section 5.1, water levels in this well have consistently be comparable to other Deep UA Sand wells, rather than to Shallow UA Sand water levels. This would tend to argue against a direct hydraulic connection from UAW15-50 to the shallow sand.

There is also no indication of any direct connection between the UAW15-50 sand and the Lower Aquifer. Hydrogeologic data indicates the presence of a significant thickness of clays and clayey soils between this sand and the Lower Aquifer. In addition, and as discussed below, Supplemental FI wells placed to monitor possible migration pathways to the Lower Aquifer do not indicate any communication between the UAW15-50 sand and the Lower Aquifer.

The groundwater gradient within the Deep UA Sands is typically relatively flat, and several of the sands are believed to be in direct hydraulic communication with the Lower Aquifer. Groundwater flow appears to be predominantly toward the south-central portion of the Morton Facility, where this hydraulic communication is best. The portion of Deep UA Sand groundwater that flows into the Lower Aquifer presumably then moves back to the east in the Lower Aquifer, toward the recovery system operated by Pristine. As a part of the Supplemental FI field activities in 2004, the USEPA requested that Rohm and Haas install additional Deep UA Sands wells to monitor for possible transport of Upper Aquifer constituents into the Lower Aquifer. Sampling results from these wells (UAW26-70 and UAW 27-50) indicate the presence only of constituents (cis-1,2-DCE and 1,1-DCA) already known to be present in the Lower Aquifer. No SVOCS, pesticides, or PCBs were detected in groundwater from these wells, and all metals appear to be consistent with background levels.

Deep UA Sand groundwater not flowing to the Lower Aquifer on site, most likely moves laterally to the south. Deep UA Sand wells on the southern fenceline exhibit only trace amounts (<10 μg/l) of volatile organics, most of which are attributable to off-site sources. Two wells (UAW09-60 and UAW21-80) have exhibited elevated concentrations of metals. Of these, the elevated metals in UAW09-60 are considered anomalous, since they occurred in only one event, and were not observed in either a preceding or subsequent event. The observed metals were likely the result of a transient turbidity condition associated with purging or sampling. At UAW21-80, only arsenic appears elevated, with a maximum observed concentration of 42.6 μg/l.

Lower Aquifer

The Lower Aquifer has been evaluated throughout the area of the Morton Facility, including on-site during the course of the Pristine Remedial Investigation. Prior to the commencement of the FI, seven Pristine Lower Aquifer wells were present in three well clusters on the Morton Facility, with additional Lower Aquifer wells off site near the property line.

Historical sampling has not indicated impact to the Lower Aquifer by Morton Facility current or historical operations. Despite this, the EPA expressed concerns in scoping meetings that the limited analyte list used for Pristine sampling may not have fully evaluated the presence or absence of such impact.

To resolve these concerns, Rohm and Haas has installed multiple Lower Aquifer wells in the northwestern portion of the Morton Facility. This area was selected for several reasons:

- It was the location of the surface impoundments, where large quantities of process wastewater were managed. If significant releases to groundwater had occurred, this was considered to be a likely source area.

- The Lower Aquifer is shallower in this area than in any other portion of the Morton Facility. Its depth at this location is only approximately 50 feet, compared to typical depths ranging from 90 to 120 feet in other areas of the Morton Facility. This would make this area of the Lower Aquifer most vulnerable to impact from surficial or near-surface releases.

- This area represented a data gap for the Lower Aquifer. Pristine wells were already present in and near the northeast, southeast, and southwest areas of the Morton Facility, so wells in the northwest would complete the monitoring coverage.

Monitoring wells were installed in the upper portion of the Lower Aquifer immediately to the north of the former surface impoundments (at the north property boundary), and to the southwest of the former surface impoundments (at the west property boundary). In addition, the west property boundary location included a well constructed across the basal portion of the Lower Aquifer. [Note—the western property boundary location was selected by the USEPA in scoping meetings as the most likely location for impact to be reaching the Lower Aquifer from sources in the northwest portion of the Morton Facility.]

Based on analytical results from these Lower Aquifer monitoring wells (LAW05-60, LAW05-150, and LAW12-60), impact from the Morton Facility is not reaching the Lower Aquifer. Impact was observed from a number of typical Pristine constituents, including chloroethenes and chloroethanes. This is not surprising, given that the wells are located within the interpreted extent of the Pristine Lower Aquifer plume.

There were two detections of constituents that, at other locations, have been interpreted to represent possible impact from historical or current Morton Facility operations: chlorobenzene and acetone. The chlorobenzene detection, in well LAW12-60, was a qualified detection at less than 1 μg/l, and was not reproduced in a second sampling event. Acetone detections in LAW12-60 samples were nearly as low, at 0.55 and 2.3 μg/l (both qualified detections). In summary, neither constituent was observed at levels that

would indicate impact by Morton Facility constituents. Elevated tin has not been observed in any Lower Aquifer sample.

Groundwater pH

In their letter of April 8, 2002, the USEPA requested that the FI include an evaluation of groundwater pH, based on scattered observations of low pH conditions during 2001/2002 well purging and development. Geomatrix performed this review in 2002, and concluded that the observed pH values were more likely a result of performance issues with field instrumentation, rather than actual groundwater conditions. The issue of pH was addressed in a non-conformance report (Appendix D), and Geomatrix modified field procedures during future monitoring to reduce the probability of a recurrence. The non-conformance report also recommended that pH be observed during future sampling events for any recurrence.

This was performed, and subsequent field data have not exhibited the anomalously low pH readings observed in the initial FI sampling. This would confirm the initial conclusion of instrumentation issues. Groundwater pH is not currently considered to be an issue.

### 5.3.3 Surface Water

As discussed previously, the primary occurrences of surface water at and near the Morton Facility are Mill Creek and associated seeps. Surface water does not flow from the Morton Facility directly into Mill Creek, except under unusual flooding conditions. Only one such flooding event has been observed since 2001. Seeps were visually identified at two locations along the east bank of Mill Creek adjacent to the Morton Facility. Sampling of these seeps has identified several constituents also observed in shallow Morton Facility groundwater, including tin, BTEX, chlorobenzenes, and dichlorobenzenes (see Tables 5-8 through 5-12 and Figures 5-21 through 5-24). Water from the seeps also contained low concentrations of chloroethanes and pesticides

believed to originate from sources other than the Morton Facility. In addition, sorbent probes in shallow wellpoints along the Mill Creek east bank identified the presence of optical brighteners along the southern extent of the Morton Facility boundary.

In addition to chemical indications, hydrogeologic evaluations illustrate that the Shallow UA Sand is expected to outcrop in the lower part of the Mill Creek channel (see discussion in Section 5.1). This location would be consistent with the observation of seeps along the creek.

In summary, a hydraulic connection is interpreted to be present between this uppermost sand stratum and Mill Creek. Based on site hydrogeology, groundwater within this sand is interpreted to be migrating across the Morton Facility from the vicinity of Pristine, moving beyond the western facility boundary, and discharging into Mill Creek. Impact in observed seeps is, however, at relatively low levels, consistent with the observed levels of impact to groundwater.

Based on a directive by the USEPA, Rohm and Haas sampled surface water at six locations designated WS-1A through -6A, along and downstream of the west Morton Facility boundary. Rohm and Haas has historically expressed concerns about the value of such sampling, given that the chemical character of surface water will be dominantly controlled by upstream conditions, rather than by groundwater discharge to the creek. The analytical results of this sampling are summarized in Table 5-13. Very few constituents were detected, and almost all of these were qualified detections less than 10 μg/l for organics, and less than 70 μg/l for dissolved metals. All concentrations detected were below default human health- and ecological-based action levels. Although the concentrations observed in these samples are sufficiently small to make the value of any statistical analysis highly questionable, none of the detected parameters exhibit a clear increasing trend from upstream to downstream. Instead, concentrations are relatively consistent at all sampling locations, or even exhibit a declining trend from upstream to

downstream along the Morton Facility boundary. In short, there is no indication that groundwater from the Morton Facility is causing any significant, or even measurable impact to Mill Creek surface water.

### 5.3.4 Sediment

Sediment samples were collected from both the bed and lower bank areas of Mill Creek, adjacent to and immediately upstream and downstream of the Morton Facility. As noted in the discussion on Mill Creek (Section 5.2), however, there is very little true bed sediment in the vicinity of the Morton Facility. Probably as a relict of rechannelization efforts, the bed of Mill Creek is comprised predominantly of sand- to boulder-sized fragments of concrete rubble and rip rap. Small accumulations of finer materials are present in the eddies immediately downstream of the larger rocks, but these are typically thin (<1 inch). There is a large body of sand and sandy soils in the creek west of the UAW03/04 well location, but this is believed to reflect a bank collapse that occurred during the July 2001 flooding. A large portion of the east bank of Mill Creek was undercut and eventually slumped into the creek bed at that time; most of it has since been eroded and transported downstream.

During 2001 and 2002 field activities, sediments were collected from the lower bank, typically about 1 foot above the water line, and from the relatively few accumulations of sediment in the creek bed large enough to allow sampling (locations in Figure 4-2). These samples contained low concentrations of acetone, BTEX, chlorobenzenes, carbon disulfide, methylcyclohexane, and various pesticides (see Tables 5-2 through 5-5 and Figures 5-25 through 5-28). In addition, one bank sediment south of the Morton Facility contained low concentrations of various PAHs; these constituents were not observed in sediments or seeps along the Morton Facility. Fewer constituents were observed in the creek bed sediments than in the bank, and typically at significantly lower concentrations.

Creek bed sediments were sampled again in 2004, at locations CS-1A through -6A (Figure 4-3), and analyzed for a broader list of parameters than that used in 2001-2002 (Tables 5-2 through 5-5). This sampling detected very low, qualified levels of volatiles 2-butanone, acetone, chlorobenzene, and methylene chloride in sediments from the central and southern Morton Facility boundary. All concentrations were qualified and below 10 μg/kg, with the exception of two acetone detections at 11(J) and 12(J) μg/kg. At these concentrations, it is uncertain whether the observed methylene chloride and acetone are actually present, or artifacts of the laboratory. Methylene chloride was also observed in laboratory-method blanks associated with these sediment samples.

A larger number of semivolatiles were observed in the sediment samples, specifically, low concentrations of methylnapthalenes, methylphenols, phthalates, and PAHs. All of these are common urban chemicals, and may be derived from fuel residues, plastics, asphalt and pavement sealants, etc. In short, given the nature and setting of Mill Creek, it would be somewhat surprising not to have detected these types of compounds in creek sediments. Their distribution does not suggest that these compounds are derived from the Morton Facility. Concentrations along the Morton Facility western boundary are generally consistent with concentrations observed at the upstream (north) property boundary. Concentrations of several constituents are significantly higher at the CS-2A location, approximately 500 feet south (downstream) of south Morton Facility boundary, than at any other location (including locations proximal to the identified seeps along the Morton Facility). This is most likely a reflection of the character of this sampling location. Immediately downstream of a weir dam across the creek, this location contains the most significant accumulation of true sediment observed in this reach of the creek. The higher organic carbon fraction one would expect to be present in such material, in contrast to the fragmented concrete particles that make up most of the creek bottom, would tend to preferentially accumulate and retain many semivolatile organics.

Several pesticides and PCB Aroclors were detected in sediments in 2004, again at very low concentrations (a maximum of 0.1 mg/kg [Table 5-4]). All but two of these detections were observed in either the furthest upstream (i.e., north Morton Facility boundary) or furthest downstream sample locations. The only exceptions were a single detection (100 µg/kg) of Aroclor 1254 at the CS-3A location (this sample contained no other pesticide/PCB constituents), and a single detection (0.023[J]) of Aroclor 1248 in the CS-5A location, approximately 500 feet south of the Morton Facility.

Fifteen metals were observed in the 2004 sediment samples, including arsenic, barium, chromium, lead, mercury, tin, and vanadium (see Table 5-5 for a complete listing). Concentrations were again relatively low, and variable. The distribution pattern exhibited by lead, for example, shows levels remaining in the range of 4 to 5.3 mg/kg from the extreme upstream to the extreme downstream sampling locations, except for two samples with slightly higher values at 14.6 and 22.8 mg/kg.

Overall, the following conclusions are observed with respect to organics and metals detected in Mill Creek bed sediments:

- Concentrations are relatively low. Although several compounds (most notably PAHs, PCBs, and pesticides) exceed either default human health or ecological screening levels, the screening levels for these compounds in sediment are extremely low (example, 4,4'-DDE with an EDQL of 0.0014 mg/kg).
- There is no trend or distribution in the data that would suggest that the Morton Facility is the source for the detected compounds, with the possible exception of certain volatiles (2-butanone, acetone, chlorobenzene) that may be related to groundwater seepage from the Shallow UA Sand to Mill Creek.

## 5.4 SUMMARY OF BASELINE RISK ASSESSMENT FINDINGS

The FI Report, as originally submitted in June 2002 (Geomatrix, 2002a), included a summary of the conclusions of the Baseline Risk Assessment, also submitted in June

2002 (Geomatrix, 2002b). The USEPA subsequently provided technical comments on the Baseline Risk Assessment. Although responses to those comments have been provided, Rohm and Haas does not propose to revise and resubmit the Baseline Risk Assessment until the FI Report has been finalized and approved. Because the Baseline Risk Assessment relies directly on FI data and findings, this will ensure that the Baseline Risk Assessment utilizes data and findings that have been approved for use by the USEPA. This issue was discussed in the Supplemental FI Work Plan (Geomatrix, 2003b). Please note that the Baseline Risk Assessment is not a required submittal under the AO. Because the Baseline Risk Assessment is no longer considered a final document, its findings are not summarized in this report.

## 5.5 PHYSICAL CHARACTER OF SITE SOILS

Site soils and sediments were analyzed for a variety of geotechnical and related parameters, including cation exchange capacity, water content, Atterberg limits, and grain size distribution. FI boring logs (Appendix A) describe site soils predominantly as sands and clays with varying amounts of silts. The results of geotechnical analysis of site soils and sediments are generally consistent with field descriptions (Table 5-14).

## 5.6 CHARACTER OF SUSPECTED SOURCE AREAS

This section is intended to summarize physical and chemical conditions at locations previously identified as potential sources for environmental impact. These include areas identified as SWMUs, including the CSS. They also include areas where Morton records suggested small quantities of waste might have been buried.

### 5.6.1 Former Impoundments & Drum Storage Area – SWMUs 1 and 3

The Former Drum Storage Area was located directly over the previous location of the Former Surface Impoundments, allowing both SWMUs to be investigated concurrently. In 2001-2002, Geomatrix advanced 10 borings at the location of these SWMUs, and analyzed 18 soil samples for App. IX TAL and CLP-TAL parameters. At least one

boring was advanced through each of the former impoundment locations, based on historical aerial photographs. A cross-section based on these borings is shown in Figure 5-11. In 2004, Geomatrix supplemented previous investigation of these SWMUs with the advancement of 24 additional borings. 12 samples were selected for analysis based on field screening; 9 were biased toward locations with obvious field indications of impact, and 3 were biased toward locations with little to no evidence of impact in the field. All soil samples collected in 2004 were analyzed for CLP-TAL parameters.

As discussed in Section 5.3, borings did not identify any significant presence of sludges, oils, or other waste materials within or near the former impoundments, although thin (less than 1 foot thick) layers of possible sludge were observed and sampled in a small number of 2004 Former Surface Impoundment borings. Although detailed historical information was not available on the decommissioning of these impoundments in the early 1980s, anecdotal reports suggest sludges were generally excavated and removed during the decommissioning. Extensive dark soil staining was observed (see Figure 5-11), but did not correlate consitently with high organic concentrations in soils. This suggests that the staining may have been caused primarily by reduced metals or sulfides, rather than organics. As shown on Figures 5-16 through 5-19, and summarized in Tables 5-2 through 5-5, soils contained low concentrations of a number of VOCs, SVOCs, and metals, including aniline, phenols, chlorobenzenes, BTEX, methylene chloride, acetone, and tin.

### 5.6.2 Former Wastewater Storage and Treatment Tanks (SWMUs 2 & 5 and Three Additional Non-SWMU Tanks)

These aboveground tanks were formerly used for wastewater treatment and storage. As a part of the RCRA closure process for these sites, 2 to 4 soil borings were advanced at each location. One to two samples per boring were analyzed for the CLP-TAL, depending on the depth of the boring. There were no significant chemical detections observed in the Tank evaluation samples, with the exception of the former Ignitable and

Reactive Hazardous Waste Storage Tanks north and northwest of Building 5. Samples at these Hazardous Waste Storage Tank locations did contain low levels of BTEX, acetone, and methylcyclohexane. These are observed in shallow samples across the Morton Facility, however, and concentrations at the Tank borings do not indicate the storage tanks are a likely source. In summary, no evidence was observed for waste releases from any of the assessed tanks.

### 5.6.3 Former Swale Area – SWMU 10

This location was evaluated using a combination of trenching, DPT borings, rotasonic borings, monitoring wells, and groundwater and soil sampling. Although there are anecdotal reports of large-scale drum burial within the Former Swale Area, large quantities of drums and wastes were not present. The geophysical survey clearly delineated the boundaries of the swale, but did not detect the presence of large amounts of metal. Trenching at one of the isolated geophysical anomalies located the remains of a single scrapped drum. A small pocket of sludge (apparently lime sludge) was observed and sampled during trenching, but did not contain significant levels of chemical impact. Large amounts of construction and demolition debris, including concrete, were present within the Former Swale. Soils were analyzed for the App. IX-TAL, and did not exhibit high levels of chemical impact; low levels of BTEX and acetone were observed. Groundwater samples from the recovery well approximately 100 feet downgradient (west) of the Former Swale Area exhibit elevated levels of acetone and several metals (including tin), in addition to detectable chlorobenzene levels.

### 5.6.4 Suspected Waste Burial Areas

These consist of six areas where Morton Facility historical documentation suggested possible burial of small quantities of process and laboratory wastes—typically one to three drums. These locations were assessed using surface geophysical surveys followed by trenching or DPT borings, with soil sampling and analysis. Although the geophysical survey findings correlated extremely well with the actual presence of buried metallic

objects, the actual presence of buried drums or chemical wastes was observed only at Area F (Figure 4-1). Trench T-1 at this location identified the remnants of two crushed drums; a halo of cemented soil, possibly caused by the former drum contents, surrounded one of the drums. Soils at this location exhibited localized high levels of various metals, including lead, to a depth of at least 10 feet.

As discussed in 5.3.1, Rohm and Haas elected to remove soils from the T-1 location, in order to reduce potential risks associated with the metals in those soils. The T-1 soil removal was successful in significantly reducing metal and organic concentrations in this area of the site, including:

- Arsenic, reduced from pre-excavation maximum of 580 mg/kg to post-excavation maximum of 7.3 mg/kg;
- Chromium, reduced from pre-excavation maximum of 232 mg/kg to post-excavation maximum of 14.6 mg/kg;
- Lead, reduced from pre-excavation maximum of 19,300 mg/kg to post-excavation maximum of 13.2 mg/kg; and
- Tin, reduced from pre-excavation maximum of 158,000 mg/kg to post-excavation maximum of 488(J) mg/kg.

As discussed in 5.3.2, groundwater sampling at the T-1 location did not indicate the presence of elevated metals, except for tin at levels consistent with other locations in the central and northwestern portion of the site.

### 5.6.5 Combined Sewer System – SWMU 12

As described in Section 4.12, the CSS was evaluated using a combination of camera surveys, direct visual inspections of open portions (e.g., strip drains), DPT borings, monitoring wells, and soil and groundwater sampling.

As expected for an industrial piping system constructed in varying stages over approximately 50 years, the CSS exhibits a wide range of conditions and materials of construction. Extensive sections appear to be in good condition, with no apparent major integrity problems. Other portions, especially those serving process-related areas, exhibit blockages, debris accumulations, corrosion damage, and pipe failures. A summary of FI direct visual or camera survey observations regarding the system condition is provided in Figure 5-29. Subsequent work by the Morton Facility has further characterized the condition of the CSS, including areas that were inaccessible during the FI. These findings are, however, not included in this report.

Shallow monitoring wells downgradient of the largest CSS concentration, in the northeast portion of the Morton Facility, identified elevated concentrations of acetone, carbon disulfide, 2-butanone, tin, and other compounds, in addition to the presence of a separate-phase floating layer at UAW11-10, that may represent a CSS release. This area coincides with the presence of elevated ammonia, chlorides, and nitrate-nitrite in Shallow UA Sand groundwater. The presence of these compounds is probably related either to sanitary waste leakage or ammonia-bearing process waters from the CSS.

On balance, given the condition of the system and the evidence of chemical impact from leakage, the CSS must be considered a likely source of historical and on-going releases to shallow site groundwater. Rohm and Haas has initiated a capital improvement project to upgrade the CSS, address integrity issues, and minimize storm water input into the system. Portions of the southern CSS mains are currently scheduled for replacement in late 2004; soil sampling was performed along the alignment of the planned replacement lines in May 2004 for health and safety planning and waste characterization purposes. The overall CSS upgrade and repair program is currently anticipated to require through 2007 to complete.

## 5.7 SOIL BACKGROUND EVALUATION

The Morton Facility is located in a highly industrialized area, with known and potential sources of waste releases, hazardous substance releases, and airborne chemicals present throughout the surrounding area. This presents a challenge to the evaluation of chemical data from an investigation such as the FI. As discussed in other sections of this report, efforts were made to gain access to several properties near the Morton Facility including the Cincinnati Drum and Pristine site. Access for off-property sampling, however, could only be obtained from the City of Reading property.

The FI therefore does not attempt to delineate or fully characterize impact derived from sources outside the Morton Facility. Geomatrix did, however, attempt to identify such compounds, so that the distinction between potential Morton Facility constituents and those from off-site sources could be made. This identification was based on the results of off-site (background) soil sampling locations, and on the evaluation of compounds observed in on-site groundwater and soils (see Tables 5-2 through 5-5 and Figures 5-25 through 5-28).

Several groups of compounds are either present or elevated in background samples, or distributed across the Morton Facility in such a manner as to make it clear they are migrating onto the site (see discussion in Section 5.3.1). These include:

- Chloroethenes, chloroethanes, and chloroform
- PAHs
- PCBs
- Pesticides and herbicides
- Certain metals (aluminum, barium, and vanadium).

## 5.8 EVALUATION OF FRENCH DRAIN AND SLURRY WALL INTERIM MEASURES

As described in Section 4.12, a variety of measures were utilized to evaluate the effectiveness of the French drain/slurry wall combination. It should be noted that the

purposes of these two structures are largely different. The slurry wall was constructed to minimize the flow of shallow groundwater onto the Morton Facility from off-site source areas to the north. From a qualitative standpoint, it is considered likely that the slurry wall has reduced the on-site flow of any groundwater impact from Cincinnati Drum. It would have been less effective with respect to on-site migration of shallow Pristine impact, given that the slurry wall is absent along the shared boundary with Pristine. This may have been balanced somewhat by the relative absence and thin, intermittent character of the shallow sand stratum in the area of the Pristine boundary.

The French drain, in contrast, was constructed to control the potential migration of shallow groundwater from the Morton Facility off-site to Mill Creek. Groundwater on the downgradient (west) side of the French drain contains constituents present in upgradient groundwater, particularly in the central portion of the French drain. Concentrations are typically lower, however, than those observed in the upgradient locations.

This indicates that the French drain has been somewhat, but not completely, effective in containing shallow groundwater impact; some portion of that impact has moved beyond the French drain and the west Morton Facility boundary, reaching discharge points in Mill Creek.

The 2002 pumping test of the French drain indicated that it could probably be pumped at a greater average rate than has historically occurred. An increase in the average pumping rate will, however, require changes in both groundwater treatment and point of use (e.g., process, cooling) for the additional water. The Morton Facility is currently evaluating the changes that would be required, and a final decision on modifying the operation of the French drain is pending.

# 6.0 COMPLETION OF INVESTIGATION OBJECTIVES

This section discusses the degree to which the FI met the investigation objectives discussed in Section 3.0, and the Quality Assurance/Quality Control objectives set forth in the QAPP (Appendix A of the FI Work Plan).

## 6.1 INVESTIGATION-SPECIFIC OBJECTIVES

The AO specifies that the FI must "ascertain the nature and extent of the hazard posed by the hazardous wastes that are present at or that may have been released from the study areas at the [Morton] facility." As described in the approved FI Work Plan, this broad objective was translated into specific technical goals for the FI, each with individual information needs. These goals and information needs are described in Section 3.0 of this report.

During the course of the FI field activities, it was necessary to continually update the information needs for these technical goals, and to monitor progress toward fulfilling these needs. To achieve this, the USEPA, their technical consultants TechLaw, Inc. (TechLaw) and Booz Allen Hamilton, Rohm and Haas, and Geomatrix were in frequent communication throughout the course of the FI regarding the attainment of FI objectives. Specific FI goals and information needs were regularly evaluated via teleconference calls and meetings, and through the submittal of work plans, progress reports, letters, and emails. Teleconference calls were initiated between each major phase of work to discuss the findings of the investigation and re-evaluate the scope of work for the up-coming phase. In addition, scoping meetings were held at the USEPA offices to discuss the technical issues in January 2002 and January 2003. Based on the discussions at these meetings, several action items were identified that required additional field work to address. This field work was subsequently performed in February and March 2002, and again in May 2004.

The FI performed by Geomatrix on behalf of Rohm and Haas has substantially met all technical goals delineated in the FI Work Plan, as updated through on-going discussions with the USEPA. The FI should therefore be considered to have met the requirements of the AO. The specific attainment of individual goals is discussed more fully below.

**Goal 1—Evaluate whether the migration of impacted groundwater is under control. Primary information needs:**

The character and extent of impact to the Upper Aquifer.

The FI has effectively characterized impact to the Upper Aquifer, primarily through the collection and analysis of groundwater and seep samples. These samples have demonstrated that impact to the Upper Aquifer by organics and metals is present across the Morton Facility. Some of this impact is clearly derived from off-site sources, but a portion of the impact observed in soils and in the Shallow UA Sand is likely to have been derived from historic Morton Facility activities. In particular, toluene, chlorobenzenes, acetone, and tin are suspected to have originated from on-site activities. In general, groundwater impact occurs on-site. Impacted groundwater is migrating off-site to Mill Creek, however, across the central western boundary of the Morton Facility.

The presence of impact to those areas of the Lower Aquifer most likely to have been impacted by Morton Facility constituents.

In order to supplement existing on-site and off-site groundwater data from the Lower Aquifer acquired by Pristine testing, additional Lower Aquifer monitoring wells were placed in the northwest portion of the site, near the Former Surface Impoundments. These wells represented locations selected by Rohm and Haas and the USEPA as the most likely location for impact to be reaching the Lower Aquifer from sources in the northwest portion of the Morton Facility.

Based on analytical results from these wells, impact from the Morton Facility is not reaching the Lower Aquifer. Impact from off-site sources was present at these locations.

The effectiveness of the French drain and the slurry wall.

It is apparent from data immediately upgradient and downgradient of the French drain that this structure is exercising some control over the migration of impacted groundwater. Concentrations of dissolved constituents in the shallowest Upper Aquifer sand are generally lower on the downgradient side of the French drain than on the upgradient side. A portion of the shallow groundwater impact, however, does extend beyond the French drain to Mill Creek seeps. The French drain has therefore not been completely effective in containing groundwater impact within facility boundaries.

The nature of horizontal and vertical groundwater flow within the Upper Aquifer system.

Based on data from the network of existing and new monitoring wells utilized for the FI, the basic nature of Upper Aquifer groundwater flow has been characterized. Groundwater movement within the Upper Aquifer is controlled primarily by the presence of various sand strata.

As discussed in Section 5.1, there is a relatively extensive shallow sand stratum within the Upper Aquifer, termed here the Shallow UA Sand. Horizontal groundwater flow within this zone is generally to the west or southwest, sweeping from Pristine and the commercial properties east and northeast of the Morton Facility across the facility, and discharging into Mill Creek.

Deeper sand strata, termed the Deep UA Sands, are also present in those portions of the Upper Aquifer underlying the southern and eastern parts of the Morton Facility. Communication between the shallow and deeper sands of the Upper Aquifer is minimal at the Morton Facility, although some localized leakage may be present. As noted below, however, several of the deeper Upper Aquifer sands are apparently in direct hydraulic communication with the Lower Aquifer. Flow within these sands is predominantly toward the south-central portion of the Morton Facility, where communication between the Deep UA Sands and the Lower Aquifer is greatest.

The nature of flow between the Upper Aquifer and the Lower Aquifer.
Groundwater elevations are comparable for the Deep UA Sands and the Lower Aquifer, confirming hydrogeologic interpretations that communication between these sands and the Lower Aquifer may be relatively direct, particularly in the south-central area of the Morton Facility. This is not the case, however, for the Shallow UA Sand observed across most of the Morton Facility. This shallow zone did not exhibit any clear response to the shutdown and restart of Pristine Lower Aquifer pumping, indicating the relative absence of any direct or local communication between these zones.

In summary, the Shallow UA Sand is not believed to be contributing significant quantities of groundwater to the Deep UA Sands or the Lower Aquifer at the Morton Facility, with two areas representing possible exceptions:

- The thickness of sand strata in the extreme northeast corner of the Morton Facility, at the shared boundary with Pristine, suggests the presence of a more direct pathway between shallow soils and both the deep Upper Aquifer and the Lower Aquifer. The Shallow UA Sand, however, is generally absent in this area.

- The Deep UA Sand lens at UAW15-50, in the central portion of the Morton Facility. Some of FI chemical data suggests communication between the UAW15-50 sand and the Shallow UA Sand, although this is not supported by hydraulic data.

The identification of any past or continuing releases to groundwater and soils from Morton Facility sources identified in the AO or the Current Conditions Report.
All of the sources identified in the AO and the Current Conditions Report were addressed during the FI, and known or likely releases from these sources have been identified. Of these, the only source with a significant potential for current releases is the CSS (SWMU 11). A major improvement project is currently under way to address CSS integrity issues.

Relatively low concentrations of residual soil impact were observed at several of the SWMUs and other potential source areas. These may be contributing low levels of metals and/or organics to groundwater via dissolution and leaching, but do not represent focused source areas ("hot spots"). No significant impact was identified in association with several of the burial areas, or any of the aboveground waste storage tank SWMUs.

**Goal 2—Evaluate whether current risks to human health and the environment are within acceptable limits. Primary information needs:**

The character and extent of impact to seeps along and sediments in Mill Creek.
Seeps along and sediments within Mill Creek have been thoroughly characterized. Analysis of these features has identified several constituents suspected to originate from current or historic releases on the Morton Facility. In addition, it has identified several constituents suspected to originate from other sources.

The character and extent of impact to on-site shallow (<15') soils.
Soil samples from this depth have been collected from locations across the Morton Facility, including the locations of all suspected waste burial areas, all SWMUs considered to have a significant potential for releases, and in the vicinity of suspect

portions of the CSS. These samples have been analyzed for either the CLP-TAL or the App. IX TAL, depending on their location and purpose.

This evaluation has identified various metals, VOCs, and SVOCs in shallow soils. These constituents are suspected to have been derived from current or historic releases on the Morton Facility. The data acquired was sufficient to evaluate the potential for on-site sources of these compounds, and actual and potential risk levels to on-site receptors.

The character and extent of buried wastes.

All areas suspected to contain buried waste materials were evaluated using a combination of invasive and non-invasive techniques. Although areas of soil and groundwater impact were identified, the extent of actual waste materials found was both small and localized. In general, the wastes observed consisted of several drum remnants and some associated waste residue in trench T-1 (now removed, along with associated soils), thin lenses or pockets of possible sludge in parts of the Former Surface Impoundments, and one scrap drum and a small body of lime sludge within the Former Swale Area.

The presence, location and character of human and ecological receptors.

Potential receptors, both human and ecological, were identified as a part of the Risk Assessment performed by Geomatrix (2002b). These will be discussed in greater detail when a revised Risk Assessment is completed after the FI is finalized and approved. On-site human receptors included:

- Outdoor industrial (facility) workers.
- Outdoor construction workers.

Off-site human receptors included:

- Recreational users of Mill Creek.
- Individuals residing or working downwind of the Morton Facility.

Ecological receptors included the flora and fauna of Mill Creek, both aquatic and terrestrial, and fauna living on the Morton Facility.

## 6.2 QUALITY ASSURANCE OBJECTIVES

The guidelines and requirements for quality assurance/quality control (QA/QC) relating to the FI at the Morton Facility are provided in the QAPP (Appendix A of the FI Work Plan, Geomatrix, 2000b). The QAPP presents the organization, objectives, planned activities and specific QA/QC procedures for the project. The FI data were assessed to establish the validity and usability of the data presented in this FI Report. This assessment included evaluations of the following:

- Field sampling methods;
- Actual field and laboratory forms and records and sample custody procedures;
- Calibration procedures and frequency of field and laboratory instruments and equipment;
- Precision, accuracy and completeness of field data;
- Laboratory analytical procedures, as assessed through data validation;
- Accuracy and precision goals; and
- Reduction of raw analytical data into a database.

A detailed report of this QA/QC review is provided in Appendix D.

During the FI and Supplemental FI, a total of 22 Nonconformance/Variance/Clarification Reports were submitted to the USEPA with FI Project Progress Reports to identify

activities that were not consistent with procedures described in the FI Work Plan. Each nonconformance/variance issue was evaluated to assess its impact on the overall data quality objectives for the FI, and, where necessary, corrective actions were implemented. These Nonconformance Reports and the Variance Log are included in Appendix D.

Based on an assessment of quality assurance information described above and the implementation of corrective actions documented in project nonconformance reports, the overall data quality objectives were achieved for the FI. The FI data are considered valid and useable in the effort to meet the investigation-specific objectives presented in Section 3.0.

## 7.0 CONCLUSIONS

Geomatrix has performed a Facility Investigation (FI) on behalf of Rohm and Haas at the Morton Facility in Reading, Ohio. The FI was performed as a part of Rohm and Haas' response to an AO issued in August 2000 by the USEPA Region 5.

The AO directed Rohm and Haas to evaluate the character and extent of chemical impact in groundwater, soils, surface water, and sediment from potential sources on the Morton Facility, and required specific evaluation of several waste management areas. Rohm and Haas and Geomatrix developed specific goals with related information needs to attain the AO objective. These goals were developed through discussions with the EPA, and in consideration of existing information acquired for the site.

The FI utilized a number of investigative techniques to acquire information of interest. These included soil borings, monitoring wells, trenching, surface geophysical surveys, visual reconnaissance, sewer camera surveys, aquifer testing, floral and faunal surveys, and various sampling methods for soils, groundwater, sediments, and surface water. These activities were performed in a phased approach and a series of field events during the period March 2001 through May 2004.

The primary conclusions of the FI are:

- Site groundwater is present in two alluvial aquifers. The shallower is termed the Upper Aquifer, and the deeper is the Lower Aquifer. The Upper Aquifer is further subdivided into the Shallow UA Sand and the Deep UA Sands for the purposes of this evaluation.

- Groundwater within the Shallow UA Sand flows across the site from the east and northeast to the west, and discharges to Mill Creek. Groundwater within the Deep UA Sands flows generally from the west and eastern edges of the site toward the

Morton Facility's central area, where it is suspected to recharge the Lower Aquifer.

- Impact to Upper Aquifer groundwater and soils was observed at locations across the Morton Facility, consisting of generally low levels of VOCs, SVOCs (including PAHs), pesticides, PCBs, and metals. A large number of these compounds, including chloroethenes, chloroethanes, pesticides, PCBs, PAHs, and various metals, are not believed to originate from Morton Facility current or historic releases, based primarily on the physical distribution and levels of these contaminants. Impact from on-site current or historic releases consists of ethylbenzene, toluene, chlorobenzenes, acetone, tin, and other compounds.

Re: Distribution Homer OK

- Evaluation of Lower Aquifer water quality at locations considered by Rohm and Haas, the USEPA, and Geomatrix as most likely to be affected by on-site releases concluded that impact from the Morton Facility is not reaching the Lower Aquifer. Impact from off-site sources was observed in Lower Aquifer groundwater during this evaluation.

- Historic waste management areas, including the Former Surface Impoundments, the Former Swale Area, aboveground wastewater treatment and storage tanks, and suspected waste burial areas, do not exhibit significant subsurface accumulations of waste materials, oils, sludges, or other concentrated sources of on-going releases. In particular, the large quantities of drums reported for the Former Swale Area were not present.

- The French drain and recovery well termed the Groundwater Collection System (SWMU 11) appear to reduce levels of groundwater impact along the western portion of the Morton Facility. This system is not completely effective, however, in controlling the migration of impacted groundwater. This is evidenced by the

presence of suspected Morton Facility constituents in shallow groundwater downgradient (west) of the French drain, and in seeps and sediments along Mill Creek.

Although observed levels of constituents in soils, groundwater, sediment, and surface waters were generally low, certain constituents in on-site soils and groundwater could pose a potential health risk to on-site workers. Actual risks, however, are anticipated to be within acceptable levels, because current exposures to affected on-site media are either limited or absent. Potential and actual risks to off-site receptors, including residents and recreational users of Mill Creek, are also anticipated to be within acceptable limits. In their evaluation of Environmental Indicators for the Morton Facility, USEPA concluded that the migration of contaminated groundwater is under control, and that current risks to human health and the environment are within acceptable limit (USEPA, 2003a, USEPA, 2003b).

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**Table 2-1**
**Summary of Waste Management Areas**
Morton International, Inc.
Reading, Ohio

| Identification | Description | AO Study Area Reference [1] | Release Potential [2] |
|---|---|---|---|
| SWMU 1 | Former Surface Impoundments | 16 | High |
| SWMU 2 | Former Neutralization Tank | 17 | Low |
| SWMU 3 | Former Drum Storage Area | 18 | Moderate |
| SWMU 4 | Hazardous Waste Drum Storage Area | NA | Low |
| SWMU 5 | Former Sulfide Waste Treatment Tank | 19 | Low |
| SWMU 6 | Groundwater Collection System | 20 | Low |
| SWMU 7 | Groundwater Treatment Unit | 20 | Low |
| SWMU 8 | Satellite Waste Accumulation Areas | NA | Low |
| SWMU 9 | pH Control System | 21 | Low |
| SWMU 10 | Former Swale Area | 22 | High |
| SWMU 11 | Combined Sewer System | 21 | Moderate |
| Mill Creek Seeps | Seeps on east bank of Mill Creek, west of Morton Facility. | 23 | NA [4] |
| 5000-Gallon Ignitable Waste Storage Tank | Formerly used for storage of "ignitable waste." | NI [3] | NA |
| 12,000-Gallon Reactive Waste Storage Tank | Formerly used for storage of "reactive waste." | NI | NA |
| Wastewater Treatment Tank | Formerly used for wastewater treatment. | NI | NA |
| Waste Burial Location A | Burial location of small quantities of sodium and various lab samples, estimated total of 55 gallons. | NI | NA |

**Table 2-1**
**Summary of Waste Management Areas**
Morton International, Inc.
Reading, Ohio

| Identification | Description | AO Study Area Reference [1] | Release Potential [2] |
|---|---|---|---|
| Waste Burial Location B | Through 1950, area was used to neutralize acid wastes.<br>Burial location of excavation and building debris from Building 27 demolition. | NI | NA |
| Waste Burial Location C | Area was used to burn waste solvents (notably hexane, heptane, and methanol).<br>Possible location of three drums, contents unknown, buried in lime and soda ash fill. | NI | NA |
| Waste Burial Location D | One drum of sulfur monochloride buried in lime and soda ash fill. | NI | NA |
| Waste Burial Location E | Possible location of one or two drums, contents unknown, buried in lime and soda ash fill. | NI | NA |
| Waste Burial Location F | Former burial location of pipes and equipment, including sodium metal in pipes, from a building explosion and fire. The debris was later removed. | NI | NA |
| Waste Burial Location G | Possible location of three drums, contents unknown, buried in lime and soda ash. | NI | NA |

Notes:
1. The AO Study Area Reference corresponds to the paragraph within the Administrative Order (AO) that identifies the unit or location as a Study Area (USEPA, 2000).
2. The release potential was determined by USEPA Contractor TechLaw Inc. (TechLaw, 1998).
3. NI = Unit or location is not identified as a Study Area in the Administrative Order.
4. NA = Release potential not assigned by TechLaw, Inc.

# TABLE 4-1
## Summary of Monitoring Well Construction
Morton International, Inc.
Reading, Ohio

| Well Identification | Date Constructed | Location | | Top of Casing Elevation (NAVD [2]) | Depth of Boring (ft. bgs[3]) | Screened Interval (ft. bgs) | Well Casing Diameter (inches) | Screen Slot Size (inches) | Grout Seal Interval (ft. bgs) | Bentonite Seal Interval (ft. bgs) | Filter Pack Interval (ft. bgs) | Completion |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Northing [1] | Easting [1] | | | | | | | | | |
| UAW01-30 | 4/2/2001 | 5229.707 | 4270.758 | 564.27 | 29 | 14 - 29 | 4 | 0.02 | 0 - 10.3 | 10.3 - 13 | 13 - 29 | Aboveground |
| UAW01-80 | 4/3/2001 | 5218.231 | 4264.505 | 564.18 | 89 | 64.5 - 79.5 | 4 | 0.02 | 0 - 61 | 61 - 63.5 | 63.5 - 80.5 | Aboveground |
| UAW02-20 | 3/21/2001 | 5537.957 | 4469.455 | 551.59 | 19 | 8 - 18 | 4 | 0.02 | 0 - 3.9 | 3.9 - 5.9 | 5.9 - 18 | Flush |
| UAW02-40 | 3/22/2002 | 5532.532 | 4465.309 | 551.58 | 47 | 31.5 - 46.5 | 4 | 0.02 | 0 - 27.1 | 27.1 - 29.5 | 29.5 - 47 | Flush |
| UAW03-20 | 3/23/2001 | 5724.172 | 4588.110 | 551.96 | 19 | 9 - 19 | 4 | 0.02 | 0 - 5 | 5 - 7 | 7 - 19 | Flush |
| UAW04-20 | 3/23/2001 | 5706.952 | 4612.524 | 552.19 | 19 | 9 -19 | 4 | 0.02 | 0 - 4.9 | 4.9 - 7 | 7 - 19 | Flush |
| UAW05-20 | 3/23/2001 | 5882.000 | 4707.354 | 553.47 | 19 | 7 - 17 | 4 | 0.02 | 0 - 4 | 4 - 6 | 6- 19 | Flush |
| LAW05-60 (double cased) | 3/14/2002 | 5889.0096 | 4712.7351 | 553.255 | 64 | 51 - 61 | 2 | 0.02 | 0 - 44.5 (outer) 0 - 40 (inner) | 40 - 48 | 48-64 | Flush |
| LAW 05-150 (double cased) | 3/14/2002 | 5889.0096 | 4712.7351 | 553.355 | 155 | 143 - 153 | 2 | 0.02 | 0 - 44.5 (outer) 0 - 40 (inner) | 64 - 140 | 140 - 155 | Flush |
| UAW06-20 | 3/27/2001 | 5855.618 | 4718.404 | 553.25 | 19 | 9 - 19 | 4 | 0.02 | 0 - 5 | 5 - 8 | 8 - 19 | Flush |
| UAW07-20 | 3/25/2001 | 6012.607 | 4816.956 | 554.32 | 19 | 9 - 19 | 4 | 0.02 | 0 - 5.3 | 5.3 - 7.8 | 7.8 - 19 | Flush |
| UAW08-20 | 3/25/2001 | 5995.591 | 4830.911 | 554.20 | 19 | 9 - 19 | 4 | 0.02 | 0 - 6.5 | 6.5 - 8 | 8 - 19 | Flush |
| UAW09-20 | 3/27/2001 | 5207.677 | 4927.884 | 565.91 | 24 | 9 - 24 | 4 | 0.02 | 0 - 6 | 6 - 8 | 8 - 24 | Aboveground |
| UAW09-60 | 3/28/2001 | 5208.673 | 4918.107 | 566.32 | 59 | 47 - 57 | 4 | 0.02 | 0 - 43.2 | 43.2 - 45.7 | 45.7 - 57 | Aboveground |
| UAW10-50 | 8/22/2001 | 6053.8686 | 5619.0144 | 577.77 | 60 | 47 - 57 | 4 | 0.02 | 0 - 41 | 41 - 45 | 45 - 57 | Flush |
| UAW10-80 | 9/6/2001 | 6053.1906 | 5626.3057 | 577.8 | 87 | 76 - 86 | 4 | 0.02 | 0 - 71 | 71 - 74 | 74 - 86 | Flush |
| UAW11-10 | 4/17/2001 | 5816.764 | 5036.545 | 553.48 | 14.5 | 9 - 14 | 4 | 0.02 | 0 - 5.2 | 5.2 - 7.9 | 7.9 - 14.5 | Flush |
| UAW11-40 | 4/17/2001 | 5816.584 | 5028.664 | 553.45 | 45 | 34 - 44 | 4 | 0.02 | 0 - 30 | 30 - 32 | 32 - 44 | Flush |
| UAW12-20 | 3/24/2001 | 6041.409 | 5039.908 | 555.19 | 18 | 8 - 18 | 4 | 0.02 | 0 - 4.9 | 4.9 - 7 | 7 - 18 | Flush |
| LAW12-60 (double cased) | 9/8/2001 | 6039.9228 | 5031.9581 | 554.89 | 66 | 55 - 65 | 4 | 0.02 | 0 - 40 (outer) 0 - 49.5 (inner) | 49 - 53 | 53 - 66 | Flush |
| UAW13-20 | 3/24/2001 | 6024.932 | 5040.259 | 555.54 | 18 | 8 - 18 | 4 | 0.02 | 0 - 4.8 | 4.8 - 7 | 7 - 18 | Flush |

# TABLE 4-1
## Summary of Monitoring Well Construction
Morton International, Inc.
Reading, Ohio

| Well Identification | Date Constructed | Location | | Top of Casing Elevation (NAVD [2]) | Depth of Boring (ft. bgs[3]) | Screened Interval (ft. bgs) | Well Casing Diameter (inches) | Screen Slot Size (inches) | Grout Seal Interval (ft. bgs) | Bentonite Seal Interval (ft. bgs) | Filter Pack Interval (ft. bgs) | Completion |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Northing [1] | Easting [1] | | | | | | | | | |
| UAW14-10 | 4/4/2001 | 5172.449 | 5334.592 | 566.74 | 17 | 8.8 - 13.5 | 4 | 0.02 | 0 - 5 | 5 - 7.5 | 7.5 - 13.5 | Aboveground |
| UAW15-20 | 4/9/2001 | 5629.687 | 5231.839 | 561.34 | 19 | 9 - 19 | 4 | 0.02 | 0 - 4 | 4 - 7.8 | 7.8 - 19 | Flush |
| UAW15-50 | 4/8/2001 | 5640.892 | 5232.854 | 560.96 | 59 | 42.3 - 47.3 | 4 | 0.02 | 0 - 38.5 | 38.5 - 41 | 41 - 47.3 | Flush |
| UAW16-10 | 8/22/2001 | 5723.5976 | 5029.1906 | 554.71 | 15.5 | 5 - 15 | 4 | 0.02 | 0 - 1 | 1 - 3.5 | 3.5 - 15.5 | Flush |
| UAW17-40 | 4/5/2001 | 5246.715 | 5587.360 | 577.11 | 49 | 24.5 - 39.5 | 4 | 0.02 | 0 - 21 | 21 - 23.5 | 23.5 - 39.5 | Aboveground |
| UAW18-20 | 8/23/2001 | 5607.1034 | 5023.551 | 556.17 | 25 | 7.5 - 17.5 | 4 | 0.02 | 0 - 2.5 | 2.5 - 5.5 | 5.5 - 17.5 | Flush |
| UAW19-80 | 4/7/2001 | 5883.626 | 5637.833 | 580.09 | 79 | 63.5 - 78.5 | 4 | 0.02 | 0 - 59.5 | 59.5 - 62.2 | 62.2 - 78.5 | Aboveground |
| UAW20-60 | 4/10/2001 | 6050.564 | 5533.676 | 576.13 | 64 | 46.5 - 61.5 | 4 | 0.02 | 0 - 43 | 43 - 45.3 | 45.3 - 61.5 | Aboveground |
| UAW21-30 | 4/11/2001 | 4979.126 | 4573.370 | 563.73 | 27 | 11 - 26 | 4 | 0.02 | 0 - 7 | 7 - 10.4 | 10.4 - 26.5 | Aboveground |
| UAW21-80 | 4/16/2001 | 4975.354 | 4570.679 | 565.47 | 75 | 64.5 - 74.5 | 4 | 0.02 | 0 - 60.5 | 60.5 - 63 | 63 - 75 | Aboveground |
| UAW22-20 | 9/5/2001 | 5944.1318 | 5143.7382 | 557.66 | 25 | 10 - 20 | 4 | 0.02 | 0 - 5 | 5 - 8.5 | 8.5 - 20.5 | Flush |
| UAW23-20 | 9/8/2001 | 6049.533 | 5261.33 | 559.05 | 26 | 15 - 25 | 4 | 0.02 | 0 - 9.5 | 9.5 - 12.5 | 12.5 - 26 | Flush |
| UAW24-70 | 9/7/2001 | 5645.9898 | 5528.8822 | 575.9 | 82 | 63 - 73 | 4 | 0.02 | 0 - 58 | 58 - 61 | 61 - 73.5 | Flush |
| UAW25-20 | 9/8/2001 | 5386.0767 | 4367.6131 | 556.07 | 25 | 11 - 21 | 4 | 0.02 | 0 - 5.5 | 5.5 - 8.5 | 8.5 - 21 | Flush |
| UAW26-70 | 3/10/2004 | 5481.6467 | 5044.3202 | 559.60 | 78 | 67.5 - 77.5 | 4 | 0.02 | 0 - 58 | 58-65 | 65 - 79.5 | Flush |
| UAW27-50 | 3/12/2004 | 5798.3427 | 5466.2191 | 574.60 | 48 | 38 - 48 | 4 | 0.02 | 0 - 25 | 25 - 35 | 35 - 48 | Flush |

Notes:
(1) Northing and Easting are plant coordinates
(2) NAVD = North American Vertical Datum 1929
(3) bgs = below ground surface
All wells constructed of Schedule 40 Polyvinyl chloride rise and slotted stainless steel screen

**Table 4-2**
**List of Soil Samples and Target Analyte Lists**
Morton International, Inc.
Reading, Ohio

| Sample Identification | Date | Sample ID | Target Analyte List |
|---|---|---|---|
| B01-1.5' | 10/9/2001 | 100901183 | BKG |
| B01-11.5' | 10/9/2001 | 100901184 | BKG |
| B02-1.5' | 10/9/2001 | 100901186 | BKG |
| B02-11.5' | 10/9/2001 | 100901187 | BKG |
| B03-1.5' | 10/9/2001 | 100901188 | BKG |
| B03-11.5' | 10/9/2001 | 100901189 | BKG |
| B04-1.5' | 10/9/2001 | 100901190 | BKG |
| B04-1.5' (Dup) | 10/9/2001 | 100901191 | BKG |
| B04-11.5' | 10/9/2001 | 100901192 | BKG |
| B05-1.5' | 10/9/2001 | 100901193 | BKG |
| B05-11.5' | 10/9/2001 | 100901194 | BKG |
| B06-1.5' | 10/9/2001 | 100901195 | BKG |
| B06-11' | 10/9/2001 | 100901196 | BKG |
| B07-1' | 10/9/2001 | 100901197 | BKG |
| B07-9' | 10/9/2001 | 100901198 | BKG |
| B08-2' | 10/9/2001 | 100901199 | BKG |
| B08-9' | 10/9/2001 | 100901200 | BKG |
| B09-10' | 10/9/2001 | 100901202 | BKG |
| B09-2' | 10/9/2001 | 100901201 | BKG |
| B10-11' | 10/9/2001 | 100901204 | BKG |
| B10-2' | 10/9/2001 | 100901203 | BKG |
| DP01-2' | 7/24/2001 | 72401122 | CLP |
| DP01-9.5' | 7/24/2001 | 72401123 | CLP |
| DP02-2' | 7/24/2001 | 72401124 | CLP |
| DP02-9.5' | 7/24/2001 | 72401125 | CLP |
| DP03-2' | 7/24/2001 | 72401126 | CLP |
| DP03-8.5' | 7/24/2001 | 71401127 | CLP |
| DP03-8.5' | 7/24/2001 | 72401127 | CLP |
| DP05-1' | 7/25/2001 | 72501130 | CLP |
| DP05-8.5' | 7/25/2001 | 72501131 | CLP |
| DP07-9' | 7/26/2001 | 72601132 | CLP |
| DP08-11' | 7/26/2001 | 72601134 | CLP |
| DP08-6' | 7/26/2001 | 72601133 | CLP |
| DP09-12' | 7/27/2001 | 72701135 | CLP |
| DP10-10' | 7/27/2001 | 72701138 | APP IX |
| DP10-10' (Dup) | 7/27/2001 | 72701136 | APP IX |
| DP10-2' | 7/27/2001 | 72701137 | APP IX |
| DP12-1.5' | 7/28/2001 | 72801140 | CLP |
| DP12-9' | 7/28/2001 | 72801141 | CLP |
| DP13-11' | 7/29/2001 | 72901145 | APP IX |
| DP13-3' | 7/29/2001 | 72901144 | APP IX |
| DP14-3' | 7/29/2001 | 72901146 | APP IX |
| DP14-9' | 7/29/2001 | 72901147 | APP IX |
| DP15-2' | 7/29/2001 | 72901148 | APP IX |
| DP15-9' | 7/29/2001 | 72901149 | APP IX |
| DP16-12.5' | 7/30/2001 | 73001151 | APP IX |
| DP16-2.8' | 7/30/2001 | 73001150 | APP IX |

**Table 4-2**
**List of Soil Samples and Target Analyte Lists**
Morton International, Inc.
Reading, Ohio

| Sample Identification | Date | Sample ID | Target Analyte List |
|---|---|---|---|
| DP17-13' | 7/30/2001 | 73001153 | APP IX |
| DP17-3' | 7/30/2001 | 73001152 | APP IX |
| DP18-14.5' | 7/30/2001 | 73001155 | CLP |
| DP18-2' | 7/30/2001 | 73001154 | CLP |
| DP19-13' | 7/30/2001 | 73001157 | CLP |
| DP19-2' | 7/30/2001 | 73001156 | CLP |
| DP20-14.5' | 7/30/2001 | 73001159 | CLP |
| DP20-2' | 7/30/2001 | 73001158 | CLP |
| DP23-2.5' | 8/1/2001 | 80101160 | CLP |
| DP23-9' | 8/1/2001 | 80101161 | CLP |
| DP25-2.5' | 8/7/2001 | 80701163 | CLP |
| DP25-2.5' (Dup) | 8/7/2001 | 80701164 | CLP |
| DP25-7.5' | 8/7/2001 | 80701165 | CLP |
| DP29-5' | 11/9/2001 | 110901246 | CLP |
| DP31-15' | 12/5/2001 | 120501294 | APP IX |
| DP36-19' | 12/5/2001 | 120501298 | APP IX |
| DP37-19' | 12/5/2001 | 120501297 | APP IX |
| DP37-19' (Dup) | 12/5/2001 | 120501296 | APP IX |
| DP38'-14.5' | 12/5/2001 | 120501299 | APP IX |
| DP39-10' | 3/5/2002 | 030502300 | CLP MET+TIN |
| DP40-6' (Dup) | 3/5/2002 | 030502302 | CLP MET+TIN |
| DP40-6' | 3/5/2002 | 030502301 | CLP MET+TIN |
| DP41-6' | 3/5/2002 | 030502303 | CLP MET+TIN |
| DP42-6' | 3/5/2002 | 030502304 | CLP MET+TIN |
| DP43-1.5' | 3/5/2002 | 030502305 | CLP MET |
| DP44-1.5' | 3/5/2002 | 030502306 | CLP MET |
| DP45-1.5' | 3/5/2002 | 030502307 | CLP MET |
| DP46-1.5' | 3/5/2002 | 030502308 | CLP MET |
| DP47-5' | 3/9/2004 | 20040309DP47V5N | CR SPEC, PB, SN |
| DP47-10' | 3/9/2004 | 20040309DP47V10N | SN, PB |
| DP48-5' | 3/9/2004 | 20040309DP48V5N | PB, SN |
| DP49-10' | 3/9/2004 | 20040309DP49V10N | PB, SN |
| DP49-5' | 3/9/2004 | 20040309DP49V5.5N | PB, SN |
| DP50-10' | 3/10/2004 | 20040310DP50V10N | TOLUENE |
| DP51-10' | 3/10/2004 | 20040310DP51V10N | TOLUENE |
| DP52-1-1.5' | 3/10/2004 | 20040310DP52V1-1.5N | CR SPEC |
| DP52-5' | 3/10/2004 | 20040310DP52V5N | TOLUENE |
| DP54-1-1.5' | 3/10/2004 | 20040310DP54V1-1.5N | CR SPEC, SN |
| DP55-9' | 3/10/2004 | 20040310DP55V9N | CR SPEC |
| DP56A-9.5-10.5' | 3/15/2004 | 20040315DP56AV9.5-10.5N | CLP+ |
| DP58A-8.5-9.5' | 3/15/2004 | 20040315DP58AV8.5-9.5N | CLP+ |
| DP60A-6.6-7.4' | 3/15/2004 | 20040315DP60AV6.6-7.4N | CLP+ |
| DP61A-5-6' | 3/15/2004 | 20040315DP61AV5-6N | CLP+ |
| DP61A-5-6' BLIND DUP | 3/15/2004 | 20040315CINBLIND | CLP+ |
| DP64A-8.5-9.5' | 3/15/2004 | 20040315DP64AV8.5-9.5N | CLP+ |
| DP66A-9.5-10.5 | 3/15/2004 | 20040315DP66AV9.5-10.5N | CLP+ |
| DP67A-12.5-13.5' | 3/15/2004 | 20040315DP67AV12.3-13.3N | CLP+ |

**Table 4-2**
**List of Soil Samples and Target Analyte Lists**
Morton International, Inc.
Reading, Ohio

| Sample Identification | Date | Sample ID | Target Analyte List |
|---|---|---|---|
| DP70A-9-11' | 3/14/2004 | 20040314DP70AV9-11N | CLP+ |
| DP72A-12-13' | 3/14/2004 | 20040314DP72AV12-13N | CLP+ |
| DP73A-12-13' | 3/14/2004 | 20040314DP73AV12-13N | CLP+ |
| DP77-14.6-15' | 3/13/2004 | 20040313DP77V14.6-15N | CR SPEC |
| DP78A-9-10' | 3/14/2004 | 20040314DP78AV9-10N | CLP+ |
| DP79A-12-13' | 3/14/2004 | 20040314DP79AV12-13N | CLP+ |
| DP80-1' | 3/15/2004 | 20040315DP80V1N | CR SPEC |
| DP80-1.5' | 3/15/2004 | 20040315DP80V1.5N | SN |
| HA1-1.5' | 3/14/2004 | 20040314HA1V1.5N | SN |
| HA2-1.5' | 3/14/2004 | 20040314HA2V1.5N | SN |
| HA3-1.5' | 3/14/2004 | 20040314HA3V1.5N | SN |
| HA3-1.5' BLIND DUP | 3/14/2004 | 20040314CINBLIND | SN |
| HA4-1.5' | 3/14/2004 | 20040314HA4V1.5N | SN |
| HA5-1.5' | 3/14/2004 | 20040314HA5V1.5N | SN |
| HA6-1.5' | 3/14/2004 | 20040314HA6V1.5N | SN |
| HA7-1.5' | 3/14/2004 | 20040314HA7V1.5N | SN |
| HA8-1.5' | 3/14/2004 | 20040314HA8V1.5N | SN |
| HA9-1.5' | 3/14/2004 | 20040314HA9V1.5N | SN |
| HA10-1.5' | 3/14/2004 | 20040314HA10V1.5N | SN |
| ROB1 | 3/16/2004 | 20040316R0B1N | TCLP METALS |
| ROB2 | 3/16/2004 | 20040316R0B2N | TCLP METALS |
| ROB3 | 3/15/2004 | 20040315R0B3N | TCLP METALS |
| ROB4 | 3/15/2004 | 20040315R0B4N | TCLP METALS |
| ROB5 | 3/15/2004 | 20040315R0B5N | TCLP METALS |
| ROB6 | 3/15/2004 | 20040315R0B6N | TCLP METALS |
| ROB7 | 3/15/2004 | 20040315R0B7N | TCLP METALS |
| ROB8 | 3/16/2004 | 20040316R0B8N | TCLP METALS |
| ROB9 | 3/16/2004 | 20040316R0B9N | TCLP METALS |
| ROB10 | 3/16/2004 | 20040316R0B10N | TCLP METALS |
| ROB11 | 3/16/2004 | 20040316R0B11N | TCLP METALS |
| ROB12 | 3/24/2004 | 20040324ROB12N | TCLP METALS |
| ROBCOMP | 3/16/2004 | 20040316R0BCOMPN | TCLP METALS |
| STR01-114' | 3/9/2001 | 30901012 | GEOTECH |
| STR01-15' | 3/8/2001 | 30801004 | GEOTECH |
| STR01-21' | 3/8/2001 | 30801003 | CLP |
| STR01-29' | 3/8/2001 | 30801005 | GEOTECH |
| STR01-3' | 3/8/2001 | 30801001 | CLP |
| STR01-47' | 3/9/2001 | 30901006 | GEOTECH |
| STR01-58' | 3/9/2001 | 30901007 | GEOTECH |
| STR01-73' | 3/9/2001 | 30901009 | CLP |
| STR01-77' | 3/9/2001 | 30901008 | GEOTECH |
| STR01-88' | 3/9/2001 | 30901010 | CLP |
| STR01-92.5' | 3/9/2001 | 30901011 | GEOTECH |
| STR02-1' | 3/13/2001 | 31301025 | CLP |
| STR02-12.5' | 3/13/2001 | 31301026 | CLP |
| STR02-22' | 3/13/2001 | 31301027 | GEOTECH |
| STR02-55' | 3/13/2001 | 31301028 | GEOTECH |

**Table 4-2**
**List of Soil Samples and Target Analyte Lists**
Morton International, Inc.
Reading, Ohio

| Sample Identification | Date | Sample ID | Target Analyte List |
|---|---|---|---|
| STR03-12.5' | 3/14/2001 | 31401032 | APP IX |
| STR03-16' | 3/14/2001 | 31401033 | GEOTECH |
| STR03-37' | 3/19/2001 | 31901034 | GEOTECH |
| STR03-4' | 3/14/2001 | 31401031 | APP IX |
| STR03-58.5' | 3/19/2001 | 31901035 | GEOTECH |
| STR04-1.5' | 3/19/2001 | 31901036 | CLP |
| STR04-17.5' | 3/19/2001 | 31901037 | CLP |
| STR04-17.5' (Dup) | 3/19/2001 | 31901038 | CLP |
| STR04-22.5' | 3/19/2001 | 31901039 | GEOTECH |
| STR04-53.5' | 3/20/2001 | 32001040 | GEOTECH |
| STR04-88' | 3/20/2001 | 32001041 | GEOTECH |
| STR05-1.5' | 3/10/2001 | 31001013 | CLP |
| STR05-11.3' | 3/10/2001 | 31001016 | CLP |
| STR05-17.5' | 3/10/2001 | 31001017 | GEOTECH |
| STR05-35.5' | 3/10/2001 | 31001018 | GEOTECH |
| STR05-7' | 3/10/2001 | 31001015 | GEOTECH |
| STR06-1' | 3/11/2001 | 31101019 | CLP |
| STR06-15' | 3/11/2001 | 31101021 | CLP |
| STR06-45.5' | 3/11/2001 | 31101022 | GEOTECH |
| STR06-7.5' | 3/11/2001 | 31101020 | GEOTECH |
| STR06-76' | 3/11/2001 | 31101023 | GEOTECH |
| STR06-87.5' | 3/11/2001 | 31101024 | GEOTECH |
| STR07-1.5' | 3/21/2001 | 32101042 | CLP |
| STR07-18' | 3/21/2001 | 32101043 | CLP |
| STR08-1.5' | 3/26/2001 | 32601054 | CLP |
| STR08-13' | 3/26/2001 | 32601055 | CLP |
| STR08-13' Dup | 3/26/2001 | 32601056 | CLP |
| STR08-17.5' | 3/26/2001 | 32601057 | GEOTECH |
| STR08-44' | 3/26/2001 | 32601058 | GEOTECH |
| STR09-7.5' | 4/4/2001 | 40401069 | CLP |
| STR10-1.5' | 4/7/2001 | 40701074 | APP IX |
| STR10-11' | 4/7/2001 | 40701075 | APP IX |
| STR11-102' | 8/21/2001 | 82101175 | GEOTECH |
| STR11-2' | 8/20/2001 | 82001166 | CLP |
| STR11-53' | 8/20/2001 | 82001171 | GEOTECH |
| STR11-6' | 8/20/2001 | 82001169 | GEOTECH |
| STR11-63' | 8/20/2001 | 82001172 | GEOTECH |
| STR11-77' | 8/21/2001 | 82101173 | GEOTECH |
| STR11-83' | 8/21/2001 | 82101174 | GEOTECH |
| STR11-9' | 8/20/2001 | 82001168 | CLP |
| STR11-9' (Dup) | 8/20/2001 | 82001167 | CLP |
| STR11-9' | 8/20/2001 | 82001170 | GEOTECH |
| STR13-1-1.5' | 3.9/04 | 20040309 | SN |
| T-1-4' | 11/8/2001 | 110801236 | APP IX |
| T-1-6' | 11/8/2001 | 110801237 | APP IX |
| T-1B2-8' | 3/16/2004 | 20040316T-1B2V8N | CLP+ |
| T-1B-8' | 3/15/2004 | 20040315T-1BV8N | AS, PB, CR, SN |

**Table 4-2**
**List of Soil Samples and Target Analyte Lists**
Morton International, Inc.
Reading, Ohio

| Sample Identification | Date | Sample ID | Target Analyte List |
|---|---|---|---|
| T-1DC-4-5' | 3/16/2004 | 20040316T-1DCV4-5N | CLP+ |
| T-1E-2-6' | 3/16/2004 | 20040316T-1E2V6N | CLP+ |
| T-1E-6' | 3/15/2004 | 20040315T-1EV6N | AS, PB, CR, SN |
| T-1FILL-0' | 3/16/2004 | 20040316T-1F1LLV0N | CLP+ |
| T-1NE-4' | 3/16/2004 | 20040316T-1NEV4N | CLP+ |
| T-1N-6' | 3/16/2004 | 20040316T-1NV6N | CLP+ |
| T-1S-5-6' | 3/15/2004 | 20040315T-1SV5-6N | AS, PB, CR, SN |
| T-1W2-6' | 3/16/2004 | 20040316T-1W2V6N | CLP+ |
| T-1W-6' | 3/15/2004 | 20040315T-1WV6N | AS, PB, CR, SN |
| T-2-3' | 11/8/2001 | 110801238 | APP IX |
| T-2-9' | 11/8/2001 | 110801239 | APP IX |
| T-3-11' | 11/8/2001 | 110801241 | APP IX |
| T-3-3' | 11/8/2001 | 110801240 | APP IX |
| T-4-3' | 11/9/2001 | 110901243 | APP IX |
| T-4-9' | 11/9/2001 | 110901242 | APP IX |
| T-5-3' | 11/9/2001 | 110901244 | APP IX |
| T-5-9' | 11/9/2001 | 110901245 | APP IX |
| T-6-10' | 11/10/2001 | 111001248 | APP IX |
| T-6-3' | 11/10/2001 | 111001247 | APP IX |
| T-6-7.5' | 11/11/2001 | 111101249 | APP IX |
| T-8-3' | 11/11/2001 | 111101271 | APP IX |
| T-8-9' | 11/11/2001 | 111101272 | APP IX |
| UAW01-30-1.5' | 4/2/2001 | 40201063 | CLP |
| UAW01-30-15' | 4/2/2001 | 40201064 | CLP |
| UAW04-20-10' | 3/23/2001 | 32301045 | CLP |
| UAW05-20-1.5' | 3/23/2001 | 32301046 | CLP |
| UAW05-20-13' | 3/23/2001 | 32301047 | CLP |
| UAW06-20-1.5' | 3/26/2001 | 32601059 | CLP |
| UAW06-20-11.5' | 3/26/2001 | 32601060 | CLP |
| UAW08-20-13' | 3/24/2001 | 32401053 | APP IX |
| UAW09-20-1.5' | 3/27/2001 | 32701061 | CLP |
| UAW09-20-15' | 3/27/2001 | 32701062 | CLP |
| UAW11-40-2' | 4/17/2001 | 41701087 | CLP |
| UAW11-40-10' | 4/17/2001 | 41701088 | CLP |
| UAW12-20-12' | 3/24/2001 | 32401049 | APP IX |
| UAW13-20-1.5' | 3/24/2001 | 32401050 | APP IX |
| UAW13-20-11.5' | 3/24/2001 | 32401051 | APP IX |
| UAW14-10-1.5' | 4/4/2001 | 40401067 | CLP |
| UAW15-20-2' | 4/9/2001 | 40901079 | CLP |
| UAW15-20-2' DUP | 4/9/2001 | 40901080 | CLP |
| UAW15-20-8.5' | 4/9/2001 | 40901081 | CLP |
| UAW16-10-2' | 8/22/2001 | 82201176 | CLP |
| UAW16-10-5.5' | 8/22/2001 | 82201177 | CLP |
| UAW17-40-1.5' | 4/5/2001 | 4050170 | CLP |
| UAW17-40-5' | 4/5/2001 | 4050171 | CLP |
| UAW18-20-1' | 8/23/2001 | 82301178 | CLP |
| UAW18-20-15' | 8/23/2001 | 82301180 | CLP |

# Table 4-2
## List of Soil Samples and Target Analyte Lists
Morton International, Inc.
Reading, Ohio

| Sample Identification | Date | Sample ID | Target Analyte List |
|---|---|---|---|
| UAW19-80-1.5' | 4/6/2001 | 40601072 | CLP |
| UAW19-80-15' | 4/6/2001 | 40601073 | CLP |
| UAW20-60-1.5' | 4/9/2001 | 40901082 | CLP |
| UAW20-60-9.5' | 4/9/2001 | 40901083 | CLP |
| UAW21-30-1.5' | 4/11/2001 | 41101084 | CLP |
| UAW21-30-10' | 4/11/2001 | 41101085 | CLP |
| UAW22-20-2' | 9/5/2001 | 90501181 | CLP |
| UAW22-20-11' | 9/5/2001 | 90501182 | CLP |

Notes:
APP IX: Appendix IX Target Analyte List or App IX - TAL
AS: Arsenic
CLP: Contract Laboratory Target Analyte List or CLP - TAL
CLP+: CLP-TAL VOCs, SVOC: + Aniline, Pesticides, PCBs, Metals + Tin
CLP MET: Metals subset of CLP - TAL
CR: Chromium Speciation
GEOTECH: Geotechnical parameters
PB: Lead
SN: Tin
TCLP Metals:Toxicity Characteristic Leaching Procedure for waste characterization
Copies of Target Analyte Lists are provided in Appendix B of this Report.

**Table 4-3**
**List of Groundwater Samples and Target Analyte Lists**
Morton International, Inc.
Reading, Ohio

| Sample Location | Date | Sample ID | Target Analyte List |
|---|---|---|---|
| MW-EPA-1 | 5/8/2001 | 50801113 | CLP,WQ |
| | 11/15/2001 | 111501289 | CLP,WQ |
| | 10/20/2002 | 102002356 | MON TAL |
| | 11/12/2003 | 20031112MW-EPA-1V15N | CLP+ |
| | 3/28/2004 | 20040328MW-EPA-1V15N | CLP+ |
| MW-EPA-2 | 5/8/2001 | 50801114 | CLP, WQ |
| | 11/14/2001 | 111401286 | CLP, WQ |
| | 10/20/2002 | 102002352 | MON TAL |
| | 11/11/2003 | 20031111MW-EPA-2V15@N | CLP+ |
| | 3/29/2004 | 20040329MW-EPA-2V15@N | CLP+ |
| MW-EPA-3 | 5/6/2001 | 50601101 | CLP, WQ |
| | 11/13/2001 | 111301280 | CLP, WQ |
| | 10/17/2002 | 101702330 | MON TAL |
| | 11/13/2003 | 20031113-MW-EPA-3V15N | CLP+ |
| | 3/30/2004 | 20040330MW-EPA-3V15N | CLP+ |
| MW-EPA-4 | 5/8/2001 | 50801117 | CLP, WQ |
| | 11/13/2001 | 111301279 | CLP, WQ |
| | 10/18/2002 | 101802339 | MON TAL |
| | 11/16/2003 | 20031116MW-EPA-4V18N | CLP+ |
| | 4/6/2004 | 20040406MW-EPA-4V18N | CLP+ |
| Recovery Well | 7/29/2001 | 72901142 | APP IX |
| | 4/6/2004 | 20040406RWV20@N | CLP+ |
| UAW01-30 | 5/4/2001 | 50401091 | CLP, WQ |
| | 11/8/2001 | 110801250 | CLP, WQ |
| | 10/17/2002 | 101702332 | MON TAL |
| | 11/11/2003 | 20031111UAW01-30V28N | CLP+ |
| | 3/24/2004 | 20040324UAW01-30V28.5N | CLP+ |
| UAW01-80 | 5/4/2001 | 50401089 | CLP, WQ |
| | 10/10/2001 | 101001205 | CLP, WQ |
| | 11/12/2001 | 111101269 | CLP, WQ |
| | 10/17/2002 | 101702333 | MON TAL |
| | 11/11/2003 | 20031111UAW01-80V74N | CLP+ |
| | 3/24/2004 | 20040324UAW01-8OV74N | CLP+ |
| UAW02-20 | 5/7/2001 | 50701107 | CLP, WQ |
| | 11/10/2001 | 111001257 | CLP, WQ |
| | 10/17/2002 | 101702334 | MON TAL |
| | 11/12/2003 | 20031112UAW02-20V15N | CLP+ |
| | 3/26/2004 | 20040326UAW02-20V15N | CLP+ |
| UAW02-20 (Dup) | 5/7/2001 | 50701110 | CLP, WQ |
| UAW02-40 | 5/7/2001 | 50701106 | CLP, WQ |
| | 11/10/2001 | 111001256 | CLP, WQ |
| | 10/17/2002 | 101702335 | MON TAL |
| | 11/12/2003 | 20031112UAW02-40V38N | CLP+ |
| | 3/26/2004 | 20040326UAW02-40V38N | CLP+ |
| UAW03-20 | 5/7/2001 | 50701112 | CLP, WQ |
| | 11/11/2001 | 111101261 | CLP, WQ |
| | 10/23/2002 | 102302362 | MON TAL |
| | 11/12/2003 | 20031112UAW03-20V16N | CLP+ |
| | 3/28/2004 | 20040328UAW03-20V16N | CLP+ |

**Table 4-3**
**List of Groundwater Samples and Target Analyte Lists**
Morton International, Inc.
Reading, Ohio

| Sample Location | Date | Sample ID | Target Analyte List |
|---|---|---|---|
| UAW04-20 | 5/7/2001 | 50701111 | CLP, WQ |
| | 11/11/2001 | 111101262 | CLP, WQ |
| | 10/20/2002 | 102002357 | MON TAL |
| | 11/12/2003 | 20031112UAW04-20V16N | CLP+ |
| | 3/28/2004 | 20040328UAW04-20V16N | CLP+ |
| UAW05-20 | 5/6/2001 | 50601102 | CLP, WQ |
| | 10/10/2001 | 101001206 | CLP, WQ |
| | 11/12/2001 | 111101270 | CLP, WQ |
| | 10/20/2002 | 102002359 | MON TAL |
| | 11/10/2003 | 20031110UAW05-20V12@N | CLP+ |
| | 3/28/2004 | 20040328UAW05-20V15N | CLP+ |
| UAW05-20 (Dup) | 3/28/2004 | 20040328CINBLIND | CLP+ |
| UAW06-20 | 5/6/2001 | 50601103 | CLP, WQ |
| | 10/10/2001 | 101001208 | CLP, WQ |
| | 11/13/2001 | 111301274 | CLP, WQ |
| | 10/20/2002 | 102002360 | MON TAL |
| | 11/12/2003 | 20031112UAW06-20V14@N | CLP+ |
| | 3/29/2004 | 20040329UAW06-20V14@N | CLP+ |
| UAW07-20 | 5/8/2001 | 50801115 | APP IX, WQ |
| | 11/15/2001 | 111501290 | APP IX, WQ |
| | 10/20/2002 | 102002355 | MON TAL |
| | 11/12/2003 | 20031112UAW07-20V14N | CLP+ |
| | 4/5/2004 | 20040405UAW07-20V14N | CLP+ |
| UAW07-20 (Dup) | 5/8/2001 | 50801119 | APP IX, WQ |
| | 11/12/2003 | BLIND 11/12/03 | CLP+ |
| UAW08-20 | 5/6/2001 | 50601109 | APP IX, WQ |
| | 11/13/2001 | 111301273 | APP IX, WQ |
| | 10/20/2002 | 102002358 | MON TAL |
| | 11/10/2003 | 20031110UAW08-20V14@N | CLP+ |
| | 3/29/2004 | 20040329UAW08-20V14@N | CLP+ |
| UAW09-20 | 5/5/2001 | 50501095 | CLP, WQ |
| | 11/9/2001 | 110901252 | CLP, WQ |
| | 10/16/2002 | 101602325 | MON TAL |
| | 11/11/2003 | 20031111UAW09-20V24N | CLP+ |
| | 4/6/2004 | 20040406UAW09-20V24N | CLP+ |
| UAW09-60 | 5/5/2001 | 50501094 | CLP, WQ |
| | 11/9/2001 | 110901253 | CLP, WQ |
| | 10/16/2002 | 101602324 | MON TAL |
| | 11/11/2003 | 20031111UAW09-60V52N | CLP+ |
| | 4/6/2004 | 20040406UAW09-60V52N | CLP+ |
| UAW10-50 | 10/12/2001 | 101201229 | CLP, WQ |
| | 11/13/2001 | 111301277 | CLP, WQ |
| | 10/19/2002 | 101902350 | MON TAL |
| | 11/10/2003 | 20031110UAW10-50V52@N | CLP+ |
| | 3/30/2004 | 20040330UAW10-50V52@N | CLP+ |
| UAW10-80 | 10/12/2001 | 101201228 | CLP, WQ |
| | 11/13/2001 | 111301276 | CLP, WQ |
| | 10/19/2002 | 101902349 | MON TAL |
| | 11/13/2003 | 20031113UAW10-80V81@N | CLP+ |

**Table 4-3**
**List of Groundwater Samples and Target Analyte Lists**
Morton International, Inc.
Reading, Ohio

| Sample Location | Date | Sample ID | Target Analyte List |
|---|---|---|---|
| | 3/30/2004 | 20040330UAW10-80V81@N | CLP+ |
| UAW11-10 | 5/8/2001 | 50801120 | CLP, WQ |
| | 11/10/2001 | 111001258 | CLP, WQ |
| | 10/18/2002 | 101802343 | MON TAL |
| | 11/16/2003 | 20031116UAW11-10V12N | CLP+ |
| | 4/6/2004 | 20040406UAW11-10V12N | CLP+ |
| UAW11-40 | 5/8/2001 | 50801118 | CLP, WQ |
| | 11/12/2001 | 111101268 | CLP, WQ |
| | 11/40/02 | 101802342 | MON TAL |
| | 11/16/2003 | 20031116UAW11-40V38N | CLP+ |
| | 4/6/2004 | 20040406UAW11-40V38N | CLP+ |
| UAW11-40 (Dup) | 4/6/2004 | 20040406CINBLIND | CLP+ |
| UAW12-20 | 5/6/2001 | 50601108 | APP IX, WQ |
| | 11/15/2001 | 111501292 | APP IX, WQ |
| | 10/20/2002 | 102002353 | MON. TAL |
| | 11/12/2003 | 20031112UAW12-20V14N | CLP+ |
| | 3/28/2004 | 20040328UAW12-20V14N | CLP+ |
| UAW13-20 | 5/6/2001 | 50601105 | APP IX, WQ |
| | 11/15/2001 | 111501291 | APP IX, WQ |
| | 10/23/2002 | 102302363 | MON TAL |
| | 11/12/2003 | 20031112UAW13-20V14N | CLP+ |
| | 3/28/2004 | 20040328UAW13-20V14N | CLP+ |
| UAW14-10 | 5/5/2001 | 50501093 | CLP, WQ |
| | 11/9/2001 | 110901254 | CLP, WQ |
| | 10/16/2002 | 101602326 | MON TAL |
| | 11/16/2003 | 20031116UAW14-10V13N | CLP+ |
| | 4/5/2004 | 20040405UAW14-10V13N | CLP+ |
| UAW15-20 | 5/6/2001 | 50601098 | CLP, WQ |
| | 11/11/2001 | 111101264 | CLP, WQ |
| | 10/18/2002 | 101802345 | MON TAL |
| | 11/17/2003 | 20031117UAW15-20V14N | CLP+ |
| | 4/7/2004 | 20040407UAW15-20V14N | CLP+ |
| UAW15-50 | 5/6/2001 | 50601099 | CLP, WQ |
| | 11/11/2001 | 111101265 | CLP, WQ |
| | 10/18/2002 | 101802344 | MON TAL |
| | 11/17/2003 | 20031117UAW15-50V44N | CLP+ |
| | 4/7/2004 | 20040407UAW15-50V44N | CLP+ |
| UAW16-10 | 10/12/2001 | 101201230 | CLP, WQ |
| | 11/13/2001 | 111301281 | CLP, WQ |
| | 10/18/2002 | 101802341 | MON TAL |
| | 11/16/2003 | 20031116UAW16-10V12N | CLP+ |
| | 4/7/2004 | 20040407UAW16-10V12N | CLP+ |
| UAW16-10 (Dup) | 10/12/2001 | 101201231 | CLP, WQ |
| | 11/16/2003 | BLIND 11/17/03 | CLP+ |
| UAW17-40 | 5/5/2001 | 50501092 | CLP, WQ |
| | 11/9/2001 | 110901255 | CLP, WQ |
| | 10/16/2002 | 101602327 | MON TAL |
| | 11/16/2003 | 20031116UAW17-40V34N | CLP+ |
| | 3/31/2004 | 20040331UAW17-40V34N | CLP+ |

**Table 4-3**
**List of Groundwater Samples and Target Analyte Lists**
Morton International, Inc.
Reading, Ohio

| Sample Location | Date | Sample ID | Target Analyte List |
|---|---|---|---|
| UAW18-20 | 10/12/2001 | 101201232 | CLP, WQ |
| | 11/13/2001 | 111301278 | CLP, WQ |
| | 10/18/2002 | 101802340 | MON TAL |
| | 11/16/2003 | 20031116UAW18-20V15N | CLP+ |
| | 4/7/2004 | 20040407UAW18-20V15N | CLP+ |
| UAW19-80 | 5/6/2001 | 50601100 | CLP, WQ |
| | 11/12/2001 | 111101267 | CLP, WQ |
| | 10/17/2002 | 101702329 | MON TAL |
| | 11/13/2003 | 20031113UAW19-80V70N | CLP+ |
| | 3/30/2004 | 20040330UAW19-80V70N | CLP+ |
| UAW19-80 (Dup) | 11/12/2001 | 111101266 | CLP, WQ |
| | 10/17/2002 | 101702331 | MON TAL |
| UAW20-60 | 5/7/2001 | 50701104 | CLP, WQ |
| | 11/14/2001 | 111401287 | CLP, WQ |
| | 10/19/2002 | 101902348 | MON TAL |
| | 11/13/2003 | 20031113UAW20-60V53N | CLP+ |
| | 3/30/2004 | 20040330UAW20-60V53N | CLP+ |
| UAW20-60 (Dup) | 11/14/2001 | 111401283 | CLP, WQ |
| | 10/19/2002 | 101902347 | MON TAL |
| UAW21-30 | 5/5/2001 | 50501097 | CLP, WQ |
| | 11/11/2001 | 111101263 | CLP, WQ |
| | 10/18/2002 | 101802338 | MON TAL |
| | 11/11/2003 | 20031111UAW21-30V19@N | CLP+ |
| | 3/27/2004 | 20040327UAW21-30V21@N | CLP+ |
| UAW21-80 | 5/5/2001 | 50501096 | CLP, WQ |
| | 11/11/2001 | 111101260 | CLP, WQ |
| | 10/18/2002 | 101802337 | MON TAL |
| | 11/11/2003 | 20031111UAW21-80V70N | CLP+ |
| | 3/27/2004 | 20040327UAW21-80V70N | CLP+ |
| UAW22-20 | 10/13/2001 | 101301234 | CLP, WQ |
| | 11/13/2001 | 111301275 | CLP, WQ |
| | 10/20/2002 | 102002361 | MON TAL |
| | 11/10/2003 | 20031110UAW22-20V15@N | CLP+ |
| | 3/29/2004 | 20040329UAW22-20V15@N | CLP+ |
| UAW23-20 | 10/12/2001 | 101201226 | CLP, WQ |
| | 11/14/2001 | 111401284 | CLP, WQ |
| | 10/19/2002 | 101902351 | MON TAL |
| | 11/13/2003 | 20031113UAW23-20V23N | CLP+ |
| | 3/28/2004 | 20040328UAW23-20V23N | CLP+ |
| UAW24-70 | 10/13/2001 | 101301233 | CLP, WQ |
| | 11/15/2001 | 111501288 | CLP, WQ |
| | 10/17/2002 | 101702328 | MON TAL |
| | 11/16/2003 | 20031116UAW24-70V65N | CLP+ |
| | 4/5/2004 | 20040405UAW24-70V65N | CLP+ |
| UAW25-20 | 10/13/2001 | 101301235 | CLP, WQ |
| | 11/13/2001 | 111301282 | CLP, WQ |
| | 10/18/2002 | 101802336 | MON TAL |
| | 11/12/2003 | 20031112UAW25-20V19N | CLP+ |
| | 3/27/2004 | 20040327UAW25-20V19N | CLP+ |

## Table 4-3
## List of Groundwater Samples and Target Analyte Lists
Morton International, Inc.
Reading, Ohio

| Sample Location | Date | Sample ID | Target Analyte List |
|---|---|---|---|
| UAW26-70 | 4/6/2004 | 20040406UAW26-70V73N | CLP+ |
| UAW27-50 | 3/31/2004 | 20040331UAW27-50V43N | CLP+ |
| DP53-12.5' | 3/11/2004 | 20040311DP53AV12.5@N | SN, PB, AR, CR SPEC |
| LAW05-150 | 3/16/2002 | 031602320 | APP IX |
| LAW05-150 (Dup) | 3/16/2002 | 031602322 | APP IX |
| LAW05-60 | 3/16/2002 | 031602321 | APP IX |
| LAW12-60 | 10/13/2001 | 101301224 | APP IX, WQ |
| | 11/16/2001 | 111601293 | APP IX, WQ |

Notes:
App IX: Appendix IX Target Analyte List or App IX - TAL
CLP: Contract Laboratory Target Analyte List or CLP - TAL
CLP +: CLP-TAL VOCs, SVOCs + Aniline, Pesticides, PCBs, Metals + Tin
Mon TAL: Monitoring Target Analyte List
WQ: Water Quality Parameters
Copies of Target Analyte Lists are provided in Appendix B of this Report.

**Table 4-4**
**List of Sediment, Seep, and Surface Water Samples and Target Analyte Lists**
Morton International, Inc.
Reading, Ohio

| Sample Location | Date | Client ID | Target Analyte List | Notes |
|---|---|---|---|---|
| CS1 | 3/6/2002 | 030602310 | SS | Creek Sed. Sample #1 (~160' S. of Prop) |
| CS2 | 3/6/2002 | 030602311 | SS | Creek Sed. Sample #2 (~260' S. of Prop.) |
| CS3 | 3/6/2002 | 030602312 | SS | Creek Sed. Sample #3 (~30' N. of SS-12) |
| CS4 | 3/6/2002 | 030602313 | SS | Creek Sed. Sample #4 (1/2 way btw SS-7 and SS-8) |
| CS5 | 3/6/2002 | 030602314 | SS | Creek Sed. Sample #5 (~50' N. of SS-4) |
| CS6 | 3/6/2002 | 030602315 | SS | Creek Sed. Sample #6 (~40' N. of SS-2) |
| CS7 | 3/6/2002 | 030602316 | SS | Creek Sed. Sample #7(along N. Prop. Boundry) |
| CS7 (Dup) | 3/6/2002 | 030602317 | SS | Creek Sed. Sample #7 (Blind Dup) |
| CS8 | 3/6/2002 | 030602318 | SS | Creek Sed. Sample #8 (Under Cinc Drum Bridge) |
| SS-1 | 10/11/2001 | 101101211 | SS | Sediment |
| SS-1 (Seep) | 10/11/2001 | 101101209 | SS | Seep |
| SS-1 | 10/11/2001 | 101101225 | GEOTECH | Sediment |
| SS-10 | 10/11/2001 | 101101221 | SS | Sediment |
| SS-11 | 10/11/2001 | 101101222 | SS | Sediment |
| SS-12 | 10/11/2001 | 101101223 | SS | Sediment |
| SS-2 | 10/11/2001 | 101101212 | SS | Sediment |
| SS-3 | 10/11/2001 | 101101213 | SS | Sediment |
| SS-4 | 10/11/2001 | 101101216 | SS | Sediment |
| SS-5 (Seep) | 10/11/2001 | 101101210 | SS | Seep |
| SS-5 | 10/11/2001 | 101101214 | SS | Sediment, Approx. 25' south of SS-5 |
| SS-5 (Dup) | 10/11/2001 | 101101215 | SS | Sediment, Approx. 25' south of SS-5 |
| SS-6 | 10/11/2001 | 101101217 | SS | Sediment |
| SS-7 | 10/11/2001 | 101101218 | SS | Sediment |
| SS-8 | 10/11/2001 | 101101219 | SS | Sediment |
| SS-9 | 10/11/2001 | 101101220 | SS | Sediment |
| CS-1A | 3/25/2004 | 20040325CS-1AN | APP IX (no dioxins/furans) | Sediment |
| CS-5A | 3/25/2004 | 20040325CS-5AN | APP IX (no dioxins/furans) | Sediment |
| CS-6A | 3/25/2004 | 20040325CS-6AN | APP IX (no dioxins/furans) | Sediment |
| CS-6A (Dup) | 3/25/2004 | 20040325CINBLIND-1 | APP IX (no dioxins/furans) | Sediment |
| CS-2A | 3/26/2004 | 20040326CS-2AN | APP IX (no dioxins/furans) | Sediment |
| CS-3A | 3/26/2004 | 20040326CS-3AN | APP IX (no dioxins/furans) | Sediment |
| CS-4A | 3/26/2004 | 20040326CS-4AN | APP IX (no dioxins/furans) | Sediment |
| WS-1A | 3/25/2004 | 20040325WS-1AN | APP IX (no dioxins/furans) | Surface Water |

**Table 4-4**
**List of Sediment, Seep, and Surface Water Samples and Target Analyte Lists**
Morton International, Inc.
Reading, Ohio

| Sample Location | Date | Client ID | Target Analyte List | Notes |
|---|---|---|---|---|
| WS-5A | 3/25/2004 | 20040325WS-5AN | APP IX (no dioxins/furans) | Surface Water |
| WS-6A | 3/25/2004 | 20040325WS-6AN | APP IX (no dioxins/furans) | Surface Water |
| WS-6A (Dup) | 3/25/2004 | 20040325CINBLIND-2 | APP IX (no dioxins/furans) | Surface Water |
| WS-2A | 3/26/2004 | 20040326WS-2AN | APP IX (no dioxins/furans) | Surface Water |
| WS-3A | 3/26/2004 | 20040326WS-3AN | APP IX (no dioxins/furans) | Surface Water |
| WS-4A | 3/26/2004 | 20040326WS-4AN | APP IX (no dioxins/furans) | Surface Water |

**Notes:**
SS: Sediment and Seep Target Analyte List or SS - TAL
GEOTECH: Geotechnical Parameters
APP IX (no dioxins/furans): Appendix IX VOCs, SVOCs, Pesticides, PCBs, Metals + Tin
Copies of Target Analyte Lists are provided in Appendix B of this Report.

**Table 4-5**
**Combined Sewer System Inventory**
**Morton International, Inc.**
**Reading, Ohio**

| BLDG NO. | FLOOR DRAINS | SANITARY SINKS | TOILETS | LABORATORY SINKS | COMMENTS |
|---|---|---|---|---|---|
| 1 | 1 | None | None | 1 | Wax Manufacturing Bldg. |
| 2 | 3 | 2 | None | None | (CMU) Continuous Organo Tin Mercaptide Bldg. Product-TM-181 |
| 3 | 6 | 2 | None | None | Organo Sulfurs Bldg. |
| 3A | 2 | None | None | None | Reverse Esters Lubricating Stabilizers |
| 4 | 2 | None | None | None | Packaging |
| 4A | None | None | None | None | Packaging |
| 5 | 1 | 1 | None | None | Research Bldg. Dry Blending |
| 6 | 1 | None | None | None | Phosphoniums Bldg. (Catalysts) |
| 7 | 1 | 1 | None | None | Maintenance and Storage Bldg. |
| 9 | None | 1 | 1 | None | Computer Monitoring Bldg. |
| 10 | 9 | 3 | 2 Urinals, 3 toilets | None | Boiler House and Production Offices |
| 11 | 3 | None | None | None | Process Bldg. (Organo Tin Intermediate) |
| 11C | 1 | None | None | None | Stannic Chloride Bldg. (Organo Tin Intermediate) |
| 12 | 1 | None | None | None | Stannic Chloride Bldg. (Organo Tin Intermediate) |

**Table 4-5**
**Combined Sewer System Inventory**
**Morton International, Inc.**
**Reading, Ohio**

| BLDG NO. | FLOOR DRAINS | SANITARY SINKS | TOILETS | LABORATORY SINKS | COMMENTS |
|---|---|---|---|---|---|
| 12C | 2 | None | None | None | Heating Oil Boiler (No Processes) |
| 14 | 1 | 1 | None | None | Maintenance Shop and Welding Shop |
| 15 | None | None | None | None | Maintenance Shop and Warehouse |
| 16 | 1 | 1 | None | None | Process Bldg. Conveyor Packaging Operation (Wax Pellets) |
| 17 | 1 | None | None | None | Liquid Nitrogen Air Compressor (Pressure Swing Absorption Bldg.) |
| 18 | 10 Shower Drains 9 Floor Drains | 5 | 3 Urinals, 11 Toilets | None | Main Office Bldg. |
| 19 | 30 Plugged 6 Open | 9 | 11 | 28 | Office and Laboratory Bldg. |
| 20 | 2-6" Holes in Floor | None | None | None | Warehouse - Finished Goods |
| 21 | None | None | None | None | Warehouse - Consumable Supplies and Raw Materials |
| 22 | None | None | None | None | Warehouse - Consumable Supplies and Raw Materials |
| 23 | 1 | None | None | None | Old Tote Wash Room (Scrubber) |
| 24A | 2 | None | None | None | Tote Wash Room |
| 24B | None | None | None | None | Air Compressor Building |
| 25 | 1 | None | None | None | Reclaim $H_2O$ System |

**Table 4-5**
**Combined Sewer System Inventory**
**Morton International, Inc.**
**Reading, Ohio**

| BLDG NO. | FLOOR DRAINS | SANITARY SINKS | TOILETS | LABORATORY SINKS | COMMENTS |
|---|---|---|---|---|---|
| 26 | 1 | None | None | None | Warehouse - Research and Development |
| 27 | 5 | None | None | 1 | Development Bldg. (Pilot Plant) |
| 29 | None | None | None | None | Haz-Waste and Raw Material Storage |
| 30 | None | None | None | None | Warehouse - Office for Truck Drivers/Dry Storage |
| 32 | 2 | 1 | None | None | pH - Room |
| 39 | 1 | 1 | 1 | None | Guard Shack |
| 40 | 4 | 3 | 3 | 1 | Warehouse |

**Table 5-1**
**Summary of Groundwater Elevations**
Morton International, Inc.
Reading, Ohio

| Well ID. | Top of Riser Elevation | 4/30/2001 | | 11/16/2001 | | 3/5/2002 | | 10/15/2002 | | 10/21/2002 | | 3/23/2004 | | 5/27/2004 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Depth to Groundwater | Groundwater Elevation | Depth to Groundwater | Groundwater Elevation | Depth to Groundwater | Groundwater Elevation | Depth to Groundwater | Groundwater Elevation | Depth to Groundwater | Groundwater Elevation | Depth to Groundwater | Groundwater Elevation | Depth to Groundwater | Groundwater Elevation |
| UAW01-30 | 564.27 | 25.97 | 538.30 | 25.69 | 538.58 | 25.34 | 538.93 | 25.68 | 538.59 | NM | NM | 25.28 | 538.99 | 24.84 | 539.43 |
| UAW01-80 | 564.18 | 27.42 | 536.76 | 26.99 | 537.19 | 26.35 | 537.83 | 26.92 | 537.26 | NM | NM | 25.85 | 538.33 | 25.35 | 538.83 |
| UAW02-20 | 551.59 | 13.10 | 538.49 | 12.60 | 538.99 | 12.03 | 539.56 | 12.20 | 539.39 | 12.51 | 539.08 | 11.81 | 539.78 | 11.14 | 540.45 |
| UAW02-40 | 551.58 | 15.43 | 536.15 | 14.68 | 536.90 | 14.10 | 537.48 | 14.65 | 536.93 | NM | NM | 13.61 | 537.97 | 13.18 | 538.40 |
| UAW03-20 | 551.96 | 13.39 | 538.57 | 13.07 | 538.89 | 12.45 | 539.51 | 12.06 | 539.90 | NM | NM | 10.36 | 541.60 | 11.36 | 540.60 |
| UAW04-20 | 552.19 | 13.60 | 538.59 | 13.35 | 538.84 | 11.95 | 540.24 | 11.20 | 540.99 | NM | NM | 11.26 | 540.93 | 10.72 | 541.47 |
| UAW05-20 | 553.47 | 12.78 | 540.69 | 12.69 | 540.78 | 12.54 | 540.93 | 12.14 | 541.33 | NM | NM | 10.98 | 542.49 | 11.88 | 541.59 |
| LAW05-60 | 553.26 | NI | NI | NI | NI | NI | NI | 17.72 | 535.54 | NM | NM | 16.73 | 536.53 | 16.21 | 537.05 |
| LAW05-150 | 553.36 | NI | NI | NI | NI | NI | NI | 18.20 | 535.16 | NM | NM | 16.49 | 536.87 | 15.93 | 537.43 |
| UAW06-20 | 553.25 | 11.58 | 541.67 | 11.26 | 541.99 | 11.17 | 542.08 | 11.07 | 542.18 | NM | NM | 11.63 | 541.62 | 11.02 | 542.23 |
| UAW07-20 | 554.32 | 11.13 | 543.19 | 11.03 | 543.29 | 10.82 | 543.50 | 10.89 | 543.43 | NM | NM | 10.79 | 543.53 | 10.40 | 543.92 |
| UAW08-20 | 554.20 | 10.84 | 543.36 | 10.23 | 543.97 | 10.26 | 543.94 | 10.10 | 544.10 | NM | NM | 10.15 | 544.05 | 10.31 | 543.89 |
| UAW09-20 | 565.91 | 22.23 | 543.68 | 21.60 | 544.31 | 21.51 | 544.40 | 21.70 | 544.21 | 20.88 | 545.03 | 21.51 | 544.40 | 21.10 | 544.81 |
| UAW09-60 | 566.32 | 30.24 | 536.08 | 21.92 [1] | 544.4 [1] | 29.36 | 536.96 | 30.01 | 536.31 | NM | NM | 28.67 | 537.65 | 28.12 | 538.20 |
| UAW10-50 | 577.77 | NI | NI | 40.83 | 536.94 | 39.82 | 537.95 | 41.01 | 536.76 | NM | NM | 38.93 | 538.84 | 38.62 | 539.15 |
| UAW10-80 | 577.80 | NI | NI | 42.38 | 535.42 | 41.01 | 536.79 | 42.39 | 535.41 | NM | NM | 40.33 | 537.47 | 39.86 | 537.94 |
| UAW11-10 | 553.48 | 9.19 | 544.29 | 8.12 | 545.36 | 8.03 | 545.45 | 7.87 | 545.61 | 8.06 | 545.42 | 8.05 | 545.43 | 7.80 | 545.68 |
| UAW11-40 | 553.45 | 17.95 | 535.50 | 17.75 | 535.70 | 16.94 | 536.51 | 17.75 | 535.70 | NM | NM | 16.19 | 537.26 | 15.65 | 537.80 |
| UAW12-20 | 555.19 | 10.12 | 545.07 | 9.76 | 545.43 | 9.46 | 545.73 | 9.74 | 545.45 | 9.93 | 545.26 | 9.29 | 545.90 | 8.45 | 546.74 |
| LAW12-60 | 554.89 | NI | NI | 19.07 | 535.82 | 18.53 | 536.36 | 19.32 | 535.57 | NM | NM | 17.80 | 537.09 | 17.32 | 537.57 |
| UAW13-20 | 555.54 | 10.68 | 544.86 | 9.74 | 545.80 | 9.75 | 545.79 | 9.67 | 545.87 | troll | NM | 9.58 | 544.96 | 9.28 | 546.26 |
| UAW14-10 | 566.74 | 9.03 | 557.71 | 9.13 | 557.61 | 8.84 | 557.90 | 9.25 | 557.49 | 9.31 | 557.43 | 8.74 | 558.00 | 8.36 | 558.38 |
| UAW15-20 | 561.34 | 10.34 | 551.00 | 11.03 | 550.31 | 10.58 | 550.76 | 9.40 | 551.94 | 9.68 | 551.66 | 10.65 | 550.69 | 10.53 | 550.81 |
| UAW15-50 | 560.96 | 25.00 | 535.96 | 24.85 | 536.11 | 23.91 | 537.05 | 25.23 | 535.73 | NM | NM | 23.12 | 537.84 | 23.12 | 537.84 |
| UAW16-10 | 554.71 | NI | NI | 9.51 | 545.20 | 9.47 | 545.24 | 9.33 | 545.38 | 9.38 | 545.33 | 9.51 | 545.20 | 9.17 | 545.54 |
| UAW17-40 | 577.11 | 12.73 | 564.38 | 12.57 | 564.54 | 12.00 | 565.11 | 12.91 | 564.20 | NM | NM | 11.32 | 565.79 | 10.52 | 566.59 |
| UAW18-20 | 556.17 | NI | NI | 11.09 | 545.08 | 11.01 | 545.16 | 10.78 | 545.39 | 10.84 | 545.33 | 11.10 | 545.07 | 10.69 | 545.48 |
| UAW19-80 | 580.09 | 43.90 | 536.19 | 44.15 | 535.94 | 43.15 | 536.94 | 43.98 | 536.11 | NM | NM | 42.24 | 537.85 | 41.39 | 538.70 |
| UAW20-60 | 576.13 | 36.63 | 539.50 | 38.95 | 537.18 | 37.98 | 538.15 | 39.18 | 536.95 | NM | NM | 37.23 | 538.90 | 36.80 | 539.33 |
| UAW21-30 | 565.73 | 25.55 | 540.18 | 24.70 | 541.03 | 24.45 | 541.28 | 24.94 | 540.79 | NM | NM | 24.32 | 539.41 | 23.98 | 541.75 |
| UAW21-80 | 565.47 | 29.99 | 535.48 | 29.71 | 535.76 | 29.22 | 536.25 | 29.68 | 535.79 | NM | NM | 28.66 | 536.81 | 28.19 | 537.28 |
| UAW22-20 | 557.66 | NI | NI | 11.93 | 545.73 | 11.86 | 545.80 | 11.87 | 545.79 | 11.92 | 545.74 | 11.79 | 545.87 | 11.28 | 546.38 |
| UAW23-20 | 559.05 | NI | NI | 22.31 | 536.74 | 21.51 | 537.54 | 22.74 | 536.31 | 22.73 | 536.32 | 20.78 | 538.27 | 20.22 | 538.83 |
| UAW24-70 | 575.90 | NI | NI | 39.05 | 536.85 | 38.46 | 537.44 | 39.10 | 536.80 | NM | NM | 37.73 | 538.17 | 37.02 | 538.88 |
| UAW25-20 | 556.07 | NI | NI | 17.31 | 538.76 | 16.89 | 539.18 | 17.16 | 538.91 | 17.29 | 538.78 | 16.80 | 539.27 | 16.32 | 539.75 |
| UAW26-70 | 559.60 | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | 22.01 | 537.59 | 21.44 | 538.16 |
| UAW27-50 | 574.60 | NI | NI | NI | NI | NI | NI | NI | NI | NI | NI | 35.99 | 538.61 | 35.70 | 538.90 |
| MW-EPA-1 | 553.64 | 11.60 | 542.04 | 11.58 | 542.06 | 11.87 | 541.77 | 11.40 | 542.24 | NM | NM | 11.24 | 542.40 | 11.17 | 542.47 |
| MW-EPA-2 | 575.88 | 10.12 | 565.76 | 10.02 | 565.86 | 9.39 | 566.49 | 9.15 | 566.73 | 9.58 | 566.30 | 9.80 | 566.08 | 9.04 | 566.84 |
| MW-EPA-3 | 577.77 | 9.97 | 567.80 | 10.04 | 567.73 | 9.72 | 568.05 | 9.59 | 568.18 | NM | NM | 9.79 | 567.98 | 9.12 | 568.65 |
| MW-EPA-4 | 560.55 | 16.43 | 544.12 | 15.66 | 544.89 | 15.55 | 545.00 | 15.32 | 545.23 | 15.41 | 545.14 | 15.63 | 544.92 | 15.04 | 545.51 |

Notes:
1 - Based on repeated groundwater measurements at this well, it is believed that the depth to water reading is erroneous, and should have been 31.92 for a water level of 534.40.
NI: Not Installed
NM: Not Measured
All depths in feet, all elevations in feet above mean sea level

**Table 5-2**
**Summary of Volatile Organic Detections in**
**Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | 1,1-Dichloroethane | 1,2-Dichloroethane | 1,2-Dichloroethene (total) | 2-Butanone | Acetone | Acrylonitrile | Benzene | Bromodichloromethane | Carbon disulfide | Chlorobenzene | Chloroform | Chloromethane | cis-1,2-Dichloroethene | Cyclohexane | Dichlorodifluoromethane | Ethylbenzene | Iodomethane | Isopropylbenzene | Methyl acetate | Methylcyclohexane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **On-Site Soil** | | | | | | | | | | | | | | | | | | | | | |
| DP01-2' | 7/24/2001 | <1.4 | <1.4 | <1.4 | 0.64 J | 15 | NA | <1.4 | <1.4 | <1.4 | <1.4 | <1.4 | <2.8 | <0.71 | <2.8 | <1.4 | 5.7 | NA | 0.24 J | <2.8 | 1.3 J |
| DP01-9.5' | 7/24/2001 | <0.26 | <0.26 | <0.26 | <1 | <1 | NA | <0.26 | <0.26 | <0.26 | <0.26 | <0.26 | <0.52 | <0.13 | <0.52 | <0.26 | 0.16 J | NA | <0.26 | <0.52 | <0.52 |
| DP02-2' | 7/24/2001 | <0.0044 | <0.0044 | <0.0044 | <0.018 | 0.015 J | NA | <0.0044 | <0.0044 | <0.0044 | <0.0044 | <0.0044 | <0.0088 | <0.0022 | <0.0088 | <0.0044 | <0.0044 | NA | <0.0044 | <0.0088 | <0.0088 |
| DP02-9.5' | 7/24/2001 | <0.0055 | <0.0055 | <0.0055 | <0.022 | 0.0093 J | NA | <0.0055 | <0.0055 | <0.0055 | 0.013 | <0.0055 | <0.011 | <0.0028 | <0.011 | <0.0055 | <0.0055 | NA | <0.0055 | <0.011 | <0.011 |
| DP03-2' | 7/24/2001 | <0.0047 | <0.0047 | <0.0047 | <0.019 | <0.019 | NA | <0.0047 | <0.0047 | <0.0047 | <0.0047 | <0.0047 | <0.0093 | <0.0023 | <0.0093 | <0.0047 | <0.0047 | NA | <0.0047 | <0.0093 | <0.0093 |
| DP03-8.5' | 7/24/2001 | <0.0045 | <0.0045 | <0.0045 | <0.018 | <0.018 | NA | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.009 | <0.0022 | <0.009 | <0.0045 | <0.0045 | NA | <0.0045 | <0.009 | <0.009 |
| DP05-1' | 7/25/2001 | <0.0046 | <0.0046 | <0.0046 | <0.018 | <0.018 | NA | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0091 | <0.0023 | <0.0091 | <0.0046 | <0.0046 | NA | <0.0046 | <0.0091 | <0.0091 |
| DP05-8.5' | 7/25/2001 | <0.0044 | <0.0044 | <0.0044 | <0.017 | <0.017 | NA | <0.0044 | <0.0044 | <0.0044 | <0.0044 | <0.0044 | <0.0087 | <0.0022 | <0.0087 | <0.0044 | <0.0044 | NA | <0.0044 | <0.0087 | <0.0087 |
| DP07-9' | 7/26/2001 | <0.0046 | <0.0046 | <0.0046 | <0.018 | <0.018 | NA | <0.0046 | 0.0015 J | <0.0046 | <0.0046 | 0.0036 J | <0.0091 | <0.0023 | <0.0091 | <0.0046 | <0.0046 | NA | <0.0046 | <0.0091 | <0.0091 |
| DP08-6' | 7/26/2001 | <0.0057 | <0.0057 | <0.0057 | <0.023 | 0.007 J | NA | <0.0057 | <0.0057 | <0.0057 | <0.0057 | <0.0057 | <0.011 | <0.0028 | <0.011 | <0.0057 | <0.0057 | NA | <0.0057 | <0.011 | <0.011 |
| DP08-11' | 7/26/2001 | <0.0049 | <0.0049 | <0.0049 | <0.02 | <0.02 | NA | <0.0049 | <0.0049 | <0.0049 | <0.0049 | <0.0049 | <0.0098 | <0.0025 | <0.0098 | <0.0049 | <0.0049 | NA | <0.0049 | <0.0098 | <0.0098 |
| DP09-12' | 7/27/2001 | <0.0048 | <0.0048 | <0.0048 | <0.019 | 4.1 | NA | <0.0048 | <0.0048 | 0.2 | <0.0048 | <0.0048 | <0.0095 | <0.0024 | <0.0095 | <0.0048 | <0.0048 | NA | <0.0048 | 0.07 | <0.0095 |
| DP10-2' | 7/27/2001 | <0.0048 | <0.0048 | <0.0048 | 0.0037 J | 0.0091 J | <0.095 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0024 | NA | <0.0048 | <0.0048 | <0.0048 | NA | NA | NA |
| DP10-10' | 7/27/2001 | <0.27 | <0.27 | <0.27 | 0.17 J B | <1.1 | <5.3 | <0.27 | <0.27 | 0.18 J | <0.27 | <0.27 | <0.27 | <0.13 | NA | <0.27 | 0.13 J | <0.27 | NA | NA | NA |
| DP10-10' (Dup) | 7/27/2001 | <0.27 | <0.27 | <0.27 | 0.17 J B | <1.1 | <5.3 | <0.27 | <0.27 | 0.095 J | <0.27 | <0.27 | <0.27 | <0.13 | NA | <0.27 | 0.084 J | <0.27 | NA | NA | NA |
| DP12-1.5' | 7/28/2001 | <0.004 | <0.004 | <0.004 | <0.016 | 0.0019 J | NA | <0.004 | <0.004 | <0.004 | <0.004 | <0.004 | <0.008 | <0.002 | <0.008 | <0.004 | <0.004 | NA | <0.004 | <0.008 | <0.008 |
| DP12-9' | 7/28/2001 | <0.0052 | <0.0052 | <0.0052 | <0.021 | <0.021 | NA | <0.0052 | <0.0052 | <0.0052 | <0.0052 | <0.0052 | <0.01 | <0.0026 | <0.01 | <0.0052 | <0.0052 | NA | <0.0052 | <0.01 | <0.01 |
| DP13-3' | 7/29/2001 | <0.0053 | <0.0053 | <0.0053 | 0.0031 J | 0.0085 J | <0.11 | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.0027 | NA | <0.0053 | <0.0053 | <0.0053 | NA | NA | NA |
| DP13-11' | 7/29/2001 | <5.3 | <5.3 | <5.3 | <21 | <21 | <110 | <5.3 | <5.3 | <5.3 | <5.3 | <5.3 | <5.3 | <2.7 | NA | <5.3 | <5.3 | <5.3 | NA | NA | NA |
| DP14-3' | 7/29/2001 | <0.22 | <0.22 | <0.22 | <0.89 | <0.89 | <4.5 | <0.22 | <0.22 | 1.5 | <0.22 | <0.22 | <0.22 | <0.11 | NA | <0.22 | <0.22 | <0.22 | NA | NA | NA |
| DP14-9' | 7/29/2001 | <0.26 | <0.26 | <0.26 | <1 | <1 | <5.2 | <0.26 | <0.26 | 0.89 | <0.26 | <0.26 | <0.26 | <0.13 | NA | <0.26 | <0.26 | <0.26 | NA | NA | NA |
| DP15-2' | 7/29/2001 | <0.0048 | <0.0048 | <0.0048 | 0.0051 J | 0.01 J | <0.097 | 0.0017 J | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0024 | NA | <0.0048 | <0.0048 | <0.0048 | NA | NA | NA |
| DP15-9' | 7/29/2001 | <0.31 | <0.31 | <0.31 | <1.2 | <1.2 | <6.2 | <0.31 | <0.31 | 0.22 J | <0.31 | <0.31 | <0.31 | <0.16 | NA | <0.31 | <0.31 | <0.31 | NA | NA | NA |
| DP16-2.8' | 7/30/2001 | <0.0055 | <0.0055 | <0.0055 | <0.022 | <0.022 | <0.11 | <0.0055 | <0.0055 | <0.0055 | 0.0043 J | <0.0055 | <0.0055 | <0.0027 | NA | <0.0055 | <0.0055 | <0.0055 | NA | NA | NA |
| DP16-12.5' | 7/30/2001 | <12 | <12 | <12 | <49 | <49 | <250 | <12 | <12 | <12 | 1.5 J | <12 | <12 | <6.1 | NA | <12 | 6.2 J | <12 | NA | NA | NA |
| DP17-3' | 7/30/2001 | <0.26 | <0.26 | <0.26 | <1 | <1 | <5.2 | <0.26 | <0.26 | <0.26 | <0.26 | <0.26 | <0.26 | <0.13 | NA | <0.26 | <0.26 | <0.26 | NA | NA | NA |
| DP17-13' | 7/30/2001 | <1.5 | <1.5 | <1.5 | <6.1 | 0.52 J | 1.1 J | 0.67 J | <1.5 | 0.95 J | 0.81 J | <1.5 | <1.5 | <0.76 | NA | <1.5 | 1.7 | <1.5 | NA | NA | NA |
| DP18-2' | 7/30/2001 | <0.005 | <0.005 | <0.005 | <0.02 | <0.02 | NA | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.0025 | <0.0099 | <0.005 | <0.005 | NA | <0.005 | <0.0099 | <0.0099 |
| DP18-14.5' | 7/30/2001 | <0.0049 | <0.0049 | <0.0049 | <0.019 | <0.019 | NA | <0.0049 | <0.0049 | <0.0049 | 0.00053 J | <0.0049 | <0.0049 | <0.0024 | <0.0097 | <0.0049 | <0.0049 | NA | <0.0049 | <0.0097 | <0.0097 |
| DP19-2' | 7/30/2001 | <0.0059 | <0.0059 | <0.0059 | 0.0082 J | 0.02 J | NA | <0.0059 | <0.0059 | <0.0059 | <0.0059 | <0.0059 | <0.0059 | <0.0029 | <0.012 | 0.0032 J | <0.0059 | NA | <0.0059 | 0.0024 J | <0.012 |
| DP19-13' | 7/30/2001 | <0.0057 | <0.0057 | <0.0057 | <0.023 | <0.023 | NA | <0.0057 | <0.0057 | <0.0057 | <0.0057 | <0.0057 | <0.0057 | <0.0029 | <0.011 | <0.0057 | <0.0057 | NA | <0.0057 | <0.011 | <0.011 |
| DP20-2' | 7/30/2001 | <0.005 | <0.005 | <0.005 | <0.02 | <0.02 | NA | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.0025 | <0.0099 | <0.005 | <0.005 | NA | <0.005 | 0.0019 J | <0.0099 |
| DP20-14.5' | 7/30/2001 | <0.26 | <0.26 | <0.26 | <1 | <1 | NA | <0.26 | <0.26 | <0.26 | 0.079 J | <0.26 | <0.26 | <0.13 | <0.52 | <0.26 | <0.26 | NA | <0.26 | <0.52 | <0.52 |
| DP23-2.5' | 8/1/2001 | <0.0062 | <0.0062 | <0.0062 | <0.025 | <0.025 | NA | <0.0062 | <0.0062 | <0.0062 | <0.0062 | <0.0062 | <0.012 | <0.0031 | <0.012 | <0.0062 | <0.0062 | NA | <0.0062 | <0.012 | <0.012 |
| DP23-9' | 8/1/2001 | <0.0053 | <0.0053 | <0.0053 | <0.021 | <0.021 | NA | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.011 | <0.0027 | <0.011 | <0.0053 | <0.0053 | NA | <0.0053 | <0.011 | <0.011 |
| DP25-2.5' | 8/7/2001 | <0.0053 | <0.0053 | <0.0053 | <0.021 | 0.0045 J | NA | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.011 | <0.0027 | <0.011 | <0.0053 | <0.0053 | NA | <0.0053 | <0.011 | <0.011 |
| DP25-2.5' (Dup) | 8/7/2001 | <0.0047 | <0.0047 | <0.0047 | <0.019 | 0.0032 J | NA | <0.0047 | <0.0047 | <0.0047 | <0.0047 | <0.0047 | <0.0094 | <0.0024 | <0.0094 | <0.0047 | <0.0047 | NA | <0.0047 | <0.0094 | <0.0094 |
| DP25-7.5' | 8/7/2001 | <0.0044 | <0.0044 | <0.0044 | <0.018 | 0.0025 J | NA | <0.0044 | <0.0044 | <0.0044 | <0.0044 | <0.0044 | <0.0089 | <0.0022 | <0.0089 | <0.0044 | <0.0044 | NA | <0.0044 | <0.0089 | <0.0089 |
| DP29-5' | 11/9/2001 | <0.0056 | <0.0056 | <0.0056 | <0.022 | 0.0036 J B | NA | <0.0056 | <0.0056 | <0.0056 | <0.0056 | <0.0056 | <0.011 | <0.0028 | <0.011 | <0.0056 | <0.0056 | NA | <0.0056 | <0.011 | <0.011 |
| DP31-15 | 12/5/2001 | <0.28 | 0.015 J | <0.28 | <1.1 | <1.1 | <5.6 | <0.28 | <0.28 | 0.045 J | 0.1 J | <0.28 | <0.28 | <0.14 | NA | <0.28 | 0.026 J | <0.28 | NA | NA | NA |

**Table 5-2**
**Summary of Volatile Organic Detections in**
**Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | 1,1-Dichloroethane | 1,2-Dichloroethane | 1,2-Dichloroethene (total) | 2-Butanone | Acetone | Acrylonitrile | Benzene | Bromodichloromethane | Carbon disulfide | Chlorobenzene | Chloroform | Chloromethane | cis-1,2-Dichloroethene | Cyclohexane | Dichlorodifluoromethane | Ethylbenzene | Iodomethane | Isopropylbenzene | Methyl acetate | Methylcyclohexane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DP36-19 | 12/5/2001 | <0.0052 | <0.0052 | <0.0052 | <0.021 | 0.012 J | <0.1 | <0.0052 | <0.0052 | 0.00089 J | 0.0014 J | <0.0052 | <0.0052 | <0.0026 | NA | <0.0052 | <0.0052 | <0.0052 | NA | NA | NA |
| DP37-19 | 12/5/2001 | <0.005 | <0.005 | <0.005 | <0.02 | <0.02 | <0.1 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.0025 | NA | <0.005 | <0.005 | <0.005 | NA | NA | NA |
| DP37-19 (Dup) | 12/5/2001 | <0.0051 | <0.0051 | <0.0051 | <0.02 | <0.02 | <0.1 | <0.0051 | <0.0051 | <0.0051 | <0.0051 | <0.0051 | <0.0051 | <0.0025 | NA | <0.0051 | <0.0051 | <0.0051 | NA | NA | NA |
| DP38-14.5 | 12/5/2001 | <7.1 | <7.1 | <7.1 | <28 | <28 | <140 | <7.1 | <7.1 | <7.1 | 42 | <7.1 | <7.1 | <3.6 | NA | <7.1 | <7.1 | <7.1 | NA | NA | NA |
| DP50-10' | 3/10/2004 | NA | NA | NA | NA | NA | NA | <0.0052 | NA | NA | 0.016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DP51-10' | 3/10/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DP52-5' | 3/10/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DP56A-9.5-10.5' | 3/15/2004 | <14 | <14 | NA | <55 | <55 * | NA | 0.93 J | <14 | <14 | <14 | <14 | <14 | <6.9 | <27 | <14 | <14 | NA | <14 | <27 | 19 J |
| DP58A-8.5-9.5' | 3/15/2004 | <0.31 | <0.31 | NA | <1.2 | <1.2 * | NA | <0.31 | <0.31 | 0.48 | 0.023 J | <0.31 | <0.31 | <0.15 | <0.61 | <0.31 | <0.31 | NA | <0.31 | 0.15 J | <0.61 |
| DP60A-6.6-7.4' | 3/15/2004 | <0.35 | <0.35 | NA | <1.4 | <1.4 * | NA | <0.35 | <0.35 | 0.27 J | <0.35 | <0.35 | <0.35 | <0.18 | <0.71 | <0.35 | <0.35 | NA | <0.35 | <0.71 | <0.71 |
| DP61A-5-6' | 3/15/2004 | <0.82 | <0.82 | NA | <3.3 | 1 J B | NA | <0.82 | <0.82 | <0.82 | <0.82 | <0.82 | <0.82 | <0.41 | <1.6 | <0.82 | <0.82 | NA | <0.82 | <1.6 | <1.6 |
| DP61A-5-6' (Dup) | 3/15/2004 | <0.93 | <0.93 | NA | <3.7 | <3.7 * | NA | <0.93 | <0.93 | <0.93 | <0.93 | <0.93 | <0.93 | <0.47 | <1.9 | <0.93 | <0.93 | NA | <0.93 | <1.9 | <1.9 |
| DP64A-8.5-9.5' | 3/15/2004 | <0.61 | <0.61 | NA | <2.4 | 0.73 J B | NA | <0.61 | <0.61 | <0.61 | 0.35 J | <0.61 | <0.61 | <0.3 | <1.2 | <0.61 | 0.32 J | NA | 0.05 J | <1.2 | 0.1 J |
| DP66A-9.5-10.5' | 3/15/2004 | <0.25 | <0.25 | NA | <1 | <1 * | NA | 0.015 J | <0.25 | 0.48 | 0.049 J | <0.25 | <0.25 | <0.13 | <0.51 | <0.25 | 0.023 J | NA | <0.25 | <0.51 | <0.51 |
| DP67A-12.5-13.5' | 3/15/2004 | <3.5 | <3.5 | NA | <14 | 4.1 J B | NA | <3.5 | <3.5 | <3.5 | 9.7 | <3.5 | <3.5 | <1.8 | 2.4 J | <3.5 | 2.4 J | NA | <3.5 | <7 | 21 |
| DP70A-9-11' | 3/14/2004 | <0.3 | <0.3 | NA | <1.2 | <1.2 * | NA | <0.3 | <0.3 | 0.073 J | <0.3 | <0.3 | <0.3 | <0.15 | <0.59 | <0.3 | <0.3 | NA | 0.029 J | <0.59 | 1.1 |
| DP72A-12-13' | 3/14/2004 | <0.26 | <0.26 | NA | <1 | <1 * | NA | <0.26 | <0.26 | <0.26 | <0.26 | <0.26 | <0.26 | <0.13 | <0.51 | <0.26 | 0.026 J | NA | <0.26 | <0.51 | 4.7 |
| DP73A-12-13' | 3/14/2004 | <1.7 | <1.7 | NA | <6.9 | <6.9 * | NA | <1.7 | <1.7 | <1.7 | 0.25 J | <1.7 | <1.7 | <0.86 | <3.4 | <1.7 | <1.7 | NA | <1.7 | <3.4 | 0.42 J |
| DP78A-9-10' | 3/14/2004 | <47 | <47 | NA | <190 | <190 * | NA | <47 | <47 | <47 | 7.2 J | <47 | <47 | <24 | <94 | <47 | 4.8 J | NA | <47 | <94 | 5.8 J |
| DP79A-12-13' | 3/14/2004 | <0.26 | <0.26 | NA | <1.1 | <1.1 * | NA | 0.14 J | <0.26 | 0.2 J | 4.4 | <0.26 | <0.26 | <0.13 | <0.53 | <0.26 | 0.48 | NA | 0.05 J | 0.26 J | 0.22 J |
| STR01-3' | 3/8/2001 | <0.0045 | <0.0045 | <0.0045 | <0.018 | <0.018 | NA | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.0091 | <0.0023 | <0.0091 | <0.0045 | <0.0045 | NA | <0.0045 | <0.0091 | <0.0091 |
| STR01-21' | 3/8/2001 | <0.0052 | <0.0052 | <0.0052 | <0.021 | 0.015 J | NA | <0.0052 | <0.0052 | <0.0052 | 0.013 | <0.0052 | <0.01 | <0.0026 | <0.01 | <0.0052 | <0.0052 | NA | <0.0052 | <0.01 | <0.01 |
| STR01-73' | 3/9/2001 | <0.0055 | <0.0055 | <0.0055 | <0.022 | <0.022 | NA | 0.0057 | <0.0055 | <0.0055 | <0.0055 | <0.0055 | <0.011 | <0.0027 | 0.026 | <0.0055 | 0.005 J | NA | <0.0055 | <0.58 | 0.029 |
| STR01-88' | 3/9/2001 | <0.0071 | <0.0071 | <0.0071 | <0.028 | <0.028 | NA | 0.0087 | <0.0071 | 0.0076 | <0.0071 | <0.0071 | <0.014 | <0.0035 | 0.022 | <0.0071 | 0.0064 J | NA | <0.0071 | <0.47 | 0.023 |
| STR02-1' | 3/13/2001 | <0.0052 | <0.0052 | <0.0052 | <0.021 | <0.021 | NA | <0.0052 | <0.0052 | <0.0052 | <0.0052 | <0.0052 | <0.01 | <0.0026 | <0.01 | <0.0052 | <0.0052 | NA | <0.0052 | <0.01 | <0.01 |
| STR02-12.5' | 3/13/2001 | <0.0051 | <0.0051 | <0.0051 | <0.02 | 0.0071 J | NA | <0.0051 | <0.0051 | 0.0039 J | 0.026 | <0.0051 | <0.01 | <0.0026 | <0.01 | <0.0051 | <0.0051 | NA | <0.0051 | <0.01 | <0.01 |
| STR03-4' | 3/14/2001 | <0.25 | <0.25 | <0.25 | <1 | <1 | <5 | <0.25 | <0.25 | <0.25 | 0.31 | <0.25 | <0.25 | <0.13 | NA | <0.25 | <0.25 | <0.25 | NA | NA | NA |
| STR03-12.5' | 3/14/2001 | <0.0048 | <0.0048 | <0.0048 | <0.019 | 0.019 | <0.095 | <0.0048 | <0.0048 | 0.0026 J | 0.029 | <0.0048 | <0.0048 | <0.0024 | NA | <0.0048 | 0.01 | <0.0048 | NA | NA | NA |
| STR04-1.5' | 3/19/2001 | <0.0051 | <0.0051 | <0.0051 | <0.02 | <0.02 | NA | <0.0051 | <0.0051 | <0.0051 | <0.0051 | <0.0051 | <0.01 | <0.0026 | <0.01 | <0.0051 | <0.0051 | NA | <0.0051 | <0.01 | <0.01 |
| STR04-17.5' | 3/19/2001 | <0.0052 | <0.0052 | <0.0052 | <0.021 | 0.0076 J | NA | <0.0052 | <0.0052 | <0.0052 | <0.0052 | <0.0052 | <0.01 | <0.0026 | <0.01 | <0.0052 | <0.0052 | NA | <0.0052 | <0.01 | <0.01 |
| STR04-17.5' (Dup) | 3/19/2001 | <0.0046 | <0.0046 | <0.0046 | <0.019 | <0.019 | NA | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0093 | <0.0023 | <0.0093 | <0.0046 | <0.0046 | NA | <0.0046 | <0.0093 | <0.0093 |
| STR05-1.5' | 3/10/2001 | <0.0048 | <0.0048 | <0.0048 | <0.019 | 0.011 J | NA | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0096 | <0.0024 | <0.0096 | <0.0048 | <0.0048 | NA | <0.0048 | <0.0096 | <0.0096 |
| STR05-9' | 3/10/2001 | <0.0046 | <0.0046 | <0.0046 | <0.019 | <0.019 | NA | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0093 | <0.0023 | <0.0093 | <0.0046 | <0.0046 | NA | <0.0046 | <0.0093 | <0.0093 |
| STR05-11.3' | 3/10/2001 | <0.0044 | <0.0044 | <0.0044 | <0.017 | 0.0072 J | NA | <0.0044 | <0.0044 | 0.0029 J | 0.0068 | <0.0044 | <0.0087 | <0.0022 | <0.0087 | <0.0044 | <0.0044 | NA | <0.0044 | <0.0087 | <0.0087 |
| STR06-1' | 3/11/2001 | <0.0048 | <0.0048 | <0.0048 | <0.019 | 0.013 J | NA | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0097 | <0.0024 | <0.0097 | <0.0048 | <0.0048 | NA | <0.0048 | <0.0097 | <0.0097 |
| STR06-15' | 3/11/2001 | <0.0045 | <0.0045 | <0.0045 | <0.018 | <0.018 | NA | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.009 | <0.0023 | <0.009 | <0.0045 | <0.0045 | NA | <0.0045 | <0.009 | <0.009 |
| STR07-1.5' | 3/21/2001 | <0.0053 | <0.0053 | <0.0053 | 0.0091 J | 0.03 | NA | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.011 | <0.0027 | <0.011 | <0.0053 | <0.0053 | NA | <0.0053 | <0.011 | <0.011 |
| STR07-18' | 3/21/2001 | <0.26 | <0.26 | <0.26 | <1.1 | <1.1 | NA | <0.26 | <0.26 | <0.26 | 1.1 | <0.26 | <0.53 | <0.13 | <0.53 | <0.26 | <0.26 | NA | <0.26 | <0.53 | <0.53 |
| STR08-1.5' | 3/26/2001 | <0.0053 | <0.0053 | <0.0053 | <0.021 | <0.021 | NA | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.011 | <0.0026 | <0.011 | <0.0053 | <0.0053 | NA | <0.0053 | <0.011 | <0.011 |
| STR08-13' | 3/26/2001 | <0.24 | <0.24 | <0.24 | <0.96 | 3.2 | NA | <0.24 | <0.24 | 0.38 | <0.24 | <0.24 | <0.48 | <0.12 | <0.48 | <0.24 | <0.24 | NA | <0.24 | <0.48 | <0.48 |
| STR08-13' (Dup) | 3/26/2001 | <0.23 | <0.23 | <0.23 | <0.94 | 5.9 | NA | <0.23 | <0.23 | 0.29 | 0.079 J | <0.23 | <0.47 | <0.12 | <0.47 | <0.23 | <0.23 | NA | <0.23 | <0.47 | <0.47 |
| STR09-7.5' | 4/4/2001 | <0.0054 | <0.0054 | <0.0054 | <0.022 | <0.022 | NA | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.011 | <0.0027 | <0.011 | <0.0054 | <0.0054 | NA | <0.0054 | <0.011 | <0.011 |

**Table 5-2**
**Summary of Volatile Organic Detections in**
**Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | 1,1-Dichloroethane | 1,2-Dichloroethane | 1,2-Dichloroethene (total) | 2-Butanone | Acetone | Acrylonitrile | Benzene | Bromodichloromethane | Carbon disulfide | Chlorobenzene | Chloroform | Chloromethane | cis-1,2-Dichloroethene | Cyclohexane | Dichlorodifluoromethane | Ethylbenzene | Iodomethane | Isopropylbenzene | Methyl acetate | Methylcyclohexane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STR10-1.5' | 4/7/2001 | <0.0044 | <0.0044 | <0.0044 | <0.018 | <0.018 | <0.088 | <0.0044 | <0.0044 | <0.0044 | <0.0044 | <0.0044 | <0.0044 | <0.0022 | NA | <0.0044 | <0.0044 | <0.0044 | NA | NA | NA |
| STR10-11' | 4/7/2001 | 0.022 | 0.0026 J | 0.0051 J | <0.023 | 0.0081 J | <0.11 | 0.0022 J | <0.0056 | <0.0056 | 0.0038 J | <0.0056 | <0.0056 | 0.0051 | NA | <0.0056 | <0.0056 | <0.0056 | NA | NA | NA |
| STR11-2' | 8/20/2001 | <0.0048 | <0.0048 | <0.0048 | <0.019 | <0.019 | NA | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0096 | <0.0024 | <0.0096 | <0.0048 | <0.0048 | NA | <0.0048 | <0.0096 | <0.0096 |
| STR11-9' | 8/20/2001 | <0.0045 | <0.0045 | <0.0045 | <0.018 | <0.018 | NA | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.0089 | <0.0022 | <0.0089 | <0.0045 | <0.0045 | NA | <0.0045 | <0.0089 | <0.0089 |
| STR11-9' (Dup) | 8/20/2001 | <0.0047 | <0.0047 | <0.0047 | <0.019 | <0.019 | NA | <0.0047 | <0.0047 | <0.0047 | <0.0047 | <0.0047 | <0.0093 | <0.0023 | <0.0093 | <0.0047 | <0.0047 | NA | <0.0047 | <0.0093 | <0.0093 |
| T-1B2-8' | 3/16/2004 | <0.0062 | <0.0062 | NA | <0.025 | <0.025 | NA | <0.0062 | <0.0062 | <0.0062 | <0.0062 | <0.0062 | <0.0062 | <0.0031 | <0.012 | <0.0062 | <0.0062 | NA | <0.0062 | <0.012 | <0.012 |
| T-1E-2-6' | 3/16/2004 | <0.006 | <0.006 | NA | <0.024 | <0.024 | NA | <0.006 | <0.006 | <0.006 | <0.006 | <0.006 | <0.006 | <0.003 | <0.012 | <0.006 | <0.006 | NA | <0.006 | <0.012 | <0.012 |
| T-1N-6' | 3/16/2004 | <0.0067 | <0.0067 | NA | <0.027 | <0.027 | NA | <0.0067 | <0.0067 | <0.0067 | <0.0067 | <0.0067 | <0.0067 | <0.0033 | <0.013 | <0.0067 | <0.0067 | NA | <0.0067 | <0.013 | <0.013 |
| T-1NE-4' | 3/16/2004 | <0.0062 | <0.0062 | NA | <0.025 | <0.025 | NA | <0.0062 | <0.0062 | <0.0062 | <0.0062 | <0.0062 | <0.0062 | <0.0031 | <0.012 | <0.0062 | <0.0062 | NA | <0.0062 | <0.012 | <0.012 |
| T-1W2-6' | 3/16/2004 | <0.0063 | <0.0063 | NA | <0.025 | <0.025 | NA | <0.0063 | <0.0063 | <0.0063 | <0.0063 | <0.0063 | <0.0063 | <0.0032 | <0.013 | <0.0063 | <0.0063 | NA | <0.0063 | <0.013 | <0.013 |
| T-2-3' | 11/8/2001 | <0.0054 | <0.0054 | <0.0054 | <0.022 | 0.0028 J B | <0.11 | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.0027 | NA | <0.0054 | <0.0054 | <0.0054 | NA | NA | NA |
| T-2-9' | 11/8/2001 | <0.25 | <0.25 | <0.25 | 0.13 J B | 0.54 J B | <5.1 | <0.25 | <0.25 | <0.25 | 0.98 | <0.25 | <0.25 | <0.13 | NA | <0.25 | <0.25 | <0.25 | NA | NA | NA |
| T-3-3' | 11/8/2001 | <0.25 | <0.25 | <0.25 | <1 | 0.58 J B | <5 | 0.037 J | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.13 | NA | <0.25 | 0.13 J B | <0.25 | NA | NA | NA |
| T-3-11' | 11/8/2001 | <0.0047 | <0.0047 | <0.0047 | <0.019 | 0.0027 J B | <0.094 | <0.0047 | <0.0047 | <0.0047 | <0.0047 | <0.0047 | <0.0047 | <0.0023 | NA | <0.0047 | <0.0047 | <0.0047 | NA | NA | NA |
| T-4-3' | 11/9/2001 | <0.0045 | <0.0045 | <0.0045 | <0.018 | 0.007 J B | <0.091 | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.0023 | NA | <0.0045 | <0.0045 | <0.0045 | NA | NA | NA |
| T-4-9' | 11/9/2001 | <0.0055 | <0.0055 | <0.0055 | <0.022 | 0.0033 J B | <0.11 | <0.0055 | <0.0055 | <0.0055 | <0.0055 | <0.0055 | <0.0055 | <0.0027 | NA | <0.0055 | <0.0055 | <0.0055 | NA | NA | NA |
| T-5-3' | 11/9/2001 | <0.0064 | <0.0064 | <0.0064 | <0.026 | 0.0035 J B | <0.13 | <0.0064 | <0.0064 | <0.0064 | <0.0064 | <0.0064 | <0.0064 | <0.0032 | NA | <0.0064 | <0.0064 | <0.0064 | NA | NA | NA |
| T-5-9' | 11/9/2001 | <0.0053 | <0.0053 | <0.0053 | 0.0087 J | 0.028 B | <0.11 | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.0026 | NA | <0.0053 | <0.0053 | <0.0053 | NA | NA | NA |
| T-6-3' | 11/10/2001 | <0.0057 | <0.0057 | <0.0057 | 0.0045 J | 0.027 B | <0.11 | <0.0057 | <0.0057 | <0.0057 | 0.017 | <0.0057 | <0.0057 | <0.0028 | NA | <0.0057 | <0.0057 | <0.0057 | NA | NA | NA |
| T-6-7.5' | 11/11/2001 | <0.68 | <0.68 | <0.68 | <2.7 | 23 B | <14 | <0.68 | <0.68 | 0.27 J | <0.68 | <0.68 | <0.68 | <0.34 | NA | <0.68 | 0.24 J B | 0.6 J B | NA | NA | NA |
| T-6-10' | 11/10/2001 | <0.24 | <0.24 | <0.24 | <0.95 | 0.42 J B | <4.8 | <0.24 | <0.24 | <0.24 | 2.5 | <0.24 | <0.24 | <0.12 | NA | <0.24 | <0.24 | <0.24 | NA | NA | NA |
| T-8-3' | 11/11/2001 | <0.0055 | <0.0055 | <0.0055 | <0.022 | 0.0032 J B | <0.11 | <0.0055 | <0.0055 | <0.0055 | <0.0055 | <0.0055 | <0.0055 | <0.0027 | NA | <0.0055 | <0.0055 | <0.0055 | NA | NA | NA |
| T-8-9' | 11/11/2001 | <0.0054 | <0.0054 | <0.0054 | <0.022 | 0.0032 J B | <0.11 | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.0027 | NA | <0.0054 | <0.0054 | <0.0054 | NA | NA | NA |
| UAW01-30-1.5' | 4/2/2001 | <0.0054 | <0.0054 | <0.0054 | <0.021 | <0.021 | NA | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.011 | <0.0027 | <0.011 | <0.0054 | <0.0054 | NA | <0.0054 | <0.011 | <0.011 |
| UAW01-30-15' | 4/2/2001 | <0.0056 | <0.0056 | <0.0056 | <0.022 | <0.022 | NA | <0.0056 | <0.0056 | <0.0056 | <0.0056 | <0.0056 | <0.011 | <0.0028 | <0.011 | <0.0056 | <0.0056 | NA | <0.0056 | <0.011 | <0.011 |
| UAW04-20-10' | 3/23/2001 | <7.1 | <7.1 | <7.1 | <28 | <28 | NA | <7.1 | <7.1 | <7.1 | <7.1 | <7.1 | <14 | <3.5 | <14 | <7.1 | <7.1 | NA | <7.1 | <14 | <14 |
| UAW05-20-13' | 3/23/2001 | <0.22 | <0.22 | <0.22 | <0.9 | <0.9 | NA | <0.22 | <0.22 | <0.22 | 1.6 | <0.22 | <0.45 | <0.11 | <0.45 | <0.22 | <0.22 | NA | <0.22 | <0.45 | 0.22 J |
| UAW06-20-1.5' | 3/26/2001 | <0.0053 | <0.0053 | <0.0053 | 0.0072 J | 0.029 | NA | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.011 | <0.0026 | <0.011 | <0.0053 | <0.0053 | NA | <0.0053 | <0.011 | <0.011 |
| UAW06-20-11.5' | 3/26/2001 | <0.005 | <0.005 | <0.005 | <0.02 | 0.59 J | NA | <0.005 | <0.005 | 0.036 | 0.043 | <0.005 | <0.0099 | <0.0025 | <0.0099 | <0.005 | <0.005 | NA | <0.005 | <0.0099 | <0.0099 |
| UAW08-20-13' | 3/24/2001 | <0.46 | <0.46 | <0.46 | <1.8 | <1.8 | <9.2 | 0.19 J | <0.46 | 0.28 J | 0.26 J | <0.46 | <0.92 | <0.23 | NA | <0.46 | 0.32 J | <0.46 | NA | NA | NA |
| UAW09-20-1.5' | 3/27/2001 | <0.0049 | <0.0049 | <0.0049 | <0.02 | <0.02 | NA | <0.0049 | <0.0049 | <0.0049 | <0.0049 | <0.0049 | <0.0098 | <0.0025 | <0.0098 | <0.0049 | <0.0049 | NA | <0.0049 | <0.0098 | <0.0098 |
| UAW09-20-15' | 3/27/2001 | <0.0054 | <0.0054 | <0.0054 | <0.021 | <0.021 | NA | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.011 | <0.0027 | <0.011 | <0.0054 | <0.0054 | NA | <0.0054 | <0.011 | <0.011 |
| UAW11-40-2' | 4/17/2001 | <0.0048 | <0.0048 | <0.0048 | <0.019 | 0.013 J | NA | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0097 | <0.0024 | <0.0097 | <0.0048 | <0.0048 | NA | <0.0048 | <0.0097 | <0.0097 |
| UAW11-40-10' | 4/17/2001 | <0.28 | <0.28 | <0.28 | <1.1 | 2.3 | NA | <0.28 | <0.28 | <0.28 | <0.28 | <0.28 | <0.56 | <0.14 | <0.56 | <0.28 | <0.28 | NA | <0.28 | <0.56 | <0.56 |
| UAW12-20-12' | 3/24/2001 | <0.3 | <0.3 | <0.3 | <1.2 | <1.2 | <6 | <0.3 | <0.3 | <0.3 | 0.86 | <0.3 | <0.6 | <0.15 | NA | <0.3 | <0.3 | <0.3 | NA | NA | NA |
| UAW13-20-1.5' | 3/24/2001 | <0.0047 | <0.0047 | <0.0047 | <0.019 | 0.025 | <0.093 | <0.0047 | <0.0047 | <0.0047 | <0.0047 | <0.0047 | <0.0093 | <0.0023 | NA | <0.0047 | <0.0047 | <0.0047 | NA | NA | NA |
| UAW13-20-11.5' | 3/24/2001 | <0.28 | <0.28 | <0.28 | <1.1 | <1.1 | <5.7 | <0.28 | <0.28 | <0.28 | <0.28 | <0.28 | <0.57 | <0.14 | NA | <0.28 | <0.28 | <0.28 | NA | NA | NA |
| UAW14-10-1.5' | 4/4/2001 | <0.0049 | <0.0049 | <0.0049 | <0.02 | <0.02 | NA | <0.0049 | <0.0049 | <0.0049 | <0.0049 | <0.0049 | <0.0099 | <0.0025 | <0.0099 | <0.0049 | <0.0049 | NA | <0.0049 | <0.0099 | <0.0099 |
| UAW15-20-2' | 4/9/2001 | <0.0043 | <0.0043 | <0.0043 | 0.008 J | 0.028 | NA | <0.0043 | <0.0043 | <0.0043 | <0.0043 | <0.0043 | <0.0086 | <0.0022 | <0.0086 | <0.0043 | <0.0043 | NA | <0.0043 | <0.0086 | <0.0086 |
| UAW15-20-2' (Dup) | 4/9/2001 | <0.0046 | <0.0046 | <0.0046 | 0.019 | 0.075 | NA | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0093 | <0.0023 | <0.0093 | <0.0046 | <0.0046 | NA | <0.0046 | <0.0093 | <0.0093 |
| UAW15-20-8.5' | 4/9/2001 | <0.0049 | <0.0049 | <0.0049 | <0.02 | <0.02 | NA | <0.0049 | <0.0049 | <0.0049 | <0.0049 | <0.0049 | <0.0098 | <0.0025 | <0.0098 | <0.0049 | <0.0049 | NA | <0.0049 | <0.0098 | <0.0098 |
| UAW16-10-2' | 8/22/2001 | <0.0057 | <0.0057 | <0.0057 | 0.0039 J | 0.013 J | NA | <0.0057 | <0.0057 | <0.0057 | 0.0092 | <0.0057 | <0.011 | <0.0029 | <0.011 | <0.0057 | <0.0057 | NA | <0.0057 | <0.011 | 0.00082 J |

**Table 5-2**
**Summary of Volatile Organic Detections in**
**Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | 1,1-Dichloroethane | 1,2-Dichloroethane | 1,2-Dichloroethene (total) | 2-Butanone | Acetone | Acrylonitrile | Benzene | Bromodichloromethane | Carbon disulfide | Chlorobenzene | Chloroform | Chloromethane | cis-1,2-Dichloroethene | Cyclohexane | Dichlorodifluoromethane | Ethylbenzene | Iodomethane | Isopropylbenzene | Methyl acetate | Methylcyclohexane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW16-10-5.5' | 8/22/2001 | <0.0061 | <0.0061 | <0.0061 | 0.0035 J | 0.013 J | NA | <0.0061 | <0.0061 | <0.0061 | 0.032 | <0.0061 | <0.012 | <0.003 | <0.012 | <0.0061 | <0.0061 | NA | <0.0061 | <0.012 | 0.0028 J |
| UAW17-40-1.5' | 4/5/2001 | <0.0046 | <0.0046 | <0.0046 | <0.018 | <0.018 | NA | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0091 | <0.0023 | <0.0091 | <0.0046 | <0.0046 | NA | <0.0046 | <0.0091 | <0.0091 |
| UAW17-40-5' | 4/5/2001 | <0.24 | <0.24 | <0.24 | <0.96 | 0.69 J | NA | <0.24 | <0.24 | <0.24 | <0.24 | <0.24 | <0.48 | <0.12 | <0.48 | <0.24 | <0.24 | NA | <0.24 | 6 | <0.48 |
| UAW18-20-1' | 8/23/2001 | <0.26 | <0.26 | <0.26 | <1 | 1.3 | NA | <0.26 | <0.26 | <0.26 | <0.26 | <0.26 | <0.52 | <0.13 | <0.52 | <0.26 | <0.26 | NA | <0.26 | <0.52 | <0.52 |
| UAW18-20-15' | 8/23/2001 | <0.0047 | <0.0047 | <0.0047 | <0.019 | 0.0029 J | NA | <0.0047 | <0.0047 | 0.0018 J | 0.014 | <0.0047 | <0.0095 | <0.0024 | <0.0095 | <0.0047 | <0.0047 | NA | <0.0047 | <0.0095 | <0.0095 |
| UAW19-80-1.5' | 4/6/2001 | <0.005 | <0.005 | <0.005 | <0.02 | <0.02 | NA | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.0099 | <0.0025 | <0.0099 | <0.005 | <0.005 | NA | <0.005 | <0.0099 | <0.0099 |
| UAW19-80-15' | 4/6/2001 | <0.0046 | <0.0046 | <0.0046 | <0.018 | <0.018 | NA | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0091 | <0.0023 | <0.0091 | <0.0046 | <0.0046 | NA | <0.0046 | <0.0091 | <0.0091 |
| UAW20-60-1.5' | 4/9/2001 | <0.0047 | <0.0047 | <0.0047 | <0.019 | <0.019 | NA | <0.0047 | <0.0047 | <0.0047 | <0.0047 | <0.0047 | <0.0093 | <0.0023 | <0.0093 | <0.0047 | <0.0047 | NA | <0.0047 | <0.0093 | <0.0093 |
| UAW20-60-9.5' | 4/9/2001 | <0.0053 | <0.0053 | <0.0053 | <0.021 | <0.021 | NA | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.011 | <0.0026 | <0.011 | <0.0053 | <0.0053 | NA | <0.0053 | <0.011 | <0.011 |
| UAW21-30-1.5' | 4/11/2001 | <0.005 | <0.005 | <0.005 | <0.02 | <0.02 | NA | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.01 | <0.0025 | <0.01 | <0.005 | <0.005 | NA | <0.005 | <0.01 | <0.01 |
| UAW21-30-10' | 4/11/2001 | <0.0046 | <0.0046 | <0.0046 | <0.018 | <0.018 | NA | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0092 | <0.0023 | <0.0092 | <0.0046 | <0.0046 | NA | <0.0046 | <0.0092 | <0.0092 |
| UAW22-20-2' | 9/5/2001 | <0.0044 | <0.0044 | <0.0044 | 0.0036 J | 0.01 J | NA | <0.0044 | <0.0044 | <0.0044 | <0.0044 | <0.0044 | <0.0088 | <0.0022 | <0.0088 | <0.0044 | <0.0044 | NA | <0.0044 | <0.0088 | 0.00076 J |
| UAW22-20-11' | 9/5/2001 | <0.0063 | <0.0063 | <0.0063 | <0.025 | 0.0043 J | NA | <0.0063 | <0.0063 | 0.0064 | 0.037 | <0.0063 | <0.013 | <0.0031 | <0.013 | <0.0063 | <0.0063 | NA | <0.0063 | <0.013 | <0.013 |
| **Background Soil** | | | | | | | | | | | | | | | | | | | | | |
| B01-1.5' | 10/9/2001 | <0.0046 | <0.0046 | <0.0046 | <0.018 | 0.0044 J B | NA | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0092 | <0.0023 | <0.0092 | <0.0046 | <0.0046 | NA | <0.0046 | <0.0092 | <0.0092 |
| B01-11.5' | 10/9/2001 | <0.0057 | <0.0057 | <0.0057 | | 0.0061 J B | NA | <0.0057 | <0.0057 | <0.0057 | <0.0057 | <0.0057 | <0.011 | <0.0029 | <0.011 | <0.0057 | <0.0057 | NA | <0.0057 | <0.011 | <0.011 |
| B02-1.5' | 10/9/2001 | <0.0046 | <0.0046 | <0.0046 | <0.018 | 0.0044 J B | NA | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0092 | <0.0023 | <0.0092 | <0.0046 | <0.0046 | NA | <0.0046 | <0.0092 | <0.0092 |
| B02-11.5' | 10/9/2001 | <0.0058 | <0.0058 | <0.0058 | 0.004 J B | 0.0055 J B | NA | <0.0058 | <0.0058 | <0.0058 | <0.0058 | <0.0058 | <0.012 | <0.0029 | <0.012 | <0.0058 | <0.0058 | NA | <0.0058 | <0.012 | <0.012 |
| B03-1.5' | 10/9/2001 | <0.0048 | <0.0048 | <0.0048 | <0.019 | 0.004 J B | NA | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0096 | <0.0024 | <0.0096 | <0.0048 | <0.0048 | NA | <0.0048 | <0.0096 | <0.0096 |
| B03-11.5' | 10/9/2001 | <0.0054 | <0.0054 | <0.0054 | <0.022 | 0.0051 J B | NA | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.011 | <0.0027 | <0.011 | <0.0054 | <0.0054 | NA | <0.0054 | <0.011 | <0.011 |
| B04-1.5' | 10/9/2001 | <0.0054 | <0.0054 | <0.0054 | <0.022 | 0.0044 J B | NA | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.011 | <0.0027 | <0.011 | <0.0054 | <0.0054 | NA | <0.0054 | <0.011 | <0.011 |
| B04-1.5' (Dup) | 10/9/2001 | <0.0055 | <0.0055 | <0.0055 | <0.022 | 0.005 J B | NA | <0.0055 | <0.0055 | <0.0055 | <0.0055 | <0.0055 | <0.011 | <0.0027 | <0.011 | <0.0055 | <0.0055 | NA | <0.0055 | <0.011 | <0.011 |
| B04-11.5' | 10/9/2001 | <0.0052 | <0.0052 | <0.0052 | 0.0037 J B | 0.0053 J B | NA | <0.0052 | <0.0052 | <0.0052 | <0.0052 | <0.0052 | <0.01 | <0.0026 | <0.01 | <0.0052 | <0.0052 | NA | <0.0052 | <0.01 | <0.01 |
| B05-1.5' | 10/9/2001 | <0.0046 | <0.0046 | <0.0046 | <0.018 | 0.0039 J B | NA | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0092 | <0.0023 | <0.0092 | <0.0046 | <0.0046 | NA | <0.0046 | <0.0092 | <0.0092 |
| B05-11.5' | 10/9/2001 | <0.0059 | <0.0059 | <0.0059 | <0.024 | 0.006 J B | NA | <0.0059 | <0.0059 | <0.0059 | <0.0059 | <0.0059 | <0.012 | <0.003 | <0.012 | <0.0059 | <0.0059 | NA | <0.0059 | <0.012 | <0.012 |
| B06-1.5' | 10/9/2001 | <0.0049 | <0.0049 | <0.0049 | 0.0033 J B | 0.0047 J B | NA | <0.0049 | <0.0049 | <0.0049 | <0.0049 | <0.0049 | <0.0098 | <0.0024 | <0.0098 | <0.0049 | <0.0049 | NA | <0.0049 | <0.0098 | <0.0098 |
| B06-11' | 10/9/2001 | <0.0053 | <0.0053 | <0.0053 | <0.021 | 0.0047 J B | NA | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.011 | <0.0026 | <0.011 | <0.0053 | <0.0053 | NA | <0.0053 | <0.011 | <0.011 |
| B07-1' | 10/9/2001 | <0.0058 | <0.0058 | <0.0058 | <0.023 | 0.0051 J B | NA | <0.0058 | <0.0058 | <0.0058 | <0.0058 | <0.0058 | <0.012 | <0.0029 | <0.012 | <0.0058 | <0.0058 | NA | <0.0058 | <0.012 | <0.012 |
| B07-9' | 10/9/2001 | <0.0051 | <0.0051 | <0.0051 | <0.02 | 0.0046 J B | NA | <0.0051 | <0.0051 | <0.0051 | <0.0051 | <0.0051 | <0.01 | <0.0026 | <0.01 | <0.0051 | <0.0051 | NA | <0.0051 | <0.01 | <0.01 |
| B08-2' | 10/9/2001 | <0.0053 | <0.0053 | <0.0053 | <0.021 | 0.0045 J B | NA | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.011 | <0.0026 | <0.011 | <0.0053 | <0.0053 | NA | <0.0053 | <0.011 | <0.011 |
| B08-9' | 10/9/2001 | <0.0048 | <0.0048 | <0.0048 | 0.0041 J B | 0.0088 J B | NA | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0096 | <0.0024 | <0.0096 | <0.0048 | <0.0048 | NA | <0.0048 | <0.0096 | 0.00071 J |
| B09-2' | 10/9/2001 | <0.0093 | <0.0093 | <0.0093 | <0.037 | 0.012 J B | NA | <0.0093 | <0.0093 | <0.0093 | <0.0093 | <0.0093 | <0.019 | <0.0046 | <0.019 | <0.0093 | <0.0093 | NA | <0.0093 | <0.019 | <0.019 |
| B09-10' | 10/9/2001 | 0.0083 | 0.0052 J | 0.027 | <0.023 | 0.0064 J B | NA | 0.00078 J | <0.0058 | <0.0058 | <0.0058 | <0.0058 | <0.012 | 0.027 | <0.012 | <0.0058 | <0.0058 | NA | <0.0058 | <0.012 | <0.012 |
| B10-2' | 10/9/2001 | <0.011 | <0.011 | <0.011 | <0.043 | <0.043 | NA | <0.011 | <0.011 | <0.011 | <0.011 | <0.011 | <0.021 | <0.0054 | <0.021 | <0.011 | <0.011 | NA | <0.011 | 0.0031 J | <0.021 |
| B10-11' | 10/9/2001 | <0.005 | <0.005 | <0.005 | <0.02 | 0.0047 J B | NA | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.01 | <0.0025 | <0.01 | <0.005 | <0.005 | NA | <0.005 | <0.01 | <0.01 |

**Table 5-2**
**Summary of Volatile Organic Detections in**
**Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | 1,1-Dichloroethane | 1,2-Dichloroethane | 1,2-Dichloroethene (total) | 2-Butanone | Acetone | Acrylonitrile | Benzene | Bromodichloromethane | Carbon disulfide | Chlorobenzene | Chloroform | Chloromethane | cis-1,2-Dichloroethene | Cyclohexane | Dichlorodifluoromethane | Ethylbenzene | Iodomethane | Isopropylbenzene | Methyl acetate | Methylcyclohexane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Creek Bed Sediment** | | | | | | | | | | | | | | | | | | | | | |
| CS1 | 3/6/2002 | <0.0065 | <0.0065 | NA | NA | <0.026 | NA | <0.0065 | <0.0065 | <0.0065 | <0.0065 | <0.0065 | NA | NA | NA | <0.0065 | <0.0065 | NA | NA | NA | <0.013 |
| CS-1A | 3/25/2004 | <0.0054 | <0.0054 | NA | <0.022 | <0.022 | <0.11 | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.0027 | NA | <0.0054 | <0.0054 | <0.0054 | NA | NA | NA |
| CS2 | 3/6/2002 | <0.0055 | <0.0055 | NA | NA | <0.022 | NA | <0.0055 | <0.0055 | <0.0055 | <0.0055 | <0.0055 | NA | NA | NA | <0.0055 | <0.0055 | NA | NA | NA | <0.011 |
| CS-2A | 3/26/2004 | <0.0057 | <0.0057 | NA | <0.023 | <0.023 | <0.11 | <0.0057 | <0.0057 | <0.0057 | <0.0057 | <0.0057 | <0.0057 | <0.0028 | NA | <0.0057 | <0.0057 | <0.0057 | NA | NA | NA |
| CS3 | 3/6/2002 | <0.0055 | <0.0055 | NA | NA | 0.0091 J B | NA | <0.0055 | <0.0055 | <0.0055 | <0.0055 | <0.0055 | NA | NA | NA | <0.0055 | <0.0055 | NA | NA | NA | <0.011 |
| CS-3A | 3/26/2004 | <0.0055 | <0.0055 | NA | 0.0035 J | 0.011 J | <0.11 | <0.0055 | <0.0055 | <0.0055 | <0.0055 | <0.0055 | <0.0055 | <0.0027 | NA | <0.0055 | <0.0055 | <0.0055 | NA | NA | NA |
| CS4 | 3/6/2002 | <0.0057 | <0.0057 | NA | NA | <0.023 | NA | <0.0057 | <0.0057 | <0.0057 | 0.0046 J | <0.0057 | NA | NA | NA | <0.0057 | <0.0057 | NA | NA | NA | <0.011 |
| CS-4A | 3/26/2004 | <0.0072 | <0.0072 | NA | 0.0027 J | 0.012 J | <0.14 | <0.0072 | <0.0072 | <0.0072 | 0.0035 J | <0.0072 | <0.0072 | <0.0036 | NA | <0.0072 | <0.0072 | <0.0072 | NA | NA | NA |
| CS5 | 3/6/2002 | <0.0054 | <0.0054 | NA | NA | <0.021 | NA | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.0054 | NA | NA | NA | <0.0054 | <0.0054 | NA | NA | NA | <0.011 |
| CS-5A | 3/25/2004 | <0.0057 | <0.0057 | NA | <0.023 | <0.023 | <0.11 | <0.0057 | <0.0057 | <0.0057 | <0.0057 | <0.0057 | <0.0057 | <0.0028 | NA | <0.0057 | <0.0057 | <0.0057 | NA | NA | NA |
| CS6 | 3/6/2002 | <0.006 | <0.006 | NA | NA | <0.024 | NA | <0.006 | <0.006 | <0.006 | 0.0011 J | <0.006 | NA | NA | NA | <0.006 | <0.006 | NA | NA | NA | <0.012 |
| CS-6A | 3/25/2004 | <0.0079 | <0.0079 | NA | <0.031 | <0.031 | <0.16 | <0.0079 | <0.0079 | <0.0079 | <0.0079 | <0.0079 | <0.0079 | <0.0039 | NA | <0.0079 | <0.0079 | <0.0079 | NA | NA | NA |
| CS-6A (Dup) | 3/25/2004 | <0.0066 | <0.0066 | NA | <0.026 | <0.026 | <0.13 | <0.0066 | <0.0066 | <0.0066 | <0.0066 | <0.0066 | <0.0066 | <0.0033 | NA | <0.0066 | <0.0066 | <0.0066 | NA | NA | NA |
| CS7 (Dup) | 3/6/2002 | <0.0059 | <0.0059 | NA | NA | <0.024 | NA | <0.0059 | <0.0059 | <0.0059 | <0.0059 | <0.0059 | NA | NA | NA | <0.0059 | <0.0059 | NA | NA | NA | <0.012 |
| CS7 | 3/6/2002 | <0.0055 | <0.0055 | NA | NA | <0.022 | NA | <0.0055 | <0.0055 | <0.0055 | <0.0055 | <0.0055 | NA | NA | NA | <0.0055 | <0.0055 | NA | NA | NA | <0.011 |
| CS8 | 3/6/2002 | <0.0058 | <0.0058 | NA | NA | <0.023 | NA | <0.0058 | <0.0058 | <0.0058 | <0.0058 | <0.0058 | NA | NA | NA | <0.0058 | <0.0058 | NA | NA | NA | <0.012 |
| **Creek Bank Sediment** | | | | | | | | | | | | | | | | | | | | | |
| SS-1 | 10/11/2001 | <0.0049 | <0.0049 | NA | NA | 0.0047 J | NA | 0.0036 J | <0.0049 | <0.0049 | 0.018 | <0.0049 | NA | NA | NA | <0.0049 | 0.00077 J | NA | NA | NA | 0.00081 J |
| SS-2 | 10/11/2001 | <0.0048 | <0.0048 | NA | NA | <0.019 | NA | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | NA | NA | NA | <0.0048 | <0.0048 | NA | NA | NA | <0.0097 |
| SS-3 | 10/11/2001 | <0.0061 | <0.0061 | NA | NA | <0.024 | NA | <0.0061 | <0.0061 | <0.0061 | <0.0061 | <0.0061 | NA | NA | NA | <0.0061 | <0.0061 | NA | NA | NA | <0.012 |
| SS-4 | 10/11/2001 | <0.0054 | <0.0054 | NA | NA | 0.018 J | NA | <0.0054 | <0.0054 | 0.0072 | <0.0054 | <0.0054 | NA | NA | NA | <0.0054 | <0.0054 | NA | NA | NA | <0.011 |
| SS-5 ~25' South | 10/11/2001 | <0.0057 | <0.0057 | NA | NA | 0.0083 J | NA | <0.0057 | <0.0057 | <0.0057 | 0.0043 J | <0.0057 | NA | NA | NA | <0.0057 | <0.0057 | NA | NA | NA | <0.011 |
| SS-5 (Dup) | 10/11/2001 | <0.0059 | <0.0059 | NA | NA | 0.0067 J | NA | <0.0059 | <0.0059 | <0.0059 | 0.0037 J | <0.0059 | NA | NA | NA | <0.0059 | <0.0059 | NA | NA | NA | 0.0011 J |
| SS-6 | 10/11/2001 | <0.0054 | <0.0054 | NA | NA | <0.022 | NA | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.0054 | NA | NA | NA | <0.0054 | <0.0054 | NA | NA | NA | <0.011 |
| SS-7 | 10/11/2001 | <0.0051 | <0.0051 | NA | NA | <0.02 | NA | <0.0051 | <0.0051 | <0.0051 | <0.0051 | <0.0051 | NA | NA | NA | <0.0051 | <0.0051 | NA | NA | NA | <0.01 |
| SS-8 | 10/11/2001 | <0.0066 | <0.0066 | NA | NA | 0.0029 J | NA | <0.0066 | <0.0066 | <0.0066 | <0.0066 | <0.0066 | NA | NA | NA | <0.0066 | <0.0066 | NA | NA | NA | <0.013 |
| SS-9 | 10/11/2001 | <0.0059 | <0.0059 | NA | NA | 0.0029 J | NA | <0.0059 | <0.0059 | <0.0059 | <0.0059 | <0.0059 | NA | NA | NA | <0.0059 | <0.0059 | NA | NA | NA | <0.012 |
| SS-10 | 10/11/2001 | <0.005 | <0.005 | NA | NA | <0.02 | NA | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | NA | NA | NA | <0.005 | <0.005 | NA | NA | NA | <0.01 |
| SS-11 | 10/11/2001 | <0.0059 | <0.0059 | NA | NA | <0.023 | NA | <0.0059 | <0.0059 | <0.0059 | <0.0059 | <0.0059 | NA | NA | NA | <0.0059 | <0.0059 | NA | NA | NA | <0.012 |
| SS-12 | 10/11/2001 | <0.0055 | <0.0055 | <5.5 | <22 | <0.022 | NA | <0.0055 | <0.0055 | <0.0055 | <0.0055 | <0.0055 | <5.5 | <2.8 | NA | <0.0055 | <0.0055 | NA | NA | NA | <0.011 |

**Table 5-2**
**Summary of Volatile Organic Detections in**
**Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | Methylene chloride | Tetrachloroethene | Toluene | Trichloroethene | Vinyl chloride | Xylenes (total) |
|---|---|---|---|---|---|---|---|
| **On-Site Soil** | | | | | | | |
| DP01-2' | 7/24/2001 | <1.4 | <1.4 | <1.4 | <1.4 | <2.8 | 50 |
| DP01-9.5' | 7/24/2001 | 0.086 J B | <0.26 | <0.26 | <0.26 | <0.52 | 1.4 |
| DP02-2' | 7/24/2001 | <0.0044 | <0.0044 | <0.0044 | <0.0044 | <0.0088 | <0.0088 |
| DP02-9.5' | 7/24/2001 | <0.0055 | <0.0055 | <0.0055 | <0.0055 | <0.011 | <0.011 |
| DP03-2' | 7/24/2001 | <0.0047 | <0.0047 | <0.0047 | <0.0047 | <0.0093 | <0.0093 |
| DP03-8.5' | 7/24/2001 | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.009 | <0.009 |
| DP05-1' | 7/25/2001 | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0091 | <0.0091 |
| DP05-8.5' | 7/25/2001 | <0.0044 | <0.0044 | <0.0044 | <0.0044 | <0.0087 | <0.0087 |
| DP07-9' | 7/26/2001 | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0091 | <0.0091 |
| DP08-6' | 7/26/2001 | <0.0057 | <0.0057 | <0.0057 | <0.0057 | <0.011 | <0.011 |
| DP08-11' | 7/26/2001 | <0.0049 | <0.0049 | <0.0049 | <0.0049 | <0.0098 | <0.0098 |
| DP09-12' | 7/27/2001 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0095 | <0.0095 |
| DP10-2' | 7/27/2001 | <0.0048 | <0.0048 | 0.00056 J | <0.0048 | <0.0048 | <0.0095 |
| DP10-10' | 7/27/2001 | <0.27 | <0.27 | 2.4 | <0.27 | <0.27 | 0.32 J |
| DP10-10' (Dup) | 7/27/2001 | <0.27 | <0.27 | 3.8 | <0.27 | <0.27 | 0.2 J |
| DP12-1.5' | 7/28/2001 | <0.004 | <0.004 | <0.004 | <0.004 | <0.008 | <0.008 |
| DP12-9' | 7/28/2001 | <0.0052 | <0.0052 | <0.0052 | <0.0052 | <0.01 | <0.01 |
| DP13-3' | 7/29/2001 | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.011 |
| DP13-11' | 7/29/2001 | 5.7 B | <5.3 | 16 | <5.3 | <5.3 | <11 |
| DP14-3' | 7/29/2001 | 0.18 J B | <0.22 | 0.076 J | <0.22 | <0.22 | <0.45 |
| DP14-9' | 7/29/2001 | 0.23 J B | <0.26 | 0.76 | <0.26 | <0.26 | <0.52 |
| DP15-2' | 7/29/2001 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0097 |
| DP15-9' | 7/29/2001 | 0.7 B | <0.31 | 0.44 | <0.31 | <0.31 | <0.62 |
| DP16-2.8' | 7/30/2001 | 0.0014 J B | <0.0055 | <0.0055 | <0.0055 | <0.0055 | <0.011 |
| DP16-12.5' | 7/30/2001 | 11 J B | <12 | 150 | <12 | <12 | 24 J |
| DP17-3' | 7/30/2001 | 0.27 B | <0.26 | 0.063 J | <0.26 | <0.26 | 0.045 J |
| DP17-13' | 7/30/2001 | 0.41 J B | <1.5 | 35 | <1.5 | <1.5 | 9.1 |
| DP18-2' | 7/30/2001 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.0099 |
| DP18-14.5' | 7/30/2001 | 0.0015 J B | <0.0049 | <0.0049 | <0.0049 | <0.0049 | <0.0097 |
| DP19-2' | 7/30/2001 | <0.0059 | <0.0059 | <0.0059 | <0.0059 | <0.0059 | <0.012 |
| DP19-13' | 7/30/2001 | <0.0057 | <0.0057 | <0.0057 | <0.0057 | <0.0057 | <0.011 |
| DP20-2' | 7/30/2001 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.0099 |
| DP20-14.5' | 7/30/2001 | 0.25 J B | <0.26 | <0.26 | <0.26 | <0.26 | <0.52 |
| DP23-2.5' | 8/1/2001 | <0.0062 | <0.0062 | <0.0062 | <0.0062 | <0.012 | <0.012 |
| DP23-9' | 8/1/2001 | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.011 | <0.011 |
| DP25-2.5' | 8/7/2001 | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.011 | <0.011 |
| DP25-2.5' (Dup) | 8/7/2001 | <0.0047 | <0.0047 | <0.0047 | <0.0047 | <0.0094 | <0.0094 |
| DP25-7.5' | 8/7/2001 | <0.0044 | <0.0044 | <0.0044 | <0.0044 | <0.0089 | <0.0089 |
| DP29-5' | 11/9/2001 | 0.0032 J | <0.0056 | 0.00065 J | <0.0056 | <0.011 | <0.011 |
| DP31-15 | 12/5/2001 | <0.28 | <0.28 | 0.19 J B | <0.28 | <0.28 | 0.17 J B |

**Table 5-2**
**Summary of Volatile Organic Detections in**
**Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | Methylene chloride | Tetrachloroethene | Toluene | Trichloroethene | Vinyl chloride | Xylenes (total) |
|---|---|---|---|---|---|---|---|
| DP36-19 | 12/5/2001 | <0.0052 | <0.0052 | 0.00067 J | <0.0052 | <0.0052 | <0.01 |
| DP37-19 | 12/5/2001 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.01 |
| DP37-19 (Dup) | 12/5/2001 | <0.0051 | <0.0051 | <0.0051 | <0.0051 | <0.0051 | <0.01 |
| DP38-14.5 | 12/5/2001 | <7.1 | <7.1 | <7.1 | <7.1 | <7.1 | <14 |
| DP50-10' | 3/10/2004 | NA | NA | 0.0025 J B | <0.0052 | NA | NA |
| DP51-10' | 3/10/2004 | NA | NA | 0.0018 J B | NA | NA | NA |
| DP52-5' | 3/10/2004 | NA | NA | 0.0018 J B | NA | NA | NA |
| DP56A-9.5-10.5' | 3/15/2004 | <14 | <14 | 240 | <14 | <14 | <27 |
| DP58A-8.5-9.5' | 3/15/2004 | <0.31 | <0.31 | 0.3 J | <0.31 | <0.31 | <0.61 |
| DP60A-6.6-7.4' | 3/15/2004 | <0.35 | <0.35 | 4.2 | <0.35 | <0.35 | 0.063 J |
| DP61A-5-6' | 3/15/2004 | <0.82 | <0.82 | <0.82 | <0.82 | <0.82 | <1.6 |
| DP61A-5-6' (Dup) | 3/15/2004 | <0.93 | <0.93 | <0.93 | <0.93 | <0.93 | <1.9 |
| DP64A-8.5-9.5' | 3/15/2004 | <0.61 | <0.61 | 3.9 | <0.61 | <0.61 | 1.4 |
| DP66A-9.5-10.5' | 3/15/2004 | <0.25 | <0.25 | 0.27 | <0.25 | <0.25 | <0.51 |
| DP67A-12.5-13.5' | 3/15/2004 | <3.5 | <3.5 | 100 | <3.5 | <3.5 | 11 |
| DP70A-9-11' | 3/14/2004 | <0.3 | <0.3 | 0.036 J | <0.3 | <0.3 | <0.59 |
| DP72A-12-13' | 3/14/2004 | <0.26 | <0.26 | 1.6 | <0.26 | <0.26 | 0.044 J |
| DP73A-12-13' | 3/14/2004 | <1.7 | <1.7 | 4.9 | <1.7 | <1.7 | 0.31 J |
| DP78A-9-10' | 3/14/2004 | <47 | <47 | 92 | <47 | <47 | 18 J |
| DP79A-12-13' | 3/14/2004 | <0.26 | <0.26 | 0.47 | <0.26 | <0.26 | 1.6 |
| STR01-3' | 3/8/2001 | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.0091 | <0.0091 |
| STR01-21' | 3/8/2001 | <0.0052 | <0.0052 | <0.0052 | <0.0052 | <0.01 | <0.01 |
| STR01-73' | 3/9/2001 | <0.0055 | <0.0055 | 0.012 | <0.0055 | <0.011 | 0.0092 J |
| STR01-88' | 3/9/2001 | <0.0071 | <0.0071 | 0.019 | <0.0071 | <0.014 | 0.012 J |
| STR02-1' | 3/13/2001 | 0.0018 J | <0.0052 | <0.0052 | <0.0052 | <0.01 | <0.01 |
| STR02-12.5' | 3/13/2001 | 0.0024 J | <0.0051 | <0.0051 | <0.0051 | <0.01 | <0.01 |
| STR03-4' | 3/14/2001 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.5 |
| STR03-12.5' | 3/14/2001 | <0.0048 | <0.0048 | 0.0057 | <0.0048 | <0.0048 | 0.02 |
| STR04-1.5' | 3/19/2001 | <0.0051 | <0.0051 | <0.0051 | <0.0051 | <0.01 | <0.01 |
| STR04-17.5' | 3/19/2001 | <0.0052 | <0.0052 | <0.0052 | <0.0052 | <0.01 | <0.01 |
| STR04-17.5' (Dup) | 3/19/2001 | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0093 | <0.0093 |
| STR05-1.5' | 3/10/2001 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0096 | <0.0096 |
| STR05-9' | 3/10/2001 | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0093 | <0.0093 |
| STR05-11.3' | 3/10/2001 | <0.0044 | <0.0044 | 0.004 J | <0.0044 | <0.0087 | <0.0087 |
| STR06-1' | 3/11/2001 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0097 | <0.0097 |
| STR06-15' | 3/11/2001 | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.009 | <0.009 |
| STR07-1.5' | 3/21/2001 | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.011 | <0.011 |
| STR07-18' | 3/21/2001 | <0.26 | <0.26 | <0.26 | <0.26 | <0.53 | <0.53 |
| STR08-1.5' | 3/26/2001 | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.011 | <0.011 |
| STR08-13' | 3/26/2001 | <0.24 | <0.24 | <0.24 | <0.24 | <0.48 | <0.48 |
| STR08-13' (Dup) | 3/26/2001 | <0.23 | <0.23 | <0.23 | <0.23 | <0.47 | <0.47 |
| STR09-7.5' | 4/4/2001 | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.011 | <0.011 |

**Table 5-2**
**Summary of Volatile Organic Detections in**
**Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | Methylene chloride | Tetrachloroethene | Toluene | Trichloroethene | Vinyl chloride | Xylenes (total) |
|---|---|---|---|---|---|---|---|
| STR10-1.5' | 4/7/2001 | <0.0044 | <0.0044 | <0.0044 | <0.0044 | <0.0044 | <0.0088 |
| STR10-11' | 4/7/2001 | <0.0056 | 0.0047 J | <0.0056 | 0.0025 J | 0.0084 | <0.011 |
| STR11-2' | 8/20/2001 | <0.0048 | 0.0026 J | <0.0048 | <0.0048 | <0.0096 | <0.0096 |
| STR11-9' | 8/20/2001 | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.0089 | <0.0089 |
| STR11-9' (Dup) | 8/20/2001 | <0.0047 | 0.0016 J | <0.0047 | <0.0047 | <0.0093 | <0.0093 |
| T-1B2-8' | 3/16/2004 | <0.0062 | <0.0062 | <0.0062 | <0.0062 | <0.0062 | <0.012 |
| T-1E-2-6' | 3/16/2004 | <0.006 | <0.006 | <0.006 | <0.006 | <0.006 | <0.012 |
| T-1N-6' | 3/16/2004 | <0.0067 | <0.0067 | <0.0067 | <0.0067 | <0.0067 | <0.013 |
| T-1NE-4' | 3/16/2004 | <0.0062 | <0.0062 | 0.00069 J | <0.0062 | <0.0062 | <0.012 |
| T-1W2-6' | 3/16/2004 | <0.0063 | <0.0063 | <0.0063 | <0.0063 | <0.0063 | <0.013 |
| T-2-3' | 11/8/2001 | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.011 |
| T-2-9' | 11/8/2001 | 0.28 | <0.25 | 0.027 J B | <0.25 | <0.25 | 0.11 J B |
| T-3-3' | 11/8/2001 | 0.29 | <0.25 | 0.47 B | <0.25 | <0.25 | 0.96 B |
| T-3-11' | 11/8/2001 | <0.0047 | <0.0047 | 0.00052 J | <0.0047 | <0.0047 | <0.0094 |
| T-4-3' | 11/9/2001 | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.0091 |
| T-4-9' | 11/9/2001 | 0.0017 J | <0.0055 | <0.0055 | <0.0055 | <0.0055 | <0.011 |
| T-5-3' | 11/9/2001 | 0.0029 J | <0.0064 | <0.0064 | <0.0064 | <0.0064 | <0.013 |
| T-5-9' | 11/9/2001 | 0.0028 J | <0.0053 | 0.00064 J | <0.0053 | <0.0053 | <0.011 |
| T-6-3' | 11/10/2001 | 0.0019 J | <0.0057 | <0.0057 | <0.0057 | <0.0057 | <0.011 |
| T-6-7.5' | 11/11/2001 | <0.68 | 0.067 J B | 0.35 J | <0.68 | <0.68 | 2.1 B |
| T-6-10' | 11/10/2001 | 0.096 J B | 0.031 J B | <0.24 | <0.24 | <0.24 | 0.088 J B |
| T-8-3' | 11/11/2001 | <0.0055 | <0.0055 | <0.0055 | <0.0055 | <0.0055 | <0.011 |
| T-8-9' | 11/11/2001 | 0.0014 J B | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.011 |
| UAW01-30-1.5' | 4/2/2001 | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.011 | <0.011 |
| UAW01-30-15' | 4/2/2001 | 0.002 J | <0.0056 | <0.0056 | <0.0056 | <0.011 | <0.011 |
| UAW04-20-10' | 3/23/2001 | 5.6 J B | <7.1 | 160 | <7.1 | <14 | <14 |
| UAW05-20-13' | 3/23/2001 | <0.22 | <0.22 | <0.22 | <0.22 | <0.45 | <0.45 |
| UAW06-20-1.5' | 3/26/2001 | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.011 | <0.011 |
| UAW06-20-11.5' | 3/26/2001 | <0.005 | <0.005 | 0.0017 J | <0.005 | <0.0099 | 0.0025 J |
| UAW08-20-13' | 3/24/2001 | <0.46 | <0.46 | 2 | <0.46 | <0.92 | 1.5 |
| UAW09-20-1.5' | 3/27/2001 | <0.0049 | <0.0049 | <0.0049 | <0.0049 | <0.0098 | <0.0098 |
| UAW09-20-15' | 3/27/2001 | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.011 | <0.011 |
| UAW11-40-2' | 4/17/2001 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0097 | <0.0097 |
| UAW11-40-10' | 4/17/2001 | 0.099 J | <0.28 | <0.28 | <0.28 | <0.56 | <0.56 |
| UAW12-20-12' | 3/24/2001 | <0.3 | <0.3 | <0.3 | <0.3 | <0.6 | <0.6 |
| UAW13-20-1.5' | 3/24/2001 | <0.0047 | <0.0047 | <0.0047 | <0.0047 | <0.0093 | <0.0093 |
| UAW13-20-11.5' | 3/24/2001 | 0.26 J B | <0.28 | 0.15 J | <0.28 | <0.57 | <0.57 |
| UAW14-10-1.5' | 4/4/2001 | <0.0049 | <0.0049 | <0.0049 | <0.0049 | <0.0099 | <0.0099 |
| UAW15-20-2' | 4/9/2001 | <0.0043 | <0.0043 | <0.0043 | <0.0043 | <0.0086 | <0.0086 |
| UAW15-20-2' (Dup) | 4/9/2001 | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0093 | <0.0093 |
| UAW15-20-8.5' | 4/9/2001 | <0.0049 | <0.0049 | <0.0049 | <0.0049 | <0.0098 | <0.0098 |
| UAW16-10-2' | 8/22/2001 | <0.0057 | <0.0057 | <0.0057 | <0.0057 | <0.011 | <0.011 |

**Table 5-2**
**Summary of Volatile Organic Detections in**
**Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | Methylene chloride | Tetrachloroethene | Toluene | Trichloroethene | Vinyl chloride | Xylenes (total) |
|---|---|---|---|---|---|---|---|
| UAW16-10-5.5' | 8/22/2001 | <0.0061 | <0.0061 | <0.0061 | <0.0061 | <0.012 | <0.012 |
| UAW17-40-1.5' | 4/5/2001 | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0091 | <0.0091 |
| UAW17-40-5' | 4/5/2001 | <0.24 | <0.24 | <0.24 | <0.24 | <0.48 | <0.48 |
| UAW18-20-1' | 8/23/2001 | <0.26 | <0.26 | <0.26 | <0.26 | <0.52 | <0.52 |
| UAW18-20-15' | 8/23/2001 | <0.0047 | <0.0047 | 0.0015 J | <0.0047 | <0.0095 | <0.0095 |
| UAW19-80-1.5' | 4/6/2001 | <0.005 | <0.005 | <0.005 | <0.005 | <0.0099 | <0.0099 |
| UAW19-80-15' | 4/6/2001 | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0091 | <0.0091 |
| UAW20-60-1.5' | 4/9/2001 | <0.0047 | 0.0092 | <0.0047 | <0.0047 | <0.0093 | <0.0093 |
| UAW20-60-9.5' | 4/9/2001 | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.011 | <0.011 |
| UAW21-30-1.5' | 4/11/2001 | <0.005 | <0.005 | <0.005 | <0.005 | <0.01 | <0.01 |
| UAW21-30-10' | 4/11/2001 | <0.0046 | <0.0046 | 0.0034 J | <0.0046 | <0.0092 | 0.002 J |
| UAW22-20-2' | 9/5/2001 | <0.0044 | <0.0044 | <0.0044 | <0.0044 | <0.0088 | <0.0088 |
| UAW22-20-11' | 9/5/2001 | <0.0063 | <0.0063 | <0.0063 | <0.0063 | <0.013 | <0.013 |
| **Background Soil** | | | | | | | |
| B01-1.5' | 10/9/2001 | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0092 | <0.0092 |
| B01-11.5' | 10/9/2001 | <0.0057 | <0.0057 | <0.0057 | <0.0057 | <0.011 | <0.011 |
| B02-1.5' | 10/9/2001 | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0092 | <0.0092 |
| B02-11.5' | 10/9/2001 | <0.0058 | <0.0058 | <0.0058 | <0.0058 | <0.012 | <0.012 |
| B03-1.5' | 10/9/2001 | <0.0048 | <0.0048 | <0.0048 | <0.0048 | <0.0096 | <0.0096 |
| B03-11.5' | 10/9/2001 | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.011 | <0.011 |
| B04-1.5' | 10/9/2001 | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.011 | <0.011 |
| B04-1.5' (Dup) | 10/9/2001 | <0.0055 | <0.0055 | <0.0055 | <0.0055 | <0.011 | <0.011 |
| B04-11.5' | 10/9/2001 | <0.0052 | <0.0052 | 0.0006 J | <0.0052 | <0.01 | <0.01 |
| B05-1.5' | 10/9/2001 | <0.0046 | <0.0046 | <0.0046 | <0.0046 | <0.0092 | <0.0092 |
| B05-11.5' | 10/9/2001 | <0.0059 | <0.0059 | <0.0059 | <0.0059 | <0.012 | <0.012 |
| B06-1.5' | 10/9/2001 | <0.0049 | <0.0049 | <0.0049 | <0.0049 | <0.0098 | <0.0098 |
| B06-11' | 10/9/2001 | <0.0053 | 0.002 J | <0.0053 | <0.0053 | <0.011 | <0.011 |
| B07-1' | 10/9/2001 | <0.0058 | <0.0058 | <0.0058 | <0.0058 | <0.012 | <0.012 |
| B07-9' | 10/9/2001 | <0.0051 | <0.0051 | <0.0051 | <0.0051 | <0.01 | <0.01 |
| B08-2' | 10/9/2001 | <0.0053 | <0.0053 | <0.0053 | <0.0053 | <0.011 | <0.011 |
| B08-9' | 10/9/2001 | <0.0048 | <0.0048 | 0.00066 J | <0.0048 | <0.0096 | <0.0096 |
| B09-2' | 10/9/2001 | <0.0093 | 0.0059 J | <0.0093 | <0.0093 | <0.019 | <0.019 |
| B09-10' | 10/9/2001 | <0.0058 | 0.0022 J | <0.0058 | 0.0013 J | 0.0091 J | <0.012 |
| B10-2' | 10/9/2001 | <0.011 | 0.0028 J | <0.011 | <0.011 | <0.021 | <0.021 |
| B10-11' | 10/9/2001 | <0.005 | <0.005 | <0.005 | <0.005 | <0.01 | <0.01 |

**Table 5-2**
**Summary of Volatile Organic Detections in**
**Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | Methylene chloride | Tetrachloroethene | Toluene | Trichloroethene | Vinyl chloride | Xylenes (total) |
|---|---|---|---|---|---|---|---|
| **Creek Bed Sediment** | | | | | | | |
| CS1 | 3/6/2002 | <0.0065 | NA | <0.0065 | NA | NA | <0.013 |
| CS-1A | 3/25/2004 | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.0054 | <0.011 |
| CS2 | 3/6/2002 | <0.0055 | NA | <0.0055 | NA | NA | <0.011 |
| CS-2A | 3/26/2004 | 0.0041 J B | <0.0057 | <0.0057 | <0.0057 | <0.0057 | <0.011 |
| CS3 | 3/6/2002 | <0.0055 | NA | <0.0055 | NA | NA | <0.011 |
| CS-3A | 3/26/2004 | 0.0037 J B | <0.0055 | <0.0055 | <0.0055 | <0.0055 | <0.011 |
| CS4 | 3/6/2002 | <0.0057 | NA | <0.0057 | <5.7 | NA | <0.011 |
| CS-4A | 3/26/2004 | 0.0052 J B | <0.0072 | <0.0072 | <0.0072 | <0.0072 | <0.014 |
| CS5 | 3/6/2002 | <0.0054 | NA | <0.0054 | NA | NA | <0.011 |
| CS-5A | 3/25/2004 | <0.0057 | <0.0057 | <0.0057 | <0.0057 | <0.0057 | <0.011 |
| CS6 | 3/6/2002 | <0.006 | NA | <0.006 | NA | NA | <0.012 |
| CS-6A | 3/25/2004 | <0.0079 | <0.0079 | <0.0079 | <0.0079 | <0.0079 | <0.016 |
| CS-6A (Dup) | 3/25/2004 | <0.0066 | <0.0066 | <0.0066 | <0.0066 | <0.0066 | <0.013 |
| CS7 (Dup) | 3/6/2002 | <0.0059 | NA | <0.0059 | NA | NA | <0.012 |
| CS7 | 3/6/2002 | <0.0055 | NA | <0.0055 | NA | NA | <0.011 |
| CS8 | 3/6/2002 | <0.0058 | NA | <0.0058 | NA | NA | <0.012 |
| **Creek Bank Sediment** | | | | | | | |
| SS-1 | 10/11/2001 | <0.0049 | NA | <0.0049 | NA | NA | 0.002 J |
| SS-2 | 10/11/2001 | <0.0048 | NA | <0.0048 | NA | NA | <0.0097 |
| SS-3 | 10/11/2001 | <0.0061 | NA | <0.0061 | NA | NA | <0.012 |
| SS-4 | 10/11/2001 | <0.0054 | NA | <0.0054 | NA | NA | <0.011 |
| SS-5 ~25' South | 10/11/2001 | <0.0057 | NA | <0.0057 | NA | NA | <0.011 |
| SS-5 (Dup) | 10/11/2001 | <0.0059 | NA | <0.0059 | NA | NA | <0.012 |
| SS-6 | 10/11/2001 | <0.0054 | NA | <0.0054 | NA | NA | <0.011 |
| SS-7 | 10/11/2001 | <0.0051 | NA | <0.0051 | NA | NA | <0.01 |
| SS-8 | 10/11/2001 | <0.0066 | NA | <0.0066 | NA | NA | <0.013 |
| SS-9 | 10/11/2001 | <0.0059 | NA | <0.0059 | NA | NA | <0.012 |
| SS-10 | 10/11/2001 | <0.005 | NA | <0.005 | NA | NA | <0.01 |
| SS-11 | 10/11/2001 | <0.0059 | NA | <0.0059 | NA | NA | <0.012 |
| SS-12 | 10/11/2001 | <0.0055 | <5.5 | <0.0055 | <5.5 | <5.5 | <0.011 |

Notes:
J = Estimated result; result is less than reporting limit.
B = Method blank contamination. The associated method blank contains the target analyte at a reportable level.
This table only includes target analytes detected in one or more Facility Investigation samples.
See Appendix B for the complete target analyte lists.
NA = Indicates chemical was not on the target analyte list for that sample.
<10 = Indicates constituent not detected at or above indicated detection limit.
* = Indicates that Environmental Standards qualified the data as a "non-detect" as part of the 10% data validation. The analyte was detected in a field and/or laboratory blank at a similar level.
The only validation qualifiers that have been annotated into the summary tables are qualifications of detected compounds. Please refer to Appendix D for excerpts from the Quality Assurance Review (Envionmental Standards, 2004) and to review data qualification of "non-detect" results.
E = Detection exceeded laboratory calibration range.

**Table 5-3**
**Summary of Semivolatile Organic Detections in**
**Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | 1,1'-Biphenyl | 1,2-Dichlorobenzene | 1,3-Dichlorobenzene | 1,4-Dichlorobenzene | 2,4-Dimethylphenol | 2-Methylnaphthalene | 2-Methylphenol | 3-Methylphenol | 4-Methylphenol | Acenaphthene | Acenaphthylene | Acetophenone | Aniline | Anthracene | Benzaldehyde | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(ghi)perylene | Benzo(k)fluoranthene | bis(2-Ethylhexyl) phthalat | Carbazole | Chrysene | Dibenz(a,h)anthracene | Dibenzofuran | Diethyl phthalate | Di-n-octyl phthalate | Fluoranthene | Fluorene | Indeno(1,2,3-cd)pyrene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **On-Site Soil** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DP01-2' | 7/24/2001 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 |
| DP01-9.5' | 7/24/2001 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | NA | <1.5 | <1.5 | <1.5 | <1.5 | NA | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 |
| DP02-2' | 7/24/2001 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | 0.07 J | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 |
| DP02-9.5' | 7/24/2001 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | NA | <0.41 | <0.41 | <0.41 | <0.41 | NA | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 |
| DP03-2' | 7/24/2001 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 |
| DP03-8.5' | 7/24/2001 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | NA | <0.35 | <0.35 | <0.35 | <0.35 | NA | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 |
| DP05-1' | 7/25/2001 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 |
| DP05-8.5' | 7/25/2001 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 |
| DP07-9' | 7/26/2001 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 |
| DP08-6' | 7/26/2001 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | NA | <0.42 | <0.42 | <0.42 | <0.42 | NA | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 |
| DP08-11' | 7/26/2001 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 |
| DP09-12' | 7/27/2001 | <0.38 | 0.13 J | <0.38 | 0.073 J | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | 0.072 J | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 |
| DP10-2' | 7/27/2001 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | 0.16 J | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 |
| DP10-10' | 7/27/2001 | NA | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | NA | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | 1.5 | NA | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 |
| DP10-10' (Dup) | 7/27/2001 | NA | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | NA | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | 0.89 J | NA | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 |
| DP12-1.5' | 7/28/2001 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | NA | <0.34 | <0.34 | <0.34 | <0.34 | NA | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 |
| DP12-9' | 7/28/2001 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | NA | <0.41 | <0.41 | <0.41 | <0.41 | NA | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 |
| DP13-3' | 7/29/2001 | NA | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | NA | 0.07 J | <0.39 | 0.086 J | <0.39 | <0.39 | 0.16 J | <0.39 | 0.076 J | <0.39 | <0.39 | <0.39 | <0.39 | 0.14 J | <0.39 | <0.39 |
| DP13-11' | 7/29/2001 | NA | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | 0.069 J | <0.39 | <0.39 | <0.39 | 0.18 J | NA | 0.46 | 0.45 | 0.49 | 0.25 J | 0.23 J | 0.26 J | NA | 0.47 | <0.39 | <0.39 | <0.39 | <0.39 | 1.1 | 0.063 J | 0.22 J |
| DP14-3' | 7/29/2001 | NA | <35 | <35 | <35 | <35 | <35 | <35 | <35 | <35 | <35 | <35 | <35 | <35 | <35 | NA | <35 | <35 | <35 | <35 | <35 | 6.5 J | NA | <35 | <35 | <35 | <35 | <35 | <35 | <35 | <35 |
| DP14-9' | 7/29/2001 | NA | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | 0.25 J | <1.5 | NA | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | NA | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 |
| DP15-2' | 7/29/2001 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | 0.23 J | NA | 0.064 J | <0.38 | <0.38 | <0.38 | 0.29 J | 0.13 J | <0.38 | <0.38 |
| DP15-9' | 7/29/2001 | NA | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | NA | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | NA | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 |
| DP16-2.8' | 7/30/2001 | NA | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | NA | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | NA | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 |
| DP16-12.5' | 7/30/2001 | NA | <19 | <19 | <19 | <19 | <19 | <19 | <19 | <19 | <19 | <19 | <19 | <19 | <19 | NA | <19 | <19 | <19 | <19 | <19 | 26 | NA | <19 | <19 | <19 | <19 | <19 | <19 | <19 | <19 |
| DP17-3' | 7/30/2001 | NA | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 |
| DP17-13' | 7/30/2001 | NA | 21 J | <22 | <22 | <22 | <22 | <22 | 5.4 J # | 5.4 J # | <22 | <22 | <22 | 3.9 J | <22 | NA | <22 | <22 | <22 | <22 | <22 | 26 | NA | <22 | <22 | <22 | <22 | <22 | <22 | <22 | <22 |
| DP18-2' | 7/30/2001 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | 0.16 J | 0.19 J | 0.25 J | 0.12 J | 0.097 J | <0.38 | <0.38 | 0.2 J | <0.38 | <0.38 | <0.38 | <0.38 | 0.37 J | <0.38 | 0.12 J |
| DP18-14.5' | 7/30/2001 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | NA | <0.36 | <0.36 | <0.36 | <0.36 | NA | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 |
| DP19-2' | 7/30/2001 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | 0.11 J | 0.12 J | 0.2 J | 0.089 J | 0.078 J | 0.46 | <0.4 | 0.14 J | <0.4 | <0.4 | <0.4 | <0.4 | 0.27 J | <0.4 | <0.4 |
| DP19-13' | 7/30/2001 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | NA | <0.36 | <0.36 | <0.36 | <0.36 | NA | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | 0.062 J | <0.36 | <0.36 |
| DP20-2' | 7/30/2001 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | 0.1 J | 0.085 J | 0.11 J | <0.38 | <0.38 | <0.38 | <0.38 | 0.099 J | <0.38 | <0.38 | <0.38 | <0.38 | 0.25 J | <0.38 | <0.38 |
| DP20-14.5' | 7/30/2001 | <0.38 | 0.15 J | <0.38 | 0.062 J | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 |
| DP23-2.5' | 8/1/2001 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | NA | <0.42 | <0.42 | <0.42 | <0.42 | NA | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 |
| DP23-9' | 8/1/2001 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | NA | <0.43 | <0.43 | <0.43 | <0.43 | NA | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 |
| DP25-2.5' | 8/7/2001 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | NA | <0.41 | <0.41 | <0.41 | <0.41 | NA | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 |
| DP25-2.5' (Dup) | 8/7/2001 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 |
| DP25-7.5' | 8/7/2001 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 |
| DP29-5 | 11/9/2001 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | NA | <0.41 | <0.41 | <0.41 | <0.41 | NA | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 |

**Table 5-3**
**Summary of Semivolatile Organic Detections in**
**Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | 1,1'-Biphenyl | 1,2-Dichlorobenzene | 1,3-Dichlorobenzene | 1,4-Dichlorobenzene | 2,4-Dimethylphenol | 2-Methylnaphthalene | 2-Methylphenol | 3-Methylphenol | 4-Methylphenol | Acenaphthene | Acenaphthylene | Acetophenone | Aniline | Anthracene | Benzaldehyde | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(ghi)perylene | Benzo(k)fluoranthene | bis(2-Ethylhexyl) phthalat | Carbazole | Chrysene | Dibenz(a,h)anthracene | Dibenzofuran | Diethyl phthalate | Di-n-octyl phthalate | Fluoranthene | Fluorene | Indeno(1,2,3-cd)pyrene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DP31-15 | 12/5/2001 | NA | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 |
| DP36-19 | 12/5/2001 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 |
| DP37-19 | 12/5/2001 | NA | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | NA | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | NA | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 |
| DP37-19 (Dup) | 12/5/2001 | NA | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | NA | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | NA | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 |
| DP38-14.5 | 12/5/2001 | NA | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | 0.062 J | NA | 0.12 J | 0.11 J | 0.15 J | 0.062 J | <0.36 | <0.36 | <0.36 | 0.12 J | <0.36 | <0.36 | <0.36 | <0.36 | 0.27 J | <0.36 | <0.36 |
| DP56A-9.5-10.5' | 3/15/2004 | <170 | <170 | <170 | <170 | <170 | <170 | <170 | NA | <170 | <170 | <170 | <170 | <170 | <170 | <170 | <170 | <170 | <170 | <170 | <170 | <170 * | <170 | <170 | <170 | <170 | <170 | <170 | <170 | <170 | <170 |
| DP58A-8.5-9.5' | 3/15/2004 | <21 | <21 | <21 | <21 | <21 | <21 | <21 | NA | <21 | <21 | <21 | <21 | <21 | <21 | <21 | <21 | <21 | <21 | <21 | <21 | <21 | <21 | <21 | <21 | <21 | <21 | <21 | <21 | <21 | <21 |
| DP60A-6.6-7.4' | 3/15/2004 | <8.1 | <8.1 | <8.1 | <8.1 | <8.1 | 1.2 J | <8.1 | NA | <8.1 | <8.1 | <8.1 | <8.1 | <8.1 | <8.1 | <8.1 | <8.1 | <8.1 | <8.1 | <8.1 | <8.1 | <8.1 | <8.1 | <8.1 | <8.1 | <8.1 | <8.1 | <8.1 | <8.1 | <8.1 | <8.1 |
| DP61A-5-6' | 3/15/2004 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | NA | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 | <1.6 |
| DP61A-5-6' (Dup) | 3/15/2004 | <7.9 | <7.9 | <7.9 | <7.9 | <7.9 | <7.9 | <7.9 | NA | <7.9 | <7.9 | <7.9 | <7.9 | <7.9 | <7.9 | <7.9 | <7.9 | <7.9 | <7.9 | <7.9 | <7.9 | <7.9 | <7.9 | <7.9 | <7.9 | <7.9 | <7.9 | <7.9 | <7.9 | <7.9 | <7.9 |
| DP64A-8.5-9.5' | 3/15/2004 | <18 | <18 | <18 | <18 | <18 | <18 | <18 | NA | <18 | <18 | <18 | <18 | <18 | <18 | <18 | <18 | <18 | <18 | <18 | <18 | <18 | <18 | <18 | <18 | <18 | <18 | <18 | <18 | <18 | <18 |
| DP66A-9.5-10.5' | 3/15/2004 | <19 | <19 | <19 | <19 | <19 | <19 | <19 | NA | <19 | <19 | <19 | <19 | <19 | <19 | 1.6 J | <19 | <19 | <19 | <19 | <19 | <19 | <19 | <19 | <19 | <19 | <19 | <19 | <19 | <19 | <19 |
| DP67A-12.5-13.5' | 3/15/2004 | 10 J | <35 | <35 | <35 | <35 | <35 | <35 | NA | <35 | <35 | <35 | <35 | <35 | <35 | 9.3 J | <35 | <35 | <35 | <35 | <35 | 12 J B | <35 | <35 | <35 | <35 | <35 | <35 | <35 | <35 | <35 |
| DP70A-9-11' | 3/14/2004 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | NA | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | 0.68 J | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | 3.2 B | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 | <1.5 |
| DP72A-12-13' | 3/14/2004 | <7.2 | <7.2 | <7.2 | <7.2 | <7.2 | <7.2 | <7.2 | NA | <7.2 | <7.2 | <7.2 | <7.2 | <7.2 | <7.2 | 1 J | <7.2 | <7.2 | <7.2 | <7.2 | <7.2 | <7.2 * | <7.2 | <7.2 | <7.2 | <7.2 | <7.2 | <7.2 | <7.2 | <7.2 | <7.2 |
| DP73A-12-13' | 3/14/2004 | 0.67 J | <7.2 | <7.2 | <7.2 | <7.2 | <7.2 | <7.2 | NA | <7.2 | <7.2 | <7.2 | <7.2 | 0.59 J | <7.2 | 2.1 J | <7.2 | <7.2 | <7.2 | <7.2 | <7.2 | <7.2 | <7.2 | <7.2 | <7.2 | <7.2 | <7.2 | <7.2 | <7.2 | <7.2 | <7.2 |
| DP78A-9-10' | 3/14/2004 | 39 J | 2800 | 28 J | 170 | <50 | <50 | <50 | NA | <50 | <50 | <50 | <50 | 4.2 J | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 * | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| DP79A-12-13' | 3/14/2004 | 4.2 J | 11 J | <38 | <38 | <38 | <38 | <38 | NA | <38 | <38 | <38 | <38 | 5.9 J | <38 | <38 | <38 | <38 | <38 | <38 | <38 | <38 | <38 | <38 | <38 | <38 | <38 | <38 | <38 | <38 | <38 |
| STR01-3' | 3/8/2001 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 |
| STR01-21' | 3/8/2001 | <0.37 | 0.17 J | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 |
| STR01-73' | 3/9/2001 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 |
| STR01-88' | 3/9/2001 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 |
| STR02-1' | 3/13/2001 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | 0.14 J | 0.14 J | 0.14 J | <0.4 | <0.4 | <0.4 | <0.4 | 0.17 J | <0.4 | <0.4 | <0.4 | <0.4 | 0.42 | <0.4 | <0.4 |
| STR02-12.5' | 3/13/2001 | <0.37 | 0.32 J | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 |
| STR03-4' | 3/14/2001 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 |
| STR03-12.5' | 3/14/2001 | NA | <18 | <18 | <18 | <18 | <18 | <18 | <18 | <18 | <18 | <18 | <18 | <18 | <18 | NA | <18 | <18 | <18 | <18 | <18 | 150 | NA | <18 | <18 | <18 | <18 | <18 | <18 | <18 | <18 |
| STR04-1.5' | 3/19/2001 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 |
| STR04-17.5' | 3/19/2001 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 |
| STR04-17.5' (Dup) | 3/19/2001 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | NA | <0.36 | <0.36 | <0.36 | <0.36 | NA | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | 0.18 J | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 |
| STR05-1.5' | 3/10/2001 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 |
| STR05-11.3' | 3/10/2001 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | NA | <0.36 | <0.36 | <0.36 | <0.36 | NA | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 |
| STR05-9' | 3/10/2001 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 |
| STR06-1' | 3/11/2001 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 |
| STR06-15' | 3/11/2001 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 |
| STR07-1.5' | 3/21/2001 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 |
| STR07-18' | 3/21/2001 | <0.38 | 0.61 | <0.38 | 0.18 J | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 |
| STR08-1.5' | 3/26/2001 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | 0.14 J | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 |
| STR08-13' | 3/26/2001 | <0.37 | 0.34 J | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 |
| STR08-13' (Dup) | 3/26/2001 | <0.38 | 0.31 J | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 |
| STR09-7.5' | 4/4/2001 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 |
| STR10-1.5' | 4/7/2001 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 |

**Table 5-3**
**Summary of Semivolatile Organic Detections in**
**Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | 1,1'-Biphenyl | 1,2-Dichlorobenzene | 1,3-Dichlorobenzene | 1,4-Dichlorobenzene | 2,4-Dimethylphenol | 2-Methylnaphthalene | 2-Methylphenol | 3-Methylphenol | 4-Methylphenol | Acenaphthene | Acenaphthylene | Acetophenone | Aniline | Anthracene | Benzaldehyde | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(ghi)perylene | Benzo(k)fluoranthene | bis(2-Ethylhexyl) phthalat | Carbazole | Chrysene | Dibenz(a,h)anthracene | Dibenzofuran | Diethyl phthalate | Di-n-octyl phthalate | Fluoranthene | Fluorene | Indeno(1,2,3-cd)pyrene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STR10-11' | 4/7/2001 | NA | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | NA | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | NA | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 |
| STR11-2' | 8/20/2001 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 |
| STR11-9' | 8/20/2001 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 |
| STR11-9' (Dup) | 8/20/2001 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 |
| T-1B2-8' | 3/16/2004 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | NA | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | 0.055 J | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 |
| T-1E-2-6' | 3/16/2004 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | NA | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 |
| T-1N-6' | 3/16/2004 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | NA | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 |
| T-1NE-4' | 3/16/2004 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | 0.054 J | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | 0.033 J | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | 0.075 J | <0.4 | 0.076 J |
| T-1W2-6' | 3/16/2004 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 |
| T-2-3 | 11/8/2001 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 |
| T-2-9 | 11/8/2001 | NA | 0.28 J | <0.37 | 0.074 J | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 |
| T-3-11 | 11/8/2001 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 |
| T-3-3 | 11/8/2001 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | 0.084 J | <0.37 | <0.37 |
| T-4-3 | 11/9/2001 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | 0.07 J | <0.37 | <0.37 | <0.37 | NA | 0.064 J | <0.37 | <0.37 | <0.37 | <0.37 | 0.098 J | <0.37 | <0.37 |
| T-4-9 | 11/9/2001 | NA | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | NA | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | NA | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 |
| T-5-3 | 11/9/2001 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 |
| T-5-9 | 11/9/2001 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 |
| T-6-10 | 11/10/2001 | NA | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | NA | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | NA | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 |
| T-6-3 | 11/10/2001 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 |
| T-6-7.5 | 11/11/2001 | NA | <86 | <86 | <86 | <86 | 22 J | <86 | <86 | <86 | <86 | <86 | <86 | <86 | <86 | NA | <86 | <86 | <86 | <86 | <86 | <86 | NA | <86 | <86 | <86 | <86 | <86 | <86 | <86 | <86 |
| T-8-3 | 11/11/2001 | NA | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | NA | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | NA | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 |
| T-8-9 | 11/11/2001 | NA | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | NA | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | NA | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 |
| UAW01-30-1.5' | 4/2/2001 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | 0.58 | <0.38 | <0.38 | NA | 1.5 | <0.38 | 5.4 | 6.2 | 7 | 2.8 | 2.8 | <0.38 | 0.48 | 5.9 | 0.82 | 0.32 J | <0.38 | <0.38 | 14 | 0.61 | 2.7 |
| UAW01-30-15' | 4/2/2001 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | NA | <0.35 | <0.35 | <0.35 | <0.35 | NA | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 |
| UAW04-20-10' | 3/23/2001 | <0.45 | <0.45 | <0.45 | <0.45 | <0.45 | <0.45 | 0.57 | NA | 0.46 # | <0.45 | <0.45 | <0.45 | NA | <0.45 | <0.45 | <0.45 | <0.45 | <0.45 | <0.45 | <0.45 | <0.45 | <0.45 | <0.45 | <0.45 | <0.45 | <0.45 | <0.45 | <0.45 | <0.45 | <0.45 |
| UAW05-20-13' | 3/23/2001 | <0.38 | 3.3 | <0.38 | 0.49 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 |
| UAW06-20-1.5' | 3/26/2001 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 |
| UAW06-20-11.5' | 3/26/2001 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 |
| UAW08-20-13' | 3/24/2001 | NA | 2.3 | <2.4 | <2.4 | <2.4 | <2.4 | <2.4 | <2.4 | <2.4 | <2.4 | <2.4 | <2.4 | 22 | <2.4 | NA | <2.4 | <2.4 | <2.4 | <2.4 | <2.4 | <2.4 | NA | <2.4 | <2.4 | <2.4 | <2.4 | <2.4 | <2.4 | <2.4 | <2.4 |
| UAW09-20-1.5' | 3/27/2001 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 |
| UAW09-20-15' | 3/27/2001 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | NA | <0.35 | <0.35 | <0.35 | <0.35 | NA | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 |
| UAW11-40-2' | 4/17/2001 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | 0.17 J | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 |
| UAW11-40-10' | 4/17/2001 | <0.37 | 0.12 J | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 |
| UAW12-20-12' | 3/24/2001 | NA | 14 | 0.26 J | 1.3 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 |
| UAW13-20-1.5' | 3/24/2001 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | NA | 0.26 J | 0.23 J | 0.24 J | 0.14 J | <0.38 | <0.38 | NA | 0.25 J | <0.38 | <0.38 | <0.38 | <0.38 | 0.52 | <0.38 | 0.13 J |
| UAW13-20-11.5' | 3/24/2001 | NA | 0.25 J | <0.39 | <0.39 | <0.39 | 0.16 J | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | 0.16 J | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 |
| UAW14-10-1.5' | 4/4/2001 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 |
| UAW15-20-2' | 4/9/2001 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 |
| UAW15-20-2' (Dup) | 4/9/2001 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | NA | <0.36 | <0.36 | <0.36 | <0.36 | NA | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 |
| UAW15-20-8.5' | 4/9/2001 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 |
| UAW16-10-2' | 8/22/2001 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 |

**Table 5-3**
**Summary of Semivolatile Organic Detections in**
**Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | 1,1'-Biphenyl | 1,2-Dichlorobenzene | 1,3-Dichlorobenzene | 1,4-Dichlorobenzene | 2,4-Dimethylphenol | 2-Methylnaphthalene | 2-Methylphenol | 3-Methylphenol | 4-Methylphenol | Acenaphthene | Acenaphthylene | Acetophenone | Aniline | Anthracene | Benzaldehyde | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(ghi)perylene | Benzo(k)fluoranthene | bis(2-Ethylhexyl) phthalat | Carbazole | Chrysene | Dibenz(a,h)anthracene | Dibenzofuran | Diethyl phthalate | Di-n-octyl phthalate | Fluoranthene | Fluorene | Indeno(1,2,3-cd)pyrene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW16-10-5.5' | 8/22/2001 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | NA | <0.36 | <0.36 | <0.36 | <0.36 | NA | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | 0.13 J | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 |
| UAW17-40-1.5' | 4/5/2001 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 |
| UAW17-40-5' | 4/5/2001 | <8.4 | <8.4 | <8.4 | <8.4 | 24 | 3.1 J | 15 | NA | 35 # | <8.4 | 3.3 J | <8.4 | NA | <8.4 | <8.4 | <8.4 | <8.4 | <8.4 | <8.4 | <8.4 | <8.4 | <8.4 | <8.4 | <8.4 | 3.5 J | <8.4 | <8.4 | 4.6 J | 4.3 J | <8.4 |
| UAW18-20-1' | 8/23/2001 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 |
| UAW18-20-15' | 8/23/2001 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | NA | <0.41 | <0.41 | <0.41 | <0.41 | NA | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 |
| UAW19-80-1.5' | 4/6/2001 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 |
| UAW19-80-15' | 4/6/2001 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 |
| UAW20-60-1.5' | 4/9/2001 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 |
| UAW20-60-9.5' | 4/9/2001 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 |
| UAW21-30-1.5' | 4/11/2001 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 |
| UAW21-30-10' | 4/11/2001 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 |
| UAW22-20-2' | 9/5/2001 | <0.73 | <0.73 | <0.73 | <0.73 | <0.73 | <0.73 | <0.73 | NA | <0.73 | <0.73 | <0.73 | <0.73 | NA | <0.73 | <0.73 | <0.73 | <0.73 | <0.73 | <0.73 | <0.73 | 0.17 J | <0.73 | <0.73 | <0.73 | <0.73 | <0.73 | <0.73 | <0.73 | <0.73 | <0.73 |
| UAW22-20-11' | 9/5/2001 | <0.37 | 0.071 J | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 |
| **Background Soil** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B01-1.5' | 10/9/2001 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 |
| B01-11.5' | 10/9/2001 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | NA | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 |
| B02-1.5' | 10/9/2001 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 |
| B02-11.5' | 10/9/2001 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | NA | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 |
| B03-1.5' | 10/9/2001 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 |
| B03-11.5' | 10/9/2001 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | NA | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 | <0.34 |
| B04-1.5' | 10/9/2001 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | NA | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | 0.06 J | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 |
| B04-1.5' (Dup) | 10/9/2001 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | NA | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | 0.063 J | 0.076 J | 0.1 J | 0.072 J | <0.35 | <0.35 | <0.35 | 0.082 J | <0.35 | <0.35 | <0.35 | <0.35 | 0.15 J | <0.35 | <0.35 |
| B04-11.5' | 10/9/2001 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | NA | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 |
| B05-1.5' | 10/9/2001 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | NA | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 |
| B05-11.5' | 10/9/2001 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | NA | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 | <0.35 |
| B06-1.5' | 10/9/2001 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | 0.12 J | 0.19 J | 0.18 J | 0.16 J | 0.096 J | <0.38 | <0.38 | 0.14 J | <0.38 | <0.38 | <0.38 | <0.38 | 0.19 J | <0.38 | 0.15 J |
| B06-11' | 10/9/2001 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | NA | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 | <0.38 |
| B07-1' | 10/9/2001 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 |
| B07-9' | 10/9/2001 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 |
| B08-2' | 10/9/2001 | <19 | <19 | <19 | <19 | <19 | 4.3 J | <19 | NA | <19 | 37 | <19 | <19 | <19 | 26 | <19 | 36 | 24 | 29 | 9.2 J | 18 J | <19 | 4.4 J | 37 | 3.5 J | 26 | <19 | <19 | 120 | 32 | 9.2 J |
| B08-9' | 10/9/2001 | <0.37 | <0.37 | <0.37 | <0.37 | <0.37 | 0.23 J | <0.37 | NA | <0.37 | 0.3 J | <0.37 | <0.37 | <0.37 | 0.15 J | <0.37 | 0.14 J | 0.08 J | 0.094 J | <0.37 | <0.37 | <0.37 | <0.37 | 0.14 J | <0.37 | 0.33 J | <0.37 | <0.37 | 0.51 | 0.32 J | <0.37 |
| B09-2' | 10/9/2001 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | NA | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | 0.18 J | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 | <0.43 |
| B09-10' | 10/9/2001 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | NA | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 |
| B10-2' | 10/9/2001 | <0.44 | <0.44 | <0.44 | <0.44 | <0.44 | <0.44 | <0.44 | NA | <0.44 | <0.44 | <0.44 | <0.44 | <0.44 | <0.44 | <0.44 | <0.44 | <0.44 | <0.44 | <0.44 | <0.44 | <0.44 | <0.44 | <0.44 | <0.44 | <0.44 | <0.44 | <0.44 | <0.44 | <0.44 | <0.44 |
| B10-11' | 10/9/2001 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | NA | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 | <0.4 |

**Table 5-3**
**Summary of Semivolatile Organic Detections in**
**Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | 1,1'-Biphenyl | 1,2-Dichlorobenzene | 1,3-Dichlorobenzene | 1,4-Dichlorobenzene | 2,4-Dimethylphenol | 2-Methylnaphthalene | 2-Methylphenol | 3-Methylphenol | 4-Methylphenol | Acenaphthene | Acenaphthylene | Acetophenone | Aniline | Anthracene | Benzaldehyde | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(ghi)perylene | Benzo(k)fluoranthene | bis(2-Ethylhexyl) phthalat | Carbazole | Chrysene | Dibenz(a,h)anthracene | Dibenzofuran | Diethyl phthalate | Di-n-octyl phthalate | Fluoranthene | Fluorene | Indeno(1,2,3-cd)pyrene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Creek Bed Sediment** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CS-1 | 3/6/2002 | NA | <0.4 | NA | <0.4 | NA | NA | <0.4 | NA | <0.4 | NA | NA | NA | <0.4 | NA | <0.4 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CS-1A | 3/25/2004 | NA | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | 0.038 J | <0.39 | <0.39 | 0.048 J | NA | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | 0.044 J | <0.39 | <0.39 |
| CS-2 | 3/6/2002 | NA | <0.41 | NA | <0.41 | NA | NA | <0.41 | NA | <0.41 | NA | NA | NA | <0.41 | NA | <0.41 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CS-2A | 3/26/2004 | NA | <1.9 | <1.9 | <1.9 | <1.9 | 0.25 J | <1.9 | <1.9 | <1.9 | 0.25 J | 0.3 J | <1.9 | <1.9 | 1.3 J | NA | 1.4 J | 1.2 J | 1.3 J | 0.63 J | 0.62 J | <1.9 | NA | 1.7 J | 0.19 J | 0.47 J | <1.9 | <1.9 | 4.6 | 0.9 J | 0.58 J |
| CS-3 | 3/6/2002 | NA | <0.38 | NA | <0.38 | NA | NA | <0.38 | NA | <0.38 | NA | NA | NA | <0.38 | NA | <0.38 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CS-3A | 3/26/2004 | NA | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | 0.24 J # | 0.24 J # | <0.41 | <0.41 | <0.41 | <0.41 | 0.045 J | NA | 0.14 J | 0.18 J | 0.23 J | 0.14 J | 0.12 J | 0.098 J | NA | 0.25 J | 0.031 J | <0.41 | 0.04 J | 0.022 J | 0.56 | <0.41 | 0.12 J |
| CS-4 | 3/6/2002 | NA | 0.16 J | NA | <0.4 | NA | NA | <0.4 | NA | <0.4 | <0.4 | NA | NA | <0.4 | NA | <0.4 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CS-4A | 3/26/2004 | NA | <0.47 | <0.47 | <0.47 | <0.47 | <0.47 | <0.47 | <0.47 | <0.47 | <0.47 | <0.47 | <0.47 | <0.47 | 0.042 J | NA | 0.2 J | 0.24 J | 0.32 J | 0.19 J | 0.15 J | 0.13 J | NA | 0.32 J | 0.049 J | <0.47 | <0.47 | <0.47 | 0.64 | <0.47 | 0.16 J |
| CS-5 | 3/6/2002 | NA | <0.38 | NA | <0.38 | NA | NA | <0.38 | NA | <0.38 | NA | NA | NA | <0.38 | NA | <0.38 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CS-5A | 3/25/2004 | NA | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | NA | <0.36 | <0.36 | 0.027 J | <0.36 | <0.36 | <0.36 | NA | <0.36 | <0.36 | <0.36 | <0.36 | <0.36 | 0.027 J | <0.36 | <0.36 |
| CS-6 | 3/6/2002 | NA | <0.41 | NA | <0.41 | NA | NA | <0.41 | NA | <0.41 | NA | NA | NA | <0.41 | NA | <0.41 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CS-6A | 3/25/2004 | NA | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | <0.42 | 0.033 J | NA | 0.087 J | 0.1 J | 0.14 J | 0.067 J | 0.054 J | 0.034 J | NA | 0.16 J | <0.42 | <0.42 | <0.42 | <0.42 | 0.37 J | <0.42 | 0.06 J |
| CS-6A (Dup) | 3/25/2004 | NA | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | <0.41 | 0.037 J | NA | 0.11 J | 0.12 J | 0.13 J | 0.07 J | 0.09 J | 0.03 J | NA | 0.18 J | <0.41 | <0.41 | <0.41 | <0.41 | 0.4 J | <0.41 | 0.06 J |
| CS-7 | 3/6/2002 | NA | <0.41 | NA | <0.41 | NA | NA | <0.41 | NA | <0.41 | NA | NA | NA | <0.41 | NA | <0.41 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CS-7 (Dup) | 3/6/2002 | NA | <0.4 | NA | <0.4 | NA | NA | <0.4 | NA | <0.4 | NA | NA | NA | <0.4 | NA | <0.4 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CS-8 | 3/6/2002 | NA | <0.4 | NA | <0.4 | NA | NA | <0.4 | NA | <0.4 | NA | NA | NA | <0.4 | NA | <0.4 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Creek Bank Sediment** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SS-1 | 10/11/2001 | NA | 0.13 J | NA | <0.4 | NA | NA | <0.4 | NA | <0.4 | NA | NA | NA | <0.4 | NA | <0.4 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SS-2 | 10/11/2001 | NA | <0.38 | NA | <0.38 | NA | NA | <0.38 | NA | <0.38 | NA | NA | NA | <0.38 | NA | <0.38 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SS-3 | 10/11/2001 | NA | <0.43 | NA | <0.43 | NA | NA | <0.43 | NA | <0.43 | NA | NA | NA | <0.43 | NA | <0.43 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SS-4 | 10/11/2001 | NA | <0.4 | NA | <0.4 | NA | NA | <0.4 | NA | <0.4 | NA | NA | NA | <0.4 | NA | <0.4 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SS-5 ~25' South | 10/11/2001 | NA | 0.17 J | NA | <0.41 | NA | NA | <0.41 | NA | <0.41 | NA | NA | NA | <0.41 | NA | <0.41 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SS-5 (Dup) | 10/11/2001 | NA | 0.2 J | NA | <0.41 | NA | NA | <0.41 | NA | <0.41 | NA | NA | NA | <0.41 | NA | <0.41 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SS-6 | 10/11/2001 | NA | <0.41 | NA | <0.41 | NA | NA | <0.41 | NA | <0.41 | NA | NA | NA | <0.41 | NA | <0.41 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SS-7 | 10/11/2001 | NA | <0.41 | NA | <0.41 | NA | NA | <0.41 | NA | <0.41 | NA | NA | NA | <0.41 | NA | <0.41 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SS-8 | 10/11/2001 | NA | <0.43 | NA | <0.43 | NA | NA | <0.43 | NA | <0.43 | NA | NA | NA | <0.43 | NA | <0.43 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SS-9 | 10/11/2001 | NA | <0.42 | NA | <0.42 | NA | NA | <0.42 | NA | <0.42 | NA | NA | NA | <0.42 | NA | <0.42 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SS-10 | 10/11/2001 | NA | <0.39 | NA | <0.39 | NA | NA | <0.39 | NA | <0.39 | NA | NA | NA | <0.39 | NA | <0.39 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 5-3**
**Summary of Semivolatile Organic Detections in**
**Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | Naphthalene | Phenanthrene | Phenol | Pyrene |
|---|---|---|---|---|---|
| **On-Site Soil** | | | | | |
| DP01-2' | 7/24/2001 | <0.38 | <0.38 | <0.38 | <0.38 |
| DP01-9.5' | 7/24/2001 | <1.5 | <1.5 | <1.5 | <1.5 |
| DP02-2' | 7/24/2001 | <0.38 | <0.38 | <0.38 | <0.38 |
| DP02-9.5' | 7/24/2001 | <0.41 | <0.41 | <0.41 | <0.41 |
| DP03-2' | 7/24/2001 | <0.39 | <0.39 | <0.39 | <0.39 |
| DP03-8.5' | 7/24/2001 | <0.35 | <0.35 | <0.35 | <0.35 |
| DP05-1' | 7/25/2001 | <0.39 | <0.39 | <0.39 | <0.39 |
| DP05-8.5' | 7/25/2001 | <0.38 | <0.38 | <0.38 | <0.38 |
| DP07-9' | 7/26/2001 | <0.39 | <0.39 | <0.39 | <0.39 |
| DP08-6' | 7/26/2001 | <0.42 | <0.42 | <0.42 | <0.42 |
| DP08-11' | 7/26/2001 | <0.39 | <0.39 | <0.39 | <0.39 |
| DP09-12' | 7/27/2001 | <0.38 | <0.38 | <0.38 | <0.38 |
| DP10-2' | 7/27/2001 | <0.37 | <0.37 | <0.37 | <0.37 |
| DP10-10' | 7/27/2001 | <1.5 | <1.5 | <1.5 | <1.5 |
| DP10-10' (Dup) | 7/27/2001 | <1.5 | <1.5 | <1.5 | <1.5 |
| DP12-1.5' | 7/28/2001 | <0.34 | <0.34 | <0.34 | <0.34 |
| DP12-9' | 7/28/2001 | <0.41 | <0.41 | <0.41 | <0.41 |
| DP13-3' | 7/29/2001 | <0.39 | <0.39 | <0.39 | 0.13 J |
| DP13-11' | 7/29/2001 | <0.39 | 0.61 | <0.39 | 0.85 |
| DP14-3' | 7/29/2001 | <35 | <35 | <35 | <35 |
| DP14-9' | 7/29/2001 | <1.5 | <1.5 | <1.5 | <1.5 |
| DP15-2' | 7/29/2001 | <0.38 | 0.21 J | 0.075 J | 0.11 J |
| DP15-9' | 7/29/2001 | <1.6 | <1.6 | <1.6 | <1.6 |
| DP16-2.8' | 7/30/2001 | <0.35 | <0.35 | <0.35 | <0.35 |
| DP16-12.5' | 7/30/2001 | <19 | <19 | <19 | <19 |
| DP17-3' | 7/30/2001 | <0.39 | <0.39 | <0.39 | <0.39 |
| DP17-13' | 7/30/2001 | <22 | <22 | 4.7 J | <22 |
| DP18-2' | 7/30/2001 | <0.38 | 0.14 J | <0.38 | 0.29 J |
| DP18-14.5' | 7/30/2001 | <0.36 | <0.36 | <0.36 | <0.36 |
| DP19-2' | 7/30/2001 | <0.4 | 0.1 J | <0.4 | 0.2 J |
| DP19-13' | 7/30/2001 | <0.36 | <0.36 | <0.36 | <0.36 |
| DP20-2' | 7/30/2001 | <0.38 | 0.19 J | <0.38 | 0.19 J |
| DP20-14.5' | 7/30/2001 | <0.38 | <0.38 | <0.38 | <0.38 |
| DP23-2.5' | 8/1/2001 | <0.42 | <0.42 | <0.42 | <0.42 |
| DP23-9' | 8/1/2001 | <0.43 | <0.43 | <0.43 | <0.43 |
| DP25-2.5' | 8/7/2001 | <0.41 | <0.41 | <0.41 | <0.41 |
| DP25-2.5' (Dup) | 8/7/2001 | <0.37 | <0.37 | <0.37 | <0.37 |
| DP25-7.5' | 8/7/2001 | <0.38 | <0.38 | <0.38 | <0.38 |
| DP29-5 | 11/9/2001 | <0.41 | <0.41 | <0.41 | <0.41 |

**Table 5-3**
**Summary of Semivolatile Organic Detections in**
**Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | Naphthalene | Phenanthrene | Phenol | Pyrene |
|---|---|---|---|---|---|
| DP31-15 | 12/5/2001 | <0.39 | <0.39 | <0.39 | <0.39 |
| DP36-19 | 12/5/2001 | <0.37 | <0.37 | <0.37 | <0.37 |
| DP37-19 | 12/5/2001 | <0.36 | <0.36 | <0.36 | <0.36 |
| DP37-19 (Dup) | 12/5/2001 | <0.36 | <0.36 | <0.36 | <0.36 |
| DP38-14.5 | 12/5/2001 | <0.36 | 0.26 J | <0.36 | 0.24 J |
| DP56A-9.5-10.5' | 3/15/2004 | <170 | <170 | <170 | <170 |
| DP58A-8.5-9.5' | 3/15/2004 | <21 | <21 | <21 | <21 |
| DP60A-6.6-7.4' | 3/15/2004 | <8.1 | <8.1 | <8.1 | <8.1 |
| DP61A-5-6' | 3/15/2004 | <1.6 | <1.6 | <1.6 | <1.6 |
| DP61A-5-6' (Dup) | 3/15/2004 | <7.9 | <7.9 | <7.9 | <7.9 |
| DP64A-8.5-9.5' | 3/15/2004 | <18 | <18 | <18 | <18 |
| DP66A-9.5-10.5' | 3/15/2004 | <19 | <19 | <19 | <19 |
| DP67A-12.5-13.5' | 3/15/2004 | <35 | <35 | <35 | <35 |
| DP70A-9-11' | 3/14/2004 | <1.5 | <1.5 | <1.5 | <1.5 |
| DP72A-12-13' | 3/14/2004 | <7.2 | <7.2 | <7.2 | <7.2 |
| DP73A-12-13' | 3/14/2004 | <7.2 | <7.2 | <7.2 | <7.2 |
| DP78A-9-10' | 3/14/2004 | <50 | <50 | <50 | <50 |
| DP79A-12-13' | 3/14/2004 | <38 | <38 | <38 | <38 |
| STR01-3' | 3/8/2001 | <0.38 | <0.38 | <0.38 | <0.38 |
| STR01-21' | 3/8/2001 | <0.37 | <0.37 | <0.37 | <0.37 |
| STR01-73' | 3/9/2001 | <0.4 | <0.4 | <0.4 | <0.4 |
| STR01-88' | 3/9/2001 | <0.38 | <0.38 | <0.38 | <0.38 |
| STR02-1' | 3/13/2001 | <0.4 | 0.33 J | <0.4 | 0.36 J |
| STR02-12.5' | 3/13/2001 | <0.37 | <0.37 | <0.37 | <0.37 |
| STR03-4' | 3/14/2001 | <0.38 | <0.38 | <0.38 | <0.38 |
| STR03-12.5' | 3/14/2001 | <18 | <18 | <18 | <18 |
| STR04-1.5' | 3/19/2001 | <0.4 | <0.4 | <0.4 | <0.4 |
| STR04-17.5' | 3/19/2001 | <0.4 | <0.4 | <0.4 | <0.4 |
| STR04-17.5' (Dup) | 3/19/2001 | <0.36 | <0.36 | <0.36 | <0.36 |
| STR05-1.5' | 3/10/2001 | <0.38 | <0.38 | <0.38 | <0.38 |
| STR05-11.3' | 3/10/2001 | <0.36 | <0.36 | <0.36 | <0.36 |
| STR05-9' | 3/10/2001 | <0.38 | <0.38 | <0.38 | <0.38 |
| STR06-1' | 3/11/2001 | <0.39 | <0.39 | <0.39 | <0.39 |
| STR06-15' | 3/11/2001 | <0.4 | <0.4 | <0.4 | <0.4 |
| STR07-1.5' | 3/21/2001 | <0.4 | <0.4 | <0.4 | <0.4 |
| STR07-18' | 3/21/2001 | <0.38 | <0.38 | <0.38 | <0.38 |
| STR08-1.5' | 3/26/2001 | <0.4 | <0.4 | <0.4 | <0.4 |
| STR08-13' | 3/26/2001 | <0.37 | <0.37 | <0.37 | <0.37 |
| STR08-13' (Dup) | 3/26/2001 | <0.38 | <0.38 | <0.38 | <0.38 |
| STR09-7.5' | 4/4/2001 | <0.4 | <0.4 | <0.4 | <0.4 |
| STR10-1.5' | 4/7/2001 | <0.38 | <0.38 | <0.38 | <0.38 |

**Table 5-3**
**Summary of Semivolatile Organic Detections in**
**Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | Naphthalene | Phenanthrene | Phenol | Pyrene |
|---|---|---|---|---|---|
| STR10-11' | 4/7/2001 | <0.42 | <0.42 | <0.42 | <0.42 |
| STR11-2' | 8/20/2001 | <0.4 | <0.4 | <0.4 | <0.4 |
| STR11-9' | 8/20/2001 | <0.39 | <0.39 | <0.39 | <0.39 |
| STR11-9' (Dup) | 8/20/2001 | <0.39 | <0.39 | <0.39 | <0.39 |
| T-1B2-8' | 3/16/2004 | <0.36 | <0.36 | <0.36 | <0.36 |
| T-1E-2-6' | 3/16/2004 | <0.41 | <0.41 | <0.41 | <0.41 |
| T-1N-6' | 3/16/2004 | <0.41 | <0.41 | <0.41 | <0.41 |
| T-1NE-4' | 3/16/2004 | <0.4 | <0.4 | <0.4 | <0.4 |
| T-1W2-6' | 3/16/2004 | <0.4 | <0.4 | <0.4 | <0.4 |
| T-2-3 | 11/8/2001 | <0.4 | <0.4 | <0.4 | <0.4 |
| T-2-9 | 11/8/2001 | <0.37 | <0.37 | <0.37 | <0.37 |
| T-3-11 | 11/8/2001 | <0.37 | <0.37 | <0.37 | <0.37 |
| T-3-3 | 11/8/2001 | <0.37 | <0.37 | <0.37 | 0.063 J |
| T-4-3 | 11/9/2001 | <0.37 | 0.07 J | <0.37 | 0.068 J |
| T-4-9 | 11/9/2001 | <0.36 | <0.36 | <0.36 | <0.36 |
| T-5-3 | 11/9/2001 | <0.4 | <0.4 | <0.4 | <0.4 |
| T-5-9 | 11/9/2001 | <0.4 | <0.4 | <0.4 | <0.4 |
| T-6-10 | 11/10/2001 | <0.36 | <0.36 | <0.36 | <0.36 |
| T-6-3 | 11/10/2001 | <0.4 | <0.4 | <0.4 | <0.4 |
| T-6-7.5 | 11/11/2001 | <86 | <86 | <86 | <86 |
| T-8-3 | 11/11/2001 | <0.42 | <0.42 | <0.42 | <0.42 |
| T-8-9 | 11/11/2001 | <0.36 | <0.36 | <0.36 | <0.36 |
| UAW01-30-1.5' | 4/2/2001 | <0.38 | 6.5 | <0.38 | 11 |
| UAW01-30-15' | 4/2/2001 | <0.35 | <0.35 | <0.35 | <0.35 |
| UAW04-20-10' | 3/23/2001 | <0.45 | <0.45 | <0.45 | <0.45 |
| UAW05-20-13' | 3/23/2001 | <0.38 | <0.38 | <0.38 | <0.38 |
| UAW06-20-1.5' | 3/26/2001 | <0.4 | <0.4 | <0.4 | <0.4 |
| UAW06-20-11.5' | 3/26/2001 | <0.37 | <0.37 | <0.37 | <0.37 |
| UAW08-20-13' | 3/24/2001 | <2.4 | <2.4 | <2.4 | <2.4 |
| UAW09-20-1.5' | 3/27/2001 | <0.39 | <0.39 | <0.39 | <0.39 |
| UAW09-20-15' | 3/27/2001 | <0.35 | <0.35 | <0.35 | <0.35 |
| UAW11-40-2' | 4/17/2001 | <0.4 | <0.4 | <0.4 | <0.4 |
| UAW11-40-10' | 4/17/2001 | <0.37 | <0.37 | <0.37 | <0.37 |
| UAW12-20-12' | 3/24/2001 | <0.4 | <0.4 | <0.4 | <0.4 |
| UAW13-20-1.5' | 3/24/2001 | <0.38 | 0.22 J | <0.38 | 0.38 |
| UAW13-20-11.5' | 3/24/2001 | <0.39 | <0.39 | <0.39 | <0.39 |
| UAW14-10-1.5' | 4/4/2001 | <0.39 | <0.39 | <0.39 | <0.39 |
| UAW15-20-2' | 4/9/2001 | <0.37 | <0.37 | <0.37 | <0.37 |
| UAW15-20-2' (Dup) | 4/9/2001 | <0.36 | <0.36 | <0.36 | <0.36 |
| UAW15-20-8.5' | 4/9/2001 | <0.37 | <0.37 | <0.37 | <0.37 |
| UAW16-10-2' | 8/22/2001 | <0.38 | <0.38 | <0.38 | <0.38 |

**Table 5-3**
**Summary of Semivolatile Organic Detections in**
**Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | Naphthalene | Phenanthrene | Phenol | Pyrene |
|---|---|---|---|---|---|
| UAW16-10-5.5' | 8/22/2001 | <0.36 | <0.36 | <0.36 | <0.36 |
| UAW17-40-1.5' | 4/5/2001 | <0.38 | <0.38 | <0.38 | <0.38 |
| UAW17-40-5' | 4/5/2001 | 3.8 J | 9.8 | 13 | 4.3 J |
| UAW18-20-1' | 8/23/2001 | <0.4 | <0.4 | <0.4 | <0.4 |
| UAW18-20-15' | 8/23/2001 | <0.41 | <0.41 | <0.41 | <0.41 |
| UAW19-80-1.5' | 4/6/2001 | <0.4 | <0.4 | <0.4 | <0.4 |
| UAW19-80-15' | 4/6/2001 | <0.39 | <0.39 | <0.39 | <0.39 |
| UAW20-60-1.5' | 4/9/2001 | <0.37 | <0.37 | <0.37 | <0.37 |
| UAW20-60-9.5' | 4/9/2001 | <0.4 | <0.4 | <0.4 | <0.4 |
| UAW21-30-1.5' | 4/11/2001 | <0.39 | <0.39 | <0.39 | <0.39 |
| UAW21-30-10' | 4/11/2001 | <0.37 | <0.37 | <0.37 | <0.37 |
| UAW22-20-2' | 9/5/2001 | <0.73 | <0.73 | <0.73 | <0.73 |
| UAW22-20-11' | 9/5/2001 | <0.37 | <0.37 | <0.37 | <0.37 |
| **Background Soil** | | | | | |
| B01-1.5' | 10/9/2001 | <0.37 | <0.37 | <0.37 | <0.37 |
| B01-11.5' | 10/9/2001 | <0.34 | <0.34 | <0.34 | <0.34 |
| B02-1.5' | 10/9/2001 | <0.38 | <0.38 | <0.38 | <0.38 |
| B02-11.5' | 10/9/2001 | <0.34 | <0.34 | <0.34 | <0.34 |
| B03-1.5' | 10/9/2001 | <0.38 | <0.38 | <0.38 | <0.38 |
| B03-11.5' | 10/9/2001 | <0.34 | <0.34 | <0.34 | <0.34 |
| B04-1.5' | 10/9/2001 | <0.35 | <0.35 | <0.35 | <0.35 |
| B04-1.5' (Dup) | 10/9/2001 | <0.35 | 0.096 J | <0.35 | 0.14 J |
| B04-11.5' | 10/9/2001 | <0.35 | <0.35 | <0.35 | <0.35 |
| B05-1.5' | 10/9/2001 | <0.37 | <0.37 | <0.37 | <0.37 |
| B05-11.5' | 10/9/2001 | <0.35 | <0.35 | <0.35 | <0.35 |
| B06-1.5' | 10/9/2001 | <0.38 | 0.12 J | <0.38 | 0.19 J |
| B06-11' | 10/9/2001 | <0.38 | <0.38 | <0.38 | <0.38 |
| B07-1' | 10/9/2001 | <0.39 | <0.39 | <0.39 | <0.39 |
| B07-9' | 10/9/2001 | <0.39 | <0.39 | <0.39 | <0.39 |
| B08-2' | 10/9/2001 | 3 J | 110 | <19 | 83 |
| B08-9' | 10/9/2001 | 0.088 J | 0.68 | <0.37 | 0.35 J |
| B09-2' | 10/9/2001 | <0.43 | <0.43 | <0.43 | <0.43 |
| B09-10' | 10/9/2001 | <0.41 | <0.41 | <0.41 | <0.41 |
| B10-2' | 10/9/2001 | <0.44 | <0.44 | <0.44 | <0.44 |
| B10-11' | 10/9/2001 | <0.4 | <0.4 | <0.4 | <0.4 |

**Table 5-3**
**Summary of Semivolatile Organic Detections in**
**Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | Naphthalene | Phenanthrene | Phenol | Pyrene |
|---|---|---|---|---|---|
| **Creek Bed Sediment** | | | | | |
| CS-1 | 3/6/2002 | NA | NA | NA | NA |
| CS-1A | 3/25/2004 | <0.39 | <0.39 | <0.39 | 0.028 J |
| CS-2 | 3/6/2002 | NA | NA | NA | NA |
| CS-2A | 3/26/2004 | 0.7 J | 4.8 | <1.9 | 3.1 |
| CS-3 | 3/6/2002 | NA | NA | NA | NA |
| CS-3A | 3/26/2004 | <0.41 | 0.27 J | <0.41 | 0.39 J |
| CS-4 | 3/6/2002 | NA | NA | <0.4 | <0.4 |
| CS-4A | 3/26/2004 | <0.47 | 0.27 J | <0.47 | 0.46 J |
| CS-5 | 3/6/2002 | NA | NA | NA | NA |
| CS-5A | 3/25/2004 | <0.36 | <0.36 | <0.36 | 0.021 J |
| CS-6 | 3/6/2002 | NA | NA | NA | NA |
| CS-6A | 3/25/2004 | <0.42 | 0.23 J | <0.42 | 0.26 J |
| CS-6A (Dup) | 3/25/2004 | <0.41 | 0.2 J | <0.41 | 0.28 J |
| CS-7 | 3/6/2002 | NA | NA | NA | NA |
| CS-7 (Dup) | 3/6/2002 | NA | NA | NA | NA |
| CS-8 | 3/6/2002 | NA | NA | NA | NA |
| **Creek Bank Sediment** | | | | | |
| SS-1 | 10/11/2001 | NA | NA | NA | NA |
| SS-2 | 10/11/2001 | NA | NA | NA | NA |
| SS-3 | 10/11/2001 | NA | NA | NA | NA |
| SS-4 | 10/11/2001 | NA | NA | NA | NA |
| SS-5 ~25' South | 10/11/2001 | NA | NA | NA | NA |
| SS-5 (Dup) | 10/11/2001 | NA | NA | NA | NA |
| SS-6 | 10/11/2001 | NA | NA | NA | NA |
| SS-7 | 10/11/2001 | NA | NA | NA | NA |
| SS-8 | 10/11/2001 | NA | NA | NA | NA |
| SS-9 | 10/11/2001 | NA | NA | NA | NA |
| SS-10 | 10/11/2001 | NA | NA | NA | NA |

Notes:
J = Estimated result; result is less than reporting limit.
# = Co-Elution of 3-Methylphenol and 4-Methylphenol.
This table only includes target analytes detected in one or more Facility Investigation samples.
See Appendix B for the complete target analyte lists.
NA = Indicates chemical was not on the target analyte list for that sample.
<10 = Indicates constituent not detected at or above indicated detection limit.
* = Indicates that Environmental Standards qualified the data as a "non-detect" as part of the 10% data validation. The analyte was detected in a field and/or laboratory blank at a similar level.
The only validation qualifiers that have been annotated into the summary tables are qualifications of detected compounds. Please refer to Appendix D for excerpts from the Quality Assurance Review (Envionmental Standards, 2004) and to review data qualification of "non-detect" results.

**Table 5-4**
**Summary of Pesticide and Polychlorinated Biphenyl Detections in Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | 4,4'-DDD | 4,4'-DDE | 4,4'-DDT | Aldrin | alpha-BHC | beta-BHC | gamma-BHC (Lindane | alpha-Chlordane | gamma-Chlordane | Chlorobenzilate | Diallate | Dieldrin | Endosulfan I | Endosulfan II | Endosulfan sulfate | Endrin | Endrin aldehyde | Endrin ketone | Heptachlor | Heptachlor epoxide | Isodrin | Methoxychlor | Aroclor 1016 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **On-Site Soil** | | | | | | | | | | | | | | | | | | | | | | | | |
| DP01-2' | 7/24/2001 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | NA | NA | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | NA | <0.038 | <0.038 |
| DP01-9.5' | 7/24/2001 | <0.0099 | <0.0099 | <0.0099 | <0.0099 | <0.0099 | <0.0099 | <0.0099 | <0.0099 | <0.0099 | NA | NA | <0.0099 | <0.0099 | <0.0099 | <0.0099 | <0.0099 | <0.0099 | <0.0099 | <0.0099 | <0.0099 | NA | <0.019 | <0.039 |
| DP02-2' | 7/24/2001 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | NA | NA | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | NA | <0.0076 | <0.038 |
| DP02-9.5' | 7/24/2001 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | NA | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | <0.0041 | <0.041 |
| DP03-2' | 7/24/2001 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | NA | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | <0.0039 | <0.039 |
| DP03-8.5' | 7/24/2001 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | NA | NA | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | NA | <0.0035 | <0.035 |
| DP05-1' | 7/25/2001 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | NA | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | <0.0039 | <0.039 |
| DP05-8.5' | 7/25/2001 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | NA | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | <0.0038 | <0.038 |
| DP07-9' | 7/26/2001 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | NA | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | <0.0039 | <0.039 |
| DP08-6' | 7/26/2001 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | NA | NA | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | NA | 0.0017 J | <0.042 |
| DP08-11' | 7/26/2001 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | NA | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | <0.0039 | <0.039 |
| DP09-12' | 7/27/2001 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | NA | NA | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | NA | <0.0076 | <0.38 |
| DP10-2' | 7/27/2001 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | NA | <0.0037 | <0.037 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | <0.0019 | <0.0019 | <0.0037 | <0.0037 | <0.037 |
| DP10-10' | 7/27/2001 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | NA | NA | <0.38 | <3.8 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | NA | <0.2 | <0.2 | <0.38 | <0.38 | <3.8 |
| DP10-10' (Dup) | 7/27/2001 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | 0.0038 J | <0.0039 | NA | NA | <0.0075 | <0.075 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | NA | <0.0039 | <0.0039 | <0.0075 | <0.0075 | <0.38 |
| DP12-1.5' | 7/28/2001 | <0.0035 | <0.0035 | <0.0035 | <0.0035 | <0.0035 | <0.0035 | <0.0035 | <0.0035 | <0.0035 | NA | NA | <0.0035 | <0.0035 | <0.0035 | <0.0035 | <0.0035 | <0.0035 | <0.0035 | <0.0035 | <0.0035 | NA | <0.0068 | <0.034 |
| DP12-9' | 7/28/2001 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | NA | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | <0.0041 | <0.041 |
| DP13-3' | 7/29/2001 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.0039 | <0.039 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.0039 | <0.0039 | <0.039 |
| DP13-11' | 7/29/2001 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | NA | NA | 10 PG | <39 | <2 | <2 | <2 | <2 | <2 | <2 | NA | <2 | <2 | <3.9 | <3.9 | <3.9 |
| DP14-3' | 7/29/2001 | <0.89 | <0.89 | <0.89 | <0.89 | <0.89 | <0.89 | <0.89 | NA | NA | <1.7 | <17 | <0.89 | <0.89 | <0.89 | <0.89 | <0.89 | <0.89 | NA | <0.89 | <0.89 | <1.7 | <1.7 | <69 |
| DP14-9' | 7/29/2001 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | NA | NA | <0.75 | <7.5 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.75 | <0.75 | <75 |
| DP15-2' | 7/29/2001 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | NA | NA | <0.76 | <7.6 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | <0.39 | NA | <0.39 | <0.39 | <0.76 | <0.76 | <1.9 |
| DP15-9' | 7/29/2001 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | NA | NA | <0.04 | <0.4 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | NA | <0.02 | <0.02 | <0.04 | <0.04 | <40 |
| DP16-2.8' | 7/30/2001 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | NA | NA | <0.0035 | <0.035 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | NA | <0.0018 | <0.0018 | <0.0035 | <0.0035 | <0.035 |
| DP16-12.5' | 7/30/2001 | <0.99 | <0.99 | 0.78 J | <0.99 | <0.99 | <0.99 | <0.99 | NA | NA | <1.9 | <19 | <0.99 | <0.99 | <0.99 | <0.99 | <0.99 | <0.99 | NA | <0.99 | <0.99 | <1.9 | 4.5 PG | <19 |
| DP17-3' | 7/30/2001 | <0.002 | 0.0018 J | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | NA | <0.0039 | <0.039 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | <0.002 | <0.002 | <0.0039 | <0.0039 | <0.039 |
| DP17-13' | 7/30/2001 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | NA | NA | <2.2 | <22 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | <1.1 | NA | <1.1 | <1.1 | <2.2 | <2.2 | <22 |
| DP18-2' | 7/30/2001 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | NA | NA | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | NA | <0.0075 | <0.038 |
| DP18-14.5' | 7/30/2001 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | NA | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | <0.0036 | <0.036 |
| DP19-2' | 7/30/2001 | <0.0021 | 0.0017 J | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | NA | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | <0.004 | <0.04 |
| DP19-13' | 7/30/2001 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | NA | NA | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | NA | <0.0073 | <0.036 |
| DP20-2' | 7/30/2001 | <0.0019 | 0.0037 | 0.0081 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | NA | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | <0.0038 | <0.038 |
| DP20-14.5' | 7/30/2001 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | NA | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | <0.0038 | <0.038 |
| DP23-2.5' | 8/1/2001 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | NA | NA | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | NA | <0.0042 | <0.042 |
| DP23-9' | 8/1/2001 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | NA | NA | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | NA | <0.0043 | <0.043 |
| DP25-2.5' | 8/7/2001 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | NA | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | <0.0041 | <0.041 |
| DP25-2.5' (Dup) | 8/7/2001 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | NA | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | <0.0037 | <0.037 |
| DP25-7.5' | 8/7/2001 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | NA | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | <0.0038 | <0.038 |
| DP29-5 | 11/9/2001 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | NA | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | <0.0041 | <0.041 |
| DP31-15 | 12/5/2001 | <0.004 | <0.004 | <0.004 | <0.004 | <0.004 | <0.004 | <0.004 | NA | NA | <0.04 | <0.078 | <0.004 | <0.004 | <0.004 | <0.004 | <0.004 | <0.004 | NA | <0.004 | <0.004 | <0.0078 | <0.0078 | <0.039 |

**Table 5-4**
**Summary of Pesticide and Polychlorinated Biphenyl Detections in Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | 4,4'-DDD | 4,4'-DDE | 4,4'-DDT | Aldrin | alpha-BHC | beta-BHC | gamma-BHC (Lindane | alpha-Chlordane | gamma-Chlordane | Chlorobenzilate | Diallate | Dieldrin | Endosulfan I | Endosulfan II | Endosulfan sulfate | Endrin | Endrin aldehyde | Endrin ketone | Heptachlor | Heptachlor epoxide | Isodrin | Methoxychlor | Aroclor 1016 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DP36-19 | 12/5/2001 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | NA | NA | <0.038 | <0.074 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | NA | <0.0038 | <0.0038 | <0.0074 | <0.0074 | <0.037 |
| DP37-19 | 12/5/2001 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | NA | <0.019 | <0.036 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | <0.0019 | <0.0019 | <0.0036 | <0.0036 | <0.036 |
| DP37-19 (Dup) | 12/5/2001 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | NA | NA | <0.037 | <0.073 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | NA | <0.0037 | <0.0037 | <0.0073 | <0.0073 | <0.036 |
| DP38-14.5 | 12/5/2001 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.019 | <0.036 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0036 | <0.0036 | <0.036 |
| DP56A-9.5-10.5' | 3/15/2004 | 0.16 J | 2 | 3.9 PG | <0.43 | <0.43 | <0.43 | <0.43 | 0.14 J | 1.7 | NA | NA | <0.43 | <0.43 | 1.9 PG | <0.43 | 0.92 PG | <0.43 | 1 PG | <0.43 | <0.43 | NA | 5.5 PG | <0.41 |
| DP58A-8.5-9.5' | 3/15/2004 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | NA | NA | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | NA | <0.21 | <0.042 |
| DP60A-6.6-7.4' | 3/15/2004 | 0.05 J | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.26 PG | NA | NA | <0.1 | <0.1 | <0.1 | 0.055 J | <0.1 | <0.1 | 0.37 PG | <0.1 | <0.1 | NA | 0.17 J | <0.04 |
| DP61A-5-6' | 3/15/2004 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | NA | NA | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | NA | <0.4 | <0.04 |
| DP61A-5-6' (Dup) | 3/15/2004 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | NA | NA | <0.2 | <0.2 | <0.2 | <0.2 | 0.095 J | <0.2 | <0.2 | <0.2 | <0.2 | NA | <0.4 | <0.04 |
| DP64A-8.5-9.5' | 3/15/2004 | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | NA | NA | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | NA | <0.37 | <0.037 |
| DP66A-9.5-10.5' | 3/15/2004 | <0.19 | <0.19 | <0.19 | 0.26 PG | <0.19 | <0.19 | <0.19 | <0.19 | 0.023 J | NA | NA | 0.064 J | 0.75 PG | <0.19 | 0.12 J | 0.96 PG | <0.19 | <0.19 | <0.19 | <0.19 | NA | <0.38 | <0.38 |
| DP67A-12.5-13.5' | 3/15/2004 | <0.9 | <0.9 | <0.9 | <0.9 | <0.9 | <0.9 | <0.9 | <0.9 | 0.68 J PG | NA | NA | <0.9 | <0.9 | 29 PG | <0.9 | 3.1 | <0.9 | <0.9 | <0.9 | <0.9 | NA | <1.8 | <1.8 |
| DP70A-9-11' | 3/14/2004 | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | NA | NA | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | <0.19 | NA | <0.38 | <0.038 |
| DP72A-12-13' | 3/14/2004 | <0.18 | 0.064 J | <0.18 | <0.18 | <0.18 | <0.18 | <0.18 | <0.18 | 0.16 J PG | NA | NA | <0.18 | 0.54 PG | <0.18 | <0.18 | <0.18 | <0.18 | 0.3 PG | <0.18 | <0.18 | NA | <0.36 | <0.036 |
| DP73A-12-13' | 3/14/2004 | 0.04 J | 0.095 J | <0.19 | 0.098 J | <0.19 | 0.25 PG | <0.19 | <0.19 | 0.089 J | NA | NA | 0.059 J | <0.19 | <0.19 | <0.19 | <0.19 | 0.22 PG | <0.19 | <0.19 | 0.066 J | NA | 0.11 J | <0.036 |
| DP78A-9-10' | 3/14/2004 | <0.13 | <0.13 | <0.13 | <0.13 | 0.2 PG | 0.18 PG | <0.13 | <0.13 | 0.7 PG | NA | NA | <0.13 | 0.14 | 1 PG | 0.36 | 0.034 J | <0.13 | 0.35 PG | <0.13 | <0.13 | NA | 0.78 PG | <0.05 |
| DP79A-12-13' | 3/14/2004 | <0.098 | <0.098 | <0.098 | <0.098 | <0.098 | <0.098 | 0.16 | <0.098 | <0.098 | NA | NA | 0.03 J | <0.098 | 0.032 J | 0.48 PG | 0.067 J PG | <0.098 | <0.098 | 0.074 J | <0.098 | NA | <0.19 | <0.038 |
| STR01-3' | 3/8/2001 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | NA | NA | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | NA | <0.038 | <0.038 |
| STR01-21' | 3/8/2001 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | 0.0017 J | <0.0019 | <0.0019 | <0.0019 | NA | NA | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | <0.0037 | <0.07 |
| STR01-73' | 3/9/2001 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | NA | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | <0.004 | <0.04 |
| STR01-88' | 3/9/2001 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | NA | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | <0.0038 | <0.038 |
| STR02-1' | 3/13/2001 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | NA | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | <0.004 | <0.04 |
| STR02-12.5' | 3/13/2001 | <0.0096 | <0.0096 | <0.0096 | <0.0096 | <0.0096 | <0.0096 | <0.0096 | <0.0096 | <0.0096 | NA | NA | <0.0096 | <0.0096 | <0.0096 | <0.0096 | <0.0096 | <0.0096 | <0.0096 | <0.0096 | <0.0096 | NA | <0.019 | <0.037 |
| STR03-4' | 3/14/2001 | <0.0079 | <0.0079 | <0.0079 | <0.0079 | <0.0079 | <0.0079 | <0.0079 | NA | NA | <0.079 | <0.15 | <0.0079 | <0.0079 | <0.0079 | <0.0079 | <0.0079 | <0.0079 | NA | <0.0079 | <0.0079 | <0.015 | <0.015 | <0.038 |
| STR03-12.5' | 3/14/2001 | <0.074 | <0.074 | <0.074 | <0.074 | <0.074 | <0.074 | <0.074 | NA | NA | <0.74 | <1.4 | <0.074 | <0.074 | <0.074 | <0.074 | <0.074 | 0.19 PG | NA | <0.074 | <0.074 | <0.14 | <0.14 | <1.8 |
| STR04-1.5' | 3/19/2001 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | NA | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | <0.004 | <0.04 |
| STR04-17.5' | 3/19/2001 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | NA | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | <0.004 | <0.04 |
| STR04-17.5' (Dup) | 3/19/2001 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | NA | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | <0.0036 | <0.036 |
| STR05-1.5' | 3/10/2001 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | NA | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | <0.0038 | <0.038 |
| STR05-9' | 3/10/2001 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | NA | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | <0.0038 | <0.038 |
| STR05-11.3' | 3/10/2001 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | NA | NA | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | NA | <0.0036 | <0.036 |
| STR06-1' | 3/11/2001 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | NA | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | <0.0039 | <0.039 |
| STR06-15' | 3/11/2001 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | NA | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | <0.004 | <0.04 |
| STR07-1.5' | 3/21/2001 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | NA | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | 0.003 J | <0.04 |
| STR07-18' | 3/21/2001 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | NA | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | <0.0038 | <0.038 |
| STR08-1.5' | 3/26/2001 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | NA | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | <0.004 | <0.04 |
| STR08-13' | 3/26/2001 | <0.019 | <0.019 | <0.019 | <0.019 | <0.019 | <0.019 | <0.019 | <0.019 | <0.019 | NA | NA | <0.019 | <0.019 | <0.019 | <0.019 | <0.019 | <0.019 | <0.019 | <0.019 | <0.019 | NA | <0.037 | <0.037 |
| STR08-13' (Dup) | 3/26/2001 | <0.039 | <0.039 | <0.039 | <0.039 | <0.039 | <0.039 | <0.039 | <0.039 | <0.039 | NA | NA | <0.039 | <0.039 | <0.039 | <0.039 | <0.039 | <0.039 | <0.039 | <0.039 | <0.039 | NA | <0.075 | <0.038 |
| STR09-7.5' | 4/4/2001 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | NA | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | <0.004 | <0.04 |
| STR10-1.5' | 4/7/2001 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | NA | <0.019 | <0.038 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | <0.0019 | <0.0019 | <0.0038 | <0.0038 | <0.038 |
| STR10-11' | 4/7/2001 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | NA | NA | <0.022 | <0.042 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | NA | <0.0022 | <0.0022 | <0.0042 | <0.0042 | <0.042 |
| STR11-2' | 8/20/2001 | <0.002 | 0.0041 PG | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | 0.0025 PG | NA | NA | 0.0041 PG | <0.002 | <0.002 | 0.0028 PG | <0.002 | 0.0032 PG | 0.0017 J | <0.002 | <0.002 | NA | <0.004 | <0.04 |

**Table 5-4**
**Summary of Pesticide and Polychlorinated Biphenyl Detections in Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | 4,4'-DDD | 4,4'-DDE | 4,4'-DDT | Aldrin | alpha-BHC | beta-BHC | gamma-BHC (Lindane) | alpha-Chlordane | gamma-Chlordane | Chlorobenzilate | Diallate | Dieldrin | Endosulfan I | Endosulfan II | Endosulfan sulfate | Endrin | Endrin aldehyde | Endrin ketone | Heptachlor | Heptachlor epoxide | Isodrin | Methoxychlor | Aroclor 1016 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STR11-9' | 8/20/2001 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | NA | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | <0.0039 | <0.039 |
| STR11-9' (Dup) | 8/20/2001 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | NA | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | <0.0039 | <0.039 |
| T-1B2-8' | 3/16/2004 | 0.0032 PG | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | NA | <0.0019 | <0.0019 | <0.0019 | 0.0018 J | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | <0.0036 | <0.036 |
| T-1E-2-6' | 3/16/2004 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | NA | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | <0.0041 | <0.041 |
| T-1N-6' | 3/16/2004 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | NA | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | <0.0041 | <0.041 |
| T-1NE-4' | 3/16/2004 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | NA | NA | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | <0.21 | NA | <0.4 | <0.04 |
| T-1W2-6' | 3/16/2004 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | NA | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | <0.004 | <0.04 |
| T-2-3 | 11/8/2001 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | NA | <0.021 | <0.04 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | <0.0021 | <0.0021 | <0.004 | <0.004 | <0.04 |
| T-2-9 | 11/8/2001 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | NA | <0.019 | <0.037 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | <0.0019 | <0.0019 | <0.0037 | <0.0037 | <0.037 |
| T-3-11 | 11/8/2001 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | NA | <0.019 | <0.037 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | <0.0019 | <0.0019 | <0.0037 | <0.0037 | <0.037 |
| T-3-3 | 11/8/2001 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | NA | NA | <0.038 | <0.074 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | NA | <0.0038 | <0.0038 | <0.0074 | <0.0074 | <0.037 |
| T-4-3 | 11/9/2001 | <0.0019 | 0.0016 J | 0.0022 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | NA | <0.0037 | <0.037 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | <0.0019 | <0.0019 | <0.0037 | <0.0037 | <0.037 |
| T-4-9 | 11/9/2001 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | NA | NA | <0.0036 | <0.036 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | NA | <0.0018 | <0.0018 | <0.0036 | <0.0036 | <0.036 |
| T-5-3 | 11/9/2001 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | NA | <0.004 | <0.04 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | <0.002 | <0.002 | <0.004 | <0.004 | <0.04 |
| T-5-9 | 11/9/2001 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | NA | <0.004 | <0.04 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | <0.002 | <0.002 | <0.004 | <0.004 | <0.04 |
| T-6-10 | 11/10/2001 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | NA | <0.019 | <0.036 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | <0.0019 | <0.0019 | <0.0036 | <0.0036 | <0.036 |
| T-6-3 | 11/10/2001 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | NA | <0.021 | <0.04 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | <0.0021 | <0.0021 | <0.004 | <0.004 | <0.04 |
| T-6-7.5 | 11/11/2001 | <0.098 | <0.098 | <0.098 | <0.098 | <0.098 | <0.098 | <0.098 | NA | NA | <0.97 | <1.9 | <0.098 | <0.098 | <0.098 | <0.098 | <0.098 | <0.098 | NA | <0.098 | <0.098 | <0.19 | <0.19 | <4.8 |
| T-8-3 | 11/11/2001 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | NA | <0.021 | <0.042 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | <0.0021 | <0.0021 | <0.0042 | <0.0042 | <0.042 |
| T-8-9 | 11/11/2001 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | NA | <0.019 | <0.036 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | <0.0019 | <0.0019 | <0.0036 | <0.0036 | <0.036 |
| UAW01-30-1.5' | 4/2/2001 | <0.0099 | <0.0099 | <0.0099 | <0.0099 | <0.0099 | <0.0099 | <0.0099 | <0.0099 | <0.0099 | NA | NA | <0.0099 | <0.0099 | <0.0099 | <0.0099 | <0.0099 | <0.0099 | <0.0099 | <0.0099 | <0.0099 | NA | <0.019 | <0.038 |
| UAW01-30-15' | 4/2/2001 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | NA | NA | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | NA | <0.0035 | <0.035 |
| UAW04-20-10' | 3/23/2001 | <0.12 | <0.12 | <0.12 | <0.12 | <0.12 | <0.12 | <0.12 | <0.12 | <0.12 | NA | NA | <0.12 | <0.12 | <0.12 | <0.12 | <0.12 | <0.12 | <0.12 | <0.12 | <0.12 | NA | <0.22 | <0.045 |
| UAW05-20-13' | 3/23/2001 | <0.098 | <0.098 | <0.098 | <0.098 | <0.098 | <0.098 | <0.098 | <0.098 | <0.098 | NA | NA | <0.098 | <0.098 | <0.098 | <0.098 | <0.098 | <0.098 | <0.098 | <0.098 | <0.098 | NA | <0.19 | 0.016 J |
| UAW06-20-1.5' | 3/26/2001 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | NA | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | <0.004 | <0.04 |
| UAW06-20-11.5' | 3/26/2001 | <0.019 | <0.019 | <0.019 | <0.019 | <0.019 | <0.019 | <0.019 | <0.019 | <0.019 | NA | NA | <0.019 | <0.019 | <0.019 | <0.019 | <0.019 | <0.019 | <0.019 | <0.019 | <0.019 | NA | <0.037 | <0.037 |
| UAW08-20-13' | 3/24/2001 | <0.095 | <0.095 | <0.095 | <0.095 | <0.095 | <0.095 | <0.095 | NA | NA | <0.95 | <1.8 | <0.095 | <0.095 | <0.095 | <0.095 | <0.095 | <0.095 | NA | <0.095 | <0.095 | <0.18 | <0.18 | 0.016 J |
| UAW09-20-1.5' | 3/27/2001 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | NA | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | <0.0039 | <0.039 |
| UAW09-20-15' | 3/27/2001 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | NA | NA | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | NA | <0.0035 | <0.035 |
| UAW11-40-2' | 4/17/2001 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | NA | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | <0.004 | <0.04 |
| UAW11-40-10' | 4/17/2001 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | NA | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | <0.0037 | <0.037 |
| UAW12-20-12' | 3/24/2001 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | NA | NA | <1 | <2 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | NA | <0.1 | <0.1 | <0.2 | <0.2 | <0.04 |
| UAW13-20-1.5' | 3/24/2001 | <0.039 | <0.039 | <0.039 | <0.039 | <0.039 | <0.039 | <0.039 | NA | NA | <0.39 | <0.76 | <0.039 | <0.039 | <0.039 | <0.039 | <0.039 | <0.039 | NA | <0.039 | <0.039 | <0.076 | <0.076 | <0.038 |
| UAW13-20-11.5' | 3/24/2001 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | NA | NA | <1 | <2 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | NA | <0.1 | <0.1 | <0.2 | <0.2 | <0.039 |
| UAW14-10-1.5' | 4/4/2001 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | NA | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | <0.0039 | <0.039 |
| UAW15-20-2' | 4/9/2001 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | NA | NA | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | NA | <0.0073 | <0.037 |
| UAW15-20-2' (Dup) | 4/9/2001 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | NA | NA | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | NA | <0.0073 | <0.036 |
| UAW15-20-8.5' | 4/9/2001 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | NA | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | <0.0037 | <0.037 |
| UAW16-10-2' | 8/22/2001 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | NA | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | <0.0038 | <0.038 |
| UAW16-10-5.5' | 8/22/2001 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | NA | NA | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | NA | <0.0036 | <0.036 |
| UAW17-40-1.5' | 4/5/2001 | <0.0097 | <0.0097 | <0.0097 | <0.0097 | <0.0097 | <0.0097 | <0.0097 | <0.0097 | <0.0097 | NA | NA | <0.0097 | <0.0097 | <0.0097 | 0.012 PG | <0.0097 | 0.01 PG | <0.0097 | <0.0097 | <0.0097 | NA | <0.019 | <0.38 |
| UAW17-40-5' | 4/5/2001 | <0.11 | 0.2 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | NA | NA | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | NA | <0.21 | <0.042 |

**Table 5-4**
**Summary of Pesticide and Polychlorinated Biphenyl Detections in Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | 4,4'-DDD | 4,4'-DDE | 4,4'-DDT | Aldrin | alpha-BHC | beta-BHC | gamma-BHC (Lindane | alpha-Chlordane | gamma-Chlordane | Chlorobenzilate | Diallate | Dieldrin | Endosulfan I | Endosulfan II | Endosulfan sulfate | Endrin | Endrin aldehyde | Endrin ketone | Heptachlor | Heptachlor epoxide | Isodrin | Methoxychlor | Aroclor 1016 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW18-20-1' | 8/23/2001 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | NA | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | <0.004 | <0.04 |
| UAW18-20-15' | 8/23/2001 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | 0.0023 | <0.0021 | <0.0021 | <0.0021 | NA | NA | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | <0.0041 | <0.041 |
| UAW19-80-1.5' | 4/6/2001 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | NA | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | <0.004 | <0.04 |
| UAW19-80-15' | 4/6/2001 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | NA | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | <0.0039 | <0.039 |
| UAW20-60-1.5' | 4/9/2001 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | NA | NA | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | <0.0038 | NA | <0.0074 | <0.037 |
| UAW20-60-9.5' | 4/9/2001 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | NA | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | <0.004 | <0.04 |
| UAW21-30-1.5' | 4/11/2001 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | NA | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | <0.0039 | <0.039 |
| UAW21-30-10' | 4/11/2001 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | NA | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | <0.0037 | <0.037 |
| UAW22-20-2' | 9/5/2001 | 0.00064 J | 0.00074 J | 0.0027 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | 0.00083 J | 0.00047 J | NA | NA | 0.0012 J | <0.0019 | 0.0015 J | <0.0019 | 0.0021 | 0.0013 J | <0.0019 | <0.0019 | 0.0001 J | NA | <0.0037 | <0.037 |
| UAW22-20-11' | 9/5/2001 | <0.0019 | 0.0002 J | 0.00065 J | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | NA | 0.00015 J | <0.0019 | <0.0019 | <0.0019 | 0.00048 J | 0.0013 J | <0.0019 | <0.0019 | <0.0019 | NA | <0.0037 | <0.037 |
| **Background Soil** | | | | | | | | | | | | | | | | | | | | | | | | |
| B01-1.5' | 10/9/2001 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | NA | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0037 | <0.0037 | <0.037 |
| B01-11.5' | 10/9/2001 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | NA | NA | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0034 | <0.0034 | <0.034 |
| B02-1.5' | 10/9/2001 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | NA | NA | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0075 | <0.0075 | <0.038 |
| B02-11.5' | 10/9/2001 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | NA | NA | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0034 | <0.0034 | <0.034 |
| B03-1.5' | 10/9/2001 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | NA | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0038 | <0.0038 | <0.038 |
| B03-11.5' | 10/9/2001 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | NA | NA | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0034 | <0.0034 | <0.034 |
| B04-1.5' | 10/9/2001 | <0.0036 | <0.0036 | <0.0036 | <0.0036 | <0.0036 | <0.0036 | <0.0036 | <0.0036 | <0.0036 | NA | NA | <0.0036 | <0.0036 | <0.0036 | <0.0036 | <0.0036 | <0.0036 | <0.0036 | <0.0036 | <0.0036 | <0.0071 | <0.0071 | <0.035 |
| B04-1.5' (Dup) | 10/9/2001 | <0.0036 | <0.0036 | <0.0036 | <0.0036 | <0.0036 | <0.0036 | <0.0036 | <0.0036 | <0.0036 | NA | NA | <0.0036 | <0.0036 | <0.0036 | <0.0036 | <0.0036 | <0.0036 | <0.0036 | <0.0036 | <0.0036 | <0.0071 | <0.0071 | <0.035 |
| B04-11.5' | 10/9/2001 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | NA | NA | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0035 | <0.0035 | <0.035 |
| B05-1.5' | 10/9/2001 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | NA | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0037 | <0.0037 | <0.037 |
| B05-11.5' | 10/9/2001 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | NA | NA | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0035 | <0.0035 | <0.035 |
| B06-1.5' | 10/9/2001 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | NA | NA | 0.041 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0075 | <0.0075 | <0.038 |
| B06-11' | 10/9/2001 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | NA | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.0038 | <0.0038 | <0.038 |
| B07-1' | 10/9/2001 | <0.004 | 0.0015 J | <0.004 | 0.11 | <0.004 | <0.004 | <0.004 | <0.004 | <0.004 | NA | NA | 0.055 | <0.004 | <0.004 | <0.004 | <0.004 | <0.004 | <0.004 | <0.004 | <0.004 | 0.0054 J | <0.0077 | <0.039 |
| B07-9' | 10/9/2001 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | NA | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.0039 | <0.0039 | <0.039 |
| B08-2' | 10/9/2001 | <0.02 | 0.019 J | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | NA | NA | 0.031 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | 0.13 | <0.02 | <0.02 | <0.038 | <0.038 | <0.038 |
| B08-9' | 10/9/2001 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | NA | NA | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0019 | <0.0037 | <0.0037 | <0.037 |
| B09-2' | 10/9/2001 | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.0045 | NA | NA | 0.015 | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.0045 | <0.0087 | <0.0087 | <0.043 |
| B09-10' | 10/9/2001 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | NA | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0041 | <0.0041 | <0.041 |
| B10-2' | 10/9/2001 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | NA | NA | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0044 | <0.0044 | <0.044 |
| B10-11' | 10/9/2001 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | NA | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.004 | <0.004 | <0.04 |
| **Creek Bed Sediment** | | | | | | | | | | | | | | | | | | | | | | | | |
| CS1 | 3/6/2002 | <0.0021 | 0.0014 J | 0.0056 | 0.001 J | <0.0021 | <0.0021 | NA | <0.0021 | NA | NA | NA | 0.0022 PG | <0.0021 | <0.0021 | NA | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.004 | NA | NA |
| CS-1A | 3/25/2004 | <0.004 | 0.0016 J | <0.004 | <0.004 | <0.004 | <0.004 | <0.004 | NA | NA | 0.0087 J | 0.032 J | 0.002 J | <0.004 | <0.004 | <0.004 | <0.004 | <0.004 | NA | <0.004 | <0.004 | <0.0078 | 0.0034 J | <0.039 |
| CS2 | 3/6/2002 | <0.0043 | <0.0043 | <0.0043 | <0.0043 | <0.0043 | <0.0043 | NA | <0.0043 | NA | NA | NA | <0.0043 | <0.0043 | <0.0043 | NA | <0.0043 | <0.0043 | 0.0014 J | <0.0043 | <0.0043 | <0.0083 | NA | NA |
| CS-2A | 3/26/2004 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | NA | NA | <0.038 | <0.38 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | NA | <0.02 | <0.02 | <0.038 | <0.038 | <0.038 |
| CS3 | 3/6/2002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | <0.002 | NA | NA | NA | <0.002 | <0.002 | <0.002 | NA | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.0038 | NA | NA |
| CS-3A | 3/26/2004 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | NA | NA | <0.21 | <2.1 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | <0.11 | NA | <0.11 | <0.11 | <0.21 | <0.21 | <0.041 |
| CS4 | 3/6/2002 | <0.002 | 0.0012 J | <0.002 | <0.002 | <0.002 | 0.01 PG | <0.002 | <0.002 | NA | NA | NA | 0.0038 PG | <0.002 | <0.002 | NA | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.004 | NA | NA |
| CS-4A | 3/26/2004 | <0.024 | <0.024 | <0.024 | <0.024 | <0.024 | <0.024 | <0.024 | NA | NA | <0.047 | <0.47 | <0.024 | <0.024 | <0.024 | <0.024 | <0.024 | <0.024 | NA | <0.024 | <0.024 | <0.047 | <0.047 | <0.047 |

**Table 5-4**
**Summary of Pesticide and Polychlorinated Biphenyl Detections in Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | 4,4'-DDD | 4,4'-DDE | 4,4'-DDT | Aldrin | alpha-BHC | beta-BHC | gamma-BHC (Lindane | alpha-Chlordane | gamma-Chlordane | Chlorobenzilate | Diallate | Dieldrin | Endosulfan I | Endosulfan II | Endosulfan sulfate | Endrin | Endrin aldehyde | Endrin ketone | Heptachlor | Heptachlor epoxide | Isodrin | Methoxychlor | Aroclor 1016 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CS5 | 3/6/2002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | NA | <0.002 | NA | NA | NA | <0.002 | <0.002 | <0.002 | NA | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.0038 | NA | NA |
| CS-5A | 3/25/2004 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | NA | NA | <0.037 | <0.072 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | <0.0037 | NA | <0.0037 | <0.0037 | <0.0072 | <0.0072 | <0.036 |
| CS6 | 3/6/2002 | <0.0021 | 0.00091 J | <0.0021 | <0.0021 | <0.0021 | 0.0046 PG | NA | <0.0021 | NA | NA | NA | <0.0021 | <0.0021 | <0.0021 | NA | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0041 | NA | NA |
| CS-6A | 3/25/2004 | <0.0043 | 0.0018 J | <0.0043 | <0.0043 | <0.0043 | 0.0046 | <0.0043 | NA | NA | 0.024 J | 0.029 J | 0.024 | <0.0043 | <0.0043 | <0.0043 | <0.0043 | <0.0043 | NA | <0.0043 | <0.0043 | <0.0083 | 0.0056 J | <0.042 |
| CS-6A (Dup) | 3/25/2004 | <0.0042 | <0.0042 | <0.0042 | <0.0042 | <0.0042 | <0.0042 | <0.0042 | NA | NA | <0.042 | <0.082 | <0.0042 | <0.0042 | <0.0042 | <0.0042 | <0.0042 | <0.0042 | NA | <0.0042 | <0.0042 | <0.0082 | 0.004 J | <0.041 |
| CS7 | 3/6/2002 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | <0.0021 | NA | NA | NA | <0.0021 | <0.0021 | <0.0021 | NA | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0041 | NA | NA |
| CS7 (Dup) | 3/6/2002 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | <0.0021 | NA | NA | NA | <0.0021 | <0.0021 | <0.0021 | NA | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.004 | NA | NA |
| CS8 | 3/6/2002 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NA | <0.0021 | NA | NA | NA | <0.0021 | <0.0021 | <0.0021 | NA | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.004 | NA | NA |
| **Creek Bank Sediment** | | | | | | | | | | | | | | | | | | | | | | | | |
| SS-1 | 10/11/2001 | <0.0041 | <0.0041 | <0.0041 | <0.0041 | <0.0041 | <0.0041 | NA | <0.0041 | NA | NA | NA | <0.0041 | <0.0041 | <0.0041 | NA | <0.0041 | <0.0041 | <0.0041 | <0.0041 | <0.0041 | <0.0079 | NA | NA |
| SS-2 | 10/11/2001 | <0.0039 | <0.0039 | 0.004 | <0.0039 | <0.0039 | <0.0039 | NA | <0.0039 | NA | NA | NA | <0.0039 | <0.0039 | <0.0039 | NA | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0039 | <0.0075 | NA | NA |
| SS-3 | 10/11/2001 | <0.022 | <0.022 | <0.022 | <0.022 | <0.022 | <0.022 | NA | <0.022 | NA | NA | NA | <0.022 | <0.022 | <0.022 | NA | <0.022 | <0.022 | <0.022 | <0.022 | <0.022 | <0.043 | NA | NA |
| SS-4 | 10/11/2001 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | 0.094 PG | NA | <0.0021 | NA | NA | NA | <0.0021 | <0.0021 | <0.0021 | NA | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.004 | NA | NA |
| SS-5 ~25' South | 10/11/2001 | <0.021 | <0.021 | <0.021 | <0.021 | <0.021 | <0.021 | NA | <0.021 | NA | NA | NA | <0.021 | <0.021 | <0.021 | NA | <0.021 | <0.021 | <0.021 | <0.021 | <0.021 | <0.041 | NA | NA |
| SS-5 (Dup) | 10/11/2001 | <0.021 | <0.021 | <0.021 | <0.021 | <0.021 | <0.021 | NA | <0.021 | NA | NA | NA | <0.021 | <0.021 | <0.021 | NA | <0.021 | <0.021 | <0.021 | <0.021 | <0.021 | <0.041 | NA | NA |
| SS-6 | 10/11/2001 | <0.0043 | <0.0043 | <0.0043 | <0.0043 | <0.0043 | <0.0043 | NA | <0.0043 | NA | NA | NA | <0.0043 | <0.0043 | <0.0043 | NA | <0.0043 | <0.0043 | <0.0043 | <0.0043 | <0.0043 | <0.0083 | NA | NA |
| SS-7 | 10/11/2001 | <0.021 | <0.021 | <0.021 | <0.021 | <0.021 | <0.021 | NA | <0.021 | NA | NA | NA | <0.021 | <0.021 | <0.021 | NA | <0.021 | <0.021 | <0.021 | <0.021 | <0.021 | <0.041 | NA | NA |
| SS-8 | 10/11/2001 | <0.022 | <0.022 | <0.022 | <0.022 | <0.022 | <0.022 | NA | <0.022 | NA | NA | NA | <0.022 | <0.022 | <0.022 | NA | <0.022 | <0.022 | <0.022 | <0.022 | <0.022 | <0.043 | NA | NA |
| SS-9 | 10/11/2001 | <0.022 | <0.022 | <0.022 | <0.022 | <0.022 | <0.022 | NA | <0.022 | NA | NA | NA | <0.022 | <0.022 | <0.022 | NA | <0.022 | <0.022 | <0.022 | <0.022 | <0.022 | <0.042 | NA | NA |
| SS-10 | 10/11/2001 | <0.004 | 0.0046 PG | <0.004 | <0.004 | <0.004 | <0.004 | NA | <0.004 | NA | NA | NA | <0.004 | <0.004 | <0.004 | NA | <0.004 | <0.004 | <0.004 | <0.004 | <0.004 | <0.0078 | NA | NA |
| SS-11 | 10/11/2001 | <0.0044 | <0.0044 | <0.0044 | <0.0044 | <0.0044 | <0.0044 | NA | <0.0044 | NA | NA | NA | <0.0044 | <0.0044 | <0.0044 | NA | <0.0044 | <0.0044 | <0.0044 | <0.0044 | <0.0044 | <0.0085 | NA | NA |
| SS-12 | 10/11/2001 | <0.021 | 0.023 PG | <0.021 | <0.021 | <0.021 | <0.021 | <0.021 | <0.021 | <0.021 | NA | NA | <0.021 | <0.021 | <0.021 | <0.021 | <0.021 | <0.021 | <0.021 | <0.021 | <0.021 | <0.041 | <0.041 | NA |

**Table 5-4**
**Summary of Pesticide and Polychlorinated Biphenyl Detections in Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | Aroclor 1242 | Aroclor 1248 | Aroclor 1254 | Aroclor 1260 |
|---|---|---|---|---|---|
| **On-Site Soil** | | | | | |
| DP01-2' | 7/24/2001 | <0.038 | <0.038 | <0.038 | <0.038 |
| DP01-9.5' | 7/24/2001 | <0.039 | <0.039 | <0.039 | 0.016 J |
| DP02-2' | 7/24/2001 | <0.038 | <0.038 | 0.038 | <0.038 |
| DP02-9.5' | 7/24/2001 | <0.041 | <0.041 | <0.041 | <0.041 |
| DP03-2' | 7/24/2001 | <0.039 | <0.039 | <0.039 | <0.039 |
| DP03-8.5' | 7/24/2001 | <0.035 | <0.035 | <0.035 | <0.035 |
| DP05-1' | 7/25/2001 | <0.039 | <0.039 | <0.039 | <0.039 |
| DP05-8.5' | 7/25/2001 | <0.038 | <0.038 | <0.038 | <0.038 |
| DP07-9' | 7/26/2001 | <0.039 | <0.039 | <0.039 | <0.039 |
| DP08-6' | 7/26/2001 | <0.042 | <0.042 | <0.042 | <0.042 |
| DP08-11' | 7/26/2001 | <0.039 | <0.039 | <0.039 | <0.039 |
| DP09-12' | 7/27/2001 | <0.38 | <0.38 | <0.38 | <0.38 |
| DP10-2' | 7/27/2001 | <0.037 | <0.037 | <0.037 | <0.037 |
| DP10-10' | 7/27/2001 | <3.8 | <3.8 | <3.8 | <3.8 |
| DP10-10' (Dup) | 7/27/2001 | <0.38 | <0.38 | <0.38 | <0.38 |
| DP12-1.5' | 7/28/2001 | <0.034 | <0.034 | <0.034 | <0.034 |
| DP12-9' | 7/28/2001 | <0.041 | <0.041 | <0.041 | <0.041 |
| DP13-3' | 7/29/2001 | <0.039 | <0.039 | <0.039 | <0.039 |
| DP13-11' | 7/29/2001 | <3.9 | <3.9 | <3.9 | <3.9 |
| DP14-3' | 7/29/2001 | <69 | <69 | <69 | <69 |
| DP14-9' | 7/29/2001 | <75 | <75 | <75 | <75 |
| DP15-2' | 7/29/2001 | <1.9 | <1.9 | <1.9 | <1.9 |
| DP15-9' | 7/29/2001 | <40 | <40 | <40 | <40 |
| DP16-2.8' | 7/30/2001 | <0.035 | <0.035 | <0.035 | <0.035 |
| DP16-12.5' | 7/30/2001 | <19 | <19 | <19 | <19 |
| DP17-3' | 7/30/2001 | <0.039 | <0.039 | <0.039 | <0.039 |
| DP17-13' | 7/30/2001 | <22 | <22 | <22 | <22 |
| DP18-2' | 7/30/2001 | <0.038 | <0.038 | <0.038 | <0.038 |
| DP18-14.5' | 7/30/2001 | <0.036 | <0.036 | <0.036 | <0.036 |
| DP19-2' | 7/30/2001 | <0.04 | <0.04 | <0.04 | 0.021 J |
| DP19-13' | 7/30/2001 | <0.036 | <0.036 | <0.036 | <0.036 |
| DP20-2' | 7/30/2001 | <0.038 | <0.038 | 0.047 | <0.038 |
| DP20-14.5' | 7/30/2001 | <0.038 | <0.038 | <0.038 | <0.038 |
| DP23-2.5' | 8/1/2001 | <0.042 | <0.042 | <0.042 | <0.042 |
| DP23-9' | 8/1/2001 | <0.043 | <0.043 | <0.043 | <0.043 |
| DP25-2.5' | 8/7/2001 | <0.041 | <0.041 | <0.041 | <0.041 |
| DP25-2.5' (Dup) | 8/7/2001 | <0.037 | <0.037 | <0.037 | <0.037 |
| DP25-7.5' | 8/7/2001 | <0.038 | <0.038 | <0.038 | <0.038 |
| DP29-5 | 11/9/2001 | <0.041 | <0.041 | <0.041 | <0.041 |
| DP31-15 | 12/5/2001 | <0.039 | <0.039 | 0.06 | <0.039 |

**Table 5-4**
**Summary of Pesticide and Polychlorinated Biphenyl Detections in Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | Aroclor 1242 | Aroclor 1248 | Aroclor 1254 | Aroclor 1260 |
|---|---|---|---|---|---|
| DP36-19 | 12/5/2001 | <0.037 | <0.037 | <0.037 | <0.037 |
| DP37-19 | 12/5/2001 | <0.036 | <0.036 | <0.036 | <0.036 |
| DP37-19 (Dup) | 12/5/2001 | <0.036 | <0.036 | <0.036 | 0.025 J |
| DP38-14.5 | 12/5/2001 | <0.036 | <0.036 | <0.036 | <0.036 |
| DP56A-9.5-10.5' | 3/15/2004 | <0.41 | <0.41 | <0.41 | <0.41 |
| DP58A-8.5-9.5' | 3/15/2004 | <0.042 | <0.042 | <0.042 | <0.042 |
| DP60A-6.6-7.4' | 3/15/2004 | <0.04 | <0.04 | <0.04 | <0.04 |
| DP61A-5-6' | 3/15/2004 | <0.04 | <0.04 | <0.04 | <0.04 |
| DP61A-5-6' (Dup) | 3/15/2004 | <0.04 | <0.04 | <0.04 | <0.04 |
| DP64A-8.5-9.5' | 3/15/2004 | <0.037 | <0.037 | <0.037 | <0.037 |
| DP66A-9.5-10.5' | 3/15/2004 | <0.38 | <0.38 | <0.38 | <0.38 |
| DP67A-12.5-13.5' | 3/15/2004 | <1.8 | <1.8 | <1.8 | <1.8 |
| DP70A-9-11' | 3/14/2004 | <0.038 | <0.038 | <0.038 | <0.038 |
| DP72A-12-13' | 3/14/2004 | <0.036 | <0.036 | <0.036 | <0.036 |
| DP73A-12-13' | 3/14/2004 | <0.036 | <0.036 | <0.036 | <0.036 |
| DP78A-9-10' | 3/14/2004 | <0.05 | <0.05 | <0.05 | <0.05 |
| DP79A-12-13' | 3/14/2004 | <0.038 | <0.038 | <0.038 | <0.038 |
| STR01-3' | 3/8/2001 | 0.063 | <0.038 | <0.038 | <0.038 |
| STR01-21' | 3/8/2001 | 0.26 | <0.07 | <0.07 | <0.07 |
| STR01-73' | 3/9/2001 | 0.12 | <0.04 | <0.04 | <0.04 |
| STR01-88' | 3/9/2001 | 0.48 | <0.038 | <0.038 | <0.038 |
| STR02-1' | 3/13/2001 | <0.04 | <0.04 | <0.04 | <0.04 |
| STR02-12.5' | 3/13/2001 | <0.037 | <0.037 | <0.037 | <0.037 |
| STR03-4' | 3/14/2001 | <0.038 | <0.038 | <0.038 | <0.038 |
| STR03-12.5' | 3/14/2001 | <1.8 | <1.8 | <1.8 | <1.8 |
| STR04-1.5' | 3/19/2001 | <0.04 | <0.04 | <0.04 | <0.04 |
| STR04-17.5' | 3/19/2001 | <0.04 | <0.04 | <0.04 | <0.04 |
| STR04-17.5' (Dup) | 3/19/2001 | <0.036 | <0.036 | <0.036 | <0.036 |
| STR05-1.5' | 3/10/2001 | <0.038 | <0.038 | <0.038 | <0.038 |
| STR05-9' | 3/10/2001 | <0.038 | <0.038 | <0.038 | <0.038 |
| STR05-11.3' | 3/10/2001 | <0.036 | <0.036 | <0.036 | <0.036 |
| STR06-1' | 3/11/2001 | <0.039 | <0.039 | <0.039 | <0.039 |
| STR06-15' | 3/11/2001 | <0.04 | <0.04 | <0.04 | <0.04 |
| STR07-1.5' | 3/21/2001 | <0.04 | <0.04 | <0.04 | <0.04 |
| STR07-18' | 3/21/2001 | <0.038 | <0.038 | <0.038 | <0.038 |
| STR08-1.5' | 3/26/2001 | <0.04 | <0.04 | <0.04 | <0.04 |
| STR08-13' | 3/26/2001 | <0.037 | <0.037 | <0.037 | <0.037 |
| STR08-13' (Dup) | 3/26/2001 | <0.038 | <0.038 | <0.038 | <0.038 |
| STR09-7.5' | 4/4/2001 | <0.04 | <0.04 | <0.04 | <0.04 |
| STR10-1.5' | 4/7/2001 | <0.038 | <0.038 | <0.038 | <0.038 |
| STR10-11' | 4/7/2001 | <0.042 | <0.042 | <0.042 | <0.042 |
| STR11-2' | 8/20/2001 | <0.04 | <0.04 | 0.37 | <0.04 |

**Table 5-4**
**Summary of Pesticide and Polychlorinated Biphenyl Detections in Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | Aroclor 1242 | Aroclor 1248 | Aroclor 1254 | Aroclor 1260 |
|---|---|---|---|---|---|
| STR11-9' | 8/20/2001 | <0.039 | <0.039 | <0.039 | <0.039 |
| STR11-9' (Dup) | 8/20/2001 | <0.039 | <0.039 | <0.039 | <0.039 |
| T-1B2-8' | 3/16/2004 | <0.036 | <0.036 | <0.036 | <0.036 |
| T-1E-2-6' | 3/16/2004 | <0.041 | <0.041 | <0.041 | <0.041 |
| T-1N-6' | 3/16/2004 | <0.041 | <0.041 | <0.041 | <0.041 |
| T-1NE-4' | 3/16/2004 | <0.04 | <0.04 | <0.04 | 0.02 J |
| T-1W2-6' | 3/16/2004 | <0.04 | <0.04 | <0.04 | <0.04 |
| T-2-3 | 11/8/2001 | <0.04 | <0.04 | <0.04 | <0.04 |
| T-2-9 | 11/8/2001 | <0.037 | <0.037 | <0.037 | <0.037 |
| T-3-11 | 11/8/2001 | <0.037 | <0.037 | <0.037 | <0.037 |
| T-3-3 | 11/8/2001 | <0.037 | 0.011 J | <0.037 | <0.037 |
| T-4-3 | 11/9/2001 | <0.037 | <0.037 | <0.037 | <0.037 |
| T-4-9 | 11/9/2001 | <0.036 | <0.036 | <0.036 | <0.036 |
| T-5-3 | 11/9/2001 | <0.04 | <0.04 | <0.04 | <0.04 |
| T-5-9 | 11/9/2001 | <0.04 | <0.04 | <0.04 | <0.04 |
| T-6-10 | 11/10/2001 | <0.036 | <0.036 | 0.024 J | <0.036 |
| T-6-3 | 11/10/2001 | <0.04 | <0.04 | <0.04 | <0.04 |
| T-6-7.5 | 11/11/2001 | <4.8 | <4.8 | <4.8 | <4.8 |
| T-8-3 | 11/11/2001 | <0.042 | <0.042 | <0.042 | <0.042 |
| T-8-9 | 11/11/2001 | <0.036 | <0.036 | <0.036 | <0.036 |
| UAW01-30-1.5' | 4/2/2001 | <0.038 | <0.038 | <0.038 | 0.012 J |
| UAW01-30-15' | 4/2/2001 | <0.035 | <0.035 | <0.035 | <0.035 |
| UAW04-20-10' | 3/23/2001 | <0.045 | <0.045 | <0.045 | <0.045 |
| UAW05-20-13' | 3/23/2001 | <0.038 | <0.038 | <0.038 | <0.038 |
| UAW06-20-1.5' | 3/26/2001 | <0.04 | <0.04 | <0.04 | <0.04 |
| UAW06-20-11.5' | 3/26/2001 | <0.037 | <0.037 | <0.037 | <0.037 |
| UAW08-20-13' | 3/24/2001 | <0.037 | <0.037 | <0.037 | <0.037 |
| UAW09-20-1.5' | 3/27/2001 | <0.039 | <0.039 | <0.039 | <0.039 |
| UAW09-20-15' | 3/27/2001 | <0.035 | <0.035 | <0.035 | <0.035 |
| UAW11-40-2' | 4/17/2001 | <0.04 | <0.04 | <0.04 | <0.04 |
| UAW11-40-10' | 4/17/2001 | <0.037 | <0.037 | <0.037 | <0.037 |
| UAW12-20-12' | 3/24/2001 | 0.26 | <0.04 | <0.04 | <0.04 |
| UAW13-20-1.5' | 3/24/2001 | <0.038 | <0.038 | <0.038 | 0.028 J |
| UAW13-20-11.5' | 3/24/2001 | <0.039 | <0.039 | <0.039 | <0.039 |
| UAW14-10-1.5' | 4/4/2001 | <0.039 | <0.039 | <0.039 | <0.039 |
| UAW15-20-2' | 4/9/2001 | <0.037 | <0.037 | <0.037 | <0.037 |
| UAW15-20-2' (Dup) | 4/9/2001 | <0.036 | <0.036 | <0.036 | <0.036 |
| UAW15-20-8.5' | 4/9/2001 | <0.037 | <0.037 | <0.037 | <0.037 |
| UAW16-10-2' | 8/22/2001 | <0.038 | <0.038 | <0.038 | <0.038 |
| UAW16-10-5.5' | 8/22/2001 | <0.036 | <0.036 | <0.036 | <0.036 |
| UAW17-40-1.5' | 4/5/2001 | <0.38 | <0.38 | 0.98 | <0.38 |
| UAW17-40-5' | 4/5/2001 | <0.042 | <0.042 | 0.071 | <0.042 |

**Table 5-4**
**Summary of Pesticide and Polychlorinated Biphenyl Detections in Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | Aroclor 1242 | Aroclor 1248 | Aroclor 1254 | Aroclor 1260 |
|---|---|---|---|---|---|
| UAW18-20-1' | 8/23/2001 | <0.04 | <0.04 | <0.04 | <0.04 |
| UAW18-20-15' | 8/23/2001 | <0.041 | <0.041 | <0.041 | <0.041 |
| UAW19-80-1.5' | 4/6/2001 | <0.04 | <0.04 | <0.04 | <0.04 |
| UAW19-80-15' | 4/6/2001 | <0.039 | <0.039 | <0.039 | <0.039 |
| UAW20-60-1.5' | 4/9/2001 | <0.037 | <0.037 | <0.037 | 0.011 J |
| UAW20-60-9.5' | 4/9/2001 | <0.04 | <0.04 | <0.04 | <0.04 |
| UAW21-30-1.5' | 4/11/2001 | <0.039 | <0.039 | <0.039 | <0.039 |
| UAW21-30-10' | 4/11/2001 | <0.037 | <0.037 | <0.037 | <0.037 |
| UAW22-20-2' | 9/5/2001 | <0.037 | <0.037 | 0.26 | <0.037 |
| UAW22-20-11' | 9/5/2001 | <0.037 | <0.037 | <0.037 | <0.037 |
| **Background Soil** | | | | | |
| B01-1.5' | 10/9/2001 | <0.037 | <0.037 | <0.037 | <0.037 |
| B01-11.5' | 10/9/2001 | <0.034 | <0.034 | <0.034 | <0.034 |
| B02-1.5' | 10/9/2001 | <0.038 | <0.038 | <0.038 | <0.038 |
| B02-11.5' | 10/9/2001 | <0.034 | <0.034 | <0.034 | <0.034 |
| B03-1.5' | 10/9/2001 | <0.038 | <0.038 | <0.038 | <0.038 |
| B03-11.5' | 10/9/2001 | <0.034 | <0.034 | <0.034 | <0.034 |
| B04-1.5' | 10/9/2001 | <0.035 | <0.035 | <0.035 | <0.035 |
| B04-1.5' (Dup) | 10/9/2001 | <0.035 | <0.035 | <0.035 | <0.035 |
| B04-11.5' | 10/9/2001 | <0.035 | <0.035 | <0.035 | <0.035 |
| B05-1.5' | 10/9/2001 | <0.037 | <0.037 | <0.037 | <0.037 |
| B05-11.5' | 10/9/2001 | <0.035 | <0.035 | <0.035 | <0.035 |
| B06-1.5' | 10/9/2001 | <0.038 | <0.038 | <0.038 | 0.015 J |
| B06-11' | 10/9/2001 | <0.038 | <0.038 | <0.038 | <0.038 |
| B07-1' | 10/9/2001 | <0.039 | <0.039 | 0.11 | <0.039 |
| B07-9' | 10/9/2001 | <0.039 | <0.039 | <0.039 | <0.039 |
| B08-2' | 10/9/2001 | <0.038 | <0.038 | <0.038 | <0.038 |
| B08-9' | 10/9/2001 | <0.037 | <0.037 | <0.037 | <0.037 |
| B09-2' | 10/9/2001 | <0.043 | <0.043 | <0.043 | 0.24 |
| B09-10' | 10/9/2001 | <0.041 | <0.041 | <0.041 | <0.041 |
| B10-2' | 10/9/2001 | <0.044 | <0.044 | <0.044 | <0.044 |
| B10-11' | 10/9/2001 | <0.04 | <0.04 | <0.04 | <0.04 |
| **Creek Bed Sediment** | | | | | |
| CS1 | 3/6/2002 | NA | NA | NA | NA |
| CS-1A | 3/25/2004 | <0.039 | 0.07 | <0.039 | <0.039 |
| CS2 | 3/6/2002 | NA | NA | NA | NA |
| CS-2A | 3/26/2004 | <0.038 | <0.038 | <0.038 | <0.038 |
| CS3 | 3/6/2002 | NA | NA | NA | NA |
| CS-3A | 3/26/2004 | <0.041 | <0.041 | 0.1 | <0.041 |
| CS4 | 3/6/2002 | NA | NA | NA | NA |
| CS-4A | 3/26/2004 | <0.047 | <0.047 | <0.047 | <0.047 |

**Table 5-4**
**Summary of Pesticide and Polychlorinated Biphenyl Detections in Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | Aroclor 1242 | Aroclor 1248 | Aroclor 1254 | Aroclor 1260 |
|---|---|---|---|---|---|
| CS5 | 3/6/2002 | NA | NA | NA | NA |
| CS-5A | 3/25/2004 | <0.036 | 0.023 J | <0.036 | <0.036 |
| CS6 | 3/6/2002 | NA | NA | NA | NA |
| CS-6A | 3/25/2004 | <0.042 | 0.06 | <0.042 | <0.042 |
| CS-6A (Dup) | 3/25/2004 | <0.041 | 0.015 J | <0.041 | <0.041 |
| CS7 | 3/6/2002 | NA | NA | NA | NA |
| CS7 (Dup) | 3/6/2002 | NA | NA | NA | NA |
| CS8 | 3/6/2002 | NA | NA | NA | NA |
| **Creek Bank Sediment** | | | | | |
| SS-1 | 10/11/2001 | NA | NA | NA | NA |
| SS-2 | 10/11/2001 | NA | NA | NA | NA |
| SS-3 | 10/11/2001 | NA | NA | NA | NA |
| SS-4 | 10/11/2001 | NA | NA | NA | NA |
| SS-5 ~25' South | 10/11/2001 | NA | NA | NA | NA |
| SS-5 (Dup) | 10/11/2001 | NA | NA | NA | NA |
| SS-6 | 10/11/2001 | NA | NA | NA | NA |
| SS-7 | 10/11/2001 | NA | NA | NA | NA |
| SS-8 | 10/11/2001 | NA | NA | NA | NA |
| SS-9 | 10/11/2001 | NA | NA | NA | NA |
| SS-10 | 10/11/2001 | NA | NA | NA | NA |
| SS-11 | 10/11/2001 | NA | NA | NA | NA |
| SS-12 | 10/11/2001 | NA | NA | NA | NA |

Notes:
J = Estimated result; result is less than reporting limit
PG = The percentage difference between the original and confirmation analyses is greater than 40%
This table only includes target analytes detected in one or more Facility Investigation samples.
See Appendix B for the complete target analyte lists.
NA = Indicates chemical was not on the target analyte list for that sample.
<0.021 = Indicates constituent not detected at or above indicated detection limit.

**Table 5-5**
**Summary of Inorganic Detections in**
**Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | Acid-insoluble Sulfide | Acid-Soluble Sulfide | Aluminum | Antimony | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide, Total | Iron | Lead | Magnesium | Manganese | Mercury | Nickel | Potassium | Selenium | Silver | Sodium | Thallium | Tin | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **On-Site Soil** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DP01-2' | 7/24/2001 | NA | <58 | 7090 J | <1.2 | 5.7 | 51.5 | 0.44 B | 0.25 | 21600 | 8.4 | 5 B | 13.3 | <0.58 | 11100 | 22.6 | 7180 | 302 | 0.012 B | 10.8 | 569 B J | 0.68 | <0.58 | <581 | <1.2 | NA | 14.9 | 37.2 |
| DP01-9.5' | 7/24/2001 | NA | 64 | 8580 J | <1.2 | 7.2 | 55.3 | 0.5 B | 0.84 | 10400 | 15.4 | 6.1 | 20.4 | <0.58 | 16400 | 36.7 | 3000 | 430 | 0.022 B | 15.8 | 648 J | 0.68 | <0.58 | <585 | <1.2 | NA | 19.4 | 84 |
| DP02-2' | 7/24/2001 | NA | 63 | 7260 J | <1.2 | 6 | 62.6 | 0.47 B | 0.4 | 29900 | 11 | 5.7 B | 18.5 | <0.58 | 11900 | 25.8 | 8390 | 265 | 0.052 B | 11.3 | 642 J | 0.63 | <0.58 | <576 | <1.2 | NA | 16.1 | 56 |
| DP02-9.5' | 7/24/2001 | NA | <63 | 11800 J | <1.3 | 9.2 | 72.8 | 0.67 | 0.52 | 8390 | 16.6 | 10.4 | 23.2 | <0.63 | 25300 | 18.2 | 4290 | 484 | 0.023 B | 25.1 | 1110 J | 0.87 | <0.63 | 112 B | <1.3 | NA | 23 | 69 |
| DP03-2' | 7/24/2001 | NA | 64 | 6390 J | <1.2 | 5.4 | 51.3 | 0.41 B | 0.21 B | 16100 | 9 | 5.8 | 10 | <0.58 | 11500 | 11.5 | 2880 | 533 | 0.026 B | 9.6 | 666 J | 0.49 B | <0.58 | <584 | <1.2 | NA | 14.6 | 39.6 |
| DP03-8.5' | 7/24/2001 | NA | <53 | 4640 J | <1.1 | 8 | 57.4 | 0.44 B | 0.42 | 107000 | 8.2 | 10.3 | 11 | <0.53 | 16900 | 13.4 | 21000 | 1120 | 0.012 B | 9.7 | 506 B J | 0.52 B | <0.53 | 101 B | <1.1 | NA | 16.2 | 29.2 |
| DP05-1' | 7/25/2001 | NA | <59 | 9420 J | <1.2 | 8.1 | 56.9 | 0.56 B | 0.33 | 38100 | 12.8 | 5.8 B | 15.4 | <0.59 | 16900 | 19.9 | 13200 | 322 | 0.025 B | 14.3 | 1050 J | 0.66 | <0.59 | <592 | <1.2 | NA | 19.5 | 52.6 |
| DP05-8.5' | 7/25/2001 | NA | 54 B | 8990 J | <1.1 | 7.5 | 85.9 | 0.51 B | 0.47 | 64000 | 12.2 | 8.6 | 16.5 | <0.57 | 19500 | 9.3 | 22000 | 472 | 0.016 B | 19.2 | 1670 J | 0.68 | <0.57 | 92.3 B | <1.1 | NA | 17.9 | 50.9 |
| DP07-9' | 7/26/2001 | NA | 170 | 8220 J | <1.2 | 4.4 | 44 | 0.46 B | 0.4 | 102000 | 10.6 | 6.6 | 14.5 | <0.58 | 16800 | 8.1 | 20800 | 325 | <0.12 | 14.6 | 1560 J | 0.37 B | <0.58 | 146 B | <1.2 | NA | 15.4 | 43.7 |
| DP08-6' | 7/26/2001 | NA | 180 | 14100 J | <1.3 | 10.2 | 92.8 | 0.73 | 0.4 | 12700 | 16.3 | 9.7 | 21.5 | <0.64 | 25500 | 15.1 | 6140 | 429 | 0.026 B | 20.6 | 1290 J | 0.69 | <0.64 | <640 | <1.3 | NA | 28.8 | 59.2 |
| DP08-11' | 7/26/2001 | NA | 180 | 8070 J | <1.2 | 5 | 40.9 | 0.55 B | 0.17 B | 6140 | 11.6 | 6.3 | 9.7 | 1.3 | 12800 | 11.6 | 2970 | 306 | 0.015 B | 8.7 | 587 B J | 0.68 | <0.59 | <593 | <1.2 | NA | 23.4 | 28.3 |
| DP09-12' | 7/27/2001 | NA | 610 | 2290 J | <1.1 | 1.2 | 9 B | 0.13 B | 0.18 B | 112000 | 5.5 | 3.1 B | 6.4 | <0.57 | 5890 | 3.8 | 27600 | 350 | <0.11 | 6.3 | 364 B J | <0.57 | <0.57 | 158 B | <1.1 | NA | 7.5 | 29.4 |
| DP10-2' | 7/27/2001 | NA | <56 | NA | <1.1 | 4.3 | 26.3 | 0.27 B | 0.95 | NA | 6.6 | 3.8 B | 9.9 | <0.56 | NA | 7.7 | NA | NA | <0.11 | 9.2 | NA | <0.56 | <0.56 | NA | <1.1 | 27.2 | 10.7 | 31.7 |
| DP10-10' | 7/27/2001 | NA | 1400 | NA | <1.2 | 0.74 B | 13.9 B | 0.091 B | 0.25 | NA | 7.9 | 3.7 B | 5.3 | <0.58 | NA | 2.9 | NA | NA | 0.09 B | 7.8 | NA | <0.58 | <0.58 | NA | <1.2 | 531 | 5.7 B | 100 |
| DP10-10' (Dup) | 7/27/2001 | NA | 820 | NA | <1.1 | 1.2 | 8.2 B | 0.1 B | 0.18 B | NA | 6.9 | 3.4 B | 6.8 | 0.25 B | NA | 2.7 | NA | NA | 0.046 B | 7.8 | NA | <0.57 | <0.57 | NA | <1.1 | 273 | 6.5 | 49.1 |
| DP12-1.5' | 7/28/2001 | NA | <51 | 4930 J | <1 | 7.1 | 56.2 | 0.33 B | 0.42 | 111000 | 7.5 | 8.4 | 17 | <0.51 | 9380 | 12.9 | 8980 | 510 | 0.018 B | 8.1 | 520 J | 0.38 B | <0.51 | 596 | <1 | NA | 11.7 | 39.8 |
| DP12-9' | 7/28/2001 | NA | <63 | 11600 J | <1.3 | 8.4 | 47.7 | 0.41 B | 0.2 B | 1910 | 11.4 | 5 B | 14.1 | <0.63 | 18300 | 10.1 | 1780 | 292 | 0.014 B | 12.4 | 762 J | 0.82 | <0.63 | 432 B | <1.3 | NA | 24.3 | 46.8 |
| DP13-3' | 7/29/2001 | 160 | NA | NA | <1.2 | 5.4 | 51.1 | 0.37 B | 0.35 | NA | 7.8 | 4.7 B L | 11.2 | <0.6 | NA | 11.4 L | NA | NA | <0.12 | 10.2 L | NA | <0.6 | <0.6 | NA | <1.2 | 17 | 12.5 | 40.5 L |
| DP13-11' | 7/29/2001 | 310 | NA | NA | <1.2 | 1.4 | 3.1 B | 0.096 B | 0.17 B | NA | 2.3 | 1 B | 9.9 | <0.59 | NA | 5.9 | NA | NA | 0.024 B | 5.6 | NA | <0.59 | <0.59 | NA | <1.2 | 887 | 1.6 B | 8.9 |
| DP14-3' | 7/29/2001 | 290 | NA | NA | <1 | 14.3 | 125 | 0.7 | 1.3 | NA | 9.9 | 10 | 13.1 | <0.52 | NA | 39.8 | NA | NA | 0.049 B | 13.9 | NA | <0.52 | <0.52 | NA | <1 | 78.6 | 20 | 66.1 |
| DP14-9' | 7/29/2001 | 600 | NA | NA | <1.1 | 2.1 | 10.9 B | 0.32 B | 0.16 B | NA | 14.9 | 1.8 B | 11.2 | <0.57 | NA | 7.8 | NA | NA | 0.082 B | 9.4 | NA | <0.57 | <0.57 | NA | <1.1 | 299 | 14.8 | 58.4 |
| DP15-2' | 7/29/2001 | 190 | NA | NA | <1.2 | 5.8 | 84.2 | 0.72 | 0.31 | NA | 11.3 | 9.2 | 14 | <0.58 | NA | 29.9 | NA | NA | 0.045 B | 16.2 | NA | <0.58 | <0.58 | NA | <1.2 | 46.2 | 16.2 | 62.4 |
| DP15-9' | 7/29/2001 | 370 | NA | NA | <1.2 | 1.5 | 4.9 B | 0.37 B | 1.1 | NA | 12.3 | 82.8 | 7.5 | 0.36 B | NA | 52.2 | NA | NA | <0.12 | 14.1 | NA | <0.6 | <0.6 | NA | <1.2 | 283 | 13.9 | 110 |
| DP16-2.8' | 7/30/2001 | 89 | NA | NA | <1.1 | 3.3 | 16.3 B | 0.19 B | 0.15 B | NA | 4.9 | 3.4 B | 6.5 | <0.53 | NA | 3.5 | NA | NA | <0.11 | 8 | NA | <0.53 | <0.53 | NA | <1.1 | 2.5 B | 6.4 | 23.3 |
| DP16-12.5' | 7/30/2001 | 1100 | NA | NA | <1.2 | 4.7 | 20.3 B | 0.18 B | 0.31 | NA | 7.1 | 4.1 B | 7 | 0.25 B | NA | 11.9 | NA | NA | 0.028 B | 9 | NA | <0.58 | <0.58 | NA | <1.2 | 2250 | 7 | 70 |
| DP17-3' | 7/30/2001 | 150 | NA | NA | <1.2 | 6.7 | 85.1 | 0.57 B | 0.29 | NA | 13.2 | 6.4 | 19.2 | <0.59 | NA | 31.2 | NA | NA | 0.046 B | 17.9 | NA | <0.59 | <0.59 | NA | <1.2 | 2.4 B | 19.1 | 61.2 |
| DP17-13' | 7/30/2001 | 990 | NA | NA | <1.3 | 6.5 | 691 | 0.39 B | 1.3 | NA | 55.2 | 54.9 | 42.8 | <0.67 | NA | 57.6 | NA | NA | 0.57 | 21.1 | NA | <0.67 | <0.67 | NA | <1.3 | 4150 | 11.4 | 289 |
| DP18-2' | 7/30/2001 | <57 | NA | 7890 | <1.1 | 7.2 | 49.4 | 0.45 B | 0.49 | 59200 | 9.7 | 5.3 B | 10.9 | <0.57 | 13000 | 14.4 | 18200 | 539 | 0.025 B | 11.3 | 610 | <0.57 | <0.57 | 373 B | <1.1 | NA | 17.2 | 61 |
| DP18-14.5' | 7/30/2001 | 100 | NA | 1560 | <1.1 | 2.6 | 9.6 B | 0.15 B | 0.16 B | 157000 | 3.5 | 1.7 B | 7.1 | <0.55 | 5750 | 2.6 | 48900 | 502 | <0.11 | 5.1 | 321 B | <0.55 | <0.55 | 165 B | <1.1 | NA | 5.4 B | 16.4 |
| DP19-2' | 7/30/2001 | 270 | NA | 8850 | <1.2 | 7.7 | 119 | 0.73 | 0.47 | 13800 | 18.6 | 7.5 | 18.5 | <0.61 | 15200 | 29.8 | 6780 | 709 | 0.057 B | 14.9 | 1540 | <0.61 | <0.61 | 1030 | <1.2 | NA | 16.9 | 77 |
| DP19-13' | 7/30/2001 | 110 | NA | 2570 | <1.1 | 3.1 | 11.3 B | 0.22 B | 0.15 B | 91600 | 5.5 | 2.5 B | 7.2 | <0.55 | 7240 | 3.4 | 33700 | 302 | <0.11 | 7.3 | 401 B | <0.55 | <0.55 | 295 B | <1.1 | NA | 9 | 24.9 |
| DP20-2' | 7/30/2001 | <57 | NA | 7480 | <1.1 | 8.3 | 65.8 | 0.53 B | 0.38 | 37100 | 11.1 | 6.6 | 18.2 | <0.57 | 14500 | 25.9 | 9230 | 529 | 0.08 B | 14.5 | 659 | <0.57 | <0.57 | <569 | <1.1 | NA | 15.6 | 58.1 |
| DP20-14.5' | 7/30/2001 | 170 | NA | 1380 | <1.1 | 2 | 8.2 B | 0.17 B | 0.13 B | 107000 | 3.1 | 2.1 B | 6.3 | <0.57 | 3500 | 2.8 | 50100 | 261 | <0.11 | 5.3 | 243 B | <0.57 | <0.57 | 217 B | <1.1 | NA | 5.4 B | 16.7 |
| DP23-2.5' | 8/1/2001 | NA | <130 | 12900 L | <1.3 | 14.2 | 106 L | 0.75 | 0.098 B | 13800 L | 19.9 L | 16.8 L | 22.1 L | 0.38 B | 29900 L | 21.6 L | 4740 L | 1730 L | 0.03 B | 25.9 L | 1200 | 0.79 | <0.63 | 192 B | 4.7 | NA | 29.6 L | 67 L |
| DP23-9' | 8/1/2001 | NA | <130 | 13100 | <1.3 | 12.7 | 112 | 0.76 | <0.26 | 39800 | 19.6 | 14.4 | 26.5 | <0.66 | 32900 | 16.9 | 13900 | 652 | 0.018 B | 33.2 | 2120 | 1.1 | <0.66 | 204 B | 2.9 | NA | 26.1 | 76.5 |
| DP25-2.5' | 8/7/2001 | NA | <62 | 14100 | <1.2 | 8.8 | 100 | 0.55 B | 6.5 | 2690 | 15 | 7.6 | 16.2 | <0.62 | 20100 | 10.2 | 2290 | 297 | 0.024 B | 15.4 | 890 | 0.53 B | <0.62 | 574 B | 1.5 | NA | 25.8 | 54.6 |
| DP25-2.5' (Dup) | 8/7/2001 | NA | <56 | 6530 | <1.1 | 6.1 | 49.4 | 0.27 B | 0.33 | 110000 | 9.6 | 6.3 | 13.9 | 0.56 | 15900 | 6.9 | 27900 | 404 | <0.11 | 15.8 | 1160 | 0.66 | <0.56 | 428 B | 2.7 | NA | 12.2 | 39.9 |
| DP25-7.5' | 8/7/2001 | NA | <58 | 9050 | <1.2 | 6 | 75.1 | 0.35 B | 2 | 103000 | 12.2 | 7.3 | 16 | <0.58 | 17300 | 7.6 | 23700 | 575 | <0.12 | 16.8 | 2050 | 0.49 B | <0.58 | 465 B | 3.1 | NA | 17 | 46.4 |
| DP29-5 | 11/9/2001 | NA | 84 | 10600 | <1.3 | 7.5 | 59.4 J | 0.42 B | 0.14 B | 54200 | 13.9 | 8.9 | 18.8 | <0.63 | 21100 | 15.3 | 15900 | 515 | 0.049 B | 22.2 | 1250 | <0.63 | <0.63 | 76.2 B | <1.3 | NA | 18.6 | 70.2 |
| DP31-15 | 12/5/2001 | NA | <59 | NA | <1.2 | 4.9 | 60.9 | 0.28 B | 0.17 B | NA | 10.6 | 6 | 11.3 | <0.59 | NA | 20.1 | NA | NA | 0.18 J | 11.1 | NA | 1.3 J | <0.59 | NA | 1.3 | 3.6 B J | 14.7 | 44 |

**Table 5-5**
**Summary of Inorganic Detections in**
**Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | Acid-insoluble Sulfide | Acid-Soluble Sulfide | Aluminum | Antimony | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide, Total | Iron | Lead | Magnesium | Manganese | Mercury | Nickel | Potassium | Selenium | Silver | Sodium | Thallium | Tin | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DP36-19 | 12/5/2001 | NA | <56 | NA | <1.1 | 5.3 | 6.4 B | 0.065 B | 0.11 B | NA | 20.6 | 4.6 B L | 7.4 | <0.56 | NA | 4 | NA | NA | 0.02 B J | 8.6 L | NA | 0.75 J | <0.56 | NA | 1.5 | 5.4 B J | 6.4 | 22.5 |
| DP37-19 | 12/5/2001 | NA | <55 | NA | 2.2 | 4.7 | 26.1 | 0.059 B | 0.29 | NA | 15.8 | 3.4 B | 47.7 | <0.55 | NA | 421 | NA | NA | 0.049 B J | 8.1 | NA | 0.63 J | <0.55 | NA | 1.5 | 16.4 J | 8 | 55.3 |
| DP37-19 (Dup) | 12/5/2001 | NA | <55 | NA | 3.9 | 3.8 | 80.6 | 0.076 B | 0.6 | NA | 17.3 | 2.6 B | 126 | <0.55 | NA | 670 | NA | NA | 0.16 J | 7 | NA | 0.65 J | 0.4 B | NA | 1.9 | 51.7 J | 6.6 | 112 |
| DP38-14.5 | 12/5/2001 | NA | <54 | NA | <1.1 | 5.3 | 20.6 B | 0.095 B | 0.21 B | NA | 21.7 | 2.8 B | 11.4 | <0.54 | NA | 11.9 | NA | NA | 2.7 J | 7.7 | NA | 0.81 J | <0.54 | NA | 1.9 | 18.8 J | 7.9 | 179 |
| DP39-10' | 3/5/2002 | NA | NA | 4500 J | <1.1 | 5 | 35.3 | 0.26 B | 0.57 | 101000 J | 6.7 | 17 | 7.3 | NA | 9220 | 8.1 | 12100 | 450 | 0.021 B | 59 L | 421 B J L | <0.57 | NA | 73 B | 1.3 | 1230 J | 10.1 | 23 |
| DP40-6' (Dup) | 3/5/2002 | NA | NA | 6070 J | <1.1 | 2.7 | 39.4 | 0.31 B | 0.13 B | 39000 J | 8.1 | 5.1 B | 8.2 | NA | 11400 | 6.3 | 18300 | 277 | 0.016 B | 9.1 | 518 B J | <0.57 | NA | 63.3 B | 1.4 | 3.7 B J | 10.3 | 31 |
| DP40-6' | 3/5/2002 | NA | NA | 5670 J | <1.1 | 4.8 | 37 | 0.35 B | 0.2 B | 83500 J | 9.2 | 5 B | 7.7 | NA | 14500 | 6.4 | 40500 | 301 | 0.035 B | 8.9 | 583 J | <0.57 | NA | 103 B | 1.2 | 4 B J | 15.1 | 29 |
| DP41-6' | 3/5/2002 | NA | NA | 5820 J | <1.2 | 1.6 | 31.6 | 0.24 B | 0.074 B | 28800 J | 8.1 | 4.4 B | 6.2 | NA | 7540 | 5.9 | 11000 | 146 | 0.036 B | 8.2 | 532 B J | <0.59 | NA | 79 B | 0.79 B | 3.5 B J | 8.6 | 27 |
| DP42-6' | 3/5/2002 | NA | NA | 7570 J | <1.2 | 4.2 | 45.1 | 0.36 B | 0.15 B | 20700 J | 10.1 | 5.6 B | 8.1 | NA | 16600 | 6.9 | 9210 | 285 | <0.12 | 11 | 709 J | <0.6 | NA | <600 | 1.1 B | 3.9 B J | 15.3 | 32.6 |
| DP43-1.5' | 3/5/2002 | NA | NA | 5500 J | <1.1 | 5.5 | 60.2 | 0.22 B | 0.081 B | 1230 J | 8 | 6.3 | 8 | NA | 11400 | 58.1 | 962 | 571 | 0.035 B | 8.2 | 412 B J | <0.57 | NA | <568 | 0.98 B | NA | 15.7 | 29.4 |
| DP44-1.5' | 3/5/2002 | NA | NA | 5980 J | <1.2 | 6.6 | 50.1 | 0.22 B | 0.21 B | 20800 J | 7.1 | 2.6 B | 6.4 | NA | 6720 | 12.4 | 4160 | 130 | 0.04 B | 8.5 | 3810 J | 0.36 B | NA | 139 B | <1.2 | NA | 11.7 | 32.4 |
| DP45-1.5' | 3/5/2002 | NA | NA | 4580 J | <1.1 | 6.1 | 60.6 | 0.2 B | 0.092 B | 1040 J | 6.6 | 6.2 | 7.3 | NA | 10400 | 43.6 | 885 | 516 | 0.068 B | 7.5 | 363 B J | <0.57 | NA | <569 | <1.1 | NA | 13.4 | 27.5 |
| DP46-1.5' | 3/5/2002 | NA | NA | 4840 J | <1.1 | 5.4 | 40 | 0.2 B | 0.08 B | 1160 J | 7.7 | 5 B | 8.7 | NA | 11300 | 24.5 | 1020 | 406 | 0.018 B | 8.3 | 459 B J | <0.57 | NA | <569 | <1.1 | NA | 13.2 | 28.5 |
| DP47-5' | 3/9/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 18 | NA | NA | NA | NA | 15.5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.2 B J | NA | NA |
| DP47-10' | 3/9/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 6.7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.6 B J | NA | NA |
| DP48-5' | 3/9/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 11.1 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 2.8 B J | NA | NA |
| DP49-5' | 3/9/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 12 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3 B J | NA | NA |
| DP49-10' | 3/9/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 8.9 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 2.7 B J | NA | NA |
| DP52-1-1.5' | 3/10/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 55.4 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DP54-1-1.5' | 3/10/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 217 J | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 202 J | NA | NA |
| DP55-9' | 3/10/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 6.3 J | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DP56A-9.5-10.5' | 3/15/2004 | NA | NA | 212 J | 0.31 B | 2.4 | 5 B | <0.63 | <0.083* | 81500 J | 0.87 | 0.74 B | 9.8 | NA | 110 | 3.5 | <61.2* | 1.5 B | 0.044 B | 1.8 B | <148* | <0.63 | <0.63 | <626 | <1.3 | 852 J | 0.72 B | 12 |
| DP58A-8.5-9.5' | 3/15/2004 | NA | NA | 7400 J | <1.3 | 3.2 | 8.1 B | <0.12* | 0.4 | 124000 J | 26.1 | 2.1 B | 14.9 | NA | 3310 | 51 | 10800 J | 53.1 | <0.01* | 4.2 B | 272 B J | <0.64 | <0.64 | 162 B | <1* | 720 J | 21.4 | 29.5 |
| DP60A-6.6-7.4' | 3/15/2004 | NA | NA | 211 J | 0.66 B | 2.5 | 9.5 B | <0.61 | 0.91 | 45600 J | 1.1 | 2.7 B | 14 | NA | 259 | 15.9 | 102 B J E | 4.7 | 0.25 | 7 | 200 B J E | <0.61 | <0.61 | <109* | <0.83* | 1230 J | 1.2 B | 15.5 |
| DP61A-5-6' | 3/15/2004 | NA | NA | 257 J | <1.2 | 1.2 | 15.5 B | <0.6 | 0.14 B | 40900 J | 0.56 B | 1.2 B | 12.6 | NA | 127 | 3.3 | 48.2 B J | 3.7 | 0.048 B | 1.3 B | 161 B J | <0.6 | <0.6 | 357 B | 0.47 B J | 186 J | 0.57 B | 1.5 B |
| DP61A-5-6' (Dup) | 3/15/2004 | NA | NA | 234 J | <1.2 | 1.9 | 12.9 B | <0.6 | 0.63 | 34500 J | 0.54 B | 2.1 B | 10.9 | NA | 132 | 6.1 | <44.9* | 4.7 | 0.049 B | 2.2 B | 163 B J | <0.6 | <0.6 | 350 B | <1.2 | 522 J | 0.46 B | 2.4 |
| DP64A-8.5-9.5' | 3/15/2004 | NA | NA | 5310 J | <1.1 | 1.2 | 7.2 B | 0.31 B | 0.15 B | 96300 J | 7 | 13.2 | 3.8 | NA | 6050 | 3.8 | 41800 J | 181 | 0.012 B | 8.8 | 339 B J | <0.55 | <0.55 | 221 B | 0.91 B J | 701 J | 8.6 | 20.8 |
| DP66A-9.5-10.5' | 3/15/2004 | NA | NA | 1890 J | <1.1 | 1.8 | 6.5 B | <0.099* | 0.17 B | 130000 J | 5.5 | 3.3 B | 6.9 | NA | 7280 | 3.4 | 30100 J | 252 | 0.056 B | 21.9 | 278 B J | <0.57 | <0.57 | 310 B | <1.5* | 420 J | 4.4 B | 289 |
| DP67A-12.5-13.5' | 3/15/2004 | NA | NA | 1190 J | <1.1 | 0.85 B | 5.6 B | 0.043 B | 0.14 B | 159000 J | 4.1 | 1.8 B | 5.6 | NA | 4500 | 2.6 | 54700 J | 341 | 0.08 B | 5.2 | 236 B J | <0.53 | <0.53 | 289 B | 0.82 B J | 1210 J | 5 B | 98 |
| DP70A-9-11' | 3/14/2004 | NA | NA | 1980 J | <1.1 | 1.1 | 10.7 B | <0.57 | 0.17 B | 127000 J | 5 | 4.2 B | 6.4 | NA | 6440 | 2.7 | 46200 J | 337 | <0.024* | 9.2 | 309 B J | <0.57 | <0.57 | 211 B | <1* | 490 J | 6 | 19.8 |
| DP72A-12-13' | 3/14/2004 | NA | NA | 1400 J | <1.1 | 0.77 B | 5.9 B | <0.04* | <0.14* | 171000 J | 6.2 | 2.2 B | 5.1 | NA | 4960 | 2.2 | 41000 J | 310 | <0.037* | 5.9 | 229 B J | <0.54 | <0.54 | 215 B | <0.75* | 411 J | 5.8 | 26.6 |
| DP73A-12-13' | 3/14/2004 | NA | NA | 1910 J | <1.1 | 1.3 | 10.5 B | <0.55 | <0.13* | 109000 J | 4.6 | 2.8 B | 6.6 | NA | 6000 | 2.8 | 32900 J | 363 | 0.05 B | 6.4 | 293 B J | <0.55 | <0.55 | 302 B | <1* | 286 J | 5.9 | 68.9 |
| DP77-14.6-15' | 3/13/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 9 J | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DP78A-9-10' | 3/14/2004 | NA | NA | 1840 J | 0.43 B | 3.4 | 78.1 | 0.087* | 0.35 | 131000 J | 143 | 17.2 | 50.1 | NA | 4010 | 31.4 | 2890 J | 40.1 | 0.075 B | 5.3 B | 229 B J | <0.75 | <0.75 | <754 | <0.77* | 1330 J | 4.8 B | 148 |
| DP79A-12-13' | 3/14/2004 | NA | NA | 3310 J | 0.27 B | 2.9 | 32.6 | <0.58 | 0.89 | 90000 J | 388 | 294 | 16.6 | NA | 13400 | 45.1 | 22800 J | 147 | <0.032* | 19.7 | 240 B J | <0.58 | <0.58 | 276 B | <2.2* | 1230 J | 13.2 | 411 |
| DP80-1' | 3/15/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 13.5 J | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DP80-1.5' | 3/15/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.5 B J | NA | NA |
| HA1-1.5' | 3/14/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 17.8 J | NA | NA |
| HA2-1.5' | 3/14/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 9.1 B J | NA | NA |
| HA3-1.5' | 3/14/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 B J | NA | NA |
| HA3-1.5' (Dup) | 3/14/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 5.3 B J | NA | NA |
| HA4-1.5' | 3/14/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 2.8 B J | NA | NA |

**Table 5-5**
**Summary of Inorganic Detections in**
**Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | Acid-insoluble Sulfide | Acid-Soluble Sulfide | Aluminum | Antimony | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide, Total | Iron | Lead | Magnesium | Manganese | Mercury | Nickel | Potassium | Selenium | Silver | Sodium | Thallium | Tin | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HA5-1.5' | 3/14/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 2.2 B J | NA | NA |
| HA6-1.5' | 3/14/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 2.3 B J | NA | NA |
| HA7-1.5' | 3/14/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 2 B J | NA | NA |
| HA8-1.5' | 3/14/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 2.9 B J | NA | NA |
| HA9-1.5' | 3/14/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 12700 J | NA | NA |
| HA10-1.5' | 3/14/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1.4 B J | NA | NA |
| STR01-3' | 3/8/2001 | <58 | NA | 7920 | <1.2 | 5.3 | 76 | 0.25 B | 0.094 B | 41000 | 9.7 | 5.4 B | 12.8 | <0.58 | 11800 | 8.6 | 18400 | 585 | 0.02 B | 12.8 | 1130 | <0.58 | <0.58 | 135 B | 1.6 | NA | 17.2 | 48.2 MBD |
| STR01-21' | 3/8/2001 | <56 | NA | 1530 | <1.1 | 3.7 | 6 B | <0.56 | <0.23 | 117000 | 3.8 | 2.1 B | 5.3 | <0.56 | 4860 | 2.9 | 35200 | 264 | <0.11 | 5 | 319 B | <0.56 | <0.56 | 157 B | 1.1 | NA | 6.6 | 14.7 MBD |
| STR01-73' | 3/9/2001 | <60 | NA | 2140 | <1.2 | 5.3 | 12 B | 0.16 B | <0.24 | 104000 | 3.7 | 3.7 B | 5 | <0.6 | 9400 | 5.3 | 15200 | 491 | <0.12 | 6.4 | 460 B | <0.6 | <0.6 | 113 B | 1.3 | NA | 7.9 | 18.1 MBD |
| STR01-88' | 3/9/2001 | <57 | NA | 1960 | <1.1 | 3.1 | 15.9 B | 0.22 B | <0.23 | 104000 | 4.1 | 4.1 B | 4.7 | <0.57 | 10700 | 5.8 | 11500 | 538 | <0.11 | 6.3 | 288 B | <0.57 | <0.57 | 79 B | 0.72 B | NA | 7.6 | 17.9 MBD |
| STR02-1' | 3/13/2001 | <120 | NA | 13700 | <1.2 | 6.5 | 113 | 0.62 | 0.28 | 14800 | 58.9 | 9.4 | 16.5 | <0.61 | 19700 | 19.5 | 4920 | 1120 | 0.072 B | 18 | 1580 | <0.61 | <0.61 | 694 | <1.2 | NA | 23.4 | 64 |
| STR02-12.5' | 3/13/2001 | 800 | NA | 2350 | <1.1 | 2.1 | 11.8 B | 0.11 B | 0.16 B | 175000 | 3.9 | 3.1 B | 4.6 | <0.56 | 5330 | 3.1 | 95200 | 192 | <0.11 | 5.1 | 427 B | <0.56 | <0.56 | 292 B | <1.1 | NA | 8.2 | 16.2 |
| STR03-4' | 3/14/2001 | 800 | NA | NA | <1.2 | 3.4 | 60.3 | 0.38 B | <0.23 | NA | 10 | 6 | 6.9 | <0.58 | NA | 7.6 | NA | NA | 0.021 B | 11.4 | NA | <0.58 | <0.58 | NA | <1.2 | 1.3 B | 14.5 | 30.9 |
| STR03-12.5' | 3/14/2001 | 340 | NA | NA | <1.1 | 0.94 B | 6.7 B | <0.55 | 0.1 B | NA | 7.6 | 2.6 B | 5.6 | <0.55 | NA | 2.2 | NA | NA | 0.013 B | 6.2 | NA | <0.55 | <0.55 | NA | <1.1 | 225 | 6 | 42.7 |
| STR04-1.5' | 3/19/2001 | <120 | NA | 11900 | <1.2 | 8.1 | 83.5 | 0.43 B | 0.2 B | 20400 | 15.3 | 10 | 14.1 | <0.6 | 17100 | 13.5 | 8880 | 531 | 0.036 B | 17.6 | 1060 | <0.6 | <0.6 | 78.7 B | 0.86 B | NA | 26.2 | 46.4 |
| STR04-17.5' | 3/19/2001 | 760 | NA | 2780 | <1.2 | 3 | 12.8 B | <0.61 | 0.13 B | 119000 | 4.8 | 2.7 B | 8.1 | <0.61 | 7050 | 5.6 | 26200 | 259 | 0.026 B | 7 | 661 | <0.61 | <0.61 | 202 B | 0.98 B | NA | 8.8 | 28.4 |
| STR04-17.5' (Dup) | 3/19/2001 | 550 | NA | 1750 | <1.1 | 2.6 | 11.9 B | 0.077 B | 0.16 B | 162000 | 5.2 | 2.6 B | 7.7 | 0.21 B | 7110 | 5.1 | 38800 | 318 | <0.11 | 6.6 | 334 B | <0.54 | <0.54 | 258 B | 0.83 B | NA | 6.7 | 41.1 |
| STR05-1.5' | 3/10/2001 | <57 | NA | 10000 | <1.1 | 15.1 | 63.4 | 0.45 B | <0.23 | 3520 | 13.3 | 6.7 | 14.1 | <0.57 | 21700 | 12.4 | 2420 | 283 | 0.026 B | 16 | 884 | 0.53 B | <0.57 | 229 B | <1.1 | NA | 24.4 | 51 MBD |
| STR05-9' | 3/10/2001 | <58 | NA | 5400 | <1.2 | 4.8 | 27 | 0.22 B | 0.087 B | 62400 | 7.3 | 4.2 B | 5.4 | 0.28 B | 14200 | 4.8 | 24500 | 2120 | 0.011 B | 9.5 | 868 | <0.58 | <0.58 | 95 B | 1.6 | NA | 12.9 | 22.9 MBD |
| STR05-11.3' | 3/10/2001 | 110 | NA | 3910 | <1.1 | 5.5 | 16.8 B | 0.11 B | 0.082 B | 107000 | 7.3 | 4.7 B | 6.7 | 0.23 B | 9020 | 3.8 | 37800 | 432 | <0.11 | 10.3 | 831 | <0.54 | <0.54 | 237 B | 1.6 | NA | 9.9 | 21.4 MBD |
| STR06-1' | 3/11/2001 | <59 | NA | 11000 | <1.2 | 7.5 | 87 | 0.42 B | <0.24 | 2150 | 12.6 | 8.1 | 11.2 | <0.59 | 16400 | 13.8 | 1690 | 729 | 0.028 B | 13.3 | 672 | <0.59 | <0.59 | 1310 | <1.2 | NA | 24.3 | 42.9 |
| STR06-15' | 3/11/2001 | <61 | NA | 13500 | <1.2 | 8.4 | 198 | 0.66 | 0.34 | 42700 | 18 | 17 | 25.5 | <0.61 | 27500 | 16.1 | 13200 | 937 | 0.028 B | 36.3 | 2570 | <0.61 | <0.61 | 102 B | <1.2 | NA | 25.4 | 77.9 |
| STR07-1.5' | 3/21/2001 | 34 B | NA | 10800 | <1.2 | 7.4 | 103 | 0.66 | 0.3 | 7110 | 92.1 | 9.3 | 17.3 | <0.6 | 19400 | 21.7 | 3440 | 844 | 0.035 B | 17.3 | 1410 | <0.6 | <0.6 | 1470 | <1.2 | NA | 19.8 | 67.4 |
| STR07-18' | 3/21/2001 | <120 | NA | 2130 | <1.2 | 2.3 | 9.5 B | 0.14 B | 0.2 B | 175000 | 4.1 | 2.8 B | 10.4 | <0.58 | 6390 | 6.7 | 35300 | 314 | <0.12 | 7.4 | 517 B | <0.58 | <0.58 | 247 B | 1.1 B | NA | 7.9 | 30.8 |
| STR08-1.5' | 3/26/2001 | <61 | NA | 13400 | <1.2 | 5.9 | 120 | 0.73 | <0.24 | 8260 | 20.2 | 9.4 | 15.8 | <0.61 | 18600 | 19.5 | 4130 | 1010 | 0.033 B | 15.9 | 1660 | 0.58 B | <0.61 | <607 | 1.8 | NA | 22.2 | 64 MBD |
| STR08-13' | 3/26/2001 | 280 | NA | 4460 | <1.1 | 4.2 | 34.6 | 0.13 B | 0.063 B | 150000 | 9.4 L | 5.2 B | 9.7 | <0.56 | 13400 | 5.9 L | 41700 | 587 | <0.11 | 10.5 L | 1010 | <0.56 | <0.56 | 311 B | 2.6 | NA | 10.9 | 38.8 MBD |
| STR08-13' (Dup) | 3/26/2001 | 290 | NA | 3360 | <1.1 | 3.5 | 25.9 | 0.12 B | <0.23 | 146000 | 6.8 | 3.5 B | 6.5 | 0.29 B | 9380 | 4.3 | 24200 | 414 | <0.11 | 7.8 | 1020 | <0.57 | <0.57 | 240 B | 1.5 | NA | 7.4 | 25.3 MBD |
| STR09-7.5' | 4/4/2001 | <61 | NA | 11200 | <1.2 | 10.7 | 80.8 | 0.34 B | 0.32 | 2670 | 15.9 | 5.9 B | 22.1 | <0.61 | 21200 | 9.8 | 2390 | 555 | 0.033 B | 21.7 | 1030 | <0.61 | <0.61 | <606 | <1.2 | NA | 25.9 | 58.2 MBD |
| STR10-1.5' | 4/7/2001 | <57 | NA | NA | <1.1 | 16.2 | 105 | 1 | 0.57 | NA | 15.6 | 10.9 | 21.4 | <0.57 | NA | 21.3 | NA | NA | 0.021 B | 21.8 | NA | <0.57 | <0.57 | NA | <1.1 | 1.6 B | 30.4 | 61.4 MBD |
| STR10-11' | 4/7/2001 | 40 B | NA | NA | <1.3 | 4.5 | 57.7 | 0.51 B | 0.23 B | NA | 15.4 | 7.9 | 13.2 | <0.63 | NA | 10 | NA | NA | 0.031 B | 17.4 | NA | <0.63 | <0.63 | NA | <1.3 | 0.96 B | 20.8 | 50.7 MBD |
| STR11-2' | 8/20/2001 | NA | <120 | 10000 | <1.2 | 8.8 | 44.3 | 0.29 B | <0.24 | 810 | 10.3 | 6.8 | 13.3 | <0.6 | 16700 | 10.2 | 1570 | 386 | 0.022 B | 14.7 | 632 | 0.38 B | <0.6 | <599 | <1.2 | NA | 21.2 | 48.1 |
| STR11-9' | 8/20/2001 | NA | <120 | 10200 | <1.2 | 19.4 | 54.7 | 0.51 B | 0.15 B | 35400 | 15 | 14.8 | 23.9 | <0.59 | 36200 | 12.1 | 12600 | 317 | 0.012 B | 36.1 | 1890 | 0.57 B | <0.59 | <586 | <1.2 | NA | 20.9 | 79.1 |
| STR11-9' (Dup) | 8/20/2001 | NA | <120 | 10200 | <1.2 | 11.8 | 56.9 | 0.57 B | 0.29 | 54500 | 14.4 | 10 | 21.4 | <0.59 | 25300 | 13.1 | 14400 | 279 | <0.12 | 28.4 | 1960 | 0.42 B | <0.59 | 72.5 B | <1.2 | NA | 21.5 | 65 |
| STR13-1-1.5' | 3/9/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 7.7 B J | NA | NA |
| T-1B2-8' | 3/16/2004 | NA | NA | 2460 J | <1.1 | 0.88 B | 11 B | 0.1 B | 0.16 B | 136000 J | 4.3 | 4.2 B | 4.7 | NA | 8900 | 3.5 | 29400 J | 410 | 0.006 B | 6 | 354 B J | <0.55 | <0.55 | 101 B | 1.5 J | 30.1 J | 8.1 | 16 |
| T-1B-8' | 3/15/2004 | NA | NA | NA | NA | 1.6 | NA | NA | NA | NA | 2.5 J | NA | NA | NA | NA | 2 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 43.5 J | NA | NA |
| T-1E-2-6' | 3/16/2004 | NA | NA | 11000 J | <1.2 | 4.7 | 91.5 | 0.55 B | 0.16 B | 5950 J | 13.7 | 7.4 | 12.1 | NA | 18800 | 10.3 | 2630 J | 829 | 0.028 B | 15.5 | 836 J | <0.62 | <0.62 | <617 | 0.65 B J | 3.8 B J | 17.8 | 44 |
| T-1E-6' | 3/15/2004 | NA | NA | NA | NA | 5.1 | NA | NA | NA | NA | 12.6 J | NA | NA | NA | NA | 10.2 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.6 B J | NA | NA |
| T-1N-6' | 3/16/2004 | NA | NA | 12100 J | <1.2 | 4.4 | 83.4 | 0.61 | 0.13 B | 5720 J | 14.6 | 7.7 | 11.6 | NA | 19300 | 10.8 | 2630 J | 515 | 0.027 B | 15.3 | 977 J | <0.61 | <0.61 | <615 | 0.59 B J | 4.7 B J | 19.3 | 46 |
| T-1NE-4' | 3/16/2004 | NA | NA | 9740 J | <1.2 | 4.9 | 89 | 0.52 B | 0.35 | 6260 J | 14.3 | 7.2 | 13.3 | NA | 18200 | 13.2 | 2740 J | 622 | 0.041 B | 13.8 | 863 J | <0.61 | <0.61 | <611 | 1.1 B J | 814 J | 16.6 | 52.1 |
| T-1S-5-6' | 3/15/2004 | NA | NA | NA | NA | 7.3 | NA | NA | NA | NA | 13.5 J | NA | NA | NA | NA | 11.8 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.4 B J | NA | NA |
| T-1W2-6' | 3/16/2004 | NA | NA | 11800 J | 0.34 B | 4.8 | 93 | 0.55 B | 0.08 B | 5440 J | 14.5 | 8.8 | 13.6 | NA | 20500 | 10.8 | 2610 J | 746 | 0.026 B | 16.8 | 926 J | <0.61 | <0.61 | <610 | 0.65 B J | 4.7 B J | 20.7 | 46.4 |

**Table 5-5**
**Summary of Inorganic Detections in**
**Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | Acid-insoluble Sulfide | Acid-Soluble Sulfide | Aluminum | Antimony | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide, Total | Iron | Lead | Magnesium | Manganese | Mercury | Nickel | Potassium | Selenium | Silver | Sodium | Thallium | Tin | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T-1W-6' | 3/15/2004 | NA | NA | NA | NA | 6.1 | NA | NA | NA | NA | 7.8 J | NA | NA | NA | NA | 6.5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 488 J | NA | NA |
| T-2-3' | 11/8/2001 | NA | <60 | NA | <1.2 | 4.5 | 70 J | 0.49 B | 0.054 B | NA | 11.1 | 7.4 | 10.6 | <0.6 | NA | 13 | NA | NA | 0.02 B | 14.2 | NA | 0.73 | <0.6 | NA | <1.2 | 7.4 B J | 15.4 | 38.4 |
| T-2-9' | 11/8/2001 | NA | 66 | NA | <1.1 | 2.7 | 19.1 B J | 0.064 B | 0.085 B | NA | 5.6 | 3.7 B | 7.7 | <0.57 | NA | 6.6 | NA | NA | <0.11 | 8.7 | NA | 0.43 B | <0.57 | NA | 0.84 B | 1.9 B J | 9.6 | 25.9 |
| T-3-3' | 11/8/2001 | NA | <56 | NA | 1.5 | 9.1 | 132 J | 0.29 B | 0.52 | NA | 13.8 | 6.4 | 44.8 | <0.56 | NA | 144 | NA | NA | 0.18 | 14.9 | NA | 0.42 B | <0.56 | NA | <1.1 | 57.3 J | 15.2 | 317 |
| T-3-11' | 11/8/2001 | NA | <56 | NA | <1.1 | 6.4 | 42.6 J | 0.23 B | 0.079 B | NA | 9.2 | 5.2 B | 11.1 | <0.56 | NA | 7.9 | NA | NA | 0.017 B | 11.2 | NA | 0.4 B | <0.56 | NA | <1.1 | 4 B J | 14.4 | 33.4 |
| T-4-3' | 11/9/2001 | NA | <56 | NA | <1.1 | 8.9 | 72.6 J | 0.36 B | 0.11 B | NA | 10.9 | 6.7 | 13.4 | <0.56 | NA | 18.4 | NA | NA | 0.072 B | 11.7 | NA | 0.6 | <0.56 | NA | <1.1 | 2.7 B J | 18.9 | 47.2 |
| T-4-9' | 11/9/2001 | NA | <54 | NA | 0.6 B | 6.8 | 83.3 J | 0.3 B | 0.18 B | NA | 10.2 | 6.1 | 44.8 | <0.54 | NA | 38.9 | NA | NA | 0.056 B | 11.7 | NA | <0.54 | <0.54 | NA | <1.1 | 6.7 B J | 16.1 | 87.6 |
| T-5-3' | 11/9/2001 | NA | <60 | NA | <1.2 | 4.8 | 106 J | 0.65 | 0.11 B | NA | 17.5 | 9.2 | 15.2 | <0.6 | NA | 16.1 | NA | NA | 0.043 B | 16.4 | NA | 0.61 | <0.6 | NA | <1.2 | 12.4 J | 17.5 | 59.9 |
| T-5-9' | 11/9/2001 | NA | <60 | NA | <1.2 | 2.6 | 56.7 J | 0.39 B | 0.11 B | NA | 9.1 | 6.5 | 9.7 | <0.6 | NA | 8.1 | NA | NA | <0.12 | 12 | NA | 0.39 B | <0.6 | NA | <1.2 | 12.4 J | 13.2 | 33.5 |
| T-6-3' | 11/10/2001 | NA | <61 | NA | <1.2 | 9.7 | 60.2 J | 0.44 B | <0.24 | NA | 14.5 | 8 | 16.5 | <0.61 | NA | 13.4 | NA | NA | 0.041 B | 18.8 | NA | <0.61 | <0.61 | NA | <1.2 | 3.3 B J | 23.2 | 55.8 |
| T-6-7.5' | 11/11/2001 | NA | <72 | NA | <1.4 | 5.2 | 112 | <0.72 | 0.19 B | NA | 6.5 | 3.1 B | 24.1 | 0.28 B | NA | 57.9 | NA | NA | 0.051 B | 8.2 | NA | <0.72 | <0.72 | NA | <1.4 | 37.8 J | 7.1 B | 103 |
| T-6-10' | 11/10/2001 | NA | <55 | NA | <1.1 | 6.9 | 78.3 J | 0.4 B | 0.056 B | NA | 9.5 | 5.9 | 11.9 | <0.55 | NA | 27.1 | NA | NA | 0.049 B | 10.2 | NA | <0.55 | <0.55 | NA | <1.1 | 2.1 B J | 17.4 | 47.6 |
| T-8-3' | 11/11/2001 | NA | <63 | NA | <1.3 | 5.1 | 92.1 | 0.59 B | 0.066 B | NA | 13.5 | 9.3 | 11.9 | <0.63 | NA | 11.3 | NA | NA | 0.027 B | 17.4 | NA | <0.63 | <0.63 | NA | <1.3 | 1.6 B J | 19.7 | 43.6 |
| T-8-9' | 11/11/2001 | NA | <54 | NA | <1.1 | 4.2 | 56.4 | 0.19 B | 0.11 B | NA | 6.3 | 4 B | 6.1 | <0.54 | NA | 4.8 | NA | NA | 0.011 B | 8.1 | NA | <0.54 | <0.54 | NA | 1.1 | 11.5 J | 10 | 20.1 |
| UAW01-30-1.5' | 4/2/2001 | <58 | NA | 11200 | <1.2 | 8.6 | 109 | 0.48 B | 0.63 | 23900 L | 15.7 L | 7.8 L | 22 | <0.58 | 18500 L | 75.5 L | 7000 | 429 L | 0.071 B | 17.3 L | 915 | <0.58 | <0.58 | 92.9 B | <1.2 | 34.4 | 22.4 L | 97.5 L MBB |
| UAW01-30-15' | 4/2/2001 | <52 | NA | 2310 | <1 | 3.5 | 8.4 B | 0.052 B | 0.21 | 118000 | 4.6 | 3.3 B | 8.5 | <0.52 | 5900 | 3.7 | 39500 | 201 | <0.1 | 6.5 | 443 B | <0.52 | <0.52 | 134 B | 0.7 B | NA | 7.4 | 22.9 MBD |
| UAW04-20-10' | 3/23/2001 | 30 B | NA | 8730 | 8.9 | 7.8 | 64.5 | 0.46 B | 0.27 | 26300 | 11.3 | 7.3 | 12.2 | <0.68 | 14600 | 10 | 7420 | 483 | 0.016 B | 15 | 856 | <0.68 | <0.68 | 97.3 B | <1.4 | NA | 15.7 | 44.1 |
| UAW05-20-13' | 3/23/2001 | 220 | NA | 10100 | <1.2 | 3.4 | 52.6 | 0.48 B | 0.36 | 99000 | 12.5 | 8 | 15.6 | 0.22 B | 20500 | 8.8 | 20800 | 482 | <0.12 | 18.3 | 2050 | <0.58 | <0.58 | 329 B | <1.2 | NA | 17.9 | 45.6 |
| UAW06-20-1.5' | 3/26/2001 | <61 | NA | 13300 | <1.2 | 6.4 | 121 | 0.77 | 0.11 B | 5520 | 30.3 | 9.5 | 16.6 | <0.61 | 18700 | 23.8 | 2800 | 646 | 0.045 B | 16.2 | 1720 | 0.91 | <0.61 | 450 B | 0.92 B | NA | 22.8 | 72 MBD |
| UAW06-20-11.5' | 3/26/2001 | <56 | NA | 1600 | <1.1 | 1.2 | 5.6 B | <0.56 | <0.23 | 124000 | 3.8 | 2 B | 6.2 | <0.56 | 4150 | 3.3 | 51000 | 387 | <0.11 | 4.1 B | 239 B | <0.56 | <0.56 | 180 B | 1.4 | NA | 6.3 | 20.3 MBD |
| UAW08-20-13' | 3/24/2001 | 340 | NA | NA | <1.1 | 2 | 36.3 | <0.56 | 0.23 | NA | 51.7 | 28.8 | 20.8 | 0.19 B | NA | 6.1 | NA | NA | 0.024 B | 22.9 | NA | <0.56 | <0.56 | NA | 1 B | 24.8 | 10.8 | 142 |
| UAW09-20-1.5' | 3/27/2001 | <58 | NA | 6280 | <1.2 | 5.8 | 45.7 | 0.19 B | <0.23 | 1530 | 8.5 | 6.7 | 7.8 | <0.58 | 11300 | 10.6 | 1260 | 516 | 0.013 B | 9 | 572 B | 0.51 B | <0.58 | <584 | <1.2 | NA | 16.8 | 35.9 MBD |
| UAW09-20-15' | 3/27/2001 | <53 | NA | 1790 | <1.1 | 4.2 | 7.5 B | <0.53 | <0.21 | 106000 | 3.6 | 2.5 B | 6 | <0.53 | 5900 | 4.2 | 37100 | 156 | <0.11 | 5.6 | 458 B | <0.53 | <0.53 | 108 B | 1.6 | NA | 7.1 | 26.8 MBD |
| UAW11-40-2' | 4/17/2001 | <60 | NA | 11800 | <1.2 | 5.2 | 79.8 | 0.6 | <0.24 | 4100 | 13.1 | 8.7 | 12.5 | <0.6 | 19400 | 11.9 | 2360 | 560 | 0.026 B | 16.8 | 903 | <0.6 | <0.6 | 701 | <1.2 | NA | 19.6 | 44.8 |
| UAW11-40-10' | 4/17/2001 | 120 | NA | 1920 | <1.1 | 2.8 | 5.4 B | <0.57 | 0.061 B | 125000 | 4.2 | 3.2 B | 7.4 | <0.57 | 6680 | 4.1 | 32600 | 232 | <0.11 | 8.8 | 224 B L | <0.57 | <0.57 | 290 B | 1.3 | NA | 7.5 | 26 |
| UAW12-20-12' | 3/24/2001 | 560 | NA | NA | <1.2 | 0.75 B | 3.1 B | 0.074 B | 0.74 | NA | 3.8 | 4 B | 6.1 | <0.61 | NA | 3.1 | NA | NA | <0.12 | 7.6 | NA | <0.61 | <0.61 | NA | 0.72 B | 7.6 B | 5.9 B | 139 |
| UAW13-20-1.5' | 3/24/2001 | 34 B | NA | NA | <1.2 | 4.9 | 62.4 | 0.34 B | 0.37 | NA | 11.2 | 6.1 | 11.6 | <0.58 | NA | 15.4 | NA | NA | 0.067 B | 12.2 | NA | <0.58 | <0.58 | NA | 0.68 B | 18.1 | 17.3 | 50.6 |
| UAW13-20-11.5' | 3/24/2001 | 430 | NA | NA | <1.2 | 0.75 B | 2 B | 0.07 B | 0.21 B | NA | 3.9 | 3 B | 5.1 | 0.22 B | NA | 3 | NA | NA | <0.12 | 7.9 | NA | <0.6 | <0.6 | NA | 0.61 B | 11.5 B | 6.1 | 57.6 |
| UAW14-10-1.5' | 4/4/2001 | <59 | NA | 11500 | <1.2 | 6.4 | 117 | 0.72 | 0.34 | 5060 | 16.8 | 8.1 | 16.5 | <0.59 | 16200 | 19.7 | 2110 | 1050 | 0.048 B | 16 | 1340 | <0.59 | 0.37 B | <589 | <1.2 | NA | 19.6 | 67.3 MBD |
| UAW15-20-2' | 4/9/2001 | 26 B | NA | 5910 | <1.1 | 5.5 | 45.8 | 0.21 B | 0.093 B | 1530 | 7.5 | 5.8 | 9.7 | <0.55 | 10400 MBB | 13 | 1120 | 257 | 0.016 B | 9.7 | 576 | 0.56 | 0.9 | 470 B | <1.1 | NA | 16 | 36 |
| UAW15-20-2' (Dup) | 4/9/2001 | <55 | NA | 5940 | <1.1 | 6.2 | 55.1 | 0.21 B | 0.093 B | 4310 | 7.6 | 5.8 | 10.3 | <0.55 | 11400 MBB | 11.2 | 1210 | 530 | 0.017 B | 9.9 | 594 | 0.58 | 1.9 | 483 B | 0.94 B | NA | 16.1 | 37.4 |
| UAW15-20-8.5' | 4/9/2001 | 26 B | NA | 6250 | <1.1 | 6.9 | 38 | 0.18 B | 0.057 B | 1110 | 7.7 | 6.7 | 9.6 | <0.56 | 13600 MBB | 9 | 1590 | 431 | 0.018 B | 12.5 | 608 | 0.44 B | <0.56 | 351 B | <1.1 | NA | 16.9 | 38.2 |
| UAW16-10-2' | 8/22/2001 | NA | <120 | 9160 | <1.2 | 6.3 | 53.3 | 0.49 B | 0.11 B | 4430 | 12.8 | 5.3 B | 11.3 | <0.58 | 19500 | 11.6 | 1880 | 367 | 0.019 B | 16 | 891 | 0.49 B | <0.58 | 133 B | <1.2 | NA | 20.3 | 40 |
| UAW16-10-5.5' | 8/22/2001 | NA | <110 | 1960 | <1.1 | 2.6 | 8.4 B | <0.54 | 0.059 B | 104000 | 4.7 | 2.5 B | 6.6 | 1.7 | 5650 | 4.1 | 38800 | 371 | <0.11 | 6.5 | 390 B | <0.54 | <0.54 | 154 B | 1.2 | NA | 6.5 | 19.1 |
| UAW17-40-1.5' | 4/5/2001 | <57 | NA | 10500 | <1.1 | 7.5 | 118 | 0.26 B | 0.73 | 39300 | 17.3 | 6.2 | 27.7 | 0.19 B | 14800 | 28.4 | 10900 | 515 | 0.041 B | 17.9 | 1330 | <0.57 | 0.89 | 125 B | <1.1 | NA | 19.4 | 97.5 MBB |
| UAW17-40-5' | 4/5/2001 | <64 | NA | 5160 | 1.8 | 9.1 | 559 | 0.34 B | 1.8 | 63500 | 13.9 | 4.3 B | 77.2 | <0.64 | 16900 | 128 | 11100 | 940 | <0.13 | 22.3 | 1150 | <0.64 | 1.3 | 238 B | <1.3 | NA | 11.2 | 418 MBD |
| UAW18-20-1' | 8/23/2001 | NA | <60 | 7790 | <1.2 | 4 | 72.1 | 0.39 B | 0.29 | 21600 | 15.2 | 6.9 | 11.2 | <0.6 | 13900 | 14.2 | 7400 | 505 | 0.048 B | 13.2 | 948 | 0.79 | <0.6 | 737 | 0.71 B | NA | 15 | 47.2 |
| UAW18-20-15' | 8/23/2001 | NA | <61 | 1980 | <1.2 | 3.1 | 12.6 B | <0.61 | 0.076 B | 135000 | 4.6 | 2.7 B | 6.8 | <0.61 | 7670 | 4 | 37000 | 295 | <0.12 | 7 | 408 B | <0.61 | <0.61 | 792 | 2.1 | NA | 6.4 | 21.7 |
| UAW19-80-1.5' | 4/6/2001 | <61 | NA | 13800 | <1.2 | 8.5 | 60.3 | 0.36 B | 0.15 B | 2180 | 14.2 | 7.6 | 13.9 | <0.61 | 16700 | 12.5 | 1850 | 212 | 0.015 B | 14 | 962 | <0.61 | <0.61 | <606 | <1.2 | NA | 26.4 | 48.9 MBD |
| UAW19-80-15' | 4/6/2001 | <59 | NA | 7980 | <1.2 | 8.1 | 44.4 | 0.45 B | 0.44 | 52800 | 11.7 | 9.3 | 19.2 | <0.59 | 19100 | 10.3 | 14900 | 437 | <0.12 | 23.5 | 1630 | <0.59 | <0.59 | 106 B | <1.2 | NA | 16.2 | 62.6 MBD |
| UAW20-60-1.5' | 4/9/2001 | 35 B | NA | 8300 | <1.1 | 6.4 | 69.5 | 0.57 | 0.18 B | 27800 | 8 | 5.6 | 13.3 | <0.56 | 12600 MBB | 22.2 | 4210 | 334 | 0.058 B | 12.3 | 833 | 0.36 B | 0.42 B | 2410 | <1.1 | NA | 16.2 | 49.8 |
| UAW20-60-9.5' | 4/9/2001 | 39 B | NA | 12800 | <1.2 | 7.7 | 48.9 | 0.66 | 0.38 | 50900 | 11.5 | 14.1 | 23 | <0.61 | 25500 MBB | 12.6 | 15900 | 318 | 0.032 B | 32.8 | 2620 | 0.64 | <0.61 | 317 B | <1.2 | NA | 24.7 | 75.1 |

**Table 5-5**
**Summary of Inorganic Detections in**
**Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | Acid-insoluble Sulfide | Acid-Soluble Sulfide | Aluminum | Antimony | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide, Total | Iron | Lead | Magnesium | Manganese | Mercury | Nickel | Potassium | Selenium | Silver | Sodium | Thallium | Tin | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW21-30-1.5' | 4/11/2001 | <59 | NA | 6490 | <1.2 | 7.8 | 93 | 0.32 B | 0.13 B | 1930 | 9.1 | 6.2 | 9.8 | <0.59 | 12100 MBB | 780 | 1260 | 608 | 0.11 B | 9.8 | 543 B | 0.41 B | <0.59 | 224 B | <1.2 | NA | 17.1 | 56.4 |
| UAW21-30-10' | 4/11/2001 | <56 | NA | 2220 | <1.1 | 4.4 | 10.7 B | 0.093 B | 0.1 B | 97800 | 3.5 | 2.7 B | 8 | <0.56 | 5820 MBB | 9.1 | 30500 | 180 | <0.11 | 6.4 | 447 B | <0.56 | <0.56 | 131 B | <1.1 | NA | 6.9 | 21.2 |
| UAW22-20-2' | 9/5/2001 | NA | <110 | 6180 J | <1.1 | 6 | 48 | 0.32 B | 0.56 | 90100 | 9.6 | 5.4 B | 11.1 | <0.56 | 12200 J | 13.5 | 9680 | 760 | 0.03 B J | 10.9 | 777 | <0.56 | <0.56 | 252 B | 1 B J | NA | 12.5 | 53.3 |
| UAW22-20-11' | 9/5/2001 | NA | <110 | 1510 J | <1.1 | 1.3 | 7.4 B | 0.053 B | 0.16 B | 131000 | 3.2 | 1.8 B | 5.4 | 0.44 B | 5770 J | 3.5 | 41200 | 257 | 0.019 B J | 4.5 | 287 B | <0.56 | <0.56 | 203 B | 1.9 J | NA | 5 B | 16.3 |
| **Background Soil** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B01-1.5' | 10/9/2001 | NA | <56 | 9620 | <1.1 | 7.4 | 47.4 J | 0.26 B | 0.19 B | 1210 L | 10.1 | 7.1 L | 12.5 | <0.56 | 15600 | 9.5 | 1680 | 424 J | 0.026 B | 12.5 L | 655 | <0.56 | <0.56 | <556 | <1.1 | 0.88 B J | 20 | 39 L |
| B01-11.5' | 10/9/2001 | NA | <52 | 1620 | <1 | 2.3 | 6.9 B J | <0.52 | 0.15 B | 115000 | 3.8 | 2.8 B | 6.2 | 0.2 B | 5010 | 3.2 | 37400 | 171 J | <0.1 | 5.7 | 384 B | <0.52 | <0.52 | 98.8 B | 1.3 | 0.95 B J | 5.9 | 18.8 |
| B02-1.5' | 10/9/2001 | NA | 79 | 10800 | <1.1 | 8.4 | 58.7 J | 0.37 B | 0.21 B | 1720 | 11.8 | 6.7 | 13.3 | <0.57 | 17200 | 10.1 | 1840 | 379 J | 0.027 B | 13.2 | 688 | <0.57 | <0.57 | <569 | <1.1 | 0.79 B J | 21.9 | 42 |
| B02-11.5' | 10/9/2001 | NA | <52 | 1750 | <1 | 3.9 | 7.1 B J | <0.52 | 0.16 B | 113000 | 3.8 | 3 B | 6.9 | <0.52 | 6000 | 3.6 | 35700 | 182 J | <0.1 | 6.2 | 369 B | <0.52 | <0.52 | 91.7 B | 0.74 B | 1 B J | 6.1 | 20.1 |
| B03-1.5' | 10/9/2001 | NA | 79 | 10800 | <1.1 | 5.1 | 68 J | 0.5 B | 0.27 | 3870 | 12.2 | 8 | 13.4 | <0.57 | 18700 | 11.1 | 2380 | 589 J | 0.026 B | 15.1 | 976 | <0.57 | <0.57 | <569 | <1.1 | 0.9 B J | 18.3 | 41.1 |
| B03-11.5' | 10/9/2001 | NA | <52 | 1650 | <1 | 3 | 7.5 B J | <0.52 | 0.15 B | 126000 | 4 | 2 B | 6.2 | <0.52 | 5620 | 2.8 | 37800 | 329 J | 0.0089 B | 4.8 | 370 B | <0.52 | <0.52 | 105 B | 1.5 | 0.93 B J | 5.5 | 15.6 |
| B04-1.5' | 10/9/2001 | NA | <54 | 1870 | <1.1 | 4 | 9.8 B J | <0.54 | 0.16 B | 86600 | 3.7 | 2.8 B | 7.3 | <0.54 | 5760 | 4.1 | 31100 | 191 J | 0.0098 B | 6.5 | 368 B | <0.54 | <0.54 | 69.2 B | 1.5 | 0.93 B J | 6.2 | 22.3 |
| B04-1.5' (Dup) | 10/9/2001 | NA | <53 | 2200 | <1.1 | 3.7 | 11.4 B J | <0.53 | 0.16 B | 97000 | 3.7 | 2.9 B | 6.8 | <0.53 | 5980 | 4.3 | 36200 | 198 J | <0.11 | 6.2 | 387 B | <0.53 | <0.53 | 66.6 B | 1.2 | 0.97 B J | 6.7 | 21.6 |
| B04-11.5' | 10/9/2001 | NA | <53 | 1550 | <1.1 | 2.7 | 6 B J | <0.53 | 0.13 B | 114000 | 3.5 | 2.5 B | 5.4 | <0.53 | 4670 | 3 | 37300 | 163 J | <0.11 | 5.4 | 346 B | <0.53 | <0.53 | 91.1 B | 1.8 | 0.93 B J | 5.5 | 17.3 |
| B05-1.5' | 10/9/2001 | NA | <56 | 13000 | <1.1 | 10 | 66.1 J | 0.46 B | 0.22 B | 2370 | 15.7 | 8 | 15.6 | <0.56 | 19800 | 11.4 | 2090 | 393 J | 0.03 B | 14.9 | 660 | <0.56 | <0.56 | <565 | <1.1 | 0.82 B J | 23.9 | 51.4 |
| B05-11.5' | 10/9/2001 | NA | 120 | 1660 | <1.1 | 3.7 | 6.4 B J | <0.53 | 0.15 B | 98200 | 3.2 | 2.3 B | 7.9 | <0.53 | 5880 | 4 | 39400 | 158 J | <0.11 | 4.8 | 370 B | <0.53 | <0.53 | 92.9 B | 1.5 | 1.1 B J | 6.4 | 21.9 |
| B06-1.5' | 10/9/2001 | NA | <57 | 6950 | <1.1 | 6.2 | 67.7 J | 0.35 B | 0.52 | 38300 | 13.5 | 6.4 | 18.4 | <0.57 | 12600 | 25.3 | 9650 | 585 J | 0.15 | 12.2 | 1130 | <0.57 | <0.57 | 64.1 B | 1.1 | 1.5 B J | 19.9 | 63.3 |
| B06-11' | 10/9/2001 | NA | <58 | 1860 | <1.2 | 1.4 | 9.4 B J | 0.059 B | 0.2 B | 119000 | 4.1 | 2.3 B | 6.9 | <0.58 | 5380 | 3.7 | 36600 | 196 J | 0.013 B | 6.3 | 399 B | <0.58 | <0.58 | 111 B | 1.2 | 0.96 B J | 5.7 B | 25 |
| B07-1' | 10/9/2001 | NA | <59 | 8140 | <1.2 | 6.2 | 134 J | 0.64 | 0.43 | 35600 | 15.4 | 6.8 | 17.6 | 0.24 B | 12600 | 29 | 8670 | 645 J | 0.073 B | 12.2 | 1210 | 0.69 | <0.59 | <585 | <1.2 | 1.5 B J | 16.3 | 49.9 |
| B07-9' | 10/9/2001 | NA | <59 | 6520 | <1.2 | 2.6 | 33.4 J | 0.29 B | 0.19 B | 43800 | 8.4 | 5.4 B | 8.8 | <0.59 | 9050 | 7.2 | 20500 | 221 J | 0.013 B | 9.9 | 729 | <0.59 | <0.59 | 67.3 B | 1.5 | <11.8 | 12.1 | 31.7 |
| B08-2' | 10/9/2001 | NA | <58 | 11500 | <1.2 | 7.5 | 123 J | 0.61 | 0.7 | 8400 | 69.7 | 8.6 | 22.4 | <0.58 | 18800 | 59.3 | 2690 | 854 J | 0.16 | 15.7 | 1810 | 1.6 | <0.58 | <580 | <1.2 | 2.9 B J | 56.4 | 88.1 |
| B08-9' | 10/9/2001 | NA | <57 | 6210 | <1.1 | 3 | 20.4 B J | 0.23 B | 0.26 | 65100 | 13.4 | 4.5 B | 15.6 | <0.57 | 11300 | 7 | 23000 | 225 J | 0.01 B | 7 | 637 | <0.57 | <0.57 | 58.9 B | <1.1 | <11.3 | 13 | 30.4 |
| B09-2' | 10/9/2001 | NA | <330 | 5780 | 3.3 | 16.2 | 985 J | 0.85 | 0.33 | 3960 | 50.6 | 5 B | 64.8 | 0.42 B | 10600 | 410 | 838 | 68.6 J | 0.046 B | 10.6 | 674 | 2.5 | <0.66 | <657 | 0.92 B | 1.9 B J | 24.9 | 85.2 |
| B09-10' | 10/9/2001 | NA | <62 | 12800 | <1.2 | 6 | 71.5 J | 0.31 B | 0.2 B | 13000 | 25.1 | 3.7 B | 41.8 | <0.62 | 22600 | 8.9 | 1710 | 81.6 J | 0.026 B | 14.2 | 1750 | <0.62 | <0.62 | <618 | <1.2 | <12.4 | 42.3 | 59.2 |
| B10-2' | 10/9/2001 | NA | <330 | 5020 | <1.3 | 13.5 | 327 J | 1.4 | 0.14 B | 1910 | 5.9 | 5 B | 26.1 | 0.25 B | 4030 | 16.1 | 340 B | 14.6 J | 0.047 B | 11.1 | 993 | 1.7 | <0.66 | <659 | 0.96 B | 1.3 B J | 22.8 | 15.7 |
| B10-11' | 10/9/2001 | NA | <60 | 9360 J | <1.2 | 4.9 | 69 J | 0.46 B | 0.24 | 4160 | 16.5 | 3.6 B | 20.4 | <0.6 | 17100 | 9.4 | 1640 | 123 J | 0.018 B | 11.5 | 730 | <0.6 | <0.6 | <599 | <1.2 | 0.89 B J | 20.8 | 41.5 |
| **Sediment** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SS-1 | 10/11/2001 | NA | 73 | 4830 | <1.2 | 4.9 | 40.2 | 0.19 B | 0.22 B | 74400 | 10.3 | 5.3 B | 12.3 | <0.6 | 12100 | 11.3 | 21200 | 333 | <0.12 | 14.3 | 874 | <0.6 | NA | 223 B | <1.2 | 30.8 J | 10.7 | 38.2 |
| SS-2 | 10/11/2001 | NA | <57 | 7840 | <1.1 | 6.1 | 62.5 | 0.36 B | 0.41 | 83900 | 13.7 | 7.2 | 17.8 | <0.57 | 16500 | 28.9 | 14000 | 586 | 0.06 B | 17 | 1230 | <0.57 | NA | 160 B | <1.1 | 76.3 J | 14.8 | 54.1 |
| SS-3 | 10/11/2001 | NA | <65 | 5660 | <1.3 | 5.2 | 52.1 | 0.27 B | 0.52 | 58600 | 16 | 6.6 | 19.2 | <0.65 | 14300 | 24.8 | 12100 | 601 | 0.051 B | 17 | 610 B | <0.65 | NA | 260 B | <1.3 | 4.7 B J | 13.3 | 82.8 |
| SS-4 | 10/11/2001 | NA | 100 | 9330 | <1.2 | 3.4 | 76.9 | 0.46 B | 0.25 | 18800 | 16 | 7.5 | 11.9 | <0.61 | 17400 | 10.8 | 5450 | 344 | 0.016 B | 14.9 | 754 | <0.61 | NA | 125 B | <1.2 | 24.8 J | 17 | 42.5 |
| SS-5 ~25' South | 10/11/2001 | NA | 95 | 3370 | <1.2 | 3.9 | 37.2 | 0.18 B | 0.27 | 65700 | 9.6 | 4.2 B | 11.3 | <0.62 | 9740 | 12.5 | 12600 | 283 | <0.12 | 9.8 | 486 B | <0.62 | NA | 175 B | <1.2 | 4.9 B J | 9.3 | 38.9 |
| SS-5 (Dup) | 10/11/2001 | NA | 100 | 3870 | <1.2 | 3.8 | 30.4 | 0.21 B | 0.23 B | 67000 | 15.3 | 4.5 B | 9.3 | <0.62 | 10400 | 14.1 | 14900 | 260 | 0.011 B | 10 | 529 B | <0.62 | NA | 196 B | <1.2 | 3.9 B J | 10.4 | 46.7 |
| SS-6 | 10/11/2001 | NA | <63 | 6190 | <1.3 | 5.5 | 52.4 | 0.29 B | 0.32 | 46100 | 13.9 | 6.8 | 16.5 | <0.63 | 14100 | 29.8 | 12300 | 636 | 0.073 B | 14.9 | 685 | 0.48 B | NA | 135 B | 0.67 B | 5.7 B J | 13.9 | 59.5 |
| SS-7 | 10/11/2001 | NA | <62 | 6080 | <1.2 | 4.9 | 46.8 | 0.28 B | 0.38 | 54800 | 17.2 | 6.7 | 19.3 | <0.62 | 13500 | 24.5 | 14400 | 453 | 0.045 B | 16.7 | 734 | 0.39 B | NA | 173 B | <1.2 | 5.2 B J | 13.4 | 68.2 |
| SS-8 | 10/11/2001 | NA | <66 | 5570 | <1.3 | 5.3 | 63 | 0.24 B | 0.39 | 56300 | 14.1 | 6.3 B | 18.2 | <0.66 | 14100 | 25.8 | 12500 | 592 | 0.056 B | 15.9 | 661 | <0.66 | NA | 275 B | <1.3 | 7 B J | 13.5 | 62.4 |
| SS-9 | 10/11/2001 | NA | <64 | 5300 | <1.3 | 4.3 | 40.9 | 0.24 B | 0.32 | 52900 | 14.5 | 5.7 B | 16.2 | <0.64 | 11700 | 28.4 | 11500 | 325 | 0.038 B | 14.6 | 739 | <0.64 | NA | 341 B | <1.3 | 3.3 B J | 12.4 | 64.2 |
| SS-10 | 10/11/2001 | NA | <59 | 4290 | <1.2 | 3.9 | 29.8 | 0.17 B | 0.24 | 57100 | 12.7 | 4.2 B | 14.2 | <0.59 | 9340 | 14.7 | 15800 | 345 | 0.045 B | 12.9 | 590 | <0.59 | NA | 124 B | 0.69 B | 3.9 B J | 9.3 | 44.3 |
| SS-11 | 10/11/2001 | NA | <64 | 6630 | <1.3 | 5.5 | 55 | 0.29 B | 0.32 | 53500 | 16.3 | 6.8 | 16.9 | <0.64 | 14900 | 27.6 | 13400 | 615 | 0.039 B | 16.7 | 810 | <0.64 | NA | 340 B | <1.3 | 3.6 B J | 14.6 | 71.6 |
| SS-12 | 10/11/2001 | NA | <63 | 7760 | <1.3 | 6.3 | 68.2 | 0.34 B | 0.54 | 47300 | 22.9 | 7.8 | 26 | <0.63 | 17200 | 38.3 | 12600 | 658 | 0.095 B | 22 | 789 | <0.63 | NA | 360 B | <1.3 | 33.2 J | 16.5 | 101 |
| CS1 | 3/6/2002 | NA | NA | 1910 J | <1.2 | 3 | 13.9 B | 0.069 B | 0.14 B | 88900 J | 6.5 | 2.7 B | 5.1 | | 6780 | 6.4 | 20300 | 287 | <0.12 | 9.8 | 291 B J | <0.61 | NA | 147 B | 1.1 B | 9 B J | 6.7 | 33.5 |

**Table 5-5**
**Summary of Inorganic Detections in**
**Soil and Sediment Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| Sample Location | Sample Date | Acid-insoluble Sulfide | Acid-Soluble Sulfide | Aluminum | Antimony | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide, Total | Iron | Lead | Magnesium | Manganese | Mercury | Nickel | Potassium | Selenium | Silver | Sodium | Thallium | Tin | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CS-1A | 3/25/2004 | NA | NA | NA | <1.2 | 5 | 19.6 B | 0.19 B | 0.29 | NA | 5.7 J | 2.9 B | 4.2 | NA | NA | 5.1 | NA | NA | 0.02 B | 6 | NA | <0.59 | <0.59 | NA | <1.2 | 4.5 B J | 7.8 | 28.8 |
| CS2 | 3/6/2002 | NA | NA | 1890 J | <1.3 | 2.8 | 19.1 B | 0.099 B | 0.11 B | 77900 J | 5.8 | 2.4 B | 6.6 | NA | 6220 | 12 | 18900 | 245 | <0.13 | 5.9 | 311 B J | <0.63 | NA | 143 B | 1.2 B | 9.8 B J | 6.6 | 26.1 |
| CS-2A | 3/26/2004 | NA | NA | NA | <1.2 | 6 | 41.8 | 0.18 B | 0.41 | NA | 10.5 J E | 5.5 B E | 5.9 E | NA | NA | 22.8 | NA | NA | 0.014 B | 7.8 | NA | <0.58 | <0.58 | NA | <1.2 | 3.5 B J | 9.6 | 22.2 |
| CS3 | 3/6/2002 | NA | NA | 1730 J | <1.2 | 3.2 | 8.9 B | 0.16 B | 0.14 B | 170000 J | 6.9 | 2.4 B | 4.9 | NA | 6780 | 4.2 | 64400 | 342 | <0.12 | 5.8 | 228 B J | <0.58 | NA | 258 B | 1 B | 4.6 B J | 6.9 | 16.4 |
| CS-3A | 3/26/2004 | NA | NA | NA | <1.2 | 3.8 | 13.1 B | 0.14 B | 0.23 B | NA | 5.1 J | 2.6 B | 4.6 | NA | NA | 5.3 | NA | NA | 0.018 B | 5 | NA | <0.62 | <0.62 | NA | 0.57 B | 4 B J | 5.9 B | 23.7 |
| CS4 | 3/6/2002 | NA | NA | 2440 J | <1.2 | 3.2 | 14.4 B | 0.25 B | 0.16 B | 178000 J | 11.8 | 3.8 B | 6.5 | NA | 9360 | 14.2 | 19900 | 349 | 0.01 B | 10.1 | 373 B J | <0.6 | NA | 174 B | 1.1 B | 9.3 B J | 8.8 | 31.8 |
| CS-4A | 3/26/2004 | NA | NA | NA | <1.4 | 4.2 | 39.1 | 0.22 B | 0.37 | NA | 10.6 J | 4.3 B | 10.8 | NA | NA | 14.6 | NA | NA | 0.033 B | 12.1 | NA | <0.71 | 0.2 B | NA | 0.72 B | 8 B J | 10.7 | 50.6 |
| CS5 | 3/6/2002 | NA | NA | 2400 J | <1.2 | 4.2 | 22.3 B | 0.19 B | 0.18 B | 148000 J | 14.2 | 3.7 B | 4.5 | NA | 10800 | 5 | 38800 | 670 | <0.12 | 10 | 359 B J | <0.58 | NA | 166 B | 2 | 3.4 B J | 11.7 | 25.1 |
| CS-5A | 3/25/2004 | NA | NA | NA | <1.1 | 4.9 | 17.7 B | <0.15* | 0.36 | NA | 4 J | 2.8 B | 4.5 | NA | NA | 4 | NA | NA | <0.11* | 8.6 | NA | <0.55 | <0.55 | NA | <1.1 | <2.7* | 6.3 | 22.4 |
| CS6 | 3/6/2002 | NA | NA | 2720 J | <1.2 | 3.3 | 20.9 B | 0.14 B | 0.14 B | 70000 J | 7.8 | 3.3 B | 5.5 | NA | 7660 | 7.7 | 17200 | 344 | 0.014 B | 7.4 | 461 B J | <0.62 | NA | 150 B | 1.7 | 4.2 B J | 8.9 | 32.3 |
| CS-6A | 3/25/2004 | NA | NA | NA | <1.3 | 4.5 | 14 B | 0.12 B | 0.24 B | NA | 5.1 J | 3.1 B | 5.9 | NA | NA | 6.2 | NA | NA | 0.017 B | 5.6 | NA | <0.63 | <0.63 | NA | <1.3 | 2.7 B J | 6.3 | 27.5 |
| CS-6A (Dup) | 3/25/2004 | NA | NA | NA | <1.2 | 3.4 | 20.6 B | 0.14 B | 0.2 B | NA | 5.2 J | 2.7 B | 4.3 | NA | NA | 5.2 | NA | NA | 0.018 B | 4.7 B | NA | <0.62 | <0.62 | NA | <1.2 | 3.1 B J | 5.9 B | 20.8 |
| CS7 | 3/6/2002 | NA | NA | 1690 J | <1.2 | 3.3 | 16.8 B | 0.12 B | 0.16 B | 114000 J | 5.6 | 2.5 B | 4.9 | NA | 7480 | 7.2 | 30100 | 380 | 0.028 B | 5.5 | 290 B J | <0.62 | NA | 162 B | 1.7 | 3.9 B J | 6.6 | 29.9 |
| CS7 (Dup) | 3/6/2002 | NA | NA | 2160 J | <1.2 | 4.7 | 42.6 | 0.18 B | 0.16 B | 123000 J | 6 | 3.3 B | 4.4 | NA | 9920 | 7.5 | 37800 | 650 | 0.012 B | 5.7 | 344 B J | <0.61 | NA | 145 B | 2 | 4 B J | 9.3 | 24.8 |
| CS8 | 3/6/2002 | NA | NA | 2160 J | <1.2 | 3.7 | 18.3 B | 0.17 B | 0.12 B | 163000 J | 6.4 | 3.2 B | 5.8 | NA | 9470 | 5.4 | 19300 | 622 | 0.01 B | 6.7 | 416 B J | <0.6 | NA | 134 B | 2.2 | 3.8 B J | 7.5 | 26.1 |

Notes:
B = Estimated result; result is less than reporting limit.
E = Matrix Interference.
J = Method blank contamination. The associated method blank contains the target analyte at a reportable level.
L = Serial dilution of a digestate in the analytical batch indicates that physical and chemical interferences are present.
MBD = This analyte is present in the associated method blank at an amount that is less than two times the reporting limit.
MBB = This analyte is present at a reportable level in the associated method blank but is less than 5% of the sample amount.
This table only includes target analytes detected in one or more Facility Investigation samples.
See Appendix B for the complete target analyte lists.
NA = Indicates chemical was not on the target analyte list for that sample.
<1.1 = Indicates constituent not detected at or above indicated detection limit.
* = Indicates that Environmental Standards qualified the data as a "non-detect" as part of the 10% data validation. The analyte was detected in a field and/or laboratory blank at a similar level.
The only validation qualifiers that have been annotated into the summary tables are qualifications of detected compounds.

**Table 5-6**
**Trench T-1 Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| | | VOCs | | | | | | | | SVOCs | | Pesticides | | | | | Metals | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2-Butanone | Acetone | Chloroform | Chloromethane | Iodomethane | Methylcyclohexane | Tetrachloroethene | Toluene | Acetophenone | Dibenzofuran | 4,4'-DDE | Endosulfan I | Endosulfan II | Endrin | Heptachlor epoxide | Aluminum | Antimony | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Iron | Lead | Magnesium | Manganese |
| **Pre-excavation Samples** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T-1-4 | 11/8/2001 | <5.3 | 1.8 J B | <1.3 | 1.7 | 36 | NA | <1.3 | <1.3 | <4.2 | 0.64 J | <0.022 | <0.022 | <0.022 | <0.022 | 0.019 J | NA | 65.1 | 580 | 25.8 J | 0.14 B | 1.3 | NA | 232 | 7.9 | 1260 | NA | 19300 | NA | NA |
| T-1-6 | 11/8/2001 | 0.0066 J | 0.012 J B | <0.005 | 0.014 | 0.18 | NA | <0.005 | 0.00085 J | <0.37 | <0.37 | <0.0019 | <0.0019 | <0.0019 | 0.0025 PG | <0.0019 | NA | <1.1 | 11 | 22.3 J | 0.2 B | 0.82 | NA | 11.5 | 34.9 | 151 | NA | 94.7 | NA | NA |
| **Drum Contents** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T-1DC-4-5' | 3/16/2004 | <0.03 | 0.028 J B | 0.00061 J | <0.0076 | NA | 0.00094 J | 0.013 | 0.0013 J | 51 | <21 | 0.07 J | 0.37 | 0.11 J | 0.084 J | <0.22 | 2230 J | 0.3 B | 2.7 | 13.6 B | <0.64 | <0.26 | 1110 J | 7.4 | 1.2 B | 7.6 | 24200 | 2.2 | 713 J | 63.4 |
| **Trench Fill Material** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T-1FILL-0' | 3/16/2004 | <0.023 | 0.0066 J B | <0.0058 | <0.0058 | NA | <0.012 | <0.0058 | <0.0058 | <0.35 | <0.35 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | <0.0018 | 1270 J | 0.54 B | 14.7 | 18.7 B | 0.13 B | 0.07 B | 287000 J | 3.4 | 3.7 B | 4.7 | 8320 | 5 | 10700 J | 443 |

**Table 5-6**
**Trench T-1 Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/kg**

| | Metals | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mercury | Nickel | Potassium | Selenium | Silver | Sodium | Thallium | Tin | Vanadium | Zinc |
| **Pre-excavation Samples** | | | | | | | | | | |
| T-1-4 | 0.028 B | 35.4 | NA | <0.64 | 5.6 | NA | 31.8 | 158000 J | 4.9 B | 15.4 |
| T-1-6 | <0.11 | 142 | NA | <0.56 | <0.56 | NA | <1.1 | 36500 J | 7 | 32.9 |
| **Drum Contents** | | | | | | | | | | |
| T-1DC-4-5' | 0.012 B | 4.1 B | 327 B J | 0.42 B | <0.64 | <638 | 0.73 B J | 9 B J | 4.5 B | 7.5 |
| **Trench Fill Material** | | | | | | | | | | |
| T-1FILL-0' | 0.0077 B | 5.2 | 707 J | <0.53 | <0.53 | 136 B | 1.2 J | 3.1 B J | 3.9 B | 7.8 |

Notes:
J - VOCs, SVOC - indicates concentration was measured below the detection limit and is estimated.
B - VOCs, SVOC - indicates constituent was also detected in the laboratory method blank.
PG = The percentage difference between the original and confirmation analyses is greater than 40%.
J - Inorganics - indicates constituent was also detected in the laboratory method blank.
B- Inorganics - indicates concentration was measured below the detection limit and is estimated.
NA - Indicates compound was not on the target analyte list for that sample.
<10 - Indicates constituent not detected at or above indicated detection limit.

# Table 5-7
# Total Chromium vs. Hexavalent Chromium
# Summary of Analytical Results

| Sample Matrix: Soil<br>units: mg/kg | | | |
|---|---|---|---|
| **Sample Location** | **Sample Date** | **Chromium** | **Hexavalent Chromium** |
| DP47-5' | 3/9/2004 | 18 | <0.99 |
| DP52-1-1.5' | 3/10/2004 | 55.4 | <0.96 |
| DP54-1-1.5' | 3/10/2004 | 217 J | 0.35 B |
| DP55-9' | 3/10/2004 | 6.3 J | 0.56 B |
| DP77-14.6-15' | 3/13/2004 | 9 J | <0.9 |
| DP80-1' | 3/15/2004 | 13.5 J | <0.96 |

| Sample Matrix: Creek Bed Sediment<br>units: mg/kg | | | |
|---|---|---|---|
| **Sample Location** | **Sample Date** | **Chromium** | **Hexavalent Chromium** |
| CS-5A | 3/25/2004 | 4 J | <0.88 |
| CS-6A | 3/25/2004 | 5.1 J | <1 |
| CS-6A (Dup) | 3/25/2004 | 5.2 J | <1 |

| Sample Matrix: Groundwater<br>units: µg/l | | | |
|---|---|---|---|
| **Sample Location** | **Sample Date** | **Chromium** | **Hexavalent Chromium** |
| DP53-12.5' | 3/11/2004 | 10.9 | <20 |
| MW-EPA-2 | 3/29/2004 | 443 | <20 |
| MW-EPA-4 | 4/6/2004 | 64.6 | <20 |
| RWV20 | 4/6/2004 | <5 | <20 |
| UAW06-20 | 3/29/2004 | 3.3 B | <20 |
| UAW11-40 | 4/6/2004 | 8.5 | <20 |
| UAW11-40 BLIND DUP | 4/6/2004 | 7.7 | <20 |

| Sample Matrix: Surface Water<br>Units: µg/l | | | |
|---|---|---|---|
| **Sample Location** | **Sample Date** | **Chromium** | **Hexavalent Chromium** |
| WS-6A | 3/25/2004 | <5 | <20 |
| WS-6A BLIND DUP | 3/25/2004 | <5 | <20 |

Data Qualifiers:

B = Estimated result. Result is less than reporting limit.

J = Method blank contamination. The associated method blank contains the target analyte at a reportable level.

# Table 5-8
## Summary of Volatile Organic Detections in Groundwater and Seep Samples
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | 1,1,1-Trichloroethane | 1,1,2-Trichloro-1,2,2-trifluoroethane | 1,1,2-Trichloroethane | 1,1-Dichloroethane | 1,1-Dichloroethene | 1,2-Dichloroethane | 1,2-Dichloroethene (total) | 2-Butanone | 4-Methyl-2-pentanone (MIBK) | Acetone | Benzene | Bromodichloromethane | Bromoform | Carbon disulfide | Chlorobenzene | Chloroethane | Chloroform | cis-1,2-Dichloroethene | Cyclohexane | Dibromochloromethane | Dichlorodifluoromethane | Ethylbenzene | Isopropylbenzene | Methylcyclohexane | Methylene chloride | Tetrachloroethene | Toluene | trans-1,2-Dichloroethene | Trichloroethene | Vinyl chloride | Xylenes (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Groundwater** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW-EPA-1 | 5/8/2001 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <500 | NA | <500 | <50 | <50 | <50 | <50 | 1600 | <100 | <50 | <25 | <50 | <50 | <50 | 19 J | <50 | <50 | <50 | <50 | <50 | <25 | <50 | <100 | 30 J |
| MW-EPA-1 | 11/15/2001 | <83 | <83 | <83 | <83 | <83 | <83 | <83 | <830 | NA | 63 J B | 31 J | <83 | <83 | <83 | 3200 | <170 | <83 | <42 | <83 | <83 | <83 | 40 J | <83 | <83 | 140 B | <83 | 59 J | <42 | <83 | <170 | 93 |
| MW-EPA-1 | 10/20/2002 | NA | NA | NA | <100 | NA | <100 | NA | NA | NA | 220 J | <100 | <100 | NA | <100 | 3900 | <100 | <100 | NA | NA | NA | <100 | <100 | NA | <100 | 100 B | NA | 49 J | NA | NA | NA | <100 |
| MW-EPA-1 | 11/12/2003 | <200 | <200 | <200 | <200 | <200 | <200 | NA | NA | NA | <2000 | <200 | <200 | <200 | <200 | 4500 | <200 | <200 | <100 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <100 | <200 | <200 | <200 |
| MW-EPA-1 | 3/28/2004 | <83 | <83 | <83 | <83 | <83 | <83 | NA | <830 | <830 | <830 | <83 | <83 | <83 | <83 | 2800 | <83 | <83 | <42 | <83 | <83 | <83 | <83 | <83 | <83 | <83 | <83 | <83 | <42 | <83 | <83 | <83 |
| MW-EPA-2 | 5/8/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | NA | <10 | <1 | <1 | <1 | <1 | <1 | <2.2 | 1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | 0.98 J | 11 | <1 | <0.5 | <1 | <2 | <1 |
| MW-EPA-2 | 11/14/2001 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | <33 | NA | 2 J | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | <2 | 0.81 J | <1.7 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | 2 J B | 45 | <3.3 | <1.7 | <3.3 | <6.7 | <3.3 |
| MW-EPA-2 | 10/20/2002 | NA | NA | NA | <2.2 | NA | <2.2 | NA | NA | NA | 3.4 J | <2.2 | <2.2 | NA | <2.2 | <2.2 | <6.7 | 1.3 J | NA | NA | NA | <2.2 | <2.2 | NA | <2.2 | 1.1 J B | NA | <2.2 | NA | NA | NA | <2.2 |
| MW-EPA-2 | 11/11/2003 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | NA | NA | NA | <25 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <1.2 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | 80 | <2.5 | <1.2 | <2.5 | <2.5 | <2.5 |
| MW-EPA-2 | 3/29/2004 | <2 | <2 | <2 | <2 | <2 | <2 | NA | <20 | <20 | <20 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <1 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | 52 | <2 | <1 | <2 | <2 | <2 |
| MW-EPA-3 | 5/6/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| MW-EPA-3 | 11/13/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | NA | 2.6 J | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 0.3 J | <0.5 | <1 | <2 | <1 |
| MW-EPA-3 | 10/17/2002 | NA | NA | NA | <1 | NA | <1 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | <1 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| MW-EPA-3 | 11/13/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| MW-EPA-3 | 3/30/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| MW-EPA-4 | 5/8/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | NA | <10 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| MW-EPA-4 | 11/13/2001 | 0.2 J | <1 | <1 | <1 | <1 | <1 | <1 | <10 | NA | 2.5 J | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| MW-EPA-4 | 10/18/2002 | NA | NA | NA | <1 | NA | <1 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | <1 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| MW-EPA-4 | 11/16/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| MW-EPA-4 | 4/6/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| Recovery Well | 7/29/2001 | <29 | NA | <29 | <29 | <29 | <29 | <29 | <290 | <140 | 1600 | <29 | <29 | <29 | <29 | 8.7 J | <57 | <29 | <14 | NA | <29 | <57 | <29 | NA | NA | <29 | <29 | <29 | <14 | <29 | <57 | <29 |
| UAW01-30 | 5/4/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | NA | <10 | <1 | <1 | <1 | <1 | 1.6 | <2 | <1 | <0.5 | <1 | <1 | 0.41 J | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW01-30 | 11/8/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | NA | <10 | <1 | <1 | <1 | <1 | 0.5 J | <2 | <1 | <0.5 | <1 | <1 | 0.38 J | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW01-30 | 10/17/2002 | NA | NA | NA | <1 | NA | <1 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | 0.47 J | <1 | <1 | NA | NA | NA | <1 | <1 | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| UAW01-30 | 11/11/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW01-30 | 3/24/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW01-80 | 5/4/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | NA | <10 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | 1.4 J | <1 |
| UAW01-80 | 10/10/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | NA | 1.2 J B | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | 2.1 | <1 |
| UAW01-80 | 11/12/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | NA | <10 | <1 | <1 | <1 | <1 | <1 | <3 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 0.23 J | <0.5 | <1 | 1.9 J | <1 |
| UAW01-80 | 10/17/2002 | NA | NA | NA | <1 | NA | <1 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | <1 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| UAW01-80 | 11/11/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | 2.5 | <1 |
| UAW01-80 | 3/24/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | 2.8 | <1 |
| UAW02-20 | 5/7/2001 | <1 | <1 | <1 | 0.74 J | <1 | 0.42 J | <1 | <10 | <10 | <10 | 0.49 J | <1 | <1 | <1 | 32 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW02-20 (Dup) | 5/7/2001 | <1.2 | <1.2 | <1.2 | 0.67 J | <1.2 | 0.44 J | <1.2 | <12 | NA | <12 | 0.47 J | <1.2 | <1.2 | <1.2 | 31 | <2.5 | <1.2 | <0.62 | <1.2 | <1.2 | <1.2 | <1.2 | <1.2 | <1.2 | <1.2 | <1.2 | <1.2 | <0.62 | <1.2 | <2.5 | <1.2 |
| UAW02-20 | 11/10/2001 | <1 | <1 | <1 | 0.21 J | <1 | <1 | <1 | <10 | NA | <10 | 0.6 J | <1 | <1 | <1 | 32 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 0.45 J | <0.5 | <1 | <2 | <1 |
| UAW02-20 | 10/17/2002 | NA | NA | NA | <1 | NA | <1 | NA | NA | NA | <10 | 0.37 J | <1 | NA | <1 | 17 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | <1 | <1 | NA | 0.39 J | NA | NA | NA | <1 |
| UAW02-20 | 11/12/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | <10 | <1 | <1 | <1 | <1 | 13 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW02-20 | 3/26/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | 12 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW02-40 | 5/7/2001 | <2.5 | <2.5 | <2.5 | 28 | 4.3 | <2.5 | 66 | <25 | NA | <25 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <5 | <2.5 | 62 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | 3.3 | <2.5 | <5 | <2.5 |
| UAW02-40 | 11/10/2001 | <2.5 | <2.5 | <2.5 | 27 | 4.5 | <2.5 | 63 | <25 | NA | 1.8 J B | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <5 | <2.5 | 59 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | 3.2 | <2.5 | <5 | <2.5 |
| UAW02-40 | 10/17/2002 | NA | NA | NA | 25 | NA | <2 | NA | NA | NA | <20 | <2 | <2 | NA | <2 | <2 | <2 | <2 | NA | NA | NA | <2 | <2 | NA | <2 | 1.4 J B | NA | <2 | NA | NA | NA | <2 |
| UAW02-40 | 11/12/2003 | <2 | <2 | <2 | 22 | 4.4 | <2 | NA | NA | NA | <20 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | 50 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | 2.9 | <2 | <2 | <2 |
| UAW02-40 | 3/26/2004 | <2 | <2 | <2 | 20 | 3.5 | <2 | NA | <20 | <20 | <20 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | 49 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | 3.2 | <2 | <2 | <2 |

# Table 5-8
## Summary of Volatile Organic Detections in Groundwater and Seep Samples
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | 1,1,1-Trichloroethane | 1,1,2-Trichloro-1,2,2-trifluoroethane | 1,1,2-Trichloroethane | 1,1-Dichloroethane | 1,1-Dichloroethene | 1,2-Dichloroethane | 1,2-Dichloroethene (total) | 2-Butanone | 4-Methyl-2-pentanone (MIBK) | Acetone | Benzene | Bromodichloromethane | Bromoform | Carbon disulfide | Chlorobenzene | Chloroethane | Chloroform | cis-1,2-Dichloroethene | Cyclohexane | Dibromochloromethane | Dichlorodifluoromethane | Ethylbenzene | Isopropylbenzene | Methylcyclohexane | Methylene chloride | Tetrachloroethene | Toluene | trans-1,2-Dichloroethene | Trichloroethene | Vinyl chloride | Xylenes (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW03-20 | 5/7/2001 | <1 | <1 | <1 | 0.84 J | <1 | 14 | <1 | <10 | <10 | 3.4 J | 1.2 | <1 | <1 | 1.5 | 8.6 | <2 | <1 | <0.5 | <1 | <1 | <1 | 0.55 J | <1 | 0.41 J | <1 | <1 | 12 | <0.5 | <1 | <2 | 2.5 |
| UAW03-20 | 11/11/2001 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | 1.2 J | <2.5 | <25 | NA | 3.8 J B | 1.4 J | <2.5 | <2.5 | <2.5 | 41 | <5 | <2.5 | <1.2 | 0.73 J | <2.5 | <2.5 | 1.6 J | 0.34 J | 2.6 | 1.3 J B | <2.5 | 3.6 | <1.2 | <2.5 | <5 | 4.5 |
| UAW03-20 | 10/23/2002 | NA | NA | NA | <6.7 | NA | <6.7 | NA | NA | NA | 12 J | <6.7 | <6.7 | NA | <6.7 | 55 | <6.7 | <6.7 | NA | NA | NA | <6.7 | <6.7 | NA | 3.4 J | 4.5 J | NA | <6.7 | NA | NA | NA | 5.9 J |
| UAW03-20 | 11/12/2003 | <10 | <10 | <10 | <10 | <10 | <10 | NA | NA | NA | <100 | <10 | <10 | <10 | <10 | 130 | <10 | <10 | <5 | <10 | <10 | <10 | <10 | <10 | 17 | <10 | <10 | <10 | <5 | <10 | <10 | <10 |
| UAW03-20 | 3/28/2004 | <13 | <13 | <13 | <13 | <13 | <13 | NA | <130 | <130 | <130 | <13 | <13 | <13 | <13 | 150 | <13 | <13 | <6.7 | <13 | <13 | <13 | <13 | <13 | <13 | <13 | <13 | <13 | <6.7 | <13 | <13 | <13 |
| UAW04-20 | 5/7/2001 | <1000 | <1000 | <1000 | <1000 | <1000 | <1000 | <1000 | <10000 | NA | <10000 | <1000 | <1000 | <1000 | <1000 | <1000 | <2000 | <1000 | <500 | <1000 | <1000 | <1000 | <1000 | <1000 | <1000 | <1000 | <1000 | 21000 | <500 | <1000 | <2000 | <1000 |
| UAW04-20 | 11/11/2001 | <250 | <250 | <250 | <250 | <250 | <250 | <250 | <2500 | NA | 590 J B | <250 | <250 | <250 | <250 | <250 | <500 | <250 | <120 | <250 | <250 | <250 | <250 | <250 | <250 | 200 J B | <250 | 8800 | <120 | <250 | <500 | <250 |
| UAW04-20 | 10/20/2002 | NA | NA | NA | <33 | NA | <33 | NA | NA | NA | 1300 B | <33 | <33 | NA | <33 | <33 | <33 | <33 | NA | NA | NA | <33 | <33 | NA | <33 | <33 | NA | 320 | NA | NA | NA | <33 |
| UAW04-20 | 11/12/2003 | <100 | <100 | <100 | <100 | <100 | <100 | NA | NA | NA | <1000 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <50 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | 3500 | <50 | <100 | <100 | <100 |
| UAW04-20 | 3/28/2004 | <1000 | <1000 | <1000 | <1000 | <1000 | <1000 | NA | <10000 | <10000 | <10000 | <1000 | <1000 | <1000 | <1000 | <1000 | <1000 | <1000 | <500 | <1000 | <1000 | <1000 | <1000 | <1000 | <1000 | <1000 | <1000 | 24000 | <500 | <1000 | <1000 | <1000 |
| UAW05-20 | 5/6/2001 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <400 | NA | <400 | <40 | <40 | <40 | <40 | 460 | <80 | <40 | <20 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <20 | <40 | <80 | <40 |
| UAW05-20 | 10/10/2001 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <400 | NA | 22 J B | <40 | <40 | <40 | <40 | 440 | <80 | <40 | <20 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <20 | <40 | <80 | <40 |
| UAW05-20 | 11/12/2001 | <22 | <22 | <22 | <22 | <22 | <22 | <22 | <220 | NA | <220 | <22 | <22 | <22 | <22 | 390 | <44 | <22 | <11 | <22 | <22 | <22 | 4 J | <22 | 3.5 J | <22 | <22 | <22 | <11 | <22 | <44 | 10 J |
| UAW05-20 | 10/20/2002 | NA | NA | NA | <25 | NA | <25 | NA | NA | NA | 49 J B | 14 J | <25 | NA | 6.7 J | 310 | <25 | <25 | NA | NA | NA | <25 | <25 | NA | <25 | 13 J B | NA | <25 | NA | NA | NA | <25 |
| UAW05-20 | 11/10/2003 | <25 | <25 | <25 | <25 | <25 | <25 | NA | NA | NA | <250 | <25 | <25 | <25 | <25 | 770 | <25 | <25 | <12 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <12 | <25 | <25 | <25 |
| UAW05-20 | 3/28/2004 | <20 | <20 | <20 | <20 | <20 | <20 | NA | <200 | <200 | <200 | <20 | <20 | <20 | <20 | 580 | <20 | <20 | <10 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <10 | <20 | <20 | <20 |
| UAW05-20 (Dup) | 3/28/2004 | <17 | <17 | <17 | <17 | <17 | <17 | NA | <170 | <170 | <170 | <17 | <17 | <17 | <17 | 540 | <17 | <17 | <8.3 | <17 | <17 | <17 | <17 | <17 | <17 | <17 | <17 | <17 | <8.3 | <17 | <17 | <17 |
| UAW06-20 | 5/6/2001 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <100 | <100 | 720 | <10 | <10 | <10 | <10 | 70 | <20 | <10 | <5 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <5 | <10 | <20 | <10 |
| UAW06-20 | 10/10/2001 | <170 | <170 | <170 | <170 | <170 | <170 | <170 | <1700 | NA | 11000 | <170 | <170 | <170 | <170 | 100 J | <330 | <170 | <83 | <170 | <170 | <170 | <170 | <170 | <170 | <170 | <170 | <170 | <83 | <170 | <330 | <170 |
| UAW06-20 | 11/13/2001 | <670 | <670 | <670 | <670 | <670 | <670 | <670 | 750 J B | NA | 45000 | <670 | <670 | <670 | <670 | 110 J | <1300 | <670 | <330 | <670 | <670 | <670 | <670 | <670 | <670 | <670 | <670 | <670 | <330 | <670 | <1300 | <670 |
| UAW06-20 | 10/20/2002 | NA | NA | NA | 2.2 J | NA | <2.5 | NA | NA | NA | 170 B | 1.2 J | <2.5 | NA | 1.8 J | 71 | <2.5 | <2.5 | NA | NA | NA | <2.5 | 1.3 J | NA | <2.5 | <2.5 | NA | 13 | NA | NA | NA | <2.5 |
| UAW06-20 | 11/12/2003 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | NA | NA | NA | <33 | <3.3 | <3.3 | <3.3 | <3.3 | 73 | <3.3 | <3.3 | <1.7 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | 3.8 | <1.7 | <3.3 | <3.3 | <3.3 |
| UAW06-20 | 3/29/2004 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | NA | <25 | <25 | <25 | <2.5 | <2.5 | <2.5 | <2.5 | 52 | <2.5 | <2.5 | <1.2 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <1.2 | <2.5 | <2.5 | <2.5 |
| UAW07-20 | 5/8/2001 | <2 | NA | <2 | 1.6 J | <2 | <2 | <2 | <20 | NA | <20 | 2.1 | <2 | <2 | 2.4 | 39 | <4 | <2 | <1 | NA | <2 | <4 | 4.4 | NA | NA | <2 | <2 | 3.5 | <1 | <2 | <4 | 13 |
| UAW07-20 (Dup) | 5/8/2001 | <2.5 | NA | <2.5 | 1.5 J | <2.5 | <2.5 | <2.5 | <25 | NA | <25 | 1.8 J | <2.5 | <2.5 | 1.1 J | 38 | <5 | <2.5 | <1.2 | NA | <2.5 | <5 | 4.3 | NA | NA | <2.5 | <2.5 | 3.6 | <1.2 | <2.5 | <5 | 13 |
| UAW07-20 | 11/15/2001 | <2 | NA | <2 | 1.2 J | <2 | <2 | <2 | NA | <10 | 3.3 J B | 5.2 | <2 | <2 | <2 | 64 | <4 | <2 | <1 | NA | <2 | <4 | 5.6 | NA | NA | 2.3 B | <2 | 1.2 J | <1 | <2 | <4 | 13 |
| UAW07-20 | 10/20/2002 | NA | NA | NA | <2.5 | NA | <2.5 | NA | NA | NA | 4.8 J | 5.8 | <2.5 | NA | 0.67 J | 71 | <2.5 | <2.5 | NA | NA | NA | <2.5 | 2.2 J | NA | <2.5 | 1.4 J B | NA | <2.5 | NA | NA | NA | 7.6 |
| UAW07-20 | 11/12/2003 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | NA | NA | NA | <33 | 4.1 | <3.3 | <3.3 | <3.3 | 91 | <3.3 | <3.3 | <1.7 | <3.3 | <3.3 | <3.3 | <3.3 | 3.4 | <3.3 | <3.3 | <3.3 | <3.3 | <1.7 | <3.3 | <3.3 | 5.6 |
| UAW07-20 DUP | 11/12/2003 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | <3.3 | NA | NA | NA | <33 | 4.1 | <3.3 | <3.3 | <3.3 | 93 | <3.3 | <3.3 | <1.7 | <3.3 | <3.3 | <3.3 | <3.3 | 3.3 | <3.3 | <3.3 | <3.3 | <3.3 | <1.7 | <3.3 | <3.3 | 5.7 |
| UAW07-20 | 4/5/2004 | <2 | <2 | <2 | <2 | <2 | <2 | NA | <20 | <20 | <20 | 3.4 | <2 | <2 | <2 | 69 | <2 | <2 | <1 | <2 | <2 | <2 | 2.7 | <2 | <2 | <2 | <2 | <2 | <1 | <2 | <2 | 5 |
| UAW08-20 | 5/6/2001 | <33 | NA | <33 | <33 | <33 | <33 | <33 | <330 | NA | 150 J | 41 | <33 | <33 | 20 J | 37 | <67 | <33 | <17 | NA | <33 | <67 | 32 J | NA | NA | <33 | <33 | 1100 | <17 | <33 | <67 | 140 |
| UAW08-20 | 11/13/2001 | <100 | NA | <100 | <100 | <100 | <100 | <100 | 130 J B | <500 | 580 J | 110 | <100 | <100 | 64 J | 61 J | <200 | <100 | <50 | NA | <100 | <200 | 57 J | NA | NA | 42 J B | <100 | 1400 | <50 | <100 | <200 | 190 |
| UAW08-20 | 10/20/2002 | NA | NA | NA | <33 | NA | <33 | NA | NA | NA | 250 J B | 110 | <33 | NA | 46 | 48 | <33 | <33 | NA | NA | NA | <33 | 40 | NA | <33 | 15 J B | NA | 1100 | NA | NA | NA | 180 |
| UAW08-20 | 11/10/2003 | <40 | <40 | <40 | <40 | <40 | <40 | NA | NA | NA | <400 | 120 | <40 | <40 | <40 | 54 | <40 | <40 | <20 | <40 | <40 | <40 | 44 | <40 | <40 | <40 | <40 | 1000 | <20 | <40 | <40 | 190 |
| UAW08-20 | 3/29/2004 | <50 | <50 | <50 | <50 | <50 | <50 | NA | <500 | <500 | <500 | 92 | <50 | <50 | 51 | 61 | <50 | <50 | <25 | <50 | <50 | <50 | 54 | <50 | <50 | <50 | <50 | 1200 | <25 | <50 | <50 | 230 |
| UAW09-20 | 5/5/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | NA | <10 | <1 | 0.49 J | <1 | <1 | <1 | <2 | 0.4 J | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW09-20 | 11/9/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | NA | <10 | <1 | 0.2 J | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | 0.28 J B | <2 | <1 |
| UAW09-20 | 10/16/2002 | NA | NA | NA | <1 | NA | <1 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | <1 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| UAW09-20 | 11/11/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW09-20 | 4/6/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW09-60 | 5/5/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | NA | <10 | <1 | <1 | <1 | <1 | <1 | <2 | 0.4 J | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW09-60 | 11/9/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | NA | <10 | <1 | <1 | <1 | <1 | <1 | <2 | 0.32 J | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | 0.27 J B | <2 | <1 |
| UAW09-60 | 10/16/2002 | NA | NA | NA | <1 | NA | <1 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | <1 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| UAW09-60 | 11/11/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW09-60 | 4/6/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |

# Table 5-8
## Summary of Volatile Organic Detections in Groundwater and Seep Samples
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | 1,1,1-Trichloroethane | 1,1,2-Trichloro-1,2,2-trifluoroethane | 1,1,2-Trichloroethane | 1,1-Dichloroethane | 1,1-Dichloroethene | 1,2-Dichloroethane | 1,2-Dichloroethene (total) | 2-Butanone | 4-Methyl-2-pentanone (MIBK) | Acetone | Benzene | Bromodichloromethane | Bromoform | Carbon disulfide | Chlorobenzene | Chloroethane | Chloroform | cis-1,2-Dichloroethene | Cyclohexane | Dibromochloromethane | Dichlorodifluoromethane | Ethylbenzene | Isopropylbenzene | Methylcyclohexane | Methylene chloride | Tetrachloroethene | Toluene | trans-1,2-Dichloroethene | Trichloroethene | Vinyl chloride | Xylenes (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW10-50 | 10/12/2001 | 36 | 2.1 | 1.9 J | 12 | 3.4 | 54 | 55 | <20 | NA | 1.1 J | <2 | <2 | <2 | <2 | <2 | <4 | 20 | 54 | <2 | <2 | <2 | <2 | <2 | <2 | 2.1 | 0.48 J | <2 | 0.87 J | 3.6 | 0.43 J | <2 |
| UAW10-50 | 11/13/2001 | 32 | 1.5 J | 1.4 J | 12 | 1.6 J | 45 | 47 | 5.3 J B | NA | 3 J | <4 | <4 | <4 | <4 | <4 | <8 | 35 | 46 | <4 | <4 | <4 | <4 | <4 | <4 | 3.5 J B | <4 | <4 | 0.75 J | 2.8 J | <8 | <4 |
| UAW10-50 | 10/19/2002 | NA | NA | NA | 13 | NA | 23 | NA | NA | NA | 1.9 J | <1.4 | <1.4 | NA | <1.4 | <1.4 | 0.44 J | 13 | NA | NA | NA | <1.4 | <1.4 | NA | <1.4 | 0.91 J B | NA | <1.4 | NA | NA | NA | <1.4 |
| UAW10-50 | 11/10/2003 | 14 | 1.7 | <1.4 | 14 | 1.7 | 10 | NA | NA | NA | <14 | <1.4 | <1.4 | <1.4 | <1.4 | <1.4 | <1.4 | 24 | 38 | <1.4 | <1.4 | <1.4 | <1.4 | <1.4 | <1.4 | <1.4 | <1.4 | <1.4 | 0.97 | 1.7 | <1.4 | <1.4 |
| UAW10-50 | 3/30/2004 | 16 | <10 | <10 | 13 | <10 | 380 | NA | <100 | <100 | <100 | <10 | <10 | <10 | <10 | <10 | <10 | 68 | 59 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <5 | <10 | <10 | <10 |
| UAW10-80 | 10/12/2001 | <67 | <67 | <67 | <67 | <67 | 2200 | <67 | <670 | NA | 35 J | <67 | <67 | <67 | <67 | <67 | <130 | 24 J | <33 | <67 | <67 | <67 | <67 | <67 | <67 | 240 | <67 | <67 | <33 | <67 | 23 J | <67 |
| UAW10-80 | 11/13/2001 | <170 | <170 | <170 | <170 | <170 | 3500 | <170 | 190 J B | NA | <1700 | <170 | <170 | <170 | <170 | <170 | <330 | <170 | <83 | <170 | <170 | <170 | <170 | <170 | <170 | 81 J B | <170 | <170 | <83 | <170 | <330 | <170 |
| UAW10-80 | 10/19/2002 | NA | NA | NA | <6.7 | NA | 67 | NA | NA | NA | 12 J | <6.7 | <6.7 | NA | <6.7 | <6.7 | <6.7 | <6.7 | NA | NA | NA | <6.7 | <6.7 | NA | <6.7 | 3.1 J B | NA | <6.7 | NA | NA | NA | <6.7 |
| UAW10-80 | 11/13/2003 | <22 | <22 | <22 | <22 | <22 | 530 | NA | NA | NA | <220 | <22 | <22 | <22 | <22 | <22 | <22 | <22 | <11 | <22 | <22 | <22 | <22 | <22 | <22 | <22 | <22 | <22 | <11 | <22 | <22 | <22 |
| UAW10-80 | 3/30/2004 | <2 | <2 | <2 | <2 | <2 | 63 | NA | <20 | <20 | <20 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <1 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <1 | <2 | <2 | <2 |
| UAW11-10 | 5/8/2001 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <5000 | NA | 32000 | <500 | <500 | <500 | 270 J | <500 | <1000 | <500 | <250 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <250 | <500 | <1000 | <500 |
| UAW11-10 | 11/10/2001 | <250 | <250 | <250 | <250 | <250 | <250 | <250 | <2500 | NA | 14000 | <250 | <250 | <250 | <250 | <250 | <500 | <250 | <120 | <250 | <250 | <250 | <250 | <250 | <250 | 190 J B | <250 | <250 | <120 | <250 | <500 | <250 |
| UAW11-10 | 10/18/2002 | NA | NA | NA | <20 | NA | <20 | NA | NA | NA | 1100 | <20 | <20 | NA | <20 | 32 | <20 | <20 | NA | NA | NA | <20 | <20 | NA | <20 | 20 B | NA | <20 | NA | NA | NA | <20 |
| UAW11-10 | 11/16/2003 | <7.1 | <7.1 | <7.1 | <7.1 | <7.1 | <7.1 | NA | NA | NA | 350 | <7.1 | <7.1 | <7.1 | <7.1 | 17 | <7.1 | <7.1 | <3.6 | <7.1 | <7.1 | <7.1 | <7.1 | <7.1 | <7.1 | <7.1 | <7.1 | <7.1 | <3.6 | <7.1 | <7.1 | <7.1 |
| UAW11-10 | 4/6/2004 | <40 | <40 | <40 | <40 | <40 | <40 | NA | <400 | <400 | 2000 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <20 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <20 | <40 | <40 | <40 |
| UAW11-40 | 5/8/2001 | 15 | <5 | <5 | 10 | <5 | 160 | 12 | <50 | NA | <50 | <5 | <5 | <5 | <5 | 3 J | <10 | 2.1 J | 12 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | 14 | <5 | <2.5 | 2.5 J | <10 | <5 |
| UAW11-40 | 11/12/2001 | 13 | <5 | <5 | 9.5 | <5 | 130 | 12 | <50 | NA | 6.6 J B | <5 | <5 | <5 | <5 | 3.2 J | <10 | 3.5 J | 12 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | 16 | <5 | <2.5 | 2.6 J | <10 | <5 |
| UAW11-40 | 10/18/2002 | NA | NA | NA | 7 | NA | 26 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | 3.6 | <1 | 1.7 | NA | NA | NA | <1 | <1 | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| UAW11-40 | 11/16/2003 | 8.1 | <1 | <1 | 4.8 | <1 | 11 | NA | NA | NA | <10 | <1 | <1 | <1 | <1 | 2.4 | <1 | <1 | 5.8 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 21 | <1 | <0.5 | 2.1 | <1 | <1 |
| UAW11-40 | 4/6/2004 | 6.9 | <1 | <1 | 4.5 | <1 | 7.3 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | 2.4 | <1 | <1 | 5.2 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 20 | <1 | <0.5 | 2.2 | <1 | <1 |
| UAW11-40 (Dup) | 4/6/2004 | 6.6 | <1 | <1 | 4.5 | <1 | 7.2 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | 2.3 | <1 | <1 | 5.1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 21 | <1 | <0.5 | 2.1 | <1 | <1 |
| UAW12-20 | 5/6/2001 | <56 | NA | <56 | <56 | <56 | <56 | <56 | <560 | NA | <560 | <56 | <56 | <56 | <56 | 920 | <110 | <56 | <28 | NA | <56 | <110 | <56 | NA | NA | <56 | <56 | <56 | <28 | <56 | <110 | <56 |
| UAW12-20 | 11/15/2001 | <50 | NA | <50 | <50 | <50 | <50 | <50 | NA | <250 | <500 | <50 | <50 | <50 | <50 | 1400 | <100 | <50 | <25 | NA | <50 | <100 | <50 | NA | NA | 79 B | <50 | <50 | <25 | <50 | <100 | <50 |
| UAW12-20 | 10/20/2002 | NA | NA | NA | <50 | NA | <50 | NA | NA | NA | 97 J | <50 | <50 | NA | <50 | 1300 | <50 | <50 | NA | NA | NA | <50 | <50 | NA | <50 | 16 J B | NA | <50 | NA | NA | NA | <50 |
| UAW12-20 | 11/12/2003 | <67 | <67 | <67 | <67 | <67 | <67 | NA | NA | NA | <670 | <67 | <67 | <67 | <67 | 1100 | <67 | <67 | <33 | <67 | <67 | <67 | <67 | <67 | <67 | <67 | <67 | <67 | <33 | <67 | <67 | <67 |
| UAW12-20 | 3/28/2004 | <56 | <56 | <56 | <56 | <56 | <56 | NA | <560 | <560 | <560 | <56 | <56 | <56 | <56 | 1400 | <56 | <56 | <28 | <56 | <56 | <56 | <56 | <56 | <56 | <56 | <56 | <56 | <28 | <56 | <56 | <56 |
| UAW13-20 | 5/6/2001 | <10 | NA | <10 | 4.9 J | <10 | <10 | <10 | <100 | <50 | 180 | 21 | <10 | <10 | 170 | 20 | <20 | <10 | 1.7 J | NA | <10 | <20 | <10 | NA | NA | <10 | <10 | 250 | <5 | <10 | <20 | 5.4 J |
| UAW13-20 | 11/15/2001 | <17 | NA | <17 | <17 | <17 | <17 | <17 | 38 J | 22 J | 450 B | 20 | <17 | <17 | 140 | 31 | <33 | <17 | <8.3 | NA | <17 | <33 | 4.1 J | NA | NA | 25 B | <17 | 350 | <8.3 | <17 | <33 | 9.1 J |
| UAW13-20 | 10/23/2002 | NA | NA | NA | <40 | NA | <40 | NA | NA | NA | 300 J | 18 J | <40 | NA | 410 | 38 J | <40 | <40 | NA | NA | NA | <40 | <40 | NA | <40 | 22 J | NA | 1400 | NA | NA | NA | <40 |
| UAW13-20 | 11/12/2003 | <10 | <10 | <10 | <10 | <10 | <10 | NA | NA | NA | 190 | 19 | <10 | <10 | 120 | 29 | <10 | <10 | <5 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 210 | <5 | <10 | <10 | <10 |
| UAW13-20 | 3/28/2004 | <20 | <20 | <20 | <20 | <20 | <20 | NA | <200 | <200 | <200 | <20 | <20 | <20 | 150 | 28 | <20 | <20 | <10 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | 97 | <10 | <20 | <20 | <20 |
| UAW14-10 | 5/5/2001 | <1 | <1 | <1 | <1 | <1 | 0.67 J | <1 | <10 | NA | <10 | <1 | <1 | <1 | <1 | <1 | <2 | 0.37 J | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW14-10 | 11/9/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | NA | <10 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | 0.31 J B | <2 | <1 |
| UAW14-10 | 10/16/2002 | NA | NA | NA | <1 | NA | <1 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | <1 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| UAW14-10 | 11/16/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW14-10 | 4/5/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW15-20 | 5/6/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <2 | 3.1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW15-20 | 11/11/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | NA | <10 | <1 | <1 | <1 | <1 | <1 | <2 | 14 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 5.8 | <0.5 | <1 | <2 | <1 |
| UAW15-20 | 10/18/2002 | NA | NA | NA | <1 | NA | <1 | NA | NA | NA | <10 | <1 | <1 | NA | 0.24 J | <1 | <1 | 5.6 | NA | NA | NA | <1 | <1 | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| UAW15-20 | 11/17/2003 | <8 | <8 | <8 | <8 | <8 | <8 | NA | NA | NA | <80 | <8 | <8 | <8 | <8 | <8 | <8 | 190 | <4 | <8 | <8 | <8 | <8 | <8 | <8 | <8 | <8 | <8 | <4 | <8 | <8 | <8 |
| UAW15-20 | 4/7/2004 | <5 | <5 | <5 | <5 | <5 | <5 | NA | <50 | <50 | <50 | <5 | <5 | <5 | <5 | <5 | <5 | 120 | <2.5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <2.5 | <5 | <5 | <5 |
| UAW15-50 | 5/6/2001 | <120 | <120 | <120 | <120 | <120 | <120 | <120 | <1200 | <1200 | 7300 | <120 | <120 | <120 | <120 | <120 | <250 | <120 | <62 | <120 | <120 | <120 | <120 | <120 | <120 | <120 | <120 | 230 | <62 | <120 | <250 | <120 |
| UAW15-50 | 11/11/2001 | <170 | <170 | <170 | <170 | <170 | <170 | <170 | <1700 | NA | 10000 | <170 | <170 | <170 | <170 | 25 J | <330 | <170 | <83 | <170 | <170 | <170 | <170 | <170 | <170 | 110 J B | <170 | 200 | <83 | <170 | <330 | <170 |
| UAW15-50 | 10/18/2002 | NA | NA | NA | <10 | NA | <10 | NA | NA | NA | 280 | <10 | <10 | NA | <10 | 23 | <10 | <10 | NA | NA | NA | <10 | <10 | NA | <10 | 6.3 J B | NA | 140 | NA | NA | NA | <10 |
| UAW15-50 | 11/17/2003 | <12 | <12 | <12 | <12 | <12 | <12 | NA | NA | NA | <120 | <12 | <12 | <12 | <12 | 21 | <12 | <12 | <6.2 | <12 | <12 | <12 | <12 | <12 | <12 | <12 | <12 | 87 | <6.2 | <12 | <12 | <12 |

**Table 5-8**
**Summary of Volatile Organic Detections in**
**Groundwater and Seep Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | 1,1,1-Trichloroethane | 1,1,2-Trichloro-1,2,2-trifluoroethane | 1,1,2-Trichloroethane | 1,1-Dichloroethane | 1,1-Dichloroethene | 1,2-Dichloroethane | 1,2-Dichloroethene (total) | 2-Butanone | 4-Methyl-2-pentanone (MIBK) | Acetone | Benzene | Bromodichloromethane | Bromoform | Carbon disulfide | Chlorobenzene | Chloroethane | Chloroform | cis-1,2-Dichloroethene | Cyclohexane | Dibromochloromethane | Dichlorodifluoromethane | Ethylbenzene | Isopropylbenzene | Methylcyclohexane | Methylene chloride | Tetrachloroethene | Toluene | trans-1,2-Dichloroethene | Trichloroethene | Vinyl chloride | Xylenes (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW15-50 | 4/7/2004 | <20 | <20 | <20 | <20 | <20 | <20 | NA | <200 | <200 | <200 | <20 | <20 | <20 | <20 | 34 | <20 | <20 | <10 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | 200 | <10 | <20 | <20 | <20 |
| UAW16-10 | 10/12/2001 | <120 | <120 | <120 | <120 | <120 | <120 | <120 | <1200 | NA | 8000 | <120 | <120 | <120 | <120 | 23 J | <250 | <120 | <62 | <120 | <120 | <120 | <120 | <120 | <120 | <120 | <120 | <120 | <62 | <120 | <250 | <120 |
| UAW16-10 (Dup) | 10/12/2001 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <1000 | NA | 6500 | <100 | <100 | <100 | <100 | 24 J | <200 | <100 | <50 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <50 | <100 | <200 | <100 |
| UAW16-10 | 11/13/2001 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <1000 | NA | 6100 | <100 | <100 | <100 | <100 | 23 J | <200 | <100 | <50 | <100 | <100 | <100 | <100 | <100 | <100 | 57 J B | <100 | <100 | <50 | <100 | <200 | <100 |
| UAW16-10 | 10/18/2002 | NA | NA | NA | <1 | NA | <1 | NA | NA | NA | 3.7 J | 0.58 J | <1 | NA | <1 | 21 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | 1.8 | <1 | NA | 1.1 | NA | NA | NA | <1 |
| UAW16-10 | 11/16/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | <10 | <1 | <1 | <1 | <1 | 17 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW16-10 (Dup) | 11/17/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | <10 | <1 | <1 | <1 | <1 | 17 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW16-10 | 4/7/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | 11 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW17-40 | 5/5/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | NA | <10 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW17-40 | 11/9/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | NA | <10 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | 0.24 J B | <2 | <1 |
| UAW17-40 | 10/16/2002 | NA | NA | NA | <1 | <1 | <1 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | <1 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | <1 | <1 | NA | <1 | NA | <1 | NA | <1 |
| UAW17-40 | 11/16/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW17-40 | 3/31/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW18-20 | 10/12/2001 | <1 | <1 | <1 | 0.29 J | <1 | <1 | <1 | 0.42 J | NA | 1.4 J | <1 | <1 | <1 | 5.7 | 2.2 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 0.22 J | <0.5 | <1 | <2 | <1 |
| UAW18-20 | 11/13/2001 | <2 | <2 | <2 | 0.49 J | <2 | <2 | <2 | 1.4 J B | NA | 4.5 J | <2 | <2 | <2 | 1.9 J | 1.7 J | <4 | <2 | <1 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <1 | <2 | <4 | <2 |
| UAW18-20 | 10/18/2002 | NA | NA | NA | 0.54 J | NA | <1 | NA | NA | NA | <10 | <1 | <1 | NA | 0.7 J | 2.3 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| UAW18-20 | 11/16/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | <10 | <1 | <1 | <1 | <1 | 2.1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW18-20 | 4/7/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | 1.7 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW19-80 | 5/6/2001 | <1.7 | <1.7 | <1.7 | 5.7 | <1.7 | 45 | 1.3 J | <17 | NA | <17 | <1.7 | <1.7 | <1.7 | <1.7 | <1.7 | <3.3 | 19 | 1.3 | <1.7 | <1.7 | <1.7 | <1.7 | <1.7 | <1.7 | 0.56 J | <1.7 | <1.7 | <0.84 | <1.7 | <3.3 | <1.7 |
| UAW19-80 | 11/12/2001 | 0.25 J | <1 | <1 | 4.8 | 0.29 J | 33 | 1.3 | <10 | NA | 1.3 J B | <1 | <1 | <1 | <1 | <1 | <2 | 12 | 1.3 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 0.36 J | <0.5 | <1 | <2 | <1 |
| UAW19-80 (Dup) | 11/12/2001 | 13 | <5 | <5 | 9.8 | <5 | 140 | 13 | <50 | NA | 6.3 J B | <5 | <5 | <5 | <5 | 3.3 J | <10 | 3.7 J | 13 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | 15 | <5 | <2.5 | 2.7 J | <10 | <5 |
| UAW19-80 | 10/17/2002 | NA | NA | NA | 8.4 | NA | 26 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | <1 | <1 | 6 | NA | NA | NA | <1 | <1 | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| UAW19-80 (Dup) | 10/17/2002 | NA | NA | NA | 8.1 | NA | 25 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | <1 | <1 | 5.7 | NA | NA | NA | <1 | <1 | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| UAW19-80 | 11/13/2003 | 1.9 | <1 | <1 | 11 | <1 | 26 | NA | NA | NA | <10 | <1 | <1 | <1 | <1 | <1 | <1 | 1.2 | 5.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW19-80 | 3/30/2004 | 2.5 | <1 | <1 | 14 | 1.3 | 24 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | 1.1 | 6.8 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW20-60 | 5/7/2001 | 83 | 3.7 J | 3.4 J | 55 | 11 | 300 | 110 | <100 | NA | <100 | <10 | <10 | <10 | <10 | <10 | <20 | 40 | 100 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 17 | <10 | 2 J | 6.4 J | <20 | <10 |
| UAW20-60 | 11/14/2001 | 94 | 4.5 J | 4.2 J | 52 | 10 J | 310 | 95 | <110 | NA | 7.8 J | <11 | <11 | <11 | <11 | <11 | <22 | 39 | 92 | <11 | <11 | <11 | <11 | <11 | <11 | 8 J B | 20 | <11 | 2.5 J | 7 J | <22 | <11 |
| UAW20-60 (Dup) | 11/14/2001 | 98 | 4.8 J | <11 | 58 | 11 | 320 | 100 | <110 | NA | <110 | <11 | <11 | <11 | <11 | <11 | <22 | 41 | 99 | <11 | <11 | <11 | <11 | <11 | <11 | 7.8 J B | 20 | <11 | 1.8 J | 7.9 J | <22 | <11 |
| UAW20-60 | 10/19/2002 | NA | NA | NA | 38 | NA | 410 | NA | NA | NA | 21 J | <12 | <12 | NA | <12 | <12 | 4.4 J | 35 | NA | NA | NA | <12 | <12 | NA | <12 | 5.3 J B | NA | <12 | NA | NA | NA | <12 |
| UAW20-60 (Dup) | 10/19/2002 | NA | NA | NA | 35 | NA | 380 | NA | NA | NA | 28 J | <15 | <15 | NA | <15 | <15 | <15 | 31 | NA | NA | NA | <15 | <15 | NA | <15 | 6.7 J B | NA | <15 | NA | NA | NA | <15 |
| UAW20-60 | 11/13/2003 | 69 | <22 | <22 | 32 | <22 | 560 | NA | NA | NA | <220 | <22 | <22 | <22 | <22 | <22 | <22 | 65 | 73 | <22 | <22 | <22 | <22 | <22 | <22 | <22 | 32 | <22 | <11 | <22 | <22 | <22 |
| UAW20-60 | 3/30/2004 | 39 | <33 | <33 | <33 | <33 | 730 | NA | <330 | <330 | <330 | <33 | <33 | <33 | <33 | <33 | <33 | 53 | 57 | <33 | <33 | <33 | <33 | <33 | <33 | <33 | <33 | <33 | <17 | <33 | <33 | <33 |
| UAW21-30 | 5/5/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | NA | <10 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW21-30 | 11/11/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | NA | 0.8 J B | <1 | <1 | <1 | <1 | <1 | <2 | 0.23 J | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW21-30 | 10/18/2002 | NA | NA | NA | <1 | NA | <1 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | <1 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| UAW21-30 | 11/11/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW21-30 | 3/27/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW21-80 | 5/5/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | NA | <10 | <1 | <1 | <1 | <1 | <1 | <2 | 0.43 J | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW21-80 | 11/11/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | NA | 1.3 J B | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW21-80 | 10/18/2002 | NA | NA | NA | <1 | NA | <1 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | <1 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| UAW21-80 | 11/11/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW21-80 | 3/27/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW22-20 | 10/13/2001 | <2.5 | <2.5 | <2.5 | 53 | <2.5 | 2.5 | 6.9 | <25 | NA | 6.2 J B | 1.3 J | <2.5 | <2.5 | <2.5 | 29 | <5 | <2.5 | 6.9 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | 1.6 J B | <2.5 | 0.92 J | <1.2 | 0.39 J | 14 | <2.5 |
| UAW22-20 | 11/13/2001 | <6.9 | <6.9 | <6.9 | 66 | <6.9 | 2.3 J | 16 | 10 J B | NA | 5.3 J | 2.2 J | <6.9 | <6.9 | <6.9 | 38 | <14 | <6.9 | 16 | <6.9 | <6.9 | <6.9 | <6.9 | <6.9 | <6.9 | 4.4 J B | <6.9 | 1.3 J | <3.4 | 2 J | 15 | <6.9 |
| UAW22-20 | 10/20/2002 | NA | NA | NA | <50 | NA | <50 | NA | NA | NA | 3700 B | <50 | <50 | NA | <50 | 95 | <50 | <50 | NA | NA | NA | <50 | <50 | NA | <50 | 32 J | NA | <50 | NA | NA | NA | <50 |

# Table 5-8
## Summary of Volatile Organic Detections in Groundwater and Seep Samples
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | 1,1,1-Trichloroethane | 1,1,2-Trichloro-1,2,2-trifluoroethane | 1,1,2-Trichloroethane | 1,1-Dichloroethane | 1,1-Dichloroethene | 1,2-Dichloroethane | 1,2-Dichloroethene (total) | 2-Butanone | 4-Methyl-2-pentanone (MIBK) | Acetone | Benzene | Bromodichloromethane | Bromoform | Carbon disulfide | Chlorobenzene | Chloroethane | Chloroform | cis-1,2-Dichloroethene | Cyclohexane | Dibromochloromethane | Dichlorodifluoromethane | Ethylbenzene | Isopropylbenzene | Methylcyclohexane | Methylene chloride | Tetrachloroethene | Toluene | trans-1,2-Dichloroethene | Trichloroethene | Vinyl chloride | Xylenes (total) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW22-20 | 11/10/2003 | <2 | <2 | <2 | 12 | <2 | 2.7 | NA | NA | NA | <20 | <2 | <2 | <2 | <2 | 65 | <2 | <2 | 2.8 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <1 | <2 | 7.5 | <2 |
| UAW22-20 | 3/29/2004 | <1 | <1 | <1 | 8.1 | <1 | 2 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | 34 | <1 | <1 | 1.6 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | 3.3 | <1 |
| UAW23-20 | 10/12/2001 | 51 | <20 | 6.3 J | 20 | <20 | 660 | 25 | <200 | NA | 11 J | <20 | <20 | <20 | <20 | <20 | <40 | 67 | 25 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | 82 | <20 | <10 | 8.4 J | <40 | <20 |
| UAW23-20 | 11/14/2001 | 50 | <20 | <20 | 17 J | <20 | 510 | 21 | <200 | NA | <200 | <20 | <20 | <20 | <20 | <20 | <40 | 60 | 21 | <20 | <20 | <20 | <20 | <20 | <20 | 15 J B | 61 | <20 | <10 | 8.8 J | <40 | <20 |
| UAW23-20 | 10/19/2002 | NA | NA | NA | 11 | <1.2 | 34 | NA | NA | NA | <12 | <1.2 | <1.2 | NA | <1.2 | <1.2 | <1.2 | 31 | NA | NA | NA | <1.2 | <1.2 | NA | <1.2 | 0.45 J B | NA | <1.2 | NA | 7.2 | NA | <1.2 |
| UAW23-20 | 11/13/2003 | 22 | 2.2 | 2.9 | 10 | <1.7 | 20 | NA | NA | NA | <17 | <1.7 | <1.7 | <1.7 | <1.7 | <1.7 | <1.7 | 7.7 | 11 | <1.7 | <1.7 | <1.7 | <1.7 | <1.7 | <1.7 | <1.7 | 40 | <1.7 | <0.84 | 5 | <1.7 | <1.7 |
| UAW23-20 | 3/28/2004 | 20 | 2.4 | 2.6 | 10 | <1.4 | 21 | NA | <14 | <14 | <14 | <1.4 | <1.4 | <1.4 | <1.4 | <1.4 | <1.4 | 8 | 10 | <1.4 | <1.4 | <1.4 | <1.4 | <1.4 | <1.4 | <1.4 | 39 | <1.4 | 0.84 | 4.5 | <1.4 | <1.4 |
| UAW24-70 | 10/13/2001 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <10 | NA | <10 | <1 | <1 | <1 | <1 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW24-70 | 11/15/2001 | <1 | <1 | <1 | <1 | <1 | 0.65 J | <1 | <10 | NA | 2.9 J B | <1 | <1 | <1 | 1.5 | <1 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <2 | <1 |
| UAW24-70 | 10/17/2002 | NA | NA | NA | <1 | NA | <1 | NA | NA | NA | <10 | <1 | <1 | NA | 0.55 J | <1 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | <1 | <1 | NA | 0.48 J | NA | NA | NA | <1 |
| UAW24-70 | 11/16/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW24-70 | 4/5/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW25-20 | 10/13/2001 | <1 | <1 | <1 | 0.28 J | <1 | <1 | <1 | 0.48 J | NA | 1.5 J B | 0.6 J | <1 | <1 | <1 | 9 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 0.61 J | <0.5 | <1 | <2 | <1 |
| UAW25-20 | 11/13/2001 | <1 | <1 | <1 | 0.17 J | <1 | <1 | <1 | <10 | | 2.3 J | 0.33 J | <1 | <1 | <1 | 11 | <2 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 0.77 J | <0.5 | <1 | <2 | <1 |
| UAW25-20 | 10/18/2002 | NA | NA | NA | 0.5 J | NA | <1 | NA | NA | NA | <10 | <1 | <1 | NA | <1 | 18 | <1 | <1 | NA | NA | NA | <1 | <1 | NA | <1 | <1 | NA | <1 | NA | NA | NA | <1 |
| UAW25-20 | 11/12/2003 | <1 | <1 | <1 | <1 | <1 | <1 | NA | NA | NA | <10 | <1 | <1 | <1 | <1 | 11 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW25-20 | 3/27/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | 8 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| LAW05-60 | 3/16/2002 | <2.9 | NA | <2.9 | 46 | 9.8 | <2.9 | 68 | <29 | <14 | 5.5 J | <2.9 | <2.9 | <2.9 | <2.9 | <2.9 | <5.7 | 1 J | 64 | NA | <2.9 | <5.7 | <2.9 | NA | NA | <2.9 | <2.9 | <2.9 | 3.5 | <2.9 | 0.78 J | <2.9 |
| LAW05-150 | 3/16/2002 | <20 | NA | <20 | 25 | <20 | 450 | 30 | <200 | <100 | <200 | <20 | <20 | <20 | <20 | <20 | <40 | <20 | 26 | NA | <20 | <40 | <20 | NA | NA | <20 | <20 | <20 | 4 J | <20 | <40 | <20 |
| LAW05-150 (Dup) | 3/16/2002 | <20 | NA | <20 | 24 | <20 | 450 | 30 | <200 | <100 | <200 | <20 | <20 | <20 | <20 | <20 | <40 | <20 | 26 | NA | <20 | <40 | <20 | NA | NA | <20 | <20 | <20 | 4.6 J | <20 | <40 | <20 |
| LAW12-60 | 10/13/2001 | <1 | NA | <1 | 2.3 | <1 | 4.6 | 6 | <10 | NA | 0.55 J B | <1 | <1 | <1 | <1 | 0.14 J | <2 | <1 | 5.3 | NA | <1 | <2 | <1 | NA | NA | <1 | <1 | <1 | 0.73 | <1 | 0.2 J | <1 |
| LAW12-60 | 11/16/2001 | <1 | NA | <1 | 2.5 | <1 | 4.8 | 5.8 | NA | <5 | 1.5 J | <1 | <1 | <1 | <1 | <1 | <2 | <1 | 5.1 | NA | <1 | <2 | <1 | NA | NA | <1 | <1 | <1 | 0.68 | <1 | <2 | <1 |
| UAW26-70 | 4/6/2004 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| UAW27-50 | 3/31/2004 | <1 | <1 | <1 | 10 | <1 | <1 | NA | <10 | <10 | <10 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 5.2 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <0.5 | <1 | <1 | <1 |
| French Drain Sump @ 46 hr | 10/19/2002 | NA | NA | NA | <8 | NA | <8 | NA | NA | NA | 210 | <8 | <8 | NA | 2.1 J | 120 | <8 | <8 | NA | NA | NA | <8 | <8 | NA | <8 | 9.7 B | NA | 66 | NA | NA | NA | <8 |
| French Drain Sump @ 72 hr | 10/20/2002 | NA | NA | NA | <5 | NA | <5 | NA | NA | NA | 230 | 2.1 J | <5 | NA | 2.2 J | 110 | <5 | <5 | NA | NA | NA | <5 | 2.4 J | NA | <5 | 1.5 J B | NA | 60 | NA | NA | NA | 7.4 |
| **Seeps** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SS-1 (Seep) | 10/11/2001 | NA | NA | NA | 1 | NA | <1 | NA | NA | NA | 2.1 J B | 1.1 | <1 | NA | 0.97 J | 11 | <2 | <1 | NA | NA | NA | <1 | 0.39 J | NA | 0.49 J | <1 | NA | 0.45 J | NA | NA | NA | 1.7 |
| SS-5 (Seep) | 10/11/2001 | NA | NA | NA | 0.55 J | NA | <1.8 | NA | NA | NA | 3.1 J B | 0.92 J | <1.8 | NA | 1.1 J | 24 | <3.6 | <1.8 | NA | NA | NA | <1.8 | <1.8 | NA | 0.3 J | <1.8 | NA | 0.55 J | NA | NA | NA | <1.8 |

Notes:
J = Estimated result; result is less than reporting limit.
B = Method blank contamination. The associated method blank contains the target analyte at a reportable level.
NA indicates chemical was not on the target analyte list for that sample.
<5 = Indicates constituent not detected at or above indicated detection limit.
This table only includes target analytes detected in one or more Facility Investigation samples.
See Appendix B for the complete target analyte lists.

**Table 5-9**
**Summary of Semivolatile Organic Detections in**
**Groundwater and Seep Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | 1,1'-Biphenyl | 1,2,4-Trichlorobenzene | 1,2-Dichlorobenzene | 1,3-Dichlorobenzene | 1,4-Dichlorobenzene | 1,4-Dioxane | 2,4-Dichlorophenol | 2,4-Dimethylphenol | 2-Chlorophenol | 2-Methylphenol | 4-Methylphenol | Acenaphthene | Aniline | Benzaldehyde | bis(2-Ethylhexyl) phthalat | Butyl benzyl phthalate | Caprolactam | Di-n-octyl phthalate | Dimethyl phthalate | Fluorene | Phenol |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Groundwater** | | | | | | | | | | | | | | | | | | | | | | |
| MW-EPA-1 | 5/8/2001 | <120 | <120 | 940 | <120 | 160 | NA | <120 | <120 | <120 | <120 | <120 | <120 | NA | <120 | <120 | <120 | <120 | <120 | <120 | <120 | <120 |
| MW-EPA-1 | 11/15/2001 | <200 | <200 | 1700 | 35 J | 260 | NA | <200 | <200 | <200 | <200 | <200 | <200 | NA | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 |
| MW-EPA-1 | 10/20/2002 | NA | NA | 1900 | NA | 300 J | NA | NA | NA | NA | <1000 | <1000 | NA | <1000 | NA | <1000 | NA | NA | NA | NA | NA | NA |
| MW-EPA-1 | 11/12/2003 | <500 | <500 | 1700 | <500 | <500 | NA | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 |
| MW-EPA-1 | 3/28/2004 | <500 | <500 | 1300 | <500 | <500 | NA | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | NA | <500 | <500 |
| MW-EPA-2 | 5/8/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| MW-EPA-2 | 11/14/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| MW-EPA-2 | 10/20/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | NA | <10 | NA | NA | NA | NA | NA | NA |
| MW-EPA-2 | 11/11/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| MW-EPA-2 | 3/29/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 34 | <10 | <10 | <10 | NA | <10 | <10 |
| MW-EPA-3 | 5/6/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| MW-EPA-3 | 11/13/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| MW-EPA-3 | 10/17/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | NA | <10 | NA | NA | NA | NA | NA | NA |
| MW-EPA-3 | 11/13/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| MW-EPA-3 | 3/30/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 |
| MW-EPA-4 | 5/8/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| MW-EPA-4 | 11/13/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| MW-EPA-4 | 10/18/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | NA | <10 | NA | NA | NA | NA | NA | NA |
| MW-EPA-4 | 11/16/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| MW-EPA-4 | 4/6/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 |
| Recovery Well | 7/29/2001 | NA | <10 | 2.4 J | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 4.6 J | NA | <10 | <10 | NA | <10 | <10 | <10 | <10 |
| UAW01-30 | 5/4/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | 3.4 J | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW01-30 | 11/8/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW01-30 | 10/17/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | NA | <10 | NA | NA | NA | NA | NA | NA |
| UAW01-30 | 11/11/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW01-30 | 3/24/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 |
| UAW01-80 | 5/4/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW01-80 | 11/12/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW01-80 | 10/17/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | NA | <10 | NA | NA | NA | NA | NA | NA |
| UAW01-80 | 11/11/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW01-80 | 3/24/2004 | <67 | <67 | <67 | <67 | <67 | NA | <67 | <67 | <67 | <67 | <67 | <67 | <67 | <67 | <67 | <67 | <67 | <67 | NA | <67 | <67 |
| UAW02-20 | 5/7/2001 | <10 | <10 | 12 | <10 | 3.7 J | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW02-20 (Dup) | 5/7/2001 | <10 | <10 | 11 | <10 | 3.5 J | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW02-20 | 11/10/2001 | <10 | <10 | 12 | <10 | 4.1 J | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |

**Table 5-9**
**Summary of Semivolatile Organic Detections in**
**Groundwater and Seep Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | 1,1'-Biphenyl | 1,2,4-Trichlorobenzene | 1,2-Dichlorobenzene | 1,3-Dichlorobenzene | 1,4-Dichlorobenzene | 1,4-Dioxane | 2,4-Dichlorophenol | 2,4-Dimethylphenol | 2-Chlorophenol | 2-Methylphenol | 4-Methylphenol | Acenaphthene | Aniline | Benzaldehyde | bis(2-Ethylhexyl) phthalat | Butyl benzyl phthalate | Caprolactam | Di-n-octyl phthalate | Dimethyl phthalate | Fluorene | Phenol |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW02-20 | 10/17/2002 | NA | NA | 5.1 J | NA | 1.7 J | NA | NA | NA | NA | <10 | <10 | NA | <10 | NA | <10 | NA | NA | NA | NA | NA | NA |
| UAW02-20 | 11/12/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW02-20 | 3/26/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 |
| UAW02-40 | 5/7/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW02-40 | 11/10/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW02-40 | 10/17/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | NA | <10 | NA | NA | NA | NA | NA | NA |
| UAW02-40 | 11/12/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW02-40 | 3/26/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 |
| UAW03-20 | 5/7/2001 | <10 | <10 | 19 | <10 | 3.3 J | NA | <10 | <10 | <10 | <10 | 7.7 J # | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW03-20 | 11/11/2001 | <20 | <20 | 140 | 3.5 J | 19 J | NA | <20 | <20 | <20 | <20 | <20 | <20 | NA | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 |
| UAW03-20 | 10/23/2002 | NA | NA | 190 | NA | 27 J | NA | NA | NA | NA | <67 | <67 | NA | 11 J | NA | <67 | NA | NA | NA | NA | NA | NA |
| UAW03-20 | 11/12/2003 | <100 | <100 | 190 | <100 | <100 | NA | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 |
| UAW03-20 | 3/28/2004 | <100 | <100 | 360 | <100 | <100 | NA | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | NA | <100 | <100 |
| UAW04-20 | 5/7/2001 | <40 | <40 | <40 | <40 | <40 | NA | <40 | <40 | <40 | 140 | 150 # | <40 | NA | 53 | <40 | <40 | <40 | <40 | <40 | <40 | <40 |
| UAW04-20 | 11/11/2001 | <100 | <100 | <100 | <100 | <100 | NA | <100 | <100 | <100 | 47 J | 57 J # | <100 | NA | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 |
| UAW04-20 | 10/20/2002 | NA | NA | <120 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | 24 | NA | <10 | NA | NA | NA | NA | NA | NA |
| UAW04-20 | 11/12/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | 12 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW04-20 | 3/28/2004 | <50 | <50 | <50 | <50 | <50 | NA | <50 | <50 | <50 | 79 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | NA | <50 | <50 |
| UAW05-20 | 5/6/2001 | <100 | <100 | 880 | <100 | 120 | NA | <100 | <100 | <100 | <100 | <100 | <100 | NA | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 |
| UAW05-20 | 10/10/2001 | <10 | 2.4 J | 660 | 20 | 99 J | NA | 2.8 J | <10 | 6.3 J | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW05-20 | 11/12/2001 | <100 | <100 | 590 | 16 J | 82 J | NA | <100 | <100 | <100 | <100 | <100 | <100 | NA | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 |
| UAW05-20 | 10/20/2002 | NA | NA | 540 | NA | 82 J | NA | NA | NA | NA | <200 | <200 | NA | <200 | NA | <200 | NA | NA | NA | NA | NA | NA |
| UAW05-20 | 11/10/2003 | <50 | <50 | 200 | <50 | 63 | NA | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| UAW05-20 | 3/28/2004 | <25 | <25 | 91 | <25 | 44 | NA | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | NA | <25 | <25 |
| UAW05-20 (Dup) | 3/28/2004 | <40 | <40 | 95 | <40 | 47 | NA | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | NA | <40 | <40 |
| UAW06-20 | 5/6/2001 | <10 | <10 | 14 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW06-20 | 10/10/2001 | <25 | <25 | 16 J | <25 | <25 | NA | <25 | <25 | <25 | <25 | <25 | <25 | NA | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 |
| UAW06-20 | 11/13/2001 | 7.3 J | <25 | 25 | <25 | 4 J | NA | <25 | <25 | <25 | <25 | 5.4 J # | 6.4 J | NA | <25 | <25 | <25 | <25 | <25 | <25 | 5.9 J | <25 |
| UAW06-20 | 10/20/2002 | NA | NA | 18 J | NA | <50 | NA | NA | NA | NA | <50 | <50 | NA | 37 J | NA | <50 | NA | NA | NA | NA | NA | NA |
| UAW06-20 | 11/12/2003 | <100 | <100 | <100 | <100 | <100 | NA | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 |
| UAW06-20 | 3/29/2004 | <20 | <20 | 41 | <20 | <20 | NA | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | NA | <20 | <20 |
| UAW07-20 | 5/8/2001 | NA | <100 | 37 J | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | 150 | NA | <100 | <100 | NA | <100 | <100 | <100 | <100 |
| UAW07-20 (Dup) | 5/8/2001 | NA | <25 | 34 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | 44 | NA | <25 | <25 | NA | <25 | <25 | <25 | <25 |
| UAW07-20 | 10/20/2002 | NA | NA | 61 | NA | 7.2 J | NA | NA | NA | NA | <40 | <40 | NA | 9.1 J | NA | <40 | NA | NA | NA | NA | NA | NA |
| UAW07-20 | 11/12/2003 | 62 | <50 | 100 | <50 | <50 | NA | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 | <50 |
| UAW07-20 (Dup) | 11/12/2003 | 56 | <40 | 83 | <40 | <40 | NA | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 |

**Table 5-9**
**Summary of Semivolatile Organic Detections in**
**Groundwater and Seep Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | 1,1'-Biphenyl | 1,2,4-Trichlorobenzene | 1,2-Dichlorobenzene | 1,3-Dichlorobenzene | 1,4-Dichlorobenzene | 1,4-Dioxane | 2,4-Dichlorophenol | 2,4-Dimethylphenol | 2-Chlorophenol | 2-Methylphenol | 4-Methylphenol | Acenaphthene | Aniline | Benzaldehyde | bis(2-Ethylhexyl) phthalat | Butyl benzyl phthalate | Caprolactam | Di-n-octyl phthalate | Dimethyl phthalate | Fluorene | Phenol |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW07-20 | 4/5/2004 | <100 | <100 | <100 | <100 | <100 | NA | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | NA | <100 | <100 |
| UAW08-20 | 5/6/2001 | NA | <1700 | <1700 | <1700 | <1700 | <1700 | <1700 | <1700 | <1700 | <1700 | <1700 | <1700 | 12000 | NA | <1700 | <1700 | NA | <1700 | <1700 | <1700 | <1700 |
| UAW08-20 | 11/13/2001 | NA | <1300 | 530 J | <1300 | <1300 | <1300 | <1300 | <1300 | <1300 | <1300 | 330 J # | <1300 | 12000 | NA | <1300 | <1300 | NA | <1300 | <1300 | <1300 | <1300 |
| UAW08-20 | 10/20/2002 | NA | NA | 270 | NA | 30 J | NA | NA | NA | NA | <200 | 190 J | NA | 4400 | NA | <1000 | NA | NA | NA | NA | NA | NA |
| UAW08-20 | 11/10/2003 | <2500 | <2500 | <2500 | <2500 | <2500 | NA | <2500 | <2500 | <2500 | <2500 | <2500 | <2500 | 8300 | <2500 | <2500 | <2500 | <2500 | <2500 | <2500 | <2500 | <2500 |
| UAW08-20 | 3/29/2004 | <4000 | <4000 | <4000 | <4000 | <4000 | NA | <4000 | <4000 | <4000 | <4000 | <4000 | <4000 | 5900 | <4000 | <4000 | <4000 | <4000 | <4000 | NA | <4000 | <4000 |
| UAW09-20 | 5/5/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW09-20 | 11/9/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW09-20 | 10/16/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | NA | <10 | NA | NA | NA | NA | NA | NA |
| UAW09-20 | 11/11/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW09-20 | 4/6/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 |
| UAW09-60 | 5/5/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW09-60 | 11/9/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW09-60 | 10/16/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | NA | <10 | NA | NA | NA | NA | NA | NA |
| UAW09-60 | 11/11/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW09-60 | 4/6/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 |
| UAW10-50 | 10/12/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | 7.9 J | <10 | <10 | <10 | <10 |
| UAW10-50 | 11/13/2001 | <10 | <10 | 5 J | <10 | 2.3 J | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW10-50 | 10/19/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | NA | <10 | NA | NA | NA | NA | NA | NA |
| UAW10-50 | 11/10/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW10-50 | 3/30/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 |
| UAW10-80 | 10/12/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | 130 | <10 | 1.5 J | <10 | 19 |
| UAW10-80 | 11/13/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | 2.4 J | 11 | <10 | 1.2 J | <10 | <10 |
| UAW10-80 | 10/19/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | NA | <10 | NA | NA | NA | NA | NA | NA |
| UAW10-80 | 11/13/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW10-80 | 3/30/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 |
| UAW11-10 | 5/8/2001 | <500 | <500 | <500 | <500 | <500 | NA | <500 | <500 | <500 | <500 | <500 | <500 | NA | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 |
| UAW11-10 | 11/10/2001 | <25 | <25 | 13 J | <25 | 3.7 J | NA | <25 | <25 | <25 | <25 | 9 J # | <25 | NA | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 |
| UAW11-10 | 10/18/2002 | NA | NA | 8.7 J | NA | <40 | NA | NA | NA | NA | <10 | <10 | NA | 77 | NA | <10 | NA | NA | NA | NA | NA | NA |
| UAW11-10 | 11/16/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | 44 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW11-10 | 4/6/2004 | <40 | <40 | <40 | <40 | <40 | NA | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | <40 | NA | <40 | <40 |
| UAW11-40 | 5/8/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW11-40 | 11/12/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW11-40 | 10/18/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | NA | <10 | NA | NA | NA | NA | NA | NA |
| UAW11-40 | 11/16/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW11-40 | 4/6/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 |

**Table 5-9**
**Summary of Semivolatile Organic Detections in**
**Groundwater and Seep Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | 1,1'-Biphenyl | 1,2,4-Trichlorobenzene | 1,2-Dichlorobenzene | 1,3-Dichlorobenzene | 1,4-Dichlorobenzene | 1,4-Dioxane | 2,4-Dichlorophenol | 2,4-Dimethylphenol | 2-Chlorophenol | 2-Methylphenol | 4-Methylphenol | Acenaphthene | Aniline | Benzaldehyde | bis(2-Ethylhexyl) phthalat | Butyl benzyl phthalate | Caprolactam | Di-n-octyl phthalate | Dimethyl phthalate | Fluorene | Phenol |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW11-40 (Dup) | 4/6/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 |
| UAW12-20 | 5/6/2001 | NA | <250 | 1600 | <250 | 150 J | <250 | <250 | <250 | <250 | <250 | <250 | <250 | <250 | NA | <250 | <250 | NA | <250 | <250 | <250 | <250 |
| UAW12-20 | 11/15/2001 | NA | <200 | 1900 | 41 J | 230 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | NA | <200 | <200 | NA | <200 | <200 | <200 | <200 |
| UAW12-20 | 10/20/2002 | NA | NA | 1100 | NA | 130 J | NA | NA | NA | NA | <500 | <500 | NA | <500 | NA | <500 | NA | NA | NA | NA | NA | NA |
| UAW12-20 | 11/12/2003 | <500 | <500 | 1600 | <500 | <500 | NA | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 |
| UAW12-20 | 3/28/2004 | <500 | <500 | 1500 | <500 | <500 | NA | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 | NA | <500 | <500 |
| UAW13-20 | 5/6/2001 | NA | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | 400 | NA | <200 | <200 | NA | <200 | <200 | <200 | <200 |
| UAW13-20 | 11/15/2001 | NA | <200 | 49 J | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | NA | <200 | <200 | NA | <200 | <200 | <200 | <200 |
| UAW13-20 | 10/23/2002 | NA | NA | 55 J | NA | <250 | NA | NA | NA | NA | <250 | <250 | NA | 830 | NA | <250 | NA | NA | NA | NA | NA | NA |
| UAW13-20 | 11/12/2003 | <100 | <100 | <100 | <100 | <100 | NA | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 |
| UAW13-20 | 3/28/2004 | <250 | <250 | <250 | <250 | <250 | NA | <250 | <250 | <250 | <250 | <250 | <250 | <250 | <250 | <250 | <250 | <250 | <250 | NA | <250 | <250 |
| UAW14-10 | 5/5/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW14-10 | 11/9/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW14-10 | 10/16/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | NA | <10 | NA | NA | NA | NA | NA | NA |
| UAW14-10 | 11/16/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW14-10 | 4/5/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 |
| UAW15-20 | 5/6/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW15-20 | 11/11/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW15-20 | 10/18/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | NA | <10 | NA | NA | NA | NA | NA | NA |
| UAW15-20 | 11/17/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW15-20 | 4/7/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 |
| UAW15-50 | 5/6/2001 | <200 | <200 | <200 | <200 | <200 | NA | <200 | <200 | <200 | <200 | <200 | <200 | NA | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 |
| UAW15-50 | 11/11/2001 | <500 | <500 | <500 | <500 | <500 | NA | <500 | <500 | <500 | <500 | 110 J # | <500 | NA | <500 | <500 | <500 | <500 | <500 | <500 | <500 | <500 |
| UAW15-50 | 10/18/2002 | NA | NA | <500 | NA | <500 | NA | NA | NA | NA | <500 | <500 | NA | <500 | NA | <500 | NA | NA | NA | NA | NA | NA |
| UAW15-50 | 11/17/2003 | <200 | <200 | <200 | <200 | <200 | NA | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 | <200 |
| UAW15-50 | 4/7/2004 | <100 | <100 | <100 | <100 | <100 | NA | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | NA | <100 | <100 |
| UAW16-10 | 10/12/2001 | <10 | <10 | 6.9 J | <10 | 12 | NA | <10 | <10 | <10 | <10 | 2.4 J # | <10 | NA | <10 | <10 | <10 | 19 | <10 | <10 | <10 | <10 |
| UAW16-10 (Dup) | 10/12/2001 | <10 | <10 | 6.2 J | <10 | 11 | NA | <10 | <10 | <10 | <10 | 3.4 J # | <10 | NA | <10 | <10 | <10 | 17 | <10 | <10 | <10 | <10 |
| UAW16-10 | 11/13/2001 | <10 | <10 | 7.5 J | <10 | 10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW16-10 | 10/18/2002 | NA | NA | 7 J | NA | 8.3 J | NA | NA | NA | NA | <10 | <10 | NA | 9.5 J | NA | <10 | NA | NA | NA | NA | NA | NA |
| UAW16-10 | 11/16/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW16-10 (Dup) | 11/17/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW16-10 | 4/7/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 |
| UAW17-40 | 5/5/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW17-40 | 11/9/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW17-40 | 10/16/2002 | NA | <10 | <10 | NA | <10 | NA | NA | NA | <10 | <10 | <10 | <10 | <10 | NA | <10 | NA | NA | NA | NA | NA | <10 |

**Table 5-9**
**Summary of Semivolatile Organic Detections in**
**Groundwater and Seep Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | 1,1'-Biphenyl | 1,2,4-Trichlorobenzene | 1,2-Dichlorobenzene | 1,3-Dichlorobenzene | 1,4-Dichlorobenzene | 1,4-Dioxane | 2,4-Dichlorophenol | 2,4-Dimethylphenol | 2-Chlorophenol | 2-Methylphenol | 4-Methylphenol | Acenaphthene | Aniline | Benzaldehyde | bis(2-Ethylhexyl) phthalat | Butyl benzyl phthalate | Caprolactam | Di-n-octyl phthalate | Dimethyl phthalate | Fluorene | Phenol |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW17-40 | 11/16/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW17-40 | 3/31/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 |
| UAW18-20 | 10/12/2001 | <10 | <10 | 5.7 J | <10 | 2.8 J | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | 6 J | <10 | <10 | <10 | <10 |
| UAW18-20 | 11/13/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | 2.7 J | 14 | <10 | <10 | <10 | <10 |
| UAW18-20 | 10/18/2002 | NA | NA | 3 J | NA | 1.8 J | NA | NA | NA | NA | <10 | <10 | NA | 32 | NA | <10 | NA | NA | NA | NA | NA | NA |
| UAW18-20 | 11/16/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | 16 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW18-20 | 4/7/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 |
| UAW19-80 | 5/6/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW19-80 | 11/12/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW19-80 (Dup) | 11/12/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW19-80 | 10/17/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | NA | <10 | NA | NA | NA | NA | NA | NA |
| UAW19-80 (Dup) | 10/17/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | NA | <10 | NA | NA | NA | NA | NA | NA |
| UAW19-80 | 11/13/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW19-80 | 3/30/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 14 | <10 | <10 | <10 | NA | <10 | <10 |
| UAW20-60 | 5/7/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW20-60 | 11/14/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW20-60 (Dup) | 11/14/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW20-60 | 10/19/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | NA | <10 | NA | NA | NA | NA | NA | NA |
| UAW20-60 (Dup) | 10/19/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | NA | <10 | NA | NA | NA | NA | NA | NA |
| UAW20-60 | 11/13/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW20-60 | 3/30/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 |
| UAW21-30 | 5/5/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW21-30 | 11/11/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW21-30 | 10/18/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | NA | <10 | NA | NA | NA | NA | NA | NA |
| UAW21-30 | 11/11/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW21-30 | 3/27/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 |
| UAW21-80 | 5/5/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW21-80 | 11/11/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW21-80 | 10/18/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | NA | <10 | NA | NA | NA | NA | NA | NA |
| UAW21-80 | 11/11/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW21-80 | 3/27/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 |
| UAW22-20 | 10/13/2001 | <10 | <10 | 70 | 1.6 J | 9.7 J | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | 2.5 J | <10 | <10 | <10 | <10 |
| UAW22-20 | 11/13/2001 | <10 | <10 | 78 | 1.7 J | 9.9 J | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | 2.3 J | 2.6 J | 1.2 J | <10 | <10 | <10 |
| UAW22-20 | 10/20/2002 | NA | NA | 60 | NA | 10 J | NA | NA | NA | NA | <50 | <50 | NA | <50 | NA | <50 | NA | NA | NA | NA | NA | NA |
| UAW22-20 | 11/10/2003 | <20 | <20 | 44 | <20 | <20 | NA | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 | <20 |
| UAW22-20 | 3/29/2004 | <10 | <10 | 31 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 |

**Table 5-9**
**Summary of Semivolatile Organic Detections in**
**Groundwater and Seep Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | 1,1'-Biphenyl | 1,2,4-Trichlorobenzene | 1,2-Dichlorobenzene | 1,3-Dichlorobenzene | 1,4-Dichlorobenzene | 1,4-Dioxane | 2,4-Dichlorophenol | 2,4-Dimethylphenol | 2-Chlorophenol | 2-Methylphenol | 4-Methylphenol | Acenaphthene | Aniline | Benzaldehyde | bis(2-Ethylhexyl) phthalat | Butyl benzyl phthalate | Caprolactam | Di-n-octyl phthalate | Dimethyl phthalate | Fluorene | Phenol |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW23-20 | 10/12/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW23-20 | 11/14/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW23-20 | 10/19/2002 | NA | <10 | <10 | NA | <10 | NA | NA | NA | <10 | <10 | <10 | <10 | <10 | NA | <10 | NA | NA | NA | NA | NA | <10 |
| UAW23-20 | 11/13/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW23-20 | 3/28/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 |
| UAW24-70 | 10/13/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW24-70 | 11/15/2001 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW24-70 | 10/17/2002 | NA | NA | <10 | NA | <10 | NA | NA | NA | NA | <10 | <10 | NA | <10 | NA | <10 | NA | NA | NA | NA | NA | NA |
| UAW24-70 | 11/16/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW24-70 | 4/5/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 |
| UAW25-20 | 10/13/2001 | <10 | <10 | 11 | <10 | 3 J | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW25-20 | 11/13/2001 | <10 | <10 | 11 | <10 | 3.2 J | NA | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW25-20 | 10/18/2002 | NA | NA | 5.6 J | NA | 1.7 J | NA | NA | NA | NA | <10 | <10 | NA | <10 | NA | <10 | NA | NA | NA | NA | NA | NA |
| UAW25-20 | 11/12/2003 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 |
| UAW25-20 | 3/27/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 |
| UAW26-70 | 4/6/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 |
| UAW27-50 | 3/31/2004 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 |
| LAW05-150 | 3/16/2002 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | NA | <10 | <10 | <10 | <10 |
| LAW05-150 (Dup) | 3/16/2002 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | NA | <10 | <10 | <10 | <10 |
| LAW05-60 | 3/16/2002 | NA | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | NA | <10 | <10 | <10 | <10 |
| LAW12-60 | 10/13/2001 | NA | <10 | <10 | <10 | <10 | 1.6 J | <10 | 1.6 J B | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | NA | <10 | <10 | <10 | <10 |
| LAW12-60 | 11/16/2001 | NA | <10 | <10 | <10 | <10 | 1.5 J | <10 | <10 | <10 | <10 | <10 | <10 | <10 | NA | <10 | <10 | NA | <10 | <10 | <10 | <10 |
| French Drain Sump @ 46 hr | 10/19/2002 | NA | NA | 200 | NA | 27 J | NA | NA | NA | NA | <50 | <50 | NA | 150 | NA | <50 | NA | NA | NA | NA | NA | NA |
| French Drain Sump @ 72 hr | 10/20/2002 | NA | NA | 140 | NA | 22 J | NA | NA | NA | NA | <100 | <100 | NA | 91 J | NA | <100 | NA | NA | NA | NA | NA | NA |
| **Seeps** | | | | | | | | | | | | | | | | | | | | | | |
| SS-1 (Seep) | 10/11/2001 | NA | NA | 21 | NA | 2.6 J | NA | NA | NA | NA | <10 | <10 | NA | <10 | <10 | NA | NA | NA | NA | NA | NA | NA |
| SS-5 (Seep) | 10/11/2001 | NA | NA | 14 | NA | 1.7 J | NA | NA | NA | NA | <10 | <10 | NA | <10 | <10 | NA | NA | NA | NA | NA | NA | NA |

Notes:
B = Method blank contamination. The associated method blank contains the target analyte at a reportable level.
J = Estimated result; result is less than reporting limit.
# = Co-Elution of 3-Methylphenol and 4-Methylphenol.
NA indicates chemical was not on the target analyte list for that sample.
<10 = Indicates constituent not detected at or above indicated detection limit.
This table only includes target analytes detected in one or more Facility Investigation samples.
See Appendix B for the complete target analyte lists.

**Table 5-10**
**Summary of Pesticide and Polychlorinated Biphenyl Detections in Groundwater and Seep Samples**
**Morton International, Inc.**
**Reading, Ohio**
**Units: µg/l**

| Sample Location | Sample Date | 4,4'-DDD | 4,4'-DDE | 4,4'-DDT | Aldrin | alpha-BHC | alpha-Chlordane | beta-BHC | delta-BHC | Dieldrin | Endosulfan I | Endosulfan II | Endrin | Endrin aldehyde | Endrin ketone | gamma-BHC (Lindane) | Heptachlor | Heptachlor epoxide | Isodrin | Aroclor 1242 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Groundwater** | | | | | | | | | | | | | | | | | | | | |
| MW-EPA-1 | 5/8/2001 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | 0.11 J | <0.25 | 0.13 J | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | NA | <1 |
| MW-EPA-1 | 11/15/2001 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | NA | <1 |
| MW-EPA-1 | 10/20/2002 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | NA | <0.25 | <0.25 | <0.5 | NA |
| MW-EPA-1 | 11/12/2003 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | NA | <1 |
| MW-EPA1 | 3/28/2004 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 |
| MW-EPA-2 | 5/8/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| MW-EPA-2 | 11/14/2001 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | NA | <1 |
| MW-EPA-2 | 10/20/2002 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <1 | <1 | <2 | NA |
| MW-EPA-2 | 11/11/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| MW-EPA-2 | 3/29/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.1 | NA | <1 |
| MW-EPA-3 | 5/6/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| MW-EPA-3 | 11/13/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| MW-EPA-3 | 10/17/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.1 | NA |
| MW-EPA-3 | 11/13/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| MW-EPA-3 | 3/30/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| MW-EPA-4 | 5/8/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| MW-EPA-4 | 11/13/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| MW-EPA-4 | 10/18/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.1 | NA |
| MW-EPA-4 | 11/16/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| MW-EPA-4 | 4/6/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| Recovery Well | 7/29/2001 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | NA | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | NA | <0.1 | <0.1 | <0.1 | <0.2 | <200 |
| UAW01-30 | 5/4/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.03 J | <0.05 | NA | <1 |
| UAW01-30 | 11/8/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW01-30 | 10/17/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.1 | NA |
| UAW01-30 | 11/11/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW01-30 | 3/24/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW01-80 | 5/4/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW01-80 | 10/10/2001 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <1 |
| UAW01-80 | 11/12/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW01-80 | 10/17/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.1 | NA |
| UAW01-80 | 11/11/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW01-80 | 3/24/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW02-20 | 5/7/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW02-20 (Dup) | 5/7/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW02-20 | 11/10/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW02-20 | 10/17/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.1 | NA |
| UAW02-20 | 11/12/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW02-20 | 3/26/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW02-40 | 5/7/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW02-40 | 11/10/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW02-40 | 10/17/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.1 | NA |
| UAW02-40 | 11/12/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |

**Table 5-10**
**Summary of Pesticide and Polychlorinated Biphenyl Detections in Groundwater and Seep Samples**
**Morton International, Inc.**
**Reading, Ohio**
**Units: µg/l**

| Sample Location | Sample Date | 4,4'-DDD | 4,4'-DDE | 4,4'-DDT | Aldrin | alpha-BHC | alpha-Chlordane | beta-BHC | delta-BHC | Dieldrin | Endosulfan I | Endosulfan II | Endrin | Endrin aldehyde | Endrin ketone | gamma-BHC (Lindane) | Heptachlor | Heptachlor epoxide | Isodrin | Aroclor 1242 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW02-40 | 3/26/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW03-20 | 5/7/2001 | 0.074 PG | <0.05 | <0.05 | <0.05 | <0.05 | 0.053 PG | <0.05 | <0.05 | 0.062 PG | <0.05 | <0.05 | <0.05 | <0.05 | 0.14 PG | <0.05 | <0.05 | 0.041 J | NA | <2 |
| UAW03-20 | 11/11/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.03 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW03-20 | 10/23/2002 | 0.025 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.02 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.1 | NA |
| UAW03-20 | 11/12/2003 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | NA | <1 |
| UAW03-20 | 3/28/2004 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | NA | <1 |
| UAW04-20 | 5/7/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.039 J | 0.041 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW04-20 | 11/11/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW04-20 | 10/20/2002 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <1 | <1 | <2 | NA |
| UAW04-20 | 11/12/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW04-20 | 3/28/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW05-20 | 5/6/2001 | 0.03 J | <0.05 | <0.05 | <0.05 | 0.029 J | <0.05 | <0.05 | <0.05 | <0.05 | 0.021 J | 0.028 J | <0.05 | 0.097 PG | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW05-20 | 10/10/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.022 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.028 J | NA | <1 |
| UAW05-20 | 11/12/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | 0.92 J |
| UAW05-20 | 10/20/2002 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | NA | <0.25 | <0.25 | <0.5 | NA |
| UAW05-20 | 11/10/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW05-20 | 3/28/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW05-20 (Dup) | 3/28/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW06-20 | 5/6/2001 | <0.05 | 0.024 J | 0.022 J | <0.05 | <0.05 | <0.05 | 0.16 PG | 0.023 J | 0.033 J | <0.05 | 0.039 J | <0.05 | <0.05 | 0.045 J | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW06-20 | 10/10/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.026 J | 0.12 | <0.05 | 0.022 J | <0.05 | 0.034 J | <0.05 | <0.05 | <0.05 | <0.05 | 0.054 PG | <0.05 | NA | <1 |
| UAW06-20 | 11/13/2001 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | NA | <1 |
| UAW06-20 | 10/20/2002 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | NA | <0.25 | <0.25 | <0.5 | NA |
| UAW06-20 | 11/12/2003 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <1 |
| UAW06-20 | 3/29/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW07-20 | 5/8/2001 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | NA | <0.25 | <0.25 | <0.25 | 0.19 J | 0.13 J | <0.25 | <0.25 | NA | <0.25 | <0.25 | <0.25 | <0.5 | <1 |
| UAW07-20 (Dup) | 5/8/2001 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | NA | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.35 J | NA | <0.5 | <0.5 | <0.5 | <1 | <10 |
| UAW07-20 | 11/15/2001 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <5 | <1 |
| UAW07-20 | 10/20/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.092 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.1 | NA |
| UAW07-20 | 11/12/2003 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | NA | <1 |
| UAW07-20 (Dup) | 11/12/2003 | <0.05 | 0.2 PG | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.2 | <0.05 | 0.27 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW07-20 | 4/5/2004 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | NA | <1 |
| UAW08-20 | 5/6/2001 | <1 | <1 | <1 | <1 | <1 | NA | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <1 | <1 | <1 | <2 | <1 |
| UAW08-20 | 11/13/2001 | <0.5 | <0.5 | <0.5 | <0.5 | 0.32 J | NA | <0.5 | <0.5 | 0.52 PG | <0.5 | <0.5 | <0.5 | <0.5 | NA | <0.5 | 0.49 J | 0.32 J | <1 | <1 |
| UAW08-20 | 10/20/2002 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | NA | <0.5 | <0.5 | <1 | NA |
| UAW08-20 | 11/10/2003 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <1 |
| UAW08-20 | 3/29/2004 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 |
| UAW09-20 | 5/5/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW09-20 | 11/9/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW09-20 | 10/16/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.1 | NA |
| UAW09-20 | 11/11/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW09-20 | 4/6/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW09-60 | 5/5/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW09-60 | 11/9/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |

**Table 5-10**
**Summary of Pesticide and Polychlorinated Biphenyl Detections in Groundwater and Seep Samples**
**Morton International, Inc.**
**Reading, Ohio**
**Units: µg/l**

| Sample Location | Sample Date | 4,4'-DDD | 4,4'-DDE | 4,4'-DDT | Aldrin | alpha-BHC | alpha-Chlordane | beta-BHC | delta-BHC | Dieldrin | Endosulfan I | Endosulfan II | Endrin | Endrin aldehyde | Endrin ketone | gamma-BHC (Lindane) | Heptachlor | Heptachlor epoxide | Isodrin | Aroclor 1242 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW09-60 | 10/16/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.1 | NA |
| UAW09-60 | 11/11/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW09-60 | 4/6/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW10-50 | 10/12/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW10-50 | 11/13/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW10-50 | 10/19/2002 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | NA | <0.25 | <0.25 | <0.5 | NA |
| UAW10-50 | 11/10/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW10-50 | 3/30/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW10-80 | 10/12/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.081 | NA | <1 |
| UAW10-80 | 11/13/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW10-80 | 10/19/2002 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | NA | <0.5 | <0.5 | <1 | NA |
| UAW10-80 | 11/13/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW10-80 | 3/30/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW11-10 | 5/8/2001 | <0.05 | <0.05 | <0.05 | 0.42 | <0.05 | <0.05 | <0.05 | 0.11 | 0.054 PG | <0.05 | <0.05 | 0.043 J | <0.05 | <0.05 | <0.05 | 0.1 PG | <0.05 | NA | <1 |
| UAW11-10 | 11/10/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW11-10 | 10/18/2002 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | NA | <0.25 | <0.25 | <0.5 | NA |
| UAW11-10 | 11/16/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW11-10 | 4/6/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <5 |
| UAW11-40 | 5/8/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW11-40 | 11/12/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | 0.52 J |
| UAW11-40 | 10/18/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.1 | NA |
| UAW11-40 | 11/16/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW11-40 | 4/6/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW11-40 (Dup) | 4/6/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW12-20 | 5/6/2001 | 0.045 J | <0.05 | <0.05 | <0.05 | <0.05 | NA | 0.017 J | 0.058 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | 0.017 J | <1 |
| UAW12-20 | 11/15/2001 | 0.022 J | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.033 J | NA | <0.05 | 0.09 PG | <0.05 | <0.1 | <1 |
| UAW12-20 | 10/20/2002 | 0.039 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.1 | NA |
| UAW12-20 | 11/12/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.1 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW12-20 | 3/28/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW13-20 | 5/6/2001 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | NA | <0.5 | <0.5 | 0.25 J | <0.5 | <0.5 | <0.5 | <0.5 | NA | <0.5 | <0.5 | 0.91 PG | <1 | <1 |
| UAW13-20 | 11/15/2001 | <5 | <5 | <5 | <5 | <5 | NA | <5 | <5 | <5 | <5 | <5 | <5 | <5 | NA | <5 | <5 | <5 | <10 | <1 |
| UAW13-20 | 10/23/2002 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | NA | <0.25 | <0.25 | <0.5 | NA |
| UAW13-20 | 11/12/2003 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 2.7 PG | <1 | <1 | <1 | <1 | <1 | <1 | 6 | <1 | NA | <1 |
| UAW13-20 | 3/28/2004 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | NA | <10 |
| UAW14-10 | 5/5/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW14-10 | 11/9/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW14-10 | 10/16/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.1 | NA |
| UAW14-10 | 11/16/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW14-10 | 4/5/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW15-20 | 5/6/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW15-20 | 11/11/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW15-20 | 10/18/2002 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | NA | <0.25 | <0.25 | <0.5 | NA |
| UAW15-20 | 11/17/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |

**Table 5-10**
**Summary of Pesticide and Polychlorinated Biphenyl Detections in Groundwater and Seep Samples**
**Morton International, Inc.**
**Reading, Ohio**
**Units: µg/l**

| Sample Location | Sample Date | 4,4'-DDD | 4,4'-DDE | 4,4'-DDT | Aldrin | alpha-BHC | alpha-Chlordane | beta-BHC | delta-BHC | Dieldrin | Endosulfan I | Endosulfan II | Endrin | Endrin aldehyde | Endrin ketone | gamma-BHC (Lindane) | Heptachlor | Heptachlor epoxide | Isodrin | Aroclor 1242 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW15-20 | 4/7/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW15-50 | 5/6/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW15-50 | 11/11/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.024 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.034 J | 0.031 J | NA | 0.55 J |
| UAW15-50 | 10/18/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.1 | NA |
| UAW15-50 | 11/17/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW15-50 | 4/7/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW16-10 | 10/12/2001 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <25 | <25 | <25 | <25 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | NA | <200 |
| UAW16-10 (Dup) | 10/12/2001 | <2.5 | <10 | <10 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | NA | <100 |
| UAW16-10 | 11/13/2001 | <0.05 | <0.05 | <0.05 | <0.05 | 0.053 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.041 J PG | <0.05 | <0.05 | NA | <1 |
| UAW16-10 | 10/18/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.1 | NA |
| UAW16-10 | 11/16/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW16-10 (Dup) | 11/16/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.23 PG | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW16-10 | 4/7/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.11 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW17-40 | 5/5/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW17-40 | 11/9/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW17-40 | 10/16/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.1 | NA |
| UAW17-40 | 11/16/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW17-40 | 3/31/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW18-20 | 10/12/2001 | <0.05 | 0.021 J | <0.05 | 0.03 J | <0.05 | <0.05 | 0.51 PG | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW18-20 | 11/13/2001 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | 0.24 | <0.1 | <0.1 | <0.1 | 0.14 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | NA | <1 |
| UAW18-20 | 10/18/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.03 J | 0.12 PG | <0.05 | <0.05 | <0.05 | 0.033 J | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.1 | NA |
| UAW18-20 | 11/16/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.26 PG | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW18-20 | 4/7/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW19-80 | 5/6/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW19-80 | 11/12/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW19-80 (Dup) | 11/12/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW19-80 | 10/17/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.1 | NA |
| UAW19-80 (Dup) | 10/17/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.1 | NA |
| UAW19-80 | 11/13/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW19-80 | 3/30/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW20-60 | 5/7/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.021 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW20-60 | 11/14/2001 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | NA | <1 |
| UAW20-60 (Dup) | 11/14/2001 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | NA | <1 |
| UAW20-60 | 10/19/2002 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | NA | <0.5 | <0.5 | <1 | NA |
| UAW20-60 (Dup) | 10/19/2002 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | NA | <0.5 | <0.5 | <1 | NA |
| UAW20-60 | 11/13/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW20-60 | 3/30/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW21-30 | 5/5/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW21-30 | 11/11/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | 0.45 J |
| UAW21-30 | 10/18/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.1 | NA |
| UAW21-30 | 11/11/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW21-30 | 3/27/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW21-80 | 5/5/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |

**Table 5-10**
**Summary of Pesticide and Polychlorinated Biphenyl Detections in Groundwater and Seep Samples**
**Morton International, Inc.**
**Reading, Ohio**
**Units: µg/l**

| Sample Location | Sample Date | 4,4'-DDD | 4,4'-DDE | 4,4'-DDT | Aldrin | alpha-BHC | alpha-Chlordane | beta-BHC | delta-BHC | Dieldrin | Endosulfan I | Endosulfan II | Endrin | Endrin aldehyde | Endrin ketone | gamma-BHC (Lindane) | Heptachlor | Heptachlor epoxide | Isodrin | Aroclor 1242 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW21-80 | 11/11/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW21-80 | 10/18/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.1 | NA |
| UAW21-80 | 11/11/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW21-80 | 3/27/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW22-20 | 10/13/2001 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | NA | <1 |
| UAW22-20 | 11/13/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.21 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW22-20 | 10/20/2002 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | NA | <0.1 | <0.1 | <0.2 | NA |
| UAW22-20 | 11/10/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW22-20 | 3/29/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW23-20 | 10/12/2001 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | <2 | NA | <1 |
| UAW23-20 | 11/14/2001 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | NA | <1 |
| UAW23-20 | 10/19/2002 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | <5 | NA |
| UAW23-20 | 11/13/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW23-20 | 3/28/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW24-70 | 10/13/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW24-70 | 11/15/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW24-70 | 10/17/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.1 | NA |
| UAW24-70 | 11/16/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW24-70 | 4/5/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW25-20 | 10/13/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.16 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW25-20 | 11/13/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.14 PG | <0.05 | 0.051 PG | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.022 J PG | NA | <1 |
| UAW25-20 | 10/18/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.1 | NA |
| UAW25-20 | 11/12/2003 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.065 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW25-20 | 3/27/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW26-70 | 4/6/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| UAW27-50 | 3/31/2004 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <1 |
| LAW05-60 | 3/16/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.1 | <1 |
| LAW05-150 | 3/16/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.1 | <1 |
| LAW05-150 (Dup) | 3/16/2002 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.1 | <1 |
| LAW12-60 | 10/13/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.1 | <1 |
| LAW12-60 | 11/16/2001 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.1 | <1 |
| French Drain Sump @ 46 hr | 10/19/2002 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | <0.25 | NA | <0.25 | <0.25 | <0.5 | NA |
| French Drain Sump @ 72 hr | 10/20/2002 | 0.028 J | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.1 | NA |
| **Seeps** | | | | | | | | | | | | | | | | | | | | |
| SS-1 (Seep) | 10/11/2001 | <0.05 | <0.05 | 0.028 J | <0.05 | <0.05 | <0.05 | 0.042 J | <0.05 | 0.053 PG | <0.05 | 0.046 J | <0.05 | <0.05 | <0.05 | NA | <0.05 | 0.033 J | 0.005 J | NA |
| SS-5 (Seep) | 10/11/2001 | <0.05 | 0.025 J | <0.05 | <0.05 | <0.05 | 0.02 J | 0.056 | <0.05 | <0.05 | 0.03 J | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.1 | NA |

Notes:
J = Estimated result; result is less than reporting limit
PG = The percentage difference between the original and confirmation analyses is greater than 40%
NA indicates chemical was not on the target analyte list for that sample
<0.05 = Indicates constituent not detected at or above indicated detection limit.
This table only includes target analytes detected in one or more Facility Investigation samples.
See Appendix B for the complete target analyte lists.

**Table 5-11**
**Summary of Inorganic Chemical Detections in**
**Groundwater and Seep Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | Aluminum | Aluminum-DISS | Antimony | Antimony-DISS | Arsenic | Arsenic-DISS | Barium | Barium-DISS | Beryllium | Beryllium-DISS | Cadmium | Cadmium-DISS | Calcium | Calcium-DISS | Chromium | Chromium-DISS | Cobalt | Cobalt-DISS | Copper | Copper-DISS | Cyanide, Total | Iron | Iron-DISS | Lead | Lead-DISS | Magnesium | Magnesium-DISS | Manganese | Manganese-DISS | Mercury | Mercury-DISS | Nickel | Nickel-DISS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Groundwater** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW-EPA-1 | 5/8/2001 | 129 B | NA | 3.3 B | NA | 246 | NA | 287 | NA | <5 | NA | <2 | NA | 354000 | 365000 | 73 | NA | 2.1 B | NA | <25 | NA | <10 | 7800 | <100 | <3 | NA | 126000 | 127000 | 330 | NA | <0.2 | NA | 112 | NA |
| MW-EPA-1 | 11/15/2001 | 138 B J | NA | <10 | NA | 611 | NA | 217 J | NA | <5 | NA | <2 | NA | 435000 J | 418000 J | 9.8 | NA | 1.4 B | NA | <25 | NA | 3.6 B | 2140 | 240 | <3 | NA | 173000 | 152000 | 520 | NA | <0.2 | NA | 32.1 B | NA |
| MW-EPA-1 | 10/20/2002 | 164 B J | NA | <10 | NA | 460 | NA | 244 | NA | <5 | NA | <2 | NA | 302000 J | NA | 14.7 | NA | 1.1 B | NA | <25 | NA | <10 | 2540 | NA | <3 | NA | 172000 | NA | 219 | NA | <0.2 | NA | 20.5 B | NA |
| MW-EPA-1 | 11/12/2003 | 215 | NA | 3.1 B | NA | 465 | NA | 260 J | NA | <5 | NA | <2 | NA | 425000 J | NA | 26.2 | NA | <7 | NA | <25 | NA | <10 | 2450 | NA | <3 | NA | 173000 J | NA | 323 J | NA | <0.2 | NA | 19.3 B | NA |
| MW-EPA-1 | 3/28/2004 | 313 J | NA | <10 | NA | 483 | NA | 246 | NA | <5 | NA | <2 | NA | 466000 | NA | 37.2 | NA | <7 | NA | 5 B J | NA | <10 | 1600 | NA | <3 | NA | 148000 | NA | 479 J | NA | <0.2 | NA | 19.7 B | NA |
| MW-EPA-2 | 5/8/2001 | 38400 | NA | 3.6 B | NA | 27.4 | NA | 496 | NA | 1.9 B | NA | 0.65 B | NA | 327000 | 266000 | 1250 | NA | 38.9 | NA | 74.3 | NA | <10 | 64800 | <100 | 27.6 | NA | 114000 | 91100 | 1610 | NA | <0.2 | NA | 271 | NA |
| MW-EPA-2 | 11/14/2001 | 39300 J | NA | 5.4 B | NA | 31.7 | NA | 292 | NA | 1.8 B | NA | 5.2 | NA | 254000 | 151000 | 1750 | NA | 51.2 | NA | 109 | NA | 2.6 B | 74600 | <100 | 32.4 | NA | 88100 J | 50700 J | 1640 | NA | 0.15 B | NA | 369 | NA |
| MW-EPA-2 | 10/20/2002 | 1260 J | NA | <10 | NA | 3.1 B | NA | 113 B | NA | <5 | NA | 0.5 B | NA | 142000 J | NA | 80.1 | NA | 3.3 B | NA | 4.7 B | NA | <10 | 1860 | NA | <3 | NA | 45500 | NA | 317 | NA | <0.2 | NA | 121 | NA |
| MW-EPA-2 | 11/11/2003 | 1490 | NA | <10 | NA | <10 | NA | 105 B J | NA | <5 | NA | 1 B | NA | 154000 J | NA | 492 | NA | 5.4 B | NA | 9.4 B | NA | <10 | 3320 | NA | <3 | NA | 47700 J | NA | 288 J | NA | <0.2 | NA | 132 | NA |
| MW-EPA-2 | 3/29/2004 | 2020 J E | NA | <10 | NA | <10 | NA | 129 B | NA | <5 | NA | 0.33 B | NA | 190000 | NA | 443 | NA | 6.4 B | NA | 13 B J | NA | <10 | 3610 | NA | <3 | NA | 62000 | NA | 350 J | NA | <0.2 | NA | 225 | NA |
| MW-EPA-3 | 5/6/2001 | 1330 | NA | <10 | NA | <10 | NA | 71.9 B | NA | <5 | NA | 1.5 B | NA | 188000 | 274000 | 29.9 | NA | 2.8 B | NA | 11.2 B | NA | <10 | 5540 | <100 | <3 | NA | 68900 | 94600 | 357 | NA | <0.2 | NA | 34.4 B | NA |
| MW-EPA-3 | 11/13/2001 | 16400 | NA | <10 | NA | 14.1 | NA | 120 B | NA | 1.1 B | NA | 1.2 B | NA | 470000 J | 332000 J | 75.8 | NA | 14.5 | NA | 37.5 | NA | <10 | 40500 | 2700 | 13.7 | NA | 175000 J | 123000 J | 1440 J | NA | <0.2 | NA | 80.3 | NA |
| MW-EPA-3 | 10/17/2002 | 20800 | NA | <10 | NA | 23 | NA | 146 B | NA | 0.79 B | NA | 1.7 B | NA | 467000 J | NA | 117 | NA | 20.7 | NA | 41.5 | NA | <10 | 51400 | NA | 20.6 | NA | 153000 J | NA | 1820 J | NA | <0.2 | NA | 113 | NA |
| MW-EPA-3 | 11/13/2003 | 4770 | NA | <10 | NA | 6.7 B | NA | 86.6 B J | NA | 0.83 B | NA | 0.76 B | NA | 414000 J | NA | 69.3 | NA | 7.1 | NA | 7 B | NA | <10 | 16300 J | NA | 7.5 | NA | 118000 | NA | 1350 J | NA | <0.2 | NA | 72.2 | NA |
| MW-EPA-3 | 3/30/2004 | 19200 J | NA | <10 | NA | 22.2 | NA | 117 B | NA | 0.52 B | NA | 2.1 | NA | 464000 | NA | 143 | NA | 21 | NA | 50 | NA | <10 | 55200 | NA | 20.5 | NA | 165000 | NA | 1720 J | NA | <0.2 | NA | 159 | NA |
| MW-EPA-4 | 5/8/2001 | <200 | NA | <10 | NA | <10 | NA | 235 | NA | <5 | NA | 0.31 B | NA | 269000 | 271000 | 37.7 | NA | 2.8 B | NA | <25 | NA | <10 | 950 | <100 | <3 | NA | 63600 | 64000 | 352 | NA | <0.2 | NA | 140 | NA |
| MW-EPA-4 | 11/13/2001 | 41.7 B | NA | <10 | NA | <10 | NA | 114 B | NA | <5 | NA | <2 | NA | 157000 J | 136000 J | 130 | NA | 11.4 | NA | <25 | NA | <10 | 8220 | 398 | <3 | NA | 40600 J | 35200 J | 284 J | NA | 0.16 B | NA | 910 | NA |
| MW-EPA-4 | 10/18/2002 | <200 | NA | <10 | NA | <10 | NA | 87.9 B | NA | <5 | NA | <2 | NA | 120000 J | NA | 207 | NA | 4.1 B | NA | <25 | NA | <10 | 1980 | NA | <3 | NA | 27900 J | NA | 157 J | NA | <0.2 | NA | 256 | NA |
| MW-EPA-4 | 11/16/2003 | <200 | NA | <10 | NA | <10 | NA | 165 B J | NA | <5 | NA | 1.1 B J | NA | 196000 J | NA | 37.2 J | NA | 6.6 B J | NA | 3.7 B J | NA | <10 | 3340 | NA | <3 | NA | 48600 J | NA | 185 J | NA | <0.2 | NA | 424 J | NA |
| MW-EPA-4 | 4/6/2004 | <200 | NA | <10 | NA | <10 | NA | 137 B J | NA | <5 | NA | <2 | NA | 182000 | NA | 64.6 | NA | <2.4* | NA | <25 | NA | <10 | 1080 | NA | <3 | NA | 42400 J | NA | 193 | NA | <0.2 | NA | 198 | NA |
| Recovery Well | 7/29/2001 | NA | NA | <10 | NA | 39.6 | NA | 328 | NA | <5 | NA | 8.6 | NA | NA | NA | 264 | NA | 11.1 | NA | 4640 | NA | <10 | NA | NA | 405 | NA | NA | NA | NA | NA | <0.2 | NA | 311 | NA |
| RWV20 | 4/6/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | <5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| UAW01-30 | 5/4/2001 | 82.1 B | NA | <10 | NA | 13 | NA | 339 | NA | <5 | NA | <2 | NA | 341000 | 358000 | 7.7 | NA | 2.2 B | NA | <25 | NA | 8 B | 9970 | 150 | <3 | NA | 77200 | 84600 | 1240 | NA | <0.2 | NA | 109 | NA |
| UAW01-30 | 11/8/2001 | 81.8 B J | NA | <10 | NA | 5.1 B | NA | 164 B J | NA | 0.58 B | NA | 0.29 B | NA | 151000 J | 146000 J | 15.2 | NA | 14.8 | NA | <25 | NA | <10 | 8940 | 7700 | <3 | NA | 31800 | 30900 | 569 | NA | 0.093 B | NA | 802 | NA |
| UAW01-30 | 10/17/2002 | <200 | NA | <10 | NA | 7.6 B | NA | 93.9 B | NA | <5 | NA | <2 | NA | 110000 J | NA | 32.8 | NA | 4.7 B | NA | <25 | NA | <10 | 2830 | NA | <3 | NA | 25000 J | NA | 902 J | NA | <0.2 | NA | 237 | NA |
| UAW01-30 | 11/11/2003 | <200 | NA | <10 | NA | 5.9 B | NA | 109 B J | NA | <5 | NA | <2 | NA | 138000 J | NA | 32.1 | NA | <7 | NA | <25 | NA | <10 | 1380 | NA | <3 | NA | 32500 J | NA | 180 J | NA | <0.2 | NA | 31.1 B | NA |
| UAW01-30 | 3/24/2004 | <200 | NA | <10 | NA | 7.1 B | NA | 81.3 B | NA | 0.8 B | NA | <2 | NA | 109000 J | NA | 9.8 | NA | 1.4 B | NA | 6 B | NA | <10 | 1530 | NA | <3 | NA | 25700 J | NA | 276 J | NA | 0.082 B | NA | 36.6 B | NA |
| UAW01-80 | 5/4/2001 | 331 | NA | <10 | NA | 3.9 B | NA | 309 | NA | <5 | NA | <2 | NA | 117000 | 118000 | 2.4 B | NA | <7 | NA | <25 | NA | <10 | 10600 | 3070 | <3 | NA | 30800 | 31900 | 563 | NA | <0.2 | NA | 4.1 B | NA |
| UAW01-80 | 11/12/2001 | 105 B J | NA | <10 | NA | <10 | NA | 308 | NA | <5 | NA | <2 | NA | 112000 | 115000 | <5 | NA | <7 | NA | <25 | NA | <10 | 9600 | 279 | <3 | NA | 29900 | 31000 | 527 | NA | <0.2 | NA | <40 | NA |
| UAW01-80 | 10/17/2002 | 98.7 B | NA | <10 | NA | 2.4 B | NA | 350 | NA | <5 | NA | <2 | NA | 113000 J | NA | 3.5 B | NA | <7 | NA | <25 | NA | <10 | 10600 | NA | <3 | NA | 29200 J | NA | 527 J | NA | <0.2 | NA | 3.4 B | NA |
| UAW01-80 | 11/11/2003 | <200 | NA | <10 | NA | 3.5 B | NA | 326 J | NA | <5 | NA | <2 | NA | 120000 J | NA | 2.7 B | NA | <7 | NA | <25 | NA | <10 | 10100 | NA | <3 | NA | 30400 J | NA | 508 J | NA | <0.2 | NA | 3.7 B | NA |
| UAW01-80 | 3/24/2004 | <200 | NA | <10 | NA | 5 B | NA | 346 | NA | 0.77 B | NA | 0.46 B | NA | 122000 J | NA | <5 | NA | <7 | NA | 5 B | NA | <10 | 10300 | NA | <3 | NA | 30700 J | NA | 527 J | NA | 0.046 B | NA | <40 | NA |
| UAW02-20 | 5/7/2001 | 49.1 B | NA | <10 | NA | 3.9 B | NA | 400 | NA | <5 | NA | <2 | NA | 331000 | 316000 | 3.3 B | NA | <7 | NA | <25 | NA | <10 | 4200 | 641 | <3 | NA | 58700 | 59200 | 892 | NA | <0.2 | NA | 27.1 B | NA |
| UAW02-20 (Dup) | 5/7/2001 | 61.2 B | NA | <10 | NA | 6.1 B | NA | 395 | NA | <5 | NA | <2 | NA | 316000 | 302000 | 22.6 | NA | <7 | NA | <25 | NA | <10 | 4480 | 659 | <3 | NA | 56200 | 53400 | 869 | NA | <0.2 | NA | 47.2 | NA |
| UAW02-20 | 11/10/2001 | <200 | NA | 2.9 B | NA | <10 | NA | 169 B | NA | <5 | NA | <2 | NA | 177000 J | 157000 J | <5 | NA | <7 | NA | <25 | NA | <10 | 1940 | 340 | <3 | NA | 33200 J | 29800 J | 686 J | NA | <0.2 | NA | 35.9 B | NA |
| UAW02-20 | 10/17/2002 | <200 | NA | <10 | NA | 3.2 B | NA | 311 | NA | <5 | NA | 0.67 B | NA | 203000 J | NA | 8.1 | NA | 2.2 B | NA | <25 | NA | 2.2 B | 2600 | NA | <3 | NA | 34000 J | NA | 975 J | NA | <0.2 | NA | 94 | NA |
| UAW02-20 | 11/12/2003 | <200 | NA | <10 | NA | <10 | NA | 124 B J | NA | <5 | NA | <2 | NA | 175000 J | NA | 2.7 B | NA | <7 | NA | <25 | NA | <10 | 2170 | NA | <3 | NA | 32600 J | NA | 555 J | NA | <0.2 | NA | 23 B | NA |
| UAW02-20 | 3/26/2004 | 35 B J | NA | <10 | NA | <10 | NA | 271 | NA | <5 | NA | <2 | NA | 255000 J | NA | <5 | NA | <7 | NA | <25 | NA | <10 | 3650 | NA | <3 | NA | 45700 J | NA | 878 J | NA | <0.2 | NA | 22.5 B | NA |

**Table 5-11**
**Summary of Inorganic Chemical Detections in**
**Groundwater and Seep Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | Aluminum | Aluminum-DISS | Antimony | Antimony-DISS | Arsenic | Arsenic-DISS | Barium | Barium-DISS | Beryllium | Beryllium-DISS | Cadmium | Cadmium-DISS | Calcium | Calcium-DISS | Chromium | Chromium-DISS | Cobalt | Cobalt-DISS | Copper | Copper-DISS | Cyanide, Total | Iron | Iron-DISS | Lead | Lead-DISS | Magnesium | Magnesium-DISS | Manganese | Manganese-DISS | Mercury | Mercury-DISS | Nickel | Nickel-DISS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW02-40 | 5/7/2001 | 213 | NA | <10 | NA | <10 | NA | 130 B | NA | <5 | NA | <2 | NA | 98800 | 99200 | <5 | NA | <7 | NA | <25 | NA | <10 | 4260 | 100 | <3 | NA | 36100 | 36000 | 500 | NA | <0.2 | NA | 18.9 B | NA |
| UAW02-40 | 11/10/2001 | <200 | NA | 2.5 B | NA | <10 | NA | 156 B | NA | <5 | NA | 0.36 B | NA | 106000 J | 101000 J | <5 | NA | <7 | NA | <25 | NA | <10 | 3110 | 122 | <3 | NA | 40000 J | 38400 J | 652 J | NA | <0.2 | NA | 31.3 B | NA |
| UAW02-40 | 10/17/2002 | <200 | NA | <10 | NA | <10 | NA | 129 B | NA | <5 | NA | <2 | NA | 98400 J | NA | <5 | NA | 0.94 B | NA | <25 | NA | <10 | 4080 | NA | <3 | NA | 37600 J | NA | 513 J | NA | <0.2 | NA | 13.3 B | NA |
| UAW02-40 | 11/12/2003 | <200 | NA | <10 | NA | <10 | NA | 117 B J | NA | <5 | NA | <2 | NA | 111000 J | NA | 1.4 B | NA | <7 | NA | <25 | NA | <10 | 5190 | NA | <3 | NA | 41600 J | NA | 531 J | NA | <0.2 | NA | 6.1 B | NA |
| UAW02-40 | 3/26/2004 | 36.9 B J | NA | <10 | NA | <10 | NA | 135 B | NA | <5 | NA | <2 | NA | 121000 J | NA | <5 | NA | <7 | NA | <25 | NA | <10 | 6210 | NA | <3 | NA | 44700 J | NA | 600 J | NA | <0.2 | NA | 3.5 B | NA |
| UAW03-20 | 5/7/2001 | 39.6 B | NA | <10 | NA | 20.4 | NA | 422 | NA | <5 | NA | <2 | NA | 524000 | 551000 | 2.8 B | NA | 3.8 B | NA | <25 | NA | <10 | 2490 | 1650 | <3 | NA | 92100 | 80300 | 2860 | NA | <0.2 | NA | 39.4 B | NA |
| UAW03-20 | 11/11/2001 | 124 B J | NA | <10 | NA | 17.6 | NA | 235 | NA | <5 | NA | <2 | NA | 219000 | 210000 | 3.5 B | NA | 10.7 | NA | <25 | NA | <10 | 1720 | 978 | <3 | NA | 37500 | 36100 | 1500 | NA | 0.3 | NA | 39.5 B | NA |
| UAW03-20 | 10/23/2002 | <200 | NA | <10 | NA | 21 J | NA | 250 | NA | <5 | NA | <2 | NA | 169000 | NA | 5.3 | NA | 4.4 B | NA | 3.2 B | NA | <10 | 2390 | NA | <3 | NA | 34000 | NA | 1170 | NA | <0.2 | NA | 59.6 | NA |
| UAW03-20 | 11/12/2003 | <200 | NA | <10 | NA | 12.1 | NA | 185 B J | NA | <5 | NA | <2 | NA | 227000 J | NA | 6.7 | NA | <7 | NA | <25 | NA | <10 | 370 | NA | <3 | NA | 40700 J | NA | 1040 J | NA | <0.2 | NA | 15.4 B | NA |
| UAW03-20 | 3/28/2004 | 83.7 B J | NA | <10 | NA | 9.5 B | NA | 227 | NA | <5 | NA | <2 | NA | 283000 | NA | 2.4 B | NA | <7 | NA | <25 | NA | <10 | 422 | NA | <3 | NA | 49600 | NA | 1230 J | NA | <0.2 | NA | 8.4 B | NA |
| UAW04-20 | 5/7/2001 | 42.6 B | NA | 11.9 | NA | 82.4 | NA | 771 | NA | <5 | NA | <2 | NA | 343000 | 339000 | 6 | NA | 17.3 | NA | <25 | NA | 7.3 B | 10500 | 2410 | <3 | NA | 65600 | 64000 | 3170 | NA | <0.2 | NA | 28.9 B | NA |
| UAW04-20 | 11/11/2001 | 78.5 B J | NA | 7.6 B | NA | 20.5 | NA | 600 | NA | <5 | NA | 1.5 B | NA | 255000 | 235000 | 4 B | NA | 7.1 | NA | <25 | NA | <10 | 5060 | 1820 | <3 | NA | 43100 | 39600 | 2000 | NA | <0.2 | NA | 35.3 B | NA |
| UAW04-20 | 10/20/2002 | 82.9 B J | NA | 3.7 B | NA | 33.5 | NA | 798 | NA | <5 | NA | <2 | NA | 205000 J | NA | 6.5 | NA | 3.2 B | NA | <25 | NA | <10 | 6650 | NA | <3 | NA | 47400 | NA | 1350 | NA | <0.2 | NA | 38.2 B | NA |
| UAW04-20 | 11/12/2003 | <200 | NA | <10 | NA | 26.6 | NA | 443 J | NA | <5 | NA | <2 | NA | 219000 J | NA | 2.8 B | NA | <7 | NA | <25 | NA | <10 | 6010 | NA | <3 | NA | 64600 J | NA | 1020 J | NA | <0.2 | NA | 12.4 B | NA |
| UAW04-20 | 3/28/2004 | 68.2 B J | NA | 27.6 | NA | 30.8 | NA | 233 | NA | <5 | NA | 1.2 B | NA | 192000 | NA | <5 | NA | <7 | NA | 3.4 B J | NA | <10 | 5230 | NA | <3 | NA | 36700 | NA | 5050 J | NA | <0.2 | NA | 6.2 B | NA |
| UAW05-20 | 5/6/2001 | 2550 | NA | <10 | NA | 8.7 B | NA | 102 B | NA | <5 | NA | <2 | NA | 338000 | 391000 | 8.1 | NA | 2.2 B | NA | 7.8 B | NA | <10 | 3900 | <100 | <3 | NA | 60200 | 66900 | 938 | NA | <0.2 | NA | 15 B | NA |
| UAW05-20 | 10/10/2001 | 189 B | NA | <10 | NA | 21 | NA | 67.9 B | NA | <5 | NA | <2 | NA | 292000 | 334000 | 7.3 | NA | <7 | NA | <25 | NA | <10 | 2750 | <100 | <3 | NA | 45300 | 50300 | 901 | NA | <0.2 | NA | 57.3 | NA |
| UAW05-20 | 11/12/2001 | 558 J | NA | <10 | NA | 18.7 | NA | 68.6 B | NA | <5 | NA | <2 | NA | 265000 | 280000 | 8.8 | NA | 1.8 B | NA | 5.3 B | NA | <10 | 2930 | <100 | <3 | NA | 49300 | 45900 | 802 | NA | <0.2 | NA | 24.9 B | NA |
| UAW05-20 | 10/20/2002 | 110 B J | NA | <10 | NA | 21.8 | NA | 72.2 B | NA | <5 | NA | 0.3 B | NA | 253000 J | NA | 5.1 | NA | <7 | NA | <25 | NA | <10 | 986 | NA | <3 | NA | 38300 | NA | 732 | NA | <0.2 | NA | 39.5 B | NA |
| UAW05-20 | 11/10/2003 | <200 | NA | <10 | NA | 16.8 | NA | 55.9 B J | NA | <5 | NA | <2 | NA | 299000 J | NA | 2 B | NA | 1.5 B | NA | <25 | NA | <10 | 1020 | NA | <3 | NA | NA | NA | 772 J | NA | <0.2 | NA | 92 | NA |
| UAW05-20 | 3/28/2004 | 102 B J | NA | <10 | NA | 2.9 B | NA | 59.3 B | NA | <5 | NA | <2 | NA | 273000 | NA | 2.6 B | NA | <7 | NA | 2.9 B J | NA | <10 | 948 | NA | <3 | NA | 42500 | NA | 820 J | NA | <0.2 | NA | 4.3 B | NA |
| UAW05-20 (Dup) | 3/28/2004 | 121 B J | NA | <10 | NA | 2.7 B | NA | 63.7 B | NA | <5 | NA | <2 | NA | 295000 | NA | 4.2 B | NA | <7 | NA | 3.3 B J | NA | <10 | 1090 | NA | <3 | NA | 45700 | NA | 873 J | NA | <0.2 | NA | 7.6 B | NA |
| UAW06-20 | 5/6/2001 | 754 | NA | <10 | NA | 13.4 | NA | 105 B | NA | <5 | NA | <2 | NA | 310000 | 344000 | 3.9 B | NA | 2.6 B | NA | 4.5 B | NA | <10 | 3880 | 1150 | <3 | NA | 48300 | 54200 | 1580 | NA | <0.2 | NA | 29.6 B | NA |
| UAW06-20 | 10/10/2001 | 391 | NA | <10 | NA | 26.7 | NA | 132 B | NA | <5 | NA | <2 | NA | 343000 | 294000 | 10.8 | NA | 1.5 B | NA | <25 | NA | <10 | 1330 | 178 | <3 | NA | 43800 | 38800 | 2590 | NA | <0.2 | NA | 25 B | NA |
| UAW06-20 | 11/13/2001 | 330 | NA | <10 | NA | 34.3 | NA | 154 B | NA | <5 | NA | <2 | NA | 407000 J | 376000 J | 13.4 | NA | <7 | NA | <25 | NA | 4.2 B | 1020 | <100 | <3 | NA | 58000 J | 52800 J | 3000 J | NA | <0.2 | NA | 24.5 B | NA |
| UAW06-20 | 10/20/2002 | 126 B J | NA | 16.5 | NA | 30.8 | NA | 173 B | NA | <5 | NA | <2 | NA | 268000 J | NA | 6.2 | NA | 1.3 B | NA | 2.7 B | NA | <10 | 2580 | NA | <3 | NA | 40800 | NA | 1410 | NA | <0.2 | NA | 28.3 B | NA |
| UAW06-20 | 11/12/2003 | <200 | NA | 3.3 B | NA | 17.8 | NA | 139 B J | NA | <5 | NA | <2 | NA | 221000 J | NA | 3.2 B | NA | <7 | NA | <25 | NA | <10 | 1170 | NA | <3 | NA | 35700 J | NA | 1040 J | NA | <0.2 | NA | 12.6 B | NA |
| UAW06-20 | 3/29/2004 | 91.7 B J | NA | <10 | NA | 20.7 | NA | 135 B | NA | <5 | NA | <2 | NA | 229000 | NA | 3.3 B | NA | <7 | NA | <25 | NA | <10 | 647 | NA | <3 | NA | 41300 | NA | 1160 J | NA | <0.2 | NA | 7.4 B | NA |
| UAW07-20 | 5/8/2001 | NA | NA | <10 | NA | <10 | NA | 90.3 B | NA | <5 | NA | <2 | NA | 466000 | 453000 | 1.6 B | NA | <7 | NA | <25 | NA | <10 | 270 | <100 | <3 | NA | 58000 | 57200 | NA | NA | <0.2 | NA | 2.5 B | NA |
| UAW07-20 (Dup) | 5/8/2001 | NA | NA | <10 | NA | 4.6 B | NA | 95.8 B | NA | <5 | NA | 0.32 B | NA | 496000 | 479000 | <5 | NA | <7 | NA | <25 | NA | <10 | 303 | <100 | <3 | NA | 61600 | 60400 | NA | NA | <0.2 | NA | 2.3 B | NA |
| UAW07-20 | 11/15/2001 | NA | NA | <10 | NA | <10 | NA | 80.4 B | NA | <5 | NA | <2 | NA | NA | 421000 | <5 | NA | <7 | NA | 87.7 | NA | 3.1 B | NA | <100 | <3 | NA | NA | 55200 | NA | NA | <0.2 | NA | 2.3 B | NA |
| UAW07-20 | 10/20/2002 | 111 B J | NA | <10 | NA | 3 B | NA | 79.6 B | NA | <5 | NA | 0.39 B | NA | 374000 J | NA | 3.3 B | NA | <7 | NA | <25 | NA | <10 | 174 | NA | <3 | NA | 48700 | NA | 729 | NA | <0.2 | NA | <40 | NA |
| UAW07-20 | 11/12/2003 | 280 | NA | <10 | NA | 4.9 B | NA | 83.9 B J | NA | 0.55 B | NA | <2 | NA | 391000 J | NA | 3.3 B | NA | <7 | NA | <25 | NA | <10 | 787 J | NA | 3.7 | NA | 51400 | NA | 885 J | NA | <0.2 | NA | 4.2 B | NA |
| UAW07-20 (Dup) | 11/12/2003 | 106 B | NA | <10 | NA | 3.4 B | NA | 70.6 B J | NA | <5 | NA | <2 | NA | 350000 J | NA | 1.8 B | NA | <7 | NA | <25 | NA | <10 | 506 J | NA | <3 | NA | 45100 | NA | 781 J | NA | <0.2 | NA | 2.4 B | NA |
| UAW07-20 | 4/5/2004 | 238 J | NA | <10 | NA | 2.6 B | NA | 40.3 B J | NA | <5 | NA | <2 | NA | 263000 | NA | 3.2 B | NA | <7 | NA | <25 | NA | <10 | 1050 | NA | <3 | NA | 36600 J | NA | 1410 | NA | <0.2 | NA | 2.5 B | NA |
| UAW08-20 | 5/6/2001 | NA | NA | 3.8 B | NA | 36.2 | NA | 87.3 B | NA | <5 | NA | 0.44 B | NA | 810000 | 925000 | 15 | NA | 8.7 | NA | 13.8 B | NA | <10 | 4680 | <100 | <3 | NA | 179000 | 203000 | NA | NA | <0.2 | NA | 30.5 B | NA |
| UAW08-20 | 11/13/2001 | NA | NA | <10 | NA | 113 | NA | 144 B | NA | 0.96 B | NA | 0.61 B | NA | 969000 J | 935000 J | 67.6 | NA | 15 | NA | 41.9 | NA | <10 | 22000 | 132 | 15.8 | NA | 141000 J | 129000 J | NA | NA | <0.2 | NA | 53.4 | NA |
| UAW08-20 | 10/20/2002 | 172 B J | NA | 6.8 B | NA | 88.4 | NA | 82 B | NA | <5 | NA | <2 | NA | 988000 J | NA | 28.3 | NA | 2 B | NA | <25 | NA | <10 | 2670 | NA | <3 | NA | 142000 | NA | 596 | NA | <0.2 | NA | 11.5 B | NA |
| UAW08-20 | 11/10/2003 | 31000 | NA | 7.8 B | NA | 200 | NA | 262 J | NA | 1.3 B | NA | 21.7 | NA | 1040000 J | NA | 173 | NA | 41.7 | NA | 333 | NA | <10 | 95500 | NA | 79.2 | NA | 289000 J | NA | 2310 J | NA | <0.2 | NA | 118 | NA |
| UAW08-20 | 3/29/2004 | 193 B J | NA | 4.9 B | NA | 68.7 | NA | 73 B | NA | <5 | NA | <2 | NA | 955000 | NA | 24.3 | NA | 1.6 B | NA | 3.7 B J | NA | <10 | 1020 | NA | <3 | NA | 141000 | NA | 550 J | NA | <0.2 | NA | 8.5 B | NA |

**Table 5-11**
**Summary of Inorganic Chemical Detections in**
**Groundwater and Seep Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | Aluminum | Aluminum-DISS | Antimony | Antimony-DISS | Arsenic | Arsenic-DISS | Barium | Barium-DISS | Beryllium | Beryllium-DISS | Cadmium | Cadmium-DISS | Calcium | Calcium-DISS | Chromium | Chromium-DISS | Cobalt | Cobalt-DISS | Copper | Copper-DISS | Cyanide, Total | Iron | Iron-DISS | Lead | Lead-DISS | Magnesium | Magnesium-DISS | Manganese | Manganese-DISS | Mercury | Mercury-DISS | Nickel | Nickel-DISS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW09-20 | 5/5/2001 | 90.6 B | NA | <10 | NA | <10 | NA | 80.3 B | NA | <5 | NA | <2 | NA | 108000 | 106000 | <5 | NA | <7 | NA | <25 | NA | <10 | <100 | <100 | <3 | NA | 31000 | 31500 | 12.4 B | NA | <0.2 | NA | <40 | NA |
| UAW09-20 | 11/9/2001 | <200 | NA | <10 | NA | <10 | NA | 78.7 B | NA | <5 | NA | <2 | NA | 109000 J | 101000 J | 10.4 | NA | 1.4 B | NA | <25 | NA | <10 | 288 | 212 | <3 | NA | 25000 J | 23100 J | 17.1 J | NA | <0.2 | NA | 81.9 | NA |
| UAW09-20 | 10/16/2002 | <200 | NA | <10 | NA | <10 | NA | 84.7 B | NA | <5 | NA | 0.85 B | NA | 107000 J | NA | 24.8 | NA | 1.2 B J | NA | <25 | NA | <10 | 130 | NA | <3 | NA | 24900 J | NA | 3.6 B J | NA | <0.2 | NA | 10.8 B | NA |
| UAW09-20 | 11/11/2003 | <200 | NA | <10 | NA | <10 | NA | 95.8 B J | NA | <5 | NA | <2 | NA | 143000 J | NA | 21.2 | NA | <7 | NA | <25 | NA | <10 | 76.4 B | NA | <3 | NA | 33500 J | NA | 1.1 B J | NA | <0.2 | NA | 10.4 B | NA |
| UAW09-20 | 4/6/2004 | <200 | NA | <10 | NA | <10 | NA | 65.5 B J | NA | <5 | NA | <2 | NA | 110000 | NA | 22.5 | NA | <7 | NA | <25 | NA | <10 | 62.5 B | NA | <3 | NA | 26300 J | NA | 1.4 B | NA | <0.2 | NA | 6.6 B | NA |
| UAW09-60 | 5/5/2001 | 142 B | NA | <10 | NA | <10 | NA | 249 | NA | <5 | NA | <2 | NA | 91900 | 99300 | <5 | NA | <7 | NA | 13.7 B | NA | <10 | 132 | <100 | <3 | NA | 31500 | 35300 | 348 | NA | <0.2 | NA | 5.5 B | NA |
| UAW09-60 | 11/9/2001 | 30.4 B | NA | <10 | NA | <10 | NA | 268 | NA | <5 | NA | <2 | NA | 88100 J | 97800 J | <5 | NA | <7 | NA | <25 | NA | <10 | <100 | <100 | <3 | NA | 31500 J | 34900 J | 226 J | NA | <0.2 | NA | <40 | NA |
| UAW09-60 | 10/16/2002 | <200 | NA | <10 | NA | 5.6 B | NA | 330 | NA | <5 | NA | <2 | NA | 82200 J | NA | <5 | NA | 1.4 B J | NA | <25 | NA | <10 | 140 | NA | <3 | NA | 28700 J | NA | 298 J | NA | <0.2 | NA | 22.7 B | NA |
| UAW09-60 | 11/11/2003 | <200 | NA | <10 | NA | 5 B | NA | 364 J | NA | <5 | NA | <2 | NA | 104000 J | NA | 2 B | NA | <7 | NA | <25 | NA | <10 | 71.6 B | NA | <3 | NA | 34900 J | NA | 236 J | NA | <0.2 | NA | 19.5 B | NA |
| UAW09-60 | 4/6/2004 | <200 | NA | <10 | NA | 9.7 B | NA | 411 J | NA | <5 | NA | <2 | NA | 112000 | NA | <5 | NA | <7 | NA | <25 | NA | <10 | 149 | NA | <3 | NA | 36700 J | NA | 311 | NA | <0.2 | NA | 9.4 B | NA |
| UAW10-50 | 10/12/2001 | 32800 | NA | <10 | NA | 19.2 | NA | 281 | NA | 1.9 B | NA | 0.97 B | NA | 271000 | 193000 | 46.7 | NA | 23.9 | NA | 61.6 | NA | 3 B | 49200 | <100 | 21.3 | NA | 73100 | 54600 | 1210 | NA | <0.2 | NA | 61.8 | NA |
| UAW10-50 | 11/13/2001 | 318 | NA | <10 | NA | <10 | NA | 107 B | NA | <5 | NA | <2 | NA | 185000 J | 176000 J | <5 | NA | 2.2 B | NA | 12.3 B | NA | <10 | 346 | <100 | <3 | NA | 55000 J | 52400 J | 469 J | NA | 0.095 B | NA | 15.3 B | NA |
| UAW10-50 | 10/19/2002 | 3070 J | NA | <10 | NA | <10 | NA | 68.1 B | NA | <5 | NA | <2 | NA | 176000 J | NA | 12.1 | NA | 4.4 B | NA | 15.3 B | NA | 2.1 B | 4490 | NA | 2.2 B | NA | 58500 | NA | 559 | NA | <0.2 | NA | 14.4 B | NA |
| UAW10-50 | 11/10/2003 | 2350 | NA | <10 | NA | <10 | NA | 60.3 B J | NA | <5 | NA | <2 | NA | 196000 J | NA | 4.3 B | NA | 3.2 B | NA | 4.9 B | NA | <10 | 2810 | NA | <3 | NA | 65200 J | NA | 490 J | NA | <0.2 | NA | 9.7 B | NA |
| UAW10-50 | 3/30/2004 | 2610 J | NA | <10 | NA | 3 B | NA | 55.9 B | NA | <5 | NA | <2 | NA | 209000 | NA | 5 | NA | 3.6 B | NA | 10.1 B | NA | <10 | 3600 | NA | <3 | NA | 60400 | NA | 356 J | NA | <0.2 | NA | 12.8 B | NA |
| UAW10-80 | 10/12/2001 | 1670 | NA | <10 | NA | 5.1 B | NA | 131 B | NA | <5 | NA | <2 | NA | 181000 | 191000 | 34.8 | NA | 6.3 B | NA | 10.1 B | NA | 2.6 B | 4990 | 5360 | <3 | NA | 57700 | 61000 | 3360 | NA | <0.2 | NA | 75.3 | NA |
| UAW10-80 | 11/13/2001 | 503 | NA | <10 | NA | 6.1 B | NA | 118 B | NA | <5 | NA | 0.58 B | NA | 192000 J | 196000 J | <5 | NA | 3.5 B | NA | 5.8 B | NA | <10 | 6130 | 190 | <3 | NA | 59700 J | 60900 J | 3560 J | NA | 0.091 B | NA | 9.7 B | NA |
| UAW10-80 | 10/19/2002 | 4030 J | NA | <10 | NA | 13.3 | NA | 183 B | NA | <5 | NA | 0.36 B | NA | 117000 J | NA | 25.8 | NA | 5.5 B | NA | 6.5 B | NA | <10 | 13200 | NA | 4.8 | NA | 37100 | NA | 972 | NA | <0.2 | NA | 36 B | NA |
| UAW10-80 | 11/13/2003 | 11000 | NA | <10 | NA | 19.5 | NA | 279 J | NA | 1.1 B | NA | <2 | NA | 142000 J | NA | 171 | NA | 12 | NA | 16.5 B | NA | <10 | 24100 J | NA | 9.5 | NA | 43100 | NA | 1040 J | NA | <0.2 | NA | 129 | NA |
| UAW10-80 | 3/30/2004 | 988 J | NA | <10 | NA | 11.5 | NA | 193 B | NA | <5 | NA | <2 | NA | 132000 | NA | 8.1 | NA | 3.3 B | NA | 5.8 B | NA | <10 | 5710 | NA | <3 | NA | 40700 | NA | 691 J | NA | <0.2 | NA | 16.4 B | NA |
| UAW11-10 | 5/8/2001 | <200 | NA | 1060 | NA | 176 | NA | 295 | NA | <5 | NA | <2 | NA | 224000 | 154000 | 249 | NA | 9.6 | NA | <25 | NA | 8.1 B | 50000 | 34500 | 4.4 | NA | 41100 | 28400 | 8440 | NA | 0.21 | NA | 240 | NA |
| UAW11-10 | 11/10/2001 | 47.3 B | NA | 62.6 | NA | 62.9 | NA | 41.3 B | NA | <5 | NA | <2 | NA | 110000 J | 116000 J | 11.3 | NA | 1.5 B | NA | <25 | NA | 5.6 B | 3900 | 3140 | <3 | NA | 45500 J | 49400 J | 470 J | NA | 0.13 B | NA | 39.3 B | NA |
| UAW11-10 | 10/18/2002 | <200 | NA | 8 B | NA | 65.2 | NA | 29 B | NA | <5 | NA | <2 | NA | 181000 J | NA | 2.7 B | NA | 1.1 B | NA | <25 | NA | <10 | 404 | NA | <3 | NA | 36600 J | NA | 2630 J | NA | <0.2 | NA | 12.2 B | NA |
| UAW11-10 | 11/16/2003 | 68.1 B J | NA | 4.7 B | NA | 32.6 | NA | 23.6 B J | NA | <5 | NA | 1.1 B J | NA | 148000 J | NA | 6.2 J | NA | 1.8 B J | NA | 2 B J | NA | <10 | 270 | NA | <3 | NA | 29100 J | NA | 2800 J | NA | <0.2 | NA | 7.9 B J | NA |
| UAW11-10 | 4/6/2004 | 39.6 B J | NA | <10 | NA | 86.1 | NA | 26.8 B J | NA | <5 | NA | 1 B | NA | 183000 | NA | <5 | NA | 1.1 B | NA | 2.5 B | NA | <10 | 554 | NA | <3 | NA | 36900 J | NA | 4230 | NA | <0.2 | NA | 8.9 B | NA |
| UAW11-40 | 5/8/2001 | 355 | NA | 2.3 B | NA | <10 | NA | 31.4 B | NA | <5 | NA | 0.61 B | NA | 361000 | 383000 | 6.7 | NA | 12.7 | NA | 13.7 B | NA | <10 | 930 | <100 | <3 | NA | 81000 | 85100 | 1130 | NA | <0.2 | NA | 49.4 | NA |
| UAW11-40 | 11/12/2001 | 62 B J | NA | <10 | NA | <10 | NA | 24.4 B | NA | <5 | NA | 0.51 B | NA | 347000 | 335000 | 13 | NA | 13.2 | NA | 11.6 B | NA | <10 | <100 | <100 | <3 | NA | 79100 | 76500 | 1150 | NA | <0.2 | NA | 66.5 | NA |
| UAW11-40 | 10/18/2002 | <200 | NA | <10 | NA | <10 | NA | 26.2 B | NA | <5 | NA | 0.34 B | NA | 318000 J | NA | 24 | NA | 11.6 | NA | 6.2 B | NA | <10 | 245 | NA | <3 | NA | 72800 J | NA | 1040 J | NA | <0.2 | NA | 73.2 | NA |
| UAW11-40 | 11/16/2003 | <200 | NA | <10 | NA | <10 | NA | 24.5 B J | NA | <5 | NA | 1.3 B J | NA | 341000 J | NA | 54.6 J | NA | 10.4 J | NA | 9.4 B J | NA | <10 | 650 | NA | <3 | NA | 73000 J | NA | 904 J | NA | <0.2 | NA | 86 J | NA |
| UAW11-40 | 4/6/2004 | <65.4* | NA | <10 | NA | <10 | NA | 26.5 B J | NA | <5 | NA | 0.31 B | NA | 353000 | NA | 8.5 | NA | 9.3 | NA | <6* | NA | <10 | 100 | NA | <3 | NA | 73300 J | NA | 966 | NA | <0.2 | NA | 53.1 | NA |
| UAW11-40 (Dup) | 4/6/2004 | <48.1* | NA | <10 | NA | <10 | NA | 25.9 B J | NA | <5 | NA | 0.41 B | NA | 346000 | NA | 7.7 | NA | 8.6 | NA | <4.9* | NA | <10 | 92.8 B | NA | <3 | NA | 71200 J | NA | 903 | NA | <0.2 | NA | 49.3 | NA |
| UAW12-20 | 5/6/2001 | NA | NA | <10 | NA | 5.8 B | NA | 75.7 B | NA | <5 | NA | <2 | NA | 727000 | 679000 | 2.2 B | NA | <7 | NA | <25 | NA | <10 | 3010 | 141 | <3 | NA | 54800 | 51300 | NA | NA | <0.2 | NA | 18.2 B | NA |
| UAW12-20 | 11/15/2001 | NA | NA | <10 | NA | <10 | NA | 20.3 B | NA | <5 | NA | <2 | NA | NA | 648000 | <5 | NA | <7 | NA | 19.7 B | NA | 5 B | NA | 114 | <3 | NA | NA | 55200 | NA | NA | <0.2 | NA | 5.3 B | NA |
| UAW12-20 | 10/20/2002 | 102 B J | NA | <10 | NA | 8.9 B | NA | 18.1 B | NA | <5 | NA | <2 | NA | 742000 J | NA | 3.1 B | NA | <7 | NA | 1.8 B | NA | <10 | 213 | NA | <3 | NA | 55400 | NA | 4940 | NA | <0.2 | NA | 3.2 B | NA |
| UAW12-20 | 11/12/2003 | 63.1 B | NA | <10 | NA | 3.8 B | NA | 21.1 B J | NA | <5 | NA | <2 | NA | 660000 J | NA | 2.8 B | NA | <7 | NA | <25 | NA | <10 | 296 J | NA | <3 | NA | 46100 | NA | 5220 J | NA | <0.2 | NA | 5.4 B | NA |
| UAW12-20 | 3/28/2004 | 70.8 B J | NA | <10 | NA | <10 | NA | 26.2 B | NA | <5 | NA | 0.28 B | NA | 856000 | NA | <5 | NA | <7 | NA | 4.7 B J | NA | <10 | 456 | NA | <3 | NA | 67900 | NA | 9570 J | NA | <0.2 | NA | <40 | NA |

**Table 5-11**
**Summary of Inorganic Chemical Detections in**
**Groundwater and Seep Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | Aluminum | Aluminum-DISS | Antimony | Antimony-DISS | Arsenic | Arsenic-DISS | Barium | Barium-DISS | Beryllium | Beryllium-DISS | Cadmium | Cadmium-DISS | Calcium | Calcium-DISS | Chromium | Chromium-DISS | Cobalt | Cobalt-DISS | Copper | Copper-DISS | Cyanide, Total | Iron | Iron-DISS | Lead | Lead-DISS | Magnesium | Magnesium-DISS | Manganese | Manganese-DISS | Mercury | Mercury-DISS | Nickel | Nickel-DISS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW13-20 | 5/6/2001 | NA | NA | <10 | NA | 36.1 | NA | 21.2 B | NA | <5 | NA | <2 | NA | 818000 | 764000 | 3.4 B | NA | <7 | NA | <25 | NA | <10 | 90.4 B | <100 | <3 | NA | 81900 | 87200 | NA | NA | <0.2 | NA | 12.4 B | NA |
| UAW13-20 | 11/15/2001 | NA | NA | 4.2 B | NA | 83.1 | NA | 27.4 B | NA | <5 | NA | 0.28 B | NA | NA | 916000 | 315 | NA | <7 | NA | 597 | NA | 8.5 B | NA | <100 | <3 | NA | NA | 103000 | NA | NA | 0.11 B | NA | 23.2 B | NA |
| UAW13-20 | 10/23/2002 | <200 | NA | <10 | NA | 59.1 J | NA | 20.1 B | NA | <5 | NA | <2 | NA | 1030000 | NA | 110 | NA | <7 | NA | 4.2 B | NA | 2.6 B | 143 | NA | <3 | NA | 96600 | NA | 2750 | NA | <0.2 | NA | 19.2 B | NA |
| UAW13-20 | 11/12/2003 | <200 | NA | <10 | NA | 45.2 | NA | 13.8 B J | NA | <5 | NA | <2 | NA | 897000 J | NA | 49.4 | NA | <7 | NA | <25 | NA | <10 | 142 J | NA | <3 | NA | 98800 | NA | 2760 J | NA | <0.2 | NA | 16.6 B | NA |
| UAW13-20 | 3/28/2004 | 65.8 B J | NA | <10 | NA | 39.6 | NA | 9.1 B | NA | <5 | NA | <2 | NA | 875000 | NA | 56.3 | NA | <7 | NA | 15.9 B J | NA | <10 | 102 | NA | <3 | NA | 108000 | NA | 3140 J | NA | <0.2 | NA | 12.2 B | NA |
| UAW14-10 | 5/5/2001 | 286 | NA | <10 | NA | <10 | NA | 82.6 B | NA | <5 | NA | <2 | NA | 107000 | 108000 | <5 | NA | <7 | NA | 13.3 B | NA | <10 | 294 | <100 | <3 | NA | 30600 | 32200 | 53.8 | NA | <0.2 | NA | 6.1 B | NA |
| UAW14-10 | 11/9/2001 | 177 B | NA | <10 | NA | <10 | NA | 69.1 B | NA | <5 | NA | <2 | NA | 110000 J | 109000 J | <5 | NA | <7 | NA | <25 | NA | 1.8 B | 453 | 387 | <3 | NA | 31700 J | 31400 J | 26.4 J | NA | <0.2 | NA | 3.4 B | NA |
| UAW14-10 | 10/16/2002 | 359 | NA | <10 | NA | <10 | NA | 72 B | NA | <5 | NA | 0.41 B | NA | 100000 J | NA | 4.3 B | NA | 1.4 B J | NA | <25 | NA | <10 | 881 | NA | <3 | NA | 29300 J | NA | 100 J | NA | <0.2 | NA | 4 B | NA |
| UAW14-10 | 11/16/2003 | 57 B J | NA | <10 | NA | 6 B | NA | 73.7 B J | NA | <5 | NA | 1.3 B J | NA | 111000 J | NA | 5.5 J | NA | 1.8 B J | NA | 4 B J | NA | <10 | 1850 | NA | <3 | NA | 30100 J | NA | 60.1 J | NA | <0.2 | NA | 6.8 B J | NA |
| UAW14-10 | 4/5/2004 | <200 | NA | <10 | NA | <10 | NA | 59.9 B J | NA | <5 | NA | <2 | NA | 115000 | NA | 10.9 | NA | <7 | NA | <25 | NA | <10 | 2680 | NA | <3 | NA | 33000 J | NA | 72.5 | NA | <0.2 | NA | 20.5 B | NA |
| UAW15-20 | 5/6/2001 | 147 B | NA | <10 | NA | <10 | NA | 221 | NA | <5 | NA | 0.49 B | NA | 237000 | 253000 | 2 B | NA | 21.4 | NA | 26.4 | NA | <10 | 156 | <100 | <3 | NA | 61600 | 65300 | 397 | NA | <0.2 | NA | 55.1 | NA |
| UAW15-20 | 11/11/2001 | 271 J | NA | <10 | NA | <10 | NA | 330 | NA | <5 | NA | 0.48 B | NA | 311000 | 297000 | 8.7 | NA | 14.6 | NA | 4.9 B | NA | <10 | 398 | <100 | <3 | NA | 77100 | 73700 | 231 | NA | <0.2 | NA | 102 | NA |
| UAW15-20 | 10/18/2002 | 85.5 B J | NA | <10 | NA | <10 | NA | 145 B | NA | <5 | NA | 0.5 B | NA | 148000 J | NA | 9.7 | NA | 15 | NA | 1.8 B | NA | <10 | 273 | NA | <3 | NA | 37400 | NA | 16.1 | NA | <0.2 | NA | 57.5 | NA |
| UAW15-20 | 11/17/2003 | 104 B J | NA | <10 | NA | <10 | NA | 290 J | NA | <5 | NA | 1.2 B J | NA | 214000 J | NA | 24.6 J | NA | 7.6 J | NA | 5 B J | NA | 4.9 B | 218 | NA | <3 | NA | 51900 J | NA | 60.3 J | NA | <0.2 | NA | 66.3 J | NA |
| UAW15-20 | 4/7/2004 | 214 J | NA | <10 | NA | <10 | NA | 563 J | NA | <5 | NA | <2 | NA | 485000 | NA | 40.6 | NA | 10.1 | NA | <3* | NA | <10 | 571 | NA | <3 | NA | 115000 J | NA | 102 | NA | <0.2 | NA | 374 | NA |
| UAW15-50 | 5/6/2001 | 147 B | NA | 14.4 | NA | 83.5 | NA | 1090 | NA | <5 | NA | <2 | NA | 257000 | 219000 | 3.1 B | NA | 13.7 | NA | <25 | NA | <10 | 15600 | 407 | <3 | NA | 107000 | 89800 | 735 | NA | <0.2 | NA | 130 | NA |
| UAW15-50 | 11/11/2001 | 197 B J | NA | 16 | NA | 83 | NA | 960 | NA | <5 | NA | 0.29 B | NA | 250000 | 230000 | 1.9 B | NA | 11 | NA | <25 | NA | 4.3 B | 16400 | 582 | <3 | NA | 108000 | 99000 | 653 | NA | 0.18 B | NA | 102 | NA |
| UAW15-50 | 10/18/2002 | 88.4 B J | NA | 12.2 | NA | 91.6 | NA | 766 | NA | <5 | NA | <2 | NA | 206000 J | NA | 1.6 B | NA | 4.1 B | NA | <25 | NA | <10 | 13000 | NA | <3 | NA | 88700 | NA | 588 | NA | <0.2 | NA | 76.4 | NA |
| UAW15-50 | 11/17/2003 | 60.6 B J | NA | 8.5 B | NA | 71.4 | NA | 648 J | NA | <5 | NA | 1.2 B J | NA | 225000 J | NA | 5.4 J | NA | 4.2 B J | NA | 2.9 B J | NA | <10 | 10400 | NA | <3 | NA | 90400 J | NA | 682 J | NA | <0.2 | NA | 84.7 J | NA |
| UAW15-50 | 4/7/2004 | 62.3 B J | NA | 11.1 | NA | 77.1 | NA | 664 J | NA | <5 | NA | 0.53 B | NA | 196000 | NA | 2.5 B | NA | 7.8 | NA | <25 | NA | <10 | 13600 | NA | <3 | NA | 75500 J | NA | 543 | NA | <0.2 | NA | 85.8 | NA |
| UAW16-10 | 10/12/2001 | 98.3 B | NA | <10 | NA | 24.9 | NA | 55.5 B | NA | <5 | NA | <2 | NA | 223000 | 226000 | 7 | NA | 1.9 B | NA | <25 | NA | <10 | 1300 | 1570 | <3 | NA | 38900 | 39900 | 2760 | NA | <0.2 | NA | 17.1 B | NA |
| UAW16-10 (Dup) | 10/12/2001 | 98.6 B | NA | <10 | NA | 23.2 | NA | 55.1 B | NA | <5 | NA | <2 | NA | 221000 | 226000 | 6.9 | NA | 1.8 B | NA | <25 | NA | <10 | 1250 | 1250 | <3 | NA | 38200 | 39400 | 2740 | NA | <0.2 | NA | 17.5 B | NA |
| UAW16-10 | 11/13/2001 | 94.1 B | NA | 3.6 B | NA | 20.6 | NA | 49.6 B | NA | <5 | NA | <2 | NA | 277000 J | 243000 J | 4.3 B | NA | <7 | NA | 6.8 B | NA | <10 | 1150 | 418 | <3 | NA | 45700 J | 40200 J | 2390 J | NA | <0.2 | NA | 12.7 B | NA |
| UAW16-10 | 10/18/2002 | <200 | NA | <10 | NA | 8.9 B | NA | 56.5 B | NA | <5 | NA | <2 | NA | 410000 J | NA | 2.7 B | NA | 1.2 B | NA | <25 | NA | <10 | 721 | NA | <3 | NA | 58300 J | NA | 4460 J | NA | <0.2 | NA | 24.3 B | NA |
| UAW16-10 | 11/16/2003 | 57.3 B J | NA | <10 | NA | 5.1 B | NA | 38.4 B J | NA | <5 | NA | 1.1 B J | NA | 369000 J | NA | 5.7 J | NA | 1.7 B J | NA | 2.2 B J | NA | <10 | 603 | NA | <3 | NA | 43100 J | NA | 3180 J | NA | <0.2 | NA | 17.1 B J | NA |
| UAW16-10 (Dup) | 11/17/2003 | 62.9 B J | NA | 3.1 B | NA | 4.7 B | NA | 40.4 B J | NA | <5 | NA | 0.97 B J | NA | 382000 J | NA | 5.8 J | NA | 1.6 B J | NA | 2.3 B J | NA | <10 | 634 | NA | <3 | NA | 45100 J | NA | 3300 J | NA | <0.2 | NA | 18.3 B J | NA |
| UAW16-10 | 4/7/2004 | <200 | NA | <10 | NA | <10 | NA | 33.5 B J | NA | <5 | NA | <2 | NA | 329000 | NA | <5 | NA | <7 | NA | <25 | NA | <10 | 529 | NA | <3 | NA | 36200 J | NA | 3130 | NA | <0.2 | NA | 15.3 B | NA |
| UAW17-40 | 5/5/2001 | 955 | NA | <10 | NA | 7.6 B | NA | 216 | NA | <5 | NA | <2 | NA | 102000 | 102000 | 2 B | NA | <7 | NA | <25 | NA | <10 | 3720 | <100 | <3 | NA | 31400 | 33200 | 242 | NA | <0.2 | NA | 12.5 B | NA |
| UAW17-40 | 11/9/2001 | 395 | NA | <10 | NA | 16.2 | NA | 177 B | NA | <5 | NA | <2 | NA | 116000 J | 116000 J | 2.5 B | NA | <7 | NA | <25 | NA | <10 | 4700 | 4760 | <3 | NA | 36900 J | 36900 J | 301 J | NA | <0.2 | NA | 5 B | NA |
| UAW17-40 | 10/16/2002 | 333 | NA | <10 | NA | 17.9 | NA | 121 B | NA | <5 | NA | <2 | NA | 108000 J | NA | 1.6 B | NA | 1.7 B | NA | <25 | NA | <10 | 3930 | NA | <3 | NA | 33700 J | NA | 268 J | NA | <0.2 | NA | 5.3 B | NA |
| UAW17-40 | 11/16/2003 | 63.3 B J | NA | <10 | NA | 19.1 | NA | 117 B J | NA | <5 | NA | 1 B J | NA | 111000 J | NA | 4.5 B J | NA | 1.9 B J | NA | 2.9 B J | NA | <10 | 3450 | NA | <3 | NA | 33000 J | NA | 241 J | NA | <0.2 | NA | 6.9 B J | NA |
| UAW17-40 | 3/31/2004 | 166 B | NA | <10 | NA | 10.9 | NA | 100 B | NA | <5 | NA | <2 | NA | 102000 J | NA | 4.6 B | NA | <7 | NA | <25 | NA | <10 | 1510 | NA | <3 | NA | 30900 J | NA | 148 J | NA | <0.2 | NA | 3.9 B | NA |
| UAW18-20 | 10/12/2001 | 97.9 B | NA | <10 | NA | 12 | NA | 169 B | NA | <5 | NA | 0.31 B | NA | 73100 | 72200 | 1.5 B | NA | 2 B | NA | <25 | NA | 4.7 B | 5340 | 5300 | <3 | NA | 13900 | 13800 | 1220 | NA | <0.2 | NA | 28.8 B | NA |
| UAW18-20 | 11/13/2001 | 60.8 B | NA | <10 | NA | 11.7 | NA | 186 B | NA | <5 | NA | <2 | NA | 89100 J | 81900 J | <5 | NA | 1.8 B | NA | <25 | NA | 5.4 B | 4800 | <100 | <3 | NA | 16800 J | 15600 J | 1130 J | NA | <0.2 | NA | 28.6 B | NA |
| UAW18-20 | 10/18/2002 | <200 | NA | <10 | NA | 13.1 | NA | 49.5 B | NA | <5 | NA | <2 | NA | 23600 J | NA | 2 B | NA | 2.2 B | NA | <25 | NA | <10 | 1570 | NA | <3 | NA | 6820 J | NA | 282 J | NA | <0.2 | NA | 16.3 B | NA |
| UAW18-20 | 11/16/2003 | 70.5 B J | NA | <10 | NA | 17.8 | NA | 197 B J | NA | <5 | NA | 1 B J | NA | 99800 J | NA | 4.9 B J | NA | 1.8 B J | NA | 2.6 B J | NA | <10 | 1710 | NA | <3 | NA | 39900 J | NA | 685 J | NA | <0.2 | NA | 37.6 B J | NA |
| UAW18-20 | 4/7/2004 | <40.6* | NA | <10 | NA | 8.2 B | NA | 299 J | NA | <5 | NA | <2 | NA | 216000 | NA | <5 | NA | <7 | NA | <25 | NA | <10 | 3300 | NA | <3 | NA | 81500 J | NA | 1900 | NA | <0.2 | NA | 33.4 B | NA |

**Table 5-11**
**Summary of Inorganic Chemical Detections in**
**Groundwater and Seep Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | Aluminum | Aluminum-DISS | Antimony | Antimony-DISS | Arsenic | Arsenic-DISS | Barium | Barium-DISS | Beryllium | Beryllium-DISS | Cadmium | Cadmium-DISS | Calcium | Calcium-DISS | Chromium | Chromium-DISS | Cobalt | Cobalt-DISS | Copper | Copper-DISS | Cyanide, Total | Iron | Iron-DISS | Lead | Lead-DISS | Magnesium | Magnesium-DISS | Manganese | Manganese-DISS | Mercury | Mercury-DISS | Nickel | Nickel-DISS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW19-80 | 5/6/2001 | 150 B | NA | <10 | NA | <10 | NA | 112 B | NA | <5 | NA | 0.33 B | NA | 194000 | 191000 | 1.4 B | NA | <7 | NA | <25 | NA | <10 | 363 | <100 | <3 | NA | 58700 | 55400 | 117 | NA | <0.2 | NA | 11.7 B | NA |
| UAW19-80 | 11/12/2001 | 1010 J | NA | <10 | NA | <10 | NA | 113 B | NA | <5 | NA | <2 | NA | 177000 | 186000 | 19.6 | NA | 1.4 B | NA | 12.4 B | NA | <10 | 1700 | <100 | <3 | NA | 52700 | 55400 | 60.9 | NA | <0.2 | NA | 14.1 B | NA |
| UAW19-80 (Dup) | 11/12/2001 | 65.4 B J | NA | <10 | NA | <10 | NA | 25.4 B | NA | <5 | NA | 0.62 B | NA | 358000 | 349000 | 11.8 | NA | 13.3 | NA | 12.1 B | NA | <10 | <100 | <100 | <3 | NA | 81600 | 79200 | 1190 | NA | <0.2 | NA | 66.3 | NA |
| UAW19-80 | 10/17/2002 | 406 | NA | <10 | NA | <10 | NA | 107 B | NA | <5 | NA | <2 | NA | 197000 J | NA | 6.5 | NA | 0.84 B | NA | <25 | NA | <10 | 592 | NA | <3 | NA | 57700 J | NA | 27.8 J | NA | <0.2 | NA | 6.2 B | NA |
| UAW19-80 (Dup) | 10/17/2002 | 345 | NA | <10 | NA | <10 | NA | 110 B | NA | <5 | NA | <2 | NA | 194000 J | NA | 6.3 | NA | 0.89 B | NA | <25 | NA | <10 | 544 | NA | <3 | NA | 57100 J | NA | 26.9 J | NA | <0.2 | NA | 5.8 B | NA |
| UAW19-80 | 11/13/2003 | 76.3 B | NA | <10 | NA | <10 | NA | 88.9 B J | NA | 0.72 B | NA | <2 | NA | 196000 J | NA | 5.8 | NA | <7 | NA | <25 | NA | <10 | 138 J | NA | <3 | NA | 56600 | NA | 17.5 J | NA | <0.2 | NA | 10.8 B | NA |
| UAW19-80 | 3/30/2004 | 423 | NA | <10 | NA | <10 | NA | 95.7 B | NA | <5 | NA | <2 | NA | 213000 J | NA | 5.2 | NA | <7 | NA | <25 | NA | <10 | 549 | NA | <3 | NA | 61100 J | NA | 28.4 J | NA | <0.2 | NA | <40 | NA |
| UAW20-60 | 5/7/2001 | 200 | NA | <10 | NA | <10 | NA | 149 B | NA | <5 | NA | <2 | NA | 390000 | 482000 | 4.1 B | NA | 3 B | NA | 16.8 B | NA | <10 | 268 | <100 | <3 | NA | 97400 | 122000 | 366 | NA | <0.2 | NA | 18.4 B | NA |
| UAW20-60 | 11/14/2001 | <200 | NA | <10 | NA | <10 | NA | 26.5 B | NA | <5 | NA | 0.3 B | NA | 446000 | 430000 | <5 | NA | 2.3 B | NA | 5.8 B | NA | 2.9 B | <100 | <100 | <3 | NA | 124000 J | 120000 J | 303 | NA | <0.2 | NA | 8.7 B | NA |
| UAW20-60 (Dup) | 11/14/2001 | 70.6 B J | NA | 2.8 B | NA | <10 | NA | 26.1 B | NA | <5 | NA | 0.33 B | NA | 436000 | 431000 | <5 | NA | 2.2 B | NA | 5.3 B | NA | 1.9 B | 175 | <100 | <3 | NA | 123000 J | 121000 J | 303 | NA | <0.2 | NA | 8.9 B | NA |
| UAW20-60 | 10/19/2002 | 76.5 B J | NA | <10 | NA | <10 | NA | 20.8 B | NA | <5 | NA | 0.4 B | NA | 373000 J | NA | 6 | NA | 1.6 B | NA | <25 | NA | <10 | 50.3 B | NA | <3 | NA | 104000 | NA | 179 | NA | <0.2 | NA | 7.1 B | NA |
| UAW20-60 (Dup) | 10/19/2002 | 102 B J | NA | <10 | NA | 20.8 | NA | 69 B | NA | <5 | NA | <2 | NA | 242000 J | NA | 4.7 B | NA | 0.81 B | NA | <25 | NA | <10 | 939 | NA | <3 | NA | 36600 | NA | 696 | NA | <0.2 | NA | 38.2 B | NA |
| UAW20-60 | 11/13/2003 | <200 | NA | <10 | NA | <10 | NA | 19.9 B J | NA | 0.6 B | NA | <2 | NA | 377000 J | NA | 2.2 B | NA | 1.2 B | NA | <25 | NA | <10 | <100 | NA | <3 | NA | 96900 | NA | 111 J | NA | <0.2 | NA | 7.1 B | NA |
| UAW20-60 | 3/30/2004 | 59.4 B J | NA | <10 | NA | <10 | NA | 18.4 B | NA | <5 | NA | 0.57 B | NA | 385000 | NA | 43.3 | NA | 2.1 B | NA | 3.9 B | NA | <10 | 333 | NA | <3 | NA | 99400 | NA | 96.3 J | NA | <0.2 | NA | 21.6 B | NA |
| UAW21-30 | 5/5/2001 | 832 | NA | <10 | NA | <10 | NA | 125 B | NA | <5 | NA | <2 | NA | 153000 | 191000 | 1.5 B | NA | 1.3 B | NA | 9.9 B | NA | <10 | 923 | <100 | <3 | NA | 40200 | 50200 | 82.8 | NA | <0.2 | NA | 17.7 B | NA |
| UAW21-30 | 11/11/2001 | 3170 J | NA | 2.5 B | NA | <10 | NA | 55.4 B | NA | <5 | NA | <2 | NA | 109000 | 107000 | 670 | NA | 6.5 B | NA | 24.2 B | NA | 3.4 B | 5520 | <100 | 2.7 B | NA | 27000 | 25400 | 152 | NA | <0.2 | NA | 170 | NA |
| UAW21-30 | 10/18/2002 | 1500 | NA | <10 | NA | <10 | NA | 51.6 B | NA | <5 | NA | <2 | NA | 105000 J | NA | 349 | NA | 18.7 | NA | 7.9 B | NA | <10 | 4500 | NA | 2.1 B | NA | 28200 J | NA | 340 J | NA | <0.2 | NA | 623 | NA |
| UAW21-30 | 11/11/2003 | 4660 | NA | <10 | NA | 5.6 B | NA | 60.1 B J | NA | <5 | NA | <2 | NA | 121000 J | NA | 348 | NA | 8.5 | NA | 15.3 B | NA | <10 | 8000 | NA | 4.8 | NA | 32200 J | NA | 174 J | NA | <0.2 | NA | 103 | NA |
| UAW21-30 | 3/27/2004 | 1570 J | NA | <10 | NA | 3.1 B | NA | 52 B | NA | <5 | NA | <2 | NA | 115000 | NA | 209 | NA | 4.9 B | NA | 15.8 B J | NA | <10 | 3720 | NA | <3 | NA | 30800 | NA | 108 J | NA | <0.2 | NA | 171 | NA |
| UAW21-80 | 5/5/2001 | 271 | NA | <10 | NA | 24.2 | NA | 258 | NA | <5 | NA | <2 | NA | 135000 | 127000 | <5 | NA | <7 | NA | <25 | NA | <10 | 2020 | <100 | <3 | NA | 42800 | 42200 | 609 | NA | <0.2 | NA | 7.6 B | NA |
| UAW21-80 | 11/11/2001 | 282 | NA | <10 | NA | 42.6 | NA | 231 | NA | <5 | NA | <2 | NA | 136000 J | 142000 J | 2.1 B | NA | <7 | NA | <25 | NA | <10 | 2990 | <100 | <3 | NA | 44500 | 46300 | 728 | NA | <0.2 | NA | 7.5 B | NA |
| UAW21-80 | 10/18/2002 | 486 | NA | <10 | NA | 45.5 | NA | 232 | NA | <5 | NA | <2 | NA | 143000 J | NA | 9.7 | NA | 2.2 B | NA | <25 | NA | <10 | 3780 | NA | <3 | NA | 45400 J | NA | 787 J | NA | <0.2 | NA | 12.7 B | NA |
| UAW21-80 | 11/11/2003 | <200 | NA | <10 | NA | 45.5 | NA | 230 J | NA | <5 | NA | <2 | NA | 162000 J | NA | 1.6 B | NA | <7 | NA | <25 | NA | <10 | 2820 | NA | <3 | NA | 50200 J | NA | 791 J | NA | <0.2 | NA | 9.5 B | NA |
| UAW21-80 | 3/27/2004 | 69.5 B J | NA | <10 | NA | 44.2 | NA | 222 | NA | <5 | NA | <2 | NA | 147000 | NA | <5 | NA | 1 B | NA | <25 | NA | <10 | 2610 | NA | <3 | NA | 45800 | NA | 798 J | NA | <0.2 | NA | 6.6 B | NA |
| UAW22-20 | 10/13/2001 | 12100 | NA | <10 | NA | 14.3 | NA | 182 B | NA | 0.9 B | NA | 0.29 B | NA | 283000 | 229000 | 22.2 | NA | 8.5 | NA | 29.2 | NA | <10 | 41400 | 169 | 12.2 | NA | 68000 | 46600 | 8260 | NA | <0.2 | NA | 56.4 | NA |
| UAW22-20 | 11/13/2001 | 14700 | NA | <10 | NA | 15.9 | NA | 174 B | NA | 1.1 B | NA | 0.47 B | NA | 351000 J | 244000 J | 27.1 | NA | 10.6 | NA | 34.4 | NA | 2.5 B | 31600 | 253 | 15.4 | NA | 97200 J | 50200 J | 6960 J | NA | <0.2 | NA | 57.3 | NA |
| UAW22-20 | 10/20/2002 | 642 J | NA | <10 | NA | 22.3 | NA | 103 B | NA | <5 | NA | <2 | NA | 156000 J | NA | 1.8 B | NA | 2.2 B | NA | <25 | NA | <10 | 5000 | NA | <3 | NA | 36500 | NA | 3350 | NA | <0.2 | NA | 28 B | NA |
| UAW22-20 | 11/10/2003 | 478 | NA | <10 | NA | 7.4 B | NA | 189 B J | NA | <5 | NA | 0.41 B | NA | 352000 J | NA | 3.8 B | NA | 1.7 B | NA | 3 B | NA | <10 | 12200 | NA | <3 | NA | 69200 J | NA | 10800 J | NA | <0.2 | NA | 20.8 B | NA |
| UAW22-20 | 3/29/2004 | 1540 J | NA | <10 | NA | 5.3 B | NA | 182 B | NA | <5 | NA | 0.38 B | NA | 298000 | NA | 2.8 B | NA | 1.6 B | NA | 4.8 B J | NA | <10 | 12900 | NA | <3 | NA | 65400 | NA | 9640 J | NA | <0.2 | NA | 11.4 B | NA |
| UAW23-20 | 10/12/2001 | 117 B | NA | <10 | NA | <10 | NA | 29.6 B | NA | <5 | NA | <2 | NA | 408000 | 403000 | 6.9 | NA | <7 | NA | <25 | NA | <10 | 154 | 109 | <3 | NA | 97200 | 96200 | 31.5 | NA | <0.2 | NA | 12.8 B | NA |
| UAW23-20 | 11/14/2001 | <200 | NA | <10 | NA | <10 | NA | 25 B | NA | <5 | NA | <2 | NA | 394000 | 390000 | 5.6 | NA | 6.2 B | NA | <25 | NA | 2.1 B | 1980 | 488 | <3 | NA | 90900 J | 90700 J | 227 | NA | <0.2 | NA | 296 | NA |
| UAW23-20 | 10/19/2002 | 128 B J | NA | <10 | NA | <10 | NA | 21.7 B | NA | <5 | NA | 0.56 B | NA | 305000 J | NA | 54.2 | NA | 6.7 B | NA | 2.5 B | NA | <10 | 2860 | NA | <3 | NA | 68000 | NA | 88.1 | NA | <0.2 | NA | 400 | NA |
| UAW23-20 | 11/13/2003 | <200 | NA | <10 | NA | 3 B | NA | 19.9 B J | NA | <5 | NA | <2 | NA | 309000 J | NA | 32.4 | NA | 12.1 | NA | <25 | NA | <10 | 3750 J | NA | <3 | NA | 66900 | NA | 155 J | NA | <0.2 | NA | 789 | NA |
| UAW23-20 | 3/28/2004 | 771 J | NA | <10 | NA | <10 | NA | 36.9 B | NA | <5 | NA | 0.79 B | NA | 322000 | NA | 932 | NA | 3.6 B | NA | 25.4 J | NA | <10 | 8010 | NA | <3 | NA | 71000 | NA | 89.4 J | NA | <0.2 | NA | 214 | NA |
| UAW24-70 | 10/13/2001 | 251 | NA | <10 | NA | <10 | NA | 213 | NA | <5 | NA | <2 | NA | 128000 | 129000 | 2.1 B | NA | <7 | NA | <25 | NA | <10 | 355 | 482 | <3 | NA | 39900 | 40500 | 115 | NA | <0.2 | NA | 5.5 B | NA |
| UAW24-70 | 11/15/2001 | 358 J | NA | <10 | NA | <10 | NA | 145 B J | NA | <5 | NA | <2 | NA | 71500 J | 76500 J | 4 B | NA | <7 | NA | <25 | NA | 3.2 B | 1030 | <100 | <3 | NA | 31500 | 31500 | 154 | NA | <0.2 | NA | 3.8 B | NA |
| UAW24-70 | 10/17/2002 | 365 | NA | <10 | NA | 6.7 B | NA | 227 | NA | <5 | NA | <2 | NA | 83100 J | NA | 8.3 | NA | 1.6 B | NA | <25 | NA | <10 | 1270 | NA | <3 | NA | 37300 J | NA | 245 J | NA | <0.2 | NA | 16.9 B | NA |
| UAW24-70 | 11/16/2003 | <200 | NA | <10 | NA | 12 | NA | 167 B J | NA | <5 | NA | 1.2 B J | NA | 63300 J | NA | 6.5 J | NA | 2.2 B J | NA | 2.2 B J | NA | <10 | 843 | NA | <3 | NA | 27400 J | NA | 162 J | NA | <0.2 | NA | 13.7 B | NA |
| UAW24-70 | 4/5/2004 | <200 | NA | <10 | NA | 11.4 | NA | 249 J | NA | <5 | NA | <2 | NA | 86300 | NA | 2.1 B | NA | <7 | NA | <25 | NA | <10 | 1310 | NA | <3 | NA | 33600 J | NA | 231 | NA | <0.2 | NA | 5.9 B | NA |

**Table 5-11**
**Summary of Inorganic Chemical Detections in**
**Groundwater and Seep Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | Aluminum | Aluminum-DISS | Antimony | Antimony-DISS | Arsenic | Arsenic-DISS | Barium | Barium-DISS | Beryllium | Beryllium-DISS | Cadmium | Cadmium-DISS | Calcium | Calcium-DISS | Chromium | Chromium-DISS | Cobalt | Cobalt-DISS | Copper | Copper-DISS | Cyanide, Total | Iron | Iron-DISS | Lead | Lead-DISS | Magnesium | Magnesium-DISS | Manganese | Manganese-DISS | Mercury | Mercury-DISS | Nickel | Nickel-DISS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW25-20 | 10/13/2001 | 383 | NA | <10 | NA | 26.1 | NA | 171 B | NA | <5 | NA | 0.38 B | NA | 239000 | 239000 | 2.6 B | NA | 3 B | NA | 11.4 B | NA | <10 | 3550 | 3530 | <3 | NA | 43200 | 43300 | 1000 | NA | <0.2 | NA | 27.7 B | NA |
| UAW25-20 | 11/13/2001 | 60.2 B | NA | <10 | NA | 32.4 | NA | 162 B | NA | <5 | NA | <2 | NA | 223000 J | 200000 J | 10.5 | NA | 2.6 B | NA | 9 B | NA | <10 | 6370 | 327 | <3 | NA | 41800 J | 37300 J | 914 J | NA | <0.2 | NA | 97.5 | NA |
| UAW25-20 | 10/18/2002 | <200 | NA | <10 | NA | 21.7 | NA | 186 B | NA | <5 | NA | <2 | NA | 232000 J | NA | 7.5 | NA | 1.5 B | NA | <25 | NA | 2.8 B | 5760 | NA | <3 | NA | 49000 J | NA | 1100 J | NA | <0.2 | NA | 48.3 | NA |
| UAW25-20 | 11/12/2003 | <200 | NA | <10 | NA | 28.4 | NA | 250 J | NA | <5 | NA | <2 | NA | 277000 J | NA | 43 | NA | <7 | NA | 5.2 B | NA | <10 | 11100 | NA | <3 | NA | 55000 J | NA | 1500 J | NA | <0.2 | NA | 64.1 | NA |
| UAW25-20 | 3/27/2004 | 246 J | NA | <10 | NA | 26.6 | NA | 176 B | NA | <5 | NA | <2 | NA | 199000 | NA | 505 | NA | 1.9 B | NA | 14.4 B J | NA | <10 | 10400 | NA | <3 | NA | 40600 | NA | 1140 J | NA | <0.2 | NA | 128 | NA |
| UAW26-70 | 4/6/2004 | 379 J | NA | <10 | NA | 5.1 B | NA | 443 J | NA | <5 | NA | <2 | NA | 163000 | NA | 2.8 B | NA | 1.4 B | NA | <25 | NA | <10 | 3290 | NA | 1.7 B | NA | 49900 J | NA | 363 | NA | <0.2 | NA | 4.1 B | NA |
| UAW27-50 | 3/31/2004 | 40.7 B | NA | <10 | NA | <10 | NA | 138 B | NA | <5 | NA | <2 | NA | 236000 J | NA | 5.5 | NA | 1.5 B | NA | <25 | NA | <10 | 291 | NA | <3 | NA | 67800 J | NA | 124 J | NA | <0.2 | NA | 33.2 B | NA |
| DP53-12.5' | 3/11/2004 | NA | NA | NA | NA | 15.6 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 10.9 | NA | NA | NA | NA | NA | NA | NA | NA | 8.1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LAW05-150 | 3/16/2002 | NA | NA | <10 | NA | 6.2 B | NA | 94.3 B | NA | 0.55 B | NA | <2 | NA | NA | NA | <5 | NA | <7 | NA | <25 | NA | <10 | NA | NA | <3 | NA | NA | NA | NA | NA | 0.35 | NA | <40 | NA |
| LAW05-150 (Dup) | 3/16/2002 | NA | NA | <10 | NA | 4.6 B | NA | 94.7 B | NA | <5 | NA | <2 | NA | NA | NA | <5 | NA | <7 | NA | <25 | NA | <10 | NA | NA | <3 | NA | NA | NA | NA | NA | 0.16 B | NA | <40 | NA |
| LAW05-60 | 3/16/2002 | NA | NA | <10 | NA | <10 | NA | 87.5 B | NA | <5 | NA | <2 | NA | NA | NA | 1.6 B | NA | 3.2 B | NA | <25 | NA | <10 | NA | NA | <3 | NA | NA | NA | NA | NA | <0.2 | NA | 18.7 B | NA |
| LAW12-60 | 10/13/2001 | NA | NA | <10 | NA | <10 | NA | 113 B | NA | <5 | NA | <2 | NA | 133000 | 128000 | 6.9 | NA | 2.5 B | NA | <25 | NA | <10 | 888 | 621 | <3 | NA | 41200 | 39800 | NA | NA | <0.2 | NA | 14.2 B | NA |
| LAW12-60 | 11/16/2001 | NA | NA | <10 | NA | <10 | NA | 127 B J | NA | <5 | NA | <2 | NA | 120000 J | 104000 J | 4.1 B | NA | <7 | NA | 10.7 B | NA | <10 | 374 | <100 | <3 | NA | 46200 | 41000 | NA | NA | <0.2 | NA | 5.8 B | NA |
| French Drain Sump @ 46 hr | 10/19/2002 | 87.2 B J | NA | 3.9 B | NA | 14.2 | NA | 256 | NA | <5 | NA | <2 | NA | 240000 J | NA | 5.5 | NA | 2.5 B | NA | 9.1 B | NA | <10 | 1940 | NA | <3 | NA | 39800 | NA | 1550 | NA | <0.2 | NA | 46.8 | NA |
| French Drain Sump @ 72 hr | 10/20/2002 | 191 B J | NA | 3.5 B | NA | 15.9 | NA | 261 | NA | <5 | NA | <2 | NA | 243000 J | NA | 4.1 B | NA | 1.9 B | NA | 16.8 B | NA | <10 | 1800 | NA | <3 | NA | 40700 | NA | 1580 | NA | <0.2 | NA | 47 | NA |
| **Seeps** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SS-1 (Seep) | 10/11/2001 | 48300 | 47.8 B | <10 | <10 | 25.7 | <10 | 494 | 73.8 B | 3.1 B | <5 | 1.7 B | <2 | 430000 | 361000 | 174 | <5 | 43.8 | <7 | 104 | <25 | <10 | 90100 | <100 | 126 | <3 | 90100 | 45100 | 2150 | 2070 | <0.2 | <0.2 | 214 | 22.3 B |
| SS-5 (Seep) | 10/11/2001 | 14300 | 112 B | <10 | <10 | 6.1 B | 4.7 B | 143 B | 233 | 1.2 B | <5 | 0.28 B | <2 | 417000 | 257000 | 36.7 | <5 | 10.4 | 12.4 | 31.9 | <25 | <10 | 23800 | 734 | 24.2 | <3 | 67100 | 39000 | 2730 | 947 | 0.18 B | <0.2 | 57.7 | 85.9 |

**Table 5-11**
**Summary of Inorganic Chemical Detections in**
**Groundwater and Seep Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | Potassium | Potassium-DISS | Selenium | Selenium-DISS | Silver | Sodium | Sodium-DISS | Sulfide, Total | Thallium | Thallium-DISS | Tin | Tin-DISS | Vanadium | Vanadium-DISS | Zinc | Zinc-DISS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Groundwater** | | | | | | | | | | | | | | | | | |
| MW-EPA-1 | 5/8/2001 | 12000 | 12000 | <5 | NA | <5 | 472000 | 474000 | 2600 | 7.6 B | NA | NA | NA | 4.6 B | NA | <20 | NA |
| MW-EPA-1 | 11/15/2001 | 17600 J | 15700 J | <5 | NA | <5 | 642000 | 584000 | 7500 | 5.6 B | NA | NA | NA | 5.8 B | NA | <20 | NA |
| MW-EPA-1 | 10/20/2002 | 15500 J | NA | <5 | NA | NA | 643000 | NA | 17000 | 5.3 B | NA | 2280 | NA | 4.9 B | NA | 16.5 B | NA |
| MW-EPA-1 | 11/12/2003 | 16000 J | NA | <5 | NA | <5 | 754000 | NA | 51000 | 8 B | NA | 3390 | NA | 5.5 B | NA | 20.2 J | NA |
| MW-EPA-1 | 3/28/2004 | 16000 J | NA | <5 | NA | <5 | 767000 | NA | 29000 | <10 | NA | 3380 | NA | 6.4 B | NA | 27.9 | NA |
| MW-EPA-2 | 5/8/2001 | 15900 L | 3860 B | 5 | NA | <5 | 480000 | 486000 | 4500 | 10.4 | NA | NA | NA | 85.2 | NA | 193 | NA |
| MW-EPA-2 | 11/14/2001 | 13300 | 2190 B | <5 | NA | <5 | 336000 | 340000 | 1100 | 10.8 | NA | NA | NA | 91.7 | NA | 280 | NA |
| MW-EPA-2 | 10/20/2002 | 2560 B J | NA | <5 | NA | NA | 231000 | NA | 620 B | 6.4 B | NA | <100 | NA | 2.7 B | NA | <20 | NA |
| MW-EPA-2 | 11/11/2003 | 2770 B J | NA | <5 | NA | <5 | 248000 | NA | <1000 | 6 B | NA | 11.9 B | NA | 4.9 B | NA | 20.6 J | NA |
| MW-EPA-2 | 3/29/2004 | 3090 B J | NA | 5.1 | NA | <5 | 316000 | NA | 730 B | 4.6 B J | NA | 9.5 B | NA | 4.1 B | NA | 14.3 B | NA |
| MW-EPA-3 | 5/6/2001 | 1770 B | 1500 B | <5 | NA | <5 | 26300 | 31700 | <1000 | 9.4 B | NA | NA | NA | 2.4 B | NA | 71.3 | NA |
| MW-EPA-3 | 11/13/2001 | 6910 J | 1700 B J | <5 | NA | <5 | 48000 J | 40400 J | 1800 | <10 | NA | NA | NA | 32.1 | NA | 163 J | NA |
| MW-EPA-3 | 10/17/2002 | 8530 J | NA | <5 | NA | NA | 36300 | NA | 300 B | <10 | NA | <100 | NA | 45.3 J | NA | 148 | NA |
| MW-EPA-3 | 11/13/2003 | 3490 B J | NA | <5 | NA | <5 | 38000 | NA | <1000 | <10 | NA | <100 | NA | 10.4 | NA | 39.3 J | NA |
| MW-EPA-3 | 3/30/2004 | 6430 J | NA | <5 | NA | <5 | 42800 | NA | <1000 | 4.9 B | NA | <100 | NA | 40.3 | NA | 147 | NA |
| MW-EPA-4 | 5/8/2001 | 4830 B | 4740 B | <5 | NA | <5 | 704000 | 684000 | <1000 | 8.5 B | NA | NA | NA | <7 | NA | <20 | NA |
| MW-EPA-4 | 11/13/2001 | 2430 B J | 2170 B J | <5 | NA | <5 | 104000 J | 106000 J | 1300 | <10 | NA | NA | NA | <7 | NA | <20 | NA |
| MW-EPA-4 | 10/18/2002 | 3200 B J | NA | <5 | NA | NA | 79300 | NA | 940 B | <10 | NA | <100 | NA | 1.1 B J | NA | <20 | NA |
| MW-EPA-4 | 11/16/2003 | 5540 J | NA | <5 | NA | <5 | 250000 | NA | <1000 | 7.7 B J | NA | <100 | NA | <7 | NA | <20 | NA |
| MW-EPA-4 | 4/6/2004 | 3980 B J | NA | <5 | NA | <5 | 178000 | NA | 5900 | <4.5* | NA | <100 | NA | <7 | NA | <20 | NA |
| Recovery Well | 7/29/2001 | NA | NA | <5 | NA | <5 | NA | NA | 2700 | <10 | NA | 1650 | NA | 76 | NA | 1100 | NA |
| RWV20 | 4/6/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| UAW01-30 | 5/4/2001 | 13000 | 15900 | <5 | NA | <5 | 315000 | 335000 | <1000 | <10 | NA | NA | NA | <7 | NA | <20 | NA |
| UAW01-30 | 11/8/2001 | 13900 J | 13500 J L | <5 | NA | <5 | 243000 | 236000 | 2900 J | 7.1 B | NA | NA | NA | <7 | NA | <20 | NA |
| UAW01-30 | 10/17/2002 | 6750 J | NA | <5 | NA | NA | 68000 | NA | <1000 | <10 | NA | 23.5 B | NA | <7 | NA | <20 | NA |
| UAW01-30 | 11/11/2003 | 8590 J | NA | <5 | NA | <5 | 166000 | NA | <1000 | <10 | NA | 30.8 B | NA | <7 | NA | <20 | NA |
| UAW01-30 | 3/24/2004 | 7090 J | NA | <5 | NA | <5 | 115000 | NA | 900 B | <10 | NA | 14.9 B | NA | <7 | NA | <20 | NA |
| UAW01-80 | 5/4/2001 | 2140 B | 2390 B | <5 | NA | <5 | 51900 | 53100 | <1000 | <10 | NA | NA | NA | <7 | NA | <20 | NA |
| UAW01-80 | 11/12/2001 | 2630 B | 2530 B | <5 | NA | <5 | 50300 | 51300 | <1000 | 10.1 J | NA | NA | NA | <7 | NA | <20 | NA |
| UAW01-80 | 10/17/2002 | 2340 B J | NA | <5 | NA | NA | 51000 | NA | 460 B | <10 | NA | <100 | NA | <7 | NA | <20 | NA |
| UAW01-80 | 11/11/2003 | 2370 B J | NA | <5 | NA | <5 | 55300 | NA | <1000 | 6.3 B | NA | <100 | NA | <7 | NA | <20 | NA |
| UAW01-80 | 3/24/2004 | 2530 B J | NA | <5 | NA | <5 | 58900 | NA | 580 B | <10 | NA | <100 | NA | <7 | NA | <20 | NA |
| UAW02-20 | 5/7/2001 | 6670 | 6130 | <5 | NA | <5 | 496000 | 446000 | <1000 | 7.2 B | NA | NA | NA | 37.3 | NA | <20 | NA |
| UAW02-20 (Dup) | 5/7/2001 | 6600 L | 6280 L | <5 | NA | <5 | 475000 | 452000 | 1800 | 8.5 B | NA | NA | NA | 39.2 | NA | <20 | NA |
| UAW02-20 | 11/10/2001 | 2990 B | 2650 B | <5 | NA | <5 | 140000 J | 124000 J | <1000 | <10 | NA | NA | NA | 16.6 | NA | <20 | NA |
| UAW02-20 | 10/17/2002 | 6600 J | NA | <5 | NA | NA | 235000 | NA | 940 B | 5.9 B | NA | 277 | NA | 19.7 J | NA | 14.6 B | NA |
| UAW02-20 | 11/12/2003 | 2410 B J | NA | <5 | NA | <5 | 180000 | NA | <1000 | <10 | NA | 95 B | NA | 5.1 B | NA | <20 | NA |
| UAW02-20 | 3/26/2004 | 4360 B J | NA | <5 | NA | <5 | 337000 | NA | <1000 | 9.8 B J | NA | 85.2 B | NA | 3.3 B | NA | <20 | NA |

**Table 5-11**
**Summary of Inorganic Chemical Detections in**
**Groundwater and Seep Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | Potassium | Potassium-DISS | Selenium | Selenium-DISS | Silver | Sodium | Sodium-DISS | Sulfide, Total | Thallium | Thallium-DISS | Tin | Tin-DISS | Vanadium | Vanadium-DISS | Zinc | Zinc-DISS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW02-40 | 5/7/2001 | 2420 B | 2340 B | <5 | NA | <5 | 99900 | 99400 | <1000 | <10 | NA | NA | NA | <7 | NA | <20 | NA |
| UAW02-40 | 11/10/2001 | 2900 B | 2860 B | <5 | NA | <5 | 149000 J | 145000 J | <1000 | 5.3 B | NA | NA | NA | <7 | NA | <20 | NA |
| UAW02-40 | 10/17/2002 | 2530 B J | NA | <5 | NA | NA | 78400 | NA | <1000 | <10 | NA | <100 | NA | <7 | NA | <20 | NA |
| UAW02-40 | 11/12/2003 | 2150 B J | NA | <5 | NA | <5 | 46200 | NA | <1000 | <10 | NA | <100 | NA | <7 | NA | <20 | NA |
| UAW02-40 | 3/26/2004 | 2550 B J | NA | <5 | NA | <5 | 45000 | NA | 420 B | 8.1 B J | NA | <100 | NA | <7 | NA | <20 | NA |
| UAW03-20 | 5/7/2001 | 8740 | 8150 | <5 | NA | <5 | 308000 | 289000 | 4000 | 10 | NA | NA | NA | 148 | NA | 54.7 | NA |
| UAW03-20 | 11/11/2001 | 6010 | 5920 | <5 | NA | <5 | 165000 | 161000 | 3700 | 9.2 B J | NA | NA | NA | 36.4 | NA | <20 | NA |
| UAW03-20 | 10/23/2002 | 4200 B J | NA | <5 | NA | NA | 187000 | NA | 3600 | 6 B | NA | 1180 | NA | 54.7 | NA | <20 | NA |
| UAW03-20 | 11/12/2003 | 4230 B J | NA | <5 | NA | <5 | 291000 | NA | 15000 | <10 | NA | 2400 | NA | 29.4 | NA | <20 | NA |
| UAW03-20 | 3/28/2004 | 5550 J | NA | <5 | NA | <5 | 604000 | NA | 11000 | 5.5 B J | NA | 2350 | NA | 25.7 | NA | <20 | NA |
| UAW04-20 | 5/7/2001 | 7590 | 7380 | <5 | NA | <5 | 291000 | 285000 | 1100 | 11.7 | NA | NA | NA | 110 | NA | 14.8 B MBE | NA |
| UAW04-20 | 11/11/2001 | 5790 | 5350 | <5 | NA | <5 | 183000 | 171000 | 1200 | 6.1 B J | NA | NA | NA | 65.6 | NA | <20 | NA |
| UAW04-20 | 10/20/2002 | 6210 J | NA | <5 | NA | NA | 252000 | NA | 1300 | <10 | NA | 2270 | NA | 91.5 | NA | <20 | NA |
| UAW04-20 | 11/12/2003 | 4380 B J | NA | <5 | NA | <5 | 238000 | NA | 260 B | <10 | NA | 1280 | NA | 20.4 | NA | <20 | NA |
| UAW04-20 | 3/28/2004 | 2850 B J | NA | <5 | NA | <5 | 137000 | NA | 1000 | <10 | NA | 591 | NA | 7.9 | NA | 17.9 B | NA |
| UAW05-20 | 5/6/2001 | 7020 | 7400 | <5 | NA | <5 | 353000 | 395000 | <1000 | 5.4 B | NA | NA | NA | 6.6 B | NA | 108 MBD | NA |
| UAW05-20 | 10/10/2001 | 3900 B J | 4290 B J | <5 | NA | <5 | 219000 | 245000 | 4300 | 8.1 B | NA | 425 | NA | 3 B | NA | <20 | NA |
| UAW05-20 | 11/12/2001 | 4480 B L | 4270 B | <5 | NA | <5 | 254000 | 236000 | 5000 | 11.8 J | NA | NA | NA | 3.1 B | NA | <20 | NA |
| UAW05-20 | 10/20/2002 | 5230 J | NA | <5 | NA | NA | 244000 | NA | 10000 | <10 | NA | 569 | NA | 5.8 B | NA | <20 | NA |
| UAW05-20 | 11/10/2003 | 3010 B J | NA | <5 | NA | <5 | 106000 | NA | <1000 | <10 | NA | 223 | NA | 5.8 B | NA | <20 | NA |
| UAW05-20 | 3/28/2004 | 2640 B J | NA | <5 | NA | <5 | 149000 | NA | 5000 | <10 | NA | 99.9 B | NA | 0.81 B | NA | <20 | NA |
| UAW05-20 (Dup) | 3/28/2004 | 2870 B J | NA | <5 | NA | <5 | 162000 | NA | 2200 | 5.2 B J | NA | 107 | NA | 0.92 B | NA | <20 | NA |
| UAW06-20 | 5/6/2001 | 7400 | 8270 | <5 | NA | <5 | 218000 | 245000 | <1000 | <10 | NA | NA | NA | 127 | NA | 15.7 B MBE | NA |
| UAW06-20 | 10/10/2001 | 6430 J | 5480 J | <5 | NA | <5 | 309000 | 264000 | 2300 | 5.6 B | NA | NA | NA | 106 | NA | 22.8 | NA |
| UAW06-20 | 11/13/2001 | 6820 J | 6190 J | <5 | NA | <5 | 368000 J | 335000 J | 7200 | <10 | NA | NA | NA | 119 | NA | 21.9 J | NA |
| UAW06-20 | 10/20/2002 | 5610 J | NA | <5 | NA | NA | 407000 | NA | 7800 | <10 | NA | 11100 | NA | 76.4 | NA | 19 B | NA |
| UAW06-20 | 11/12/2003 | 4920 B J | NA | <5 | NA | <5 | 391000 | NA | 11000 | <10 | NA | 6040 | NA | 35.8 | NA | <20 | NA |
| UAW06-20 | 3/29/2004 | 3870 B J | NA | <5 | NA | <5 | 460000 | NA | 6300 | <10 | NA | 3700 | NA | 32.2 | NA | <20 | NA |
| UAW07-20 | 5/8/2001 | 11500 | 10800 | <5 | NA | <5 | 413000 | 397000 | 5800 | 10.6 | NA | 866 | NA | 3.2 B | NA | 12.4 B | NA |
| UAW07-20 (Dup) | 5/8/2001 | 12100 | 11600 | <5 | NA | <5 | 432000 | 417000 | 7500 | 8.3 B | NA | 1010 | NA | 3.9 B | NA | <20 | NA |
| UAW07-20 | 11/15/2001 | NA | 10800 | <5 | NA | <5 | NA | 395000 | 1600 | 9.6 B J | NA | 706 L | NA | 3.1 B | NA | <20 | NA |
| UAW07-20 | 10/20/2002 | 11800 J | NA | <5 | NA | NA | 374000 | NA | 14000 | <10 | NA | 778 | NA | 3.8 B | NA | <20 | NA |
| UAW07-20 | 11/12/2003 | 11600 J | NA | <5 | NA | <5 | 406000 | NA | 21000 | <10 | NA | 591 | NA | 2.5 B | NA | 31.3 J | NA |
| UAW07-20 (Dup) | 11/12/2003 | 10100 J | NA | <5 | NA | <5 | 362000 | NA | 25000 | <10 | NA | 526 | NA | 2.1 B | NA | <20 | NA |
| UAW07-20 | 4/5/2004 | 5750 J | NA | <5 | NA | <5 | 228000 | NA | 11000 | 6.8 B | NA | 180 | NA | 2.2 B | NA | <20 | NA |
| UAW08-20 | 5/6/2001 | 17700 | 20200 | <5 | NA | <5 | 523000 | 596000 | 3100 | 9.8 B | NA | 3420 | NA | 11.2 | NA | 45.1 MBD | NA |
| UAW08-20 | 11/13/2001 | 21300 J | 18900 J L | <5 | NA | <5 | 401000 J | 400000 J | 7900 | <10 | NA | 6090 | NA | 27.1 | NA | 132 J | NA |
| UAW08-20 | 10/20/2002 | 17400 J | NA | <5 | NA | NA | 407000 | NA | 22000 | 7.1 B | NA | 6110 | NA | 13 | NA | 21.8 | NA |
| UAW08-20 | 11/10/2003 | 20900 J | NA | <5 | NA | <5 | 539000 | NA | 69000 | 5.9 B | NA | 4500 | NA | 74.7 | NA | 352 J | NA |
| UAW08-20 | 3/29/2004 | 18100 J | NA | <5 | NA | <5 | 691000 | NA | 16000 | <10 | NA | 6410 | NA | 10 | NA | 20.5 | NA |

**Table 5-11**
**Summary of Inorganic Chemical Detections in Groundwater and Seep Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | Potassium | Potassium-DISS | Selenium | Selenium-DISS | Silver | Sodium | Sodium-DISS | Sulfide, Total | Thallium | Thallium-DISS | Tin | Tin-DISS | Vanadium | Vanadium-DISS | Zinc | Zinc-DISS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW09-20 | 5/5/2001 | 1720 B | 1850 B | <5 | NA | <5 | 63200 | 62400 | <1000 | <10 | NA | NA | NA | <7 | NA | <20 | NA |
| UAW09-20 | 11/9/2001 | 2420 B | 2220 B | <5 | NA | <5 | 92500 J | 84300 J | 1800 | <10 | NA | NA | NA | <7 | NA | <20 | NA |
| UAW09-20 | 10/16/2002 | 2880 B J | NA | <5 | NA | NA | 59500 | NA | 970 B J | 8.8 B | NA | <100 | NA | 0.82 B | NA | <20 | NA |
| UAW09-20 | 11/11/2003 | 2130 B J | NA | <5 | NA | <5 | 83800 | NA | <1000 | <10 | NA | <100 | NA | <7 | NA | 16.8 B J | NA |
| UAW09-20 | 4/6/2004 | 1760 B J | NA | <5 | NA | <5 | 65000 | NA | 960 B | 5.7 B | NA | 18.5 B | NA | <7 | NA | <20 | NA |
| UAW09-60 | 5/5/2001 | 1400 B | 1610 B | <5 | NA | <5 | 17600 | 14700 | <1000 | <10 | NA | NA | NA | <7 | NA | <20 | NA |
| UAW09-60 | 11/9/2001 | 1740 B | 1930 B | <5 | NA | <5 | 22800 J | 24500 J | 1500 | 6 B | NA | NA | NA | <7 | NA | <20 | NA |
| UAW09-60 | 10/16/2002 | 2020 B J E | NA | <5 | NA | NA | 23900 | NA | <1000 | <10 | NA | <100 | NA | <7 | NA | <20 | NA |
| UAW09-60 | 11/11/2003 | 1970 B J | NA | <5 | NA | <5 | 20600 | NA | 260 B | <10 | NA | <100 | NA | <7 | NA | <20 | NA |
| UAW09-60 | 4/6/2004 | 1540 B J | NA | <5 | NA | <5 | 16800 | NA | 1100 | <5* | NA | <100 | NA | <7 | NA | <20 | NA |
| UAW10-50 | 10/12/2001 | 13400 J | 4270 B J | <5 | NA | 2.5 B | 67800 | 69300 | <1000 | 7.9 B J | NA | NA | NA | 65.2 | NA | 164 | NA |
| UAW10-50 | 11/13/2001 | 4260 B J | 3900 B J | <5 | NA | <5 | 60400 J | 54500 J | 1500 | <10 | NA | NA | NA | <7 | NA | 25.3 J | NA |
| UAW10-50 | 10/19/2002 | 3740 B J | NA | <5 | NA | NA | 47000 | NA | 780 B | 5.5 B | NA | <100 | NA | 5.8 B | NA | 28.1 | NA |
| UAW10-50 | 11/10/2003 | 3350 B J | NA | <5 | NA | <5 | 45700 | NA | <1000 | <10 | NA | 7.9 B | NA | 4.4 B | NA | 19.6 B J | NA |
| UAW10-50 | 3/30/2004 | 3160 B J | NA | <5 | NA | <5 | 55100 | NA | <1000 | 6 B | NA | <100 | NA | 4.4 B | NA | 20.6 | NA |
| UAW10-80 | 10/12/2001 | 5680 J | 5970 J | <5 | NA | <5 | 40800 | 44300 | <1000 | 7.5 B J | NA | NA | NA | 2.9 B | NA | 30.3 | NA |
| UAW10-80 | 11/13/2001 | 7990 J | 8200 J | <5 | NA | <5 | 41000 J | 45600 J | 2200 | <10 | NA | NA | NA | <7 | NA | 38 J | NA |
| UAW10-80 | 10/19/2002 | 3320 B J | NA | <5 | NA | NA | 12700 | NA | 620 B | 6.3 B | NA | <100 | NA | 8.1 | NA | 29.2 | NA |
| UAW10-80 | 11/13/2003 | 4990 B J | NA | <5 | NA | <5 | 14800 | NA | 260 B | <10 | NA | <100 | NA | 22 | NA | 55.9 J | NA |
| UAW10-80 | 3/30/2004 | 2140 B J | NA | <5 | NA | <5 | 14300 | NA | 890 B | <10 | NA | <100 | NA | 1.4 B | NA | <20 | NA |
| UAW11-10 | 5/8/2001 | 8730 | 5660 | <5 | NA | <5 | 2230000 | 1500000 | 2700 | <10 | NA | NA | NA | 113 | NA | 310 | NA |
| UAW11-10 | 11/10/2001 | 7700 | 8050 | <5 | NA | <5 | 440000 J | 454000 J | 1300 | 7 B | NA | NA | NA | 15.6 | NA | 22.4 J | NA |
| UAW11-10 | 10/18/2002 | 5310 J | NA | <5 | NA | NA | 201000 | NA | 9200 | <10 | NA | 4060 | NA | 12.6 J | NA | <20 | NA |
| UAW11-10 | 11/16/2003 | 5510 J | NA | <5 | NA | <5 | 293000 | NA | 2900 | 8.6 B J | NA | 1450 | NA | 5.9 B | NA | <20 | NA |
| UAW11-10 | 4/6/2004 | 6450 J | NA | <5 | NA | <5 | 484000 | NA | 9000 | 5.9 B | NA | 1950 | NA | 16 | NA | <20 | NA |
| UAW11-40 | 5/8/2001 | 5680 | 5780 | <5 | NA | <5 | 239000 | 248000 | 960 B | 8.2 B | NA | NA | NA | 0.91 B | NA | <20 | NA |
| UAW11-40 | 11/12/2001 | 5770 | 5530 | <5 | NA | <5 | 253000 | 244000 | <1000 | 7.8 B J | NA | NA | NA | <7 | NA | <20 | NA |
| UAW11-40 | 10/18/2002 | 6200 J | NA | <5 | NA | NA | 258000 | NA | <1000 | 9.5 B | NA | 70.7 B | NA | <7 | NA | <20 | NA |
| UAW11-40 | 11/16/2003 | 6410 J | NA | <5 | NA | <5 | 273000 | NA | <1000 | 10.9 J | NA | 48.7 B | NA | <7 | NA | <20 | NA |
| UAW11-40 | 4/6/2004 | 6040 J | NA | <5 | NA | <5 | 285000 | NA | 640 B | <7.3* | NA | 62.2 B | NA | <7 | NA | <20 | NA |
| UAW11-40 (Dup) | 4/6/2004 | 5920 J | NA | <5 | NA | <5 | 278000 | NA | 800 B | <7.3* | NA | 51.7 B | NA | <7 | NA | <20 | NA |
| UAW12-20 | 5/6/2001 | 10500 | 9700 | <5 | NA | <5 | 485000 | 455000 | <1000 | 14.4 | NA | 66.9 B | NA | 2.8 B | NA | 29.8 MBD | NA |
| UAW12-20 | 11/15/2001 | NA | 8090 | <5 | NA | <5 | NA | 348000 | 2000 | 12.1 J | NA | 82.9 B | NA | 6 B | NA | <20 | NA |
| UAW12-20 | 10/20/2002 | 10100 J | NA | <5 | NA | NA | 356000 | NA | 4800 | 8.1 B | NA | 255 | NA | 5.2 B | NA | <20 | NA |
| UAW12-20 | 11/12/2003 | 8310 J | NA | <5 | NA | <5 | 632000 | NA | 7500 | <10 | NA | 105 | NA | 2.1 B | NA | 13.7 B J | NA |
| UAW12-20 | 3/28/2004 | 8250 J | NA | <5 | NA | <5 | 765000 | NA | 1000 | <10 | NA | 101 | NA | 2.7 B | NA | <20 | NA |

**Table 5-11**
**Summary of Inorganic Chemical Detections in Groundwater and Seep Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | Potassium | Potassium-DISS | Selenium | Selenium-DISS | Silver | Sodium | Sodium-DISS | Sulfide, Total | Thallium | Thallium-DISS | Tin | Tin-DISS | Vanadium | Vanadium-DISS | Zinc | Zinc-DISS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW13-20 | 5/6/2001 | 10400 | 9990 | <5 | NA | <5 | 491000 | 488000 | 5800 | 5 B | NA | 1060 | NA | 14.8 | NA | 22.1 MBD | NA |
| UAW13-20 | 11/15/2001 | NA | 13300 | <5 | NA | <5 | NA | 948000 | 2800 | 16.6 J | NA | 1930 | NA | 16.4 | NA | 23.7 | NA |
| UAW13-20 | 10/23/2002 | 12200 J | NA | <5 | NA | NA | 947000 | NA | 14000 | 5.5 B | NA | 2330 | NA | 13.1 | NA | <20 | NA |
| UAW13-20 | 11/12/2003 | 12600 J | NA | <5 | NA | <5 | 757000 | NA | 150000 | <10 | NA | 1710 | NA | 12.3 | NA | <20 | NA |
| UAW13-20 | 3/28/2004 | 10800 J | NA | <5 | NA | <5 | 871000 | NA | 8900 | <10 | NA | 1780 | NA | 12.7 | NA | 16.7 B | NA |
| UAW14-10 | 5/5/2001 | 1270 B | 1300 B | <5 | NA | <5 | 36500 | 35800 | 1500 | <10 | NA | NA | NA | <7 | NA | <20 | NA |
| UAW14-10 | 11/9/2001 | 1530 B | 1510 B | <5 | NA | <5 | 37900 J | 37500 J | 1200 | <10 | NA | NA | NA | <7 | NA | <20 | NA |
| UAW14-10 | 10/16/2002 | 1620 B J | NA | <5 | NA | NA | 31400 | NA | <1000 | 8.9 B | NA | <100 | NA | 1 B | NA | <20 | NA |
| UAW14-10 | 11/16/2003 | 1820 B J | NA | 4.1 B | NA | 1.3 B | 30900 | NA | <1000 | 15.3 J | NA | 4.7 B | NA | <7 | NA | <20 | NA |
| UAW14-10 | 4/5/2004 | <1120* | NA | <5 | NA | <5 | 22900 | NA | <1000 | <10 | NA | <100 | NA | <7 | NA | <20 | NA |
| UAW15-20 | 5/6/2001 | 2430 B | 2490 B | <5 | NA | <5 | 421000 | 443000 | <1000 | 6.2 B | NA | NA | NA | <7 | NA | 23 MBD | NA |
| UAW15-20 | 11/11/2001 | 3060 B | 2840 B | <5 | NA | <5 | 506000 | 480000 | <1000 | 14 J | NA | NA | NA | <7 | NA | <20 | NA |
| UAW15-20 | 10/18/2002 | 1930 B J | NA | <5 | NA | NA | 281000 | NA | <1000 | 7.4 B | NA | 261 | NA | <7 | NA | <20 | NA |
| UAW15-20 | 11/17/2003 | 4610 B J | NA | <5 | NA | <5 | 990000 | NA | <1000 | 11.7 J | NA | 131 | NA | <7 | NA | <20 | NA |
| UAW15-20 | 4/7/2004 | 7100 J | NA | <5 | NA | <5 | 1480000 | NA | 640 B | <5.6* | NA | 80.7 B | NA | <7 | NA | 22.8 | NA |
| UAW15-50 | 5/6/2001 | 9520 | 7590 | <5 | NA | <5 | 261000 | 218000 | <1000 | 6.1 B | NA | NA | NA | <7 | NA | 24.6 | NA |
| UAW15-50 | 11/11/2001 | 8780 | 7910 | <5 | NA | <5 | 253000 | 234000 | <1000 | 16.7 J | NA | NA | NA | <7 | NA | <20 | NA |
| UAW15-50 | 10/18/2002 | 7280 J | NA | <5 | NA | NA | 210000 | NA | 460 B | 6.6 B | NA | 2400 | NA | <7 | NA | <20 | NA |
| UAW15-50 | 11/17/2003 | 7320 J | NA | <5 | NA | <5 | 202000 | NA | 1600 | 9.4 B J | NA | 2050 | NA | <7 | NA | <20 | NA |
| UAW15-50 | 4/7/2004 | 6400 J | NA | <5 | NA | <5 | 182000 | NA | 1100 | 8.7 B | NA | 2110 | NA | <7 | NA | 15.8 B | NA |
| UAW16-10 | 10/12/2001 | 7420 J | 7400 J | <5 | NA | <5 | 277000 | 276000 | 3900 | 5.5 B J | NA | NA | NA | 59.3 | NA | <20 | NA |
| UAW16-10 (Dup) | 10/12/2001 | 7310 J | 7360 J | <5 | NA | <5 | 275000 | 278000 | 6300 | 8.6 B J | NA | NA | NA | 59.1 | NA | <20 | NA |
| UAW16-10 | 11/13/2001 | 9650 J | 8630 J | <5 | NA | <5 | 281000 J | 244000 J | 2500 | <10 | NA | NA | NA | 29.1 | NA | <20 | NA |
| UAW16-10 | 10/18/2002 | 10500 J | NA | <5 | NA | NA | 367000 | NA | 7800 | 8.9 B | NA | 741 | NA | 5.7 B J | NA | <20 | NA |
| UAW16-10 | 11/16/2003 | 7040 J | NA | <5 | NA | 1.3 B | 242000 | NA | 1800 | 8.5 B J | NA | 665 | NA | 4.1 B | NA | <20 | NA |
| UAW16-10 (Dup) | 11/17/2003 | 7290 J | NA | <5 | NA | 1.3 B | 250000 | NA | 1800 | 11.9 J | NA | 694 | NA | 4.3 B | NA | <20 | NA |
| UAW16-10 | 4/7/2004 | 6380 J | NA | <5 | NA | <5 | 200000 | NA | 1100 | 6.8 B | NA | 602 | NA | 1.6 B | NA | <20 | NA |
| UAW17-40 | 5/5/2001 | 1900 B | 2020 B | <5 | NA | <5 | 17400 | 18300 | <1000 | <10 | NA | NA | NA | 1.5 B | NA | <20 | NA |
| UAW17-40 | 11/9/2001 | 1720 B | 1750 B | <5 | NA | <5 | 13100 J | 13300 J | <1000 | <10 | NA | NA | NA | 0.92 B | NA | <20 | NA |
| UAW17-40 | 10/16/2002 | 1480 B J | NA | <5 | NA | NA | 11100 | NA | 5400 | <10 | NA | <100 | NA | 1.2 B J | NA | <20 | NA |
| UAW17-40 | 11/16/2003 | 1330 B J E | NA | <5 | NA | <5 | 10700 | NA | <1000 | 12.7 J | NA | <100 | NA | <7 | NA | <20 | NA |
| UAW17-40 | 3/31/2004 | 1390 B J E | NA | <5 | NA | <5 | 11300 | NA | <1000 | <10 | NA | <100 | NA | <7 | NA | <20 | NA |
| UAW18-20 | 10/12/2001 | 6060 J | 6200 J | <5 | NA | <5 | 1520000 | 1490000 | 3100 | 5.8 B J | NA | NA | NA | 1.7 B | NA | <20 | NA |
| UAW18-20 | 11/13/2001 | 6120 J | 5510 J | <5 | NA | <5 | 1720000 J | 1610000 J | 2200 | <10 | NA | NA | NA | <7 | NA | <20 | NA |
| UAW18-20 | 10/18/2002 | 1830 B J | NA | <5 | NA | NA | 487000 | NA | 3000 | <10 | NA | 1670 | NA | 1.8 B J | NA | <20 | NA |
| UAW18-20 | 11/16/2003 | 6240 J | NA | <5 | NA | 1.2 B | 1040000 | NA | 800 B | 12.5 J | NA | 2000 | NA | 1.5 B | NA | <20 | NA |
| UAW18-20 | 4/7/2004 | 6950 J | NA | <5 | NA | <5 | 905000 | NA | 960 B | <8.4* | NA | 1710 | NA | <1.2* | NA | <20 | NA |

**Table 5-11**
**Summary of Inorganic Chemical Detections in Groundwater and Seep Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | Potassium | Potassium-DISS | Selenium | Selenium-DISS | Silver | Sodium | Sodium-DISS | Sulfide, Total | Thallium | Thallium-DISS | Tin | Tin-DISS | Vanadium | Vanadium-DISS | Zinc | Zinc-DISS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW19-80 | 5/6/2001 | 1970 B | 1780 B | <5 | NA | <5 | 53000 | 51200 | 990 B | <10 | NA | NA | NA | <7 | NA | 18.4 B | NA |
| UAW19-80 | 11/12/2001 | 2020 B | 1850 B | <5 | NA | <5 | 58700 | 59400 | <1000 | 10.3 J | NA | NA | NA | 1 B | NA | <20 | NA |
| UAW19-80 (Dup) | 11/12/2001 | 5960 | 5750 | <5 | NA | <5 | 261000 | 254000 | <1000 | 8.2 B J | NA | NA | NA | <7 | NA | <20 | NA |
| UAW19-80 | 10/17/2002 | 2130 B J | NA | <5 | NA | NA | 60100 | NA | 300 B | 7.6 B | NA | <100 | NA | 1 B J | NA | <20 | NA |
| UAW19-80 (Dup) | 10/17/2002 | 2090 B J | NA | <5 | NA | NA | 59700 | NA | 620 B | 5.9 B | NA | <100 | NA | 1.1 B J | NA | <20 | NA |
| UAW19-80 | 11/13/2003 | 1870 B J | NA | <5 | NA | <5 | 59600 | NA | 420 B | <10 | NA | <100 | NA | <7 | NA | <20 | NA |
| UAW19-80 | 3/30/2004 | 1830 B J | NA | <5 | NA | <5 | 62400 | NA | <1000 | <10 | NA | <100 | NA | <7 | NA | <20 | NA |
| UAW20-60 | 5/7/2001 | 4060 B | 3640 B | <5 | NA | <5 | 128000 | 162000 | 960 B | 7.4 B | NA | NA | NA | <7 | NA | 14.4 B MBE | NA |
| UAW20-60 | 11/14/2001 | 3640 B | 3530 B | <5 | NA | <5 | 139000 | 134000 | 1600 | 13.8 | NA | NA | NA | <7 | NA | <20 | NA |
| UAW20-60 (Dup) | 11/14/2001 | 3550 B L | 3610 B | <5 | NA | <5 | 137000 | 137000 | 1800 | 10.3 | NA | NA | NA | <7 | NA | <20 | NA |
| UAW20-60 | 10/19/2002 | 2350 B J | NA | <5 | NA | NA | 114000 | NA | <1000 | 5.5 B | NA | 15 B | NA | <7 | NA | <20 | NA |
| UAW20-60 (Dup) | 10/19/2002 | 4970 B J | NA | <5 | NA | NA | 234000 | NA | <1000 | 6.6 B | NA | 547 | NA | 5.2 B | NA | <20 | NA |
| UAW20-60 | 11/13/2003 | 2240 B J | NA | <5 | NA | <5 | 99100 | NA | <1000 | <10 | NA | <100 | NA | <7 | NA | <20 | NA |
| UAW20-60 | 3/30/2004 | 2080 B J | NA | <5 | NA | <5 | 103000 | NA | 1400 | <10 | NA | 9 B | NA | <7 | NA | <20 | NA |
| UAW21-30 | 5/5/2001 | 5210 | 6420 | <5 | NA | <5 | 284000 | 347000 | <1000 | <10 | NA | NA | NA | 0.95 B | NA | <20 | NA |
| UAW21-30 | 11/11/2001 | 3610 B | 2820 B | <5 | NA | <5 | 53500 | 54100 | <1000 | 6.7 B J | NA | NA | NA | 6.4 B | NA | 30 | NA |
| UAW21-30 | 10/18/2002 | 3410 B J | NA | <5 | NA | NA | 47800 | NA | 460 B | 6.4 B | NA | <100 | NA | 4.9 B J | NA | <20 | NA |
| UAW21-30 | 11/11/2003 | 4350 B J | NA | <5 | NA | <5 | 48100 | NA | <1000 | 9 B | NA | <100 | NA | 9 | NA | 29.8 J | NA |
| UAW21-30 | 3/27/2004 | 3560 B J | NA | 8.7 | NA | <5 | 37800 | NA | 1000 | 7.3 B J | NA | <100 | NA | 3 B | NA | <20 | NA |
| UAW21-80 | 5/5/2001 | 1190 B | 1210 B | <5 | NA | <5 | 28600 | 26900 | <1000 | <10 | NA | NA | NA | <7 | NA | 13.8 B | NA |
| UAW21-80 | 11/11/2001 | 1350 B | 1310 B | <5 | NA | <5 | 30700 | 31900 | <1000 | 9.2 B | NA | NA | NA | <7 | NA | <20 | NA |
| UAW21-80 | 10/18/2002 | 1380 B J | NA | <5 | NA | NA | 31900 | NA | <1000 | <10 | NA | <100 | NA | 1.6 B J | NA | <20 | NA |
| UAW21-80 | 11/11/2003 | 1300 B J | NA | <5 | NA | <5 | 39800 | NA | <1000 | <10 | NA | <100 | NA | <7 | NA | <20 | NA |
| UAW21-80 | 3/27/2004 | 1040 B J | NA | 4.6 B | NA | <5 | 38700 | NA | 410 B | <10 | NA | <100 | NA | <7 | NA | <20 | NA |
| UAW22-20 | 10/13/2001 | 18400 J | 15500 J | <5 | NA | <5 | 661000 | 673000 | <1000 | <10 | NA | NA | NA | 24 | NA | 86.8 | NA |
| UAW22-20 | 11/13/2001 | 16600 J | 12400 J | <5 | NA | <5 | 706000 J | 676000 J | 1800 | <10 | NA | NA | NA | 29.6 | NA | 132 J | NA |
| UAW22-20 | 10/20/2002 | 6330 J E | NA | <5 | NA | NA | 381000 | NA | 1400 | <10 | NA | 979 | NA | 7.2 | NA | <20 | NA |
| UAW22-20 | 11/10/2003 | 8380 J | NA | <5 | NA | <5 | 996000 | NA | <1000 | <10 | NA | 529 | NA | 2.7 B | NA | 59.3 J | NA |
| UAW22-20 | 3/29/2004 | 9510 J | NA | <5 | NA | <5 | 921000 | NA | 410 B | <10 | NA | 203 | NA | 3.6 B | NA | <20 | NA |
| UAW23-20 | 10/12/2001 | 26900 J | 26800 J | 6.1 | NA | <5 | 167000 | 166000 | 2000 | 8.9 B J | NA | NA | NA | <7 | NA | <20 | NA |
| UAW23-20 | 11/14/2001 | 23200 | 23500 | 9.5 | NA | <5 | 169000 | 169000 | <1000 | 11.3 | NA | NA | NA | <7 | NA | <20 | NA |
| UAW23-20 | 10/19/2002 | 19400 J | NA | 20.2 | NA | NA | 126000 | NA | 300 B | <10 | NA | <100 | NA | <7 | NA | <20 | NA |
| UAW23-20 | 11/13/2003 | 21000 J | NA | 12.7 | NA | <5 | 99500 | NA | 420 B | <10 | NA | <100 | NA | <7 | NA | <20 | NA |
| UAW23-20 | 3/28/2004 | 19900 J | NA | 18.2 | NA | <5 | 105000 | NA | 730 B | <10 | NA | <100 | NA | 3.7 B | NA | <20 | NA |
| UAW24-70 | 10/13/2001 | 2150 B J | 2050 B J | <5 | NA | <5 | 50500 | 55500 | 2800 | <10 | NA | NA | NA | <7 | NA | <20 | NA |
| UAW24-70 | 11/15/2001 | 4220 B J | 3380 B J | <5 | NA | <5 | 57200 | 79300 | 1100 | 5 B | NA | NA | NA | <7 | NA | <20 | NA |
| UAW24-70 | 10/17/2002 | 4950 B J | NA | <5 | NA | NA | 51100 | NA | 460 B | 8.6 B | NA | <100 | NA | 1.1 B J | NA | <20 | NA |
| UAW24-70 | 11/16/2003 | 9890 J | NA | <5 | NA | 2 B | 54200 | NA | <1000 | 14.7 J | NA | 7.8 B | NA | <7 | NA | <20 | NA |
| UAW24-70 | 4/5/2004 | 3100 B J | NA | <5 | NA | <5 | 37400 | NA | <1000 | <10 | NA | <100 | NA | <7 | NA | <20 | NA |

**Table 5-11**
**Summary of Inorganic Chemical Detections in Groundwater and Seep Samples**
Morton International, Inc.
Reading, Ohio
**Units: µg/l**

| Sample Location | Sample Date | Potassium | Potassium-DISS | Selenium | Selenium-DISS | Silver | Sodium | Sodium-DISS | Sulfide, Total | Thallium | Thallium-DISS | Tin | Tin-DISS | Vanadium | Vanadium-DISS | Zinc | Zinc-DISS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW25-20 | 10/13/2001 | 3530 B J | 3540 B J | <5 | NA | <5 | 338000 | 340000 | 1500 | <10 | NA | NA | NA | 1.2 B | NA | 99.2 | NA |
| UAW25-20 | 11/13/2001 | 3480 B J | 3160 B J | <5 | NA | <5 | 328000 J | 296000 J | 2200 | <10 | NA | NA | NA | 5.2 B | NA | <20 | NA |
| UAW25-20 | 10/18/2002 | 11800 J | NA | <5 | NA | NA | 395000 | NA | <1000 | <10 | NA | 188 | NA | <7 | NA | <20 | NA |
| UAW25-20 | 11/12/2003 | 6870 J | NA | <5 | NA | <5 | 429000 | NA | <1000 | <10 | NA | 150 | NA | <7 | NA | <20 | NA |
| UAW25-20 | 3/27/2004 | 6970 J | NA | <5 | NA | <5 | 320000 | NA | 1200 | <10 | NA | 130 | NA | 1.4 B | NA | <20 | NA |
| UAW26-70 | 4/6/2004 | 2290 B J | NA | <5 | NA | <5 | 40600 | NA | 1100 | <10 | NA | <100 | NA | <7 | NA | <20 | NA |
| UAW27-50 | 3/31/2004 | 2120 B J | NA | <5 | NA | <5 | 37600 | NA | <1000 | <10 | NA | <100 | NA | <7 | NA | <20 | NA |
| DP53-12.5' | 3/11/2004 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 2550 | NA | NA | NA | NA | NA |
| LAW05-150 | 3/16/2002 | NA | NA | <5 | NA | <5 | NA | NA | <1000 | <10 | NA | <100 | NA | <7 | NA | <20 | NA |
| LAW05-150 (Dup) | 3/16/2002 | NA | NA | <5 | NA | <5 | NA | NA | <1000 | <10 | NA | <100 | NA | <7 | NA | 59.6 | NA |
| LAW05-60 | 3/16/2002 | NA | NA | 5.3 | NA | <5 | NA | NA | <1000 | <10 | NA | <100 | NA | 2 B | NA | 41.2 | NA |
| LAW12-60 | 10/13/2001 | 10000 J | 9590 J | <5 | NA | <5 | 61300 | 59200 | 1500 | 5.5 B | NA | <100 | NA | 2 B | NA | <20 | NA |
| LAW12-60 | 11/16/2001 | 11100 J | 9780 J | <5 | NA | <5 | 54900 | 49500 | <1000 | <10 | NA | <100 | NA | <7 | NA | <20 | NA |
| French Drain Sump @ 46 hr | 10/19/2002 | 5880 J | NA | <5 | NA | NA | 304000 | NA | 8600 | 6.3 B | NA | 2930 | NA | 73.8 | NA | 22.4 | NA |
| French Drain Sump @ 72 hr | 10/20/2002 | 5950 J | NA | <5 | NA | NA | 307000 | NA | 9600 | <10 | NA | 3070 | NA | 74.2 | NA | 67.9 | NA |
| **Seeps** | | | | | | | | | | | | | | | | | |
| SS-1 (Seep) | 10/11/2001 | 14200 J | 9600 J L | <5 | <5 | NA | 149000 | 361000 | <1000 | <10 | <10 | 782 | 121 | 124 | 1.6 B | 411 | 12.6 B |
| SS-5 (Seep) | 10/11/2001 | 14100 J | 7180 J | <5 | <5 | NA | 375000 | 159000 | <1000 | <10 | <10 | 1340 | 348 | 33.2 | 11.6 | 219 | 19.4 B |

Notes:
B = Estimated result; result is less than reporting limit
E = Matrix interference
J = Method blank contamination. The associated method blank contains the target analyte at a reportable level.
L = Serial dilution of a digestate in the analytical batch indicates that physical and chemical interferences are present.
MBB = This analyte is present at a reportable level in the associated method blank but is less than 5% of the sample amount.
MBD = This analyte is present in the associated method blank at an amount that is less than two times the reporting limit.
MBE = This analyte is present in the associated method blank.
NA indicates chemical was not on the target analyte list for that sample.
<5 = Indicates constituent not detected at or above indicated detection limit.
This table only includes target analytes detected in one or more Facility Investigation samples.
See Appendix B for the complete target analyte lists.
* = Indicates that Environmental Standards qualified the data as a "non-detect" as part of the 10% data validation. The analyte was detected in a field and/or laboratory blank at a similar level.
The only validation qualifiers that have been annotated into the summary tables are qualifications of detected compounds. Please refer to Appendix D for excerpts from the Quality Assurance Review (Envionmental Standards, 2004) and to review data qualification of "non-detect" results.

# Table 5-12
## Summary of Water Quality Parameter Measurements in Groundwater and Seep Samples
Morton International, Inc.
Reading, Ohio
**Units: mg/l**

| Sample Location | Sample Date | Total Organic Carbon | Total Dissolved Solids | Total Suspended Solids | Total Alkalinity | Chloride | Nitrogen, as Ammonia | Ferric Iron | Ferrous Iron | Nitrate-Nitrite | Ortho-Phosphate | Total Phosphorus |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-EPA-1 | 5/8/2001 | 27 | 2200 | 35 | 860 | 1050 | 56 | 7.5 | 0.34 | 0.07 | 0.08 | 0.09 |
| MW-EPA-1 | 11/15/2001 | 39 | 3600 | 20 | 980 | 1490 | 100 | 1.8 | 0.34 | 0.1 | 0.5 | 0.7 |
| MW-EPA-2 | 5/8/2001 | 1 | 2200 | 11000 | 290 | 1250 | 0.1 | 64.8 | 0.05 | 3.1 | 0.1 | 0.05 |
| MW-EPA-2 | 11/14/2001 | 1 | 1600 | 2800 | 290 | 773 | 0.09 | 72.1 | 2.5 | 3.5 | 1 | 1.5 |
| MW-EPA-3 | 5/6/2001 | 1 | 1200 | 370 | 380 | 149 | 0.1 | 5.5 | 0.05 | 0.07 | 0.03 | 0.1 |
| MW-EPA-3 | 11/13/2001 | 2 | 1800 | 1200 | 380 | 268 | 0.3 | 39.6 | 0.89 | 0.1 | 0.9 | 1 |
| MW-EPA-4 | 5/8/2001 | 0.3 | 2600 | 16 | 410 | 1290 | 0.07 | 0.78 | 0.17 | 4.4 | 0.07 | 0.1 |
| MW-EPA-4 | 11/13/2001 | 2 | 860 | 29 | 330 | 243 | 0.2 | 7.7 | 0.52 | 1.6 | 0.1 | 0.1 |
| Recovery Well | 7/29/2001 | 10 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| UAW01-30 | 5/4/2001 | 3 | 2200 | 33 | 500 | 925 | 2.4 | 7.3 | 2.7 | 0.2 | 0.07 | 0.3 |
| UAW01-30 | 11/8/2001 | 3 | 1000 | 21 | 370 | 402 | 0.9 | 8.5 | 0.43 | 0.5 | 0.08 | 0.08 |
| UAW01-80 | 5/4/2001 | 0.5 | 550 | 36 | 400 | 95.2 | 1.1 | 9.3 | 1.3 | 0.1 | 0.3 | 0.5 |
| UAW01-80 | 11/12/2001 | 3 | 540 | 25 | 370 | 93.1 | 1 | 9.4 | 0.19 | 0.1 | 0.5 | 0.5 |
| UAW02-20 | 5/7/2001 | 4 | 2400 | 19 | 440 | 1330 | 56 | 4.2 | 0.03 | 0.04 | 0.09 | 0.03 |
| UAW02-20 | 11/10/2001 | 5 | 1000 | 5 | 410 | 330 | 31 | 1.9 | 0.05 | 0.1 | 0.3 | 0.3 |
| UAW02-20 (Dup) | 5/7/2001 | 4 | 2500 | 35 | 440 | 1340 | 62 | 4.5 | 0.05 | 0.06 | 0.1 | 0.2 |
| UAW02-40 | 5/7/2001 | 0.6 | 660 | 19 | 320 | 165 | 0.4 | 4.3 | 0.05 | 0.04 | 0.06 | 0.1 |
| UAW02-40 | 11/10/2001 | 2 | 800 | 12 | 230 | 237 | 0.5 | 3.1 | 0.05 | 0.04 | 0.04 | 0.05 |
| UAW03-20 | 5/7/2001 | 17 | 2400 | 15 | 630 | 1440 | 160 | 2.4 | 0.059 | 0.1 | 0.4 | 0.1 |
| UAW03-20 | 11/11/2001 | 13 | 2100 | 10 | 350 | 894 | 140 | 1.5 | 0.21 | 0.1 | 0.5 | 0.4 |
| UAW04-20 | 5/7/2001 | 28 | 2500 | 36 | 570 | 1360 | 140 | 10.5 | 0.05 | 0.03 | 0.2 | 0.2 |
| UAW04-20 | 11/11/2001 | 21 | 2200 | 19 | 380 | 1140 | 220 | 4.9 | 0.15 | 0.1 | 0.5 | 0.4 |
| UAW05-20 | 5/6/2001 | 11 | 2500 | 110 | 600 | 722 | 37 | 3.9 | 0.05 | 0.1 | 0.09 | 0.06 |
| UAW05-20 | 10/10/2001 | 10 | 1900 | 46 | 530 | 621 | 15 | 2.7 | 0.1 | 0.02 | 0.3 | 0.3 |
| UAW05-20 | 11/12/2001 | 12 | 1800 | 98 | 560 | 463 | 12 | 2.6 | 0.34 | 0.1 | 0.4 | 0.4 |
| UAW06-20 | 5/6/2001 | 20 | 1800 | 70 | 740 | 681 | 220 | 3.8 | 0.049 | 0.1 | 0.2 | 0.1 |
| UAW06-20 | 10/10/2001 | 34 | 2600 | 10 | 680 | 1200 | 320 | 1.3 | 0.48 | 0.1 | 0.4 | 0.6 |
| UAW06-20 | 11/13/2001 | 41 | 3200 | 19 | 760 | 1480 | 320 | 0.74 | 0.28 | 0.1 | 0.4 | 0.5 |
| UAW07-20 | 5/8/2001 | 17 | 2800 | 4 | 650 | 873 | 210 | 0.23 | 0.039 | 0.1 | 0.4 | 0.4 |
| UAW07-20 | 11/15/2001 | 22 | 2700 | 6 | 630 | 887 | 27 | 0.05 | 0.06 | 0.1 | 0.4 | 0.5 |
| UAW07-20 (Dup) | 5/8/2001 | 19 | 2900 | 18 | 660 | 875 | 230 | 0.24 | 0.059 | 0.1 | 0.5 | 0.4 |
| UAW08-20 | 5/6/2001 | 110 | 4900 | 290 | 1200 | 1480 | 77 | 4.7 | 0.05 | 0.1 | 0.1 | 0.4 |

**Table 5-12**
**Summary of Water Quality Parameter Measurements in Groundwater and Seep Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/l**

| Sample Location | Sample Date | Total Organic Carbon | Total Dissolved Solids | Total Suspended Solids | Total Alkalinity | Chloride | Nitrogen, as Ammonia | Ferric Iron | Ferrous Iron | Nitrate-Nitrite | Ortho-Phosphate | Total Phosphorus |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW08-20 | 11/13/2001 | 150 | 4700 | 220 | 1400 | 967 | 1.3 | 21.2 | 0.84 | 0.1 | 0.5 | 0.6 |
| UAW09-20 | 5/5/2001 | 0.3 | 620 | 4 | 290 | 130 | 0.2 | 0.1 | 0.05 | 0.9 | 0.1 | 0.03 |
| UAW09-20 | 11/9/2001 | 1 | 570 | 4 | 290 | 133 | 0.2 | 0.29 | 0.05 | 1.6 | 0.08 | 0.03 |
| UAW09-60 | 5/5/2001 | 1 | 460 | 5 | 310 | 30.9 | 0.2 | 0.12 | 0.0098 | 0.06 | 0.1 | 0.04 |
| UAW09-60 | 11/9/2001 | 2 | 440 | 4 | 270 | 28.6 | 0.2 | 0.05 | 0.05 | 0.1 | 0.03 | 0.1 |
| UAW10-50 | 10/12/2001 | 3 | 1200 | 2700 | 360 | 82.1 | 0.06 | 49.1 | 0.1 | 3.1 | 0.1 | 1.4 |
| UAW10-50 | 11/13/2001 | 3 | 960 | 23 | 360 | 68.8 | 0.4 | 0.33 | 0.02 | 1.7 | 0.1 | 0.05 |
| UAW10-80 | 10/12/2001 | 4 | 1800 | 14000 | 410 | 279 | 0.5 | 4.6 | 0.39 | 0.04 | 0.01 | 0.9 |
| UAW10-80 | 11/13/2001 | 5 | 1200 | 50 | 390 | 110 | 0.8 | 6.1 | 0.03 | 0.1 | 0.03 | 0.09 |
| UAW11-10 | 5/8/2001 | 1800 | 8900 | 46 | 2100 | 37400 | 42000 | 49 | 0.99 | 4 | 0.1 | 5.5 |
| UAW11-10 | 11/10/2001 | 82 | 2300 | 16 | 770 | 1810 | 610 | 3.7 | 0.18 | 0.1 | 5 | 1.9 |
| UAW11-40 | 5/8/2001 | 4 | 2000 | 39 | 320 | 509 | 0.4 | 0.93 | 0.05 | 2.6 | 0.03 | 0.1 |
| UAW11-40 | 11/12/2001 | 6 | 2000 | 5 | 290 | 544 | 0.4 | 0.05 | 0.019 | 4.4 | 0.04 | 0.1 |
| UAW12-20 | 5/6/2001 | 12 | 3400 | 22 | 500 | 886 | 68 | 1.9 | 1.1 | 0.03 | 0.6 | 0.3 |
| UAW12-20 | 11/15/2001 | 12 | 3300 | 14 | 510 | 646 | 37 | 0.05 | 0.11 | 0.1 | 1.2 | 0.8 |
| LAW12-60 | 10/13/2001 | 2 | 730 | 49 | 260 | 67.2 | 2.1 | 0.89 | 0.05 | 0.1 | 0.01 | 0.04 |
| LAW12-60 | 11/16/2001 | 2 | 700 | 20 | 270 | 70.7 | 1.8 | 0.37 | 0.05 | 0.1 | 0.08 | 0.02 |
| UAW13-20 | 5/6/2001 | 67 | 4200 | 12 | 990 | 1150 | 180 | 0.09 | 0.1 | 0.1 | 0.09 | 0.4 |
| UAW13-20 | 11/15/2001 | 130 | 6700 | 33 | 990 | 1990 | 130 | 0.05 | 0.099 | 0.1 | 0.2 | 0.4 |
| UAW14-10 | 5/5/2001 | 0.5 | 560 | 3 | 290 | 58.6 | 0.02 | 0.28 | 0.0098 | 0.4 | 0.1 | 0.09 |
| UAW14-10 | 11/9/2001 | 2 | 490 | 7 | 300 | 18.9 | 0.04 | 0.45 | 0.0044 | 2 | 0.02 | 0.02 |
| UAW15-20 | 5/6/2001 | 0.7 | 2000 | 18 | 450 | 953 | 0.1 | 0.16 | 0.05 | 1.5 | 0.1 | 0.1 |
| UAW15-20 | 11/11/2001 | 3 | 3100 | 8 | 360 | 1350 | 0.05 | 0.37 | 0.03 | 5.7 | 0.06 | 0.1 |
| UAW15-50 | 5/6/2001 | 83 | 2200 | 52 | 210 | 1140 | 53 | 15.6 | 0.1 | 0.04 | 0.1 | 0.1 |
| UAW15-50 | 11/11/2001 | 69 | 2000 | 48 | 200 | 1080 | 50 | 16 | 0.38 | 0.1 | 0.09 | 0.1 |
| UAW16-10 | 10/12/2001 | 27 | 1800 | 11 | 590 | 885 | 240 | 0.55 | 0.75 | 0.02 | 0.9 | 1.3 |
| UAW16-10 | 11/13/2001 | 23 | 2000 | 17 | 580 | 704 | 160 | 0.98 | 0.17 | 0.1 | 1.8 | 1 |
| UAW16-10 (Dup) | 10/12/2001 | 29 | 1800 | 11 | 590 | 884 | 240 | 0.35 | 0.9 | 0.1 | 0.7 | 1.2 |
| UAW17-40 | 5/5/2001 | 0.9 | 460 | 42 | 300 | 11.4 | 0.3 | 3.7 | 0.05 | 0.1 | 0.2 | 0.2 |
| UAW17-40 | 11/9/2001 | 2 | 470 | 25 | 280 | 9.3 | 0.3 | 4.7 | 0.05 | 0.1 | 0.02 | 0.1 |
| UAW18-20 | 10/12/2001 | 12 | 3900 | 29 | 640 | 2030 | 3.6 | 5.2 | 0.11 | 0.1 | 1 | 2.1 |
| UAW18-20 | 11/13/2001 | 13 | 4400 | 31 | 680 | 2260 | 5.6 | 4.8 | 0.02 | 0.1 | 2.5 | 1.8 |

**Table 5-12**
**Summary of Water Quality Parameter Measurements in Groundwater and Seep Samples**
Morton International, Inc.
Reading, Ohio
**Units: mg/l**

| Sample Location | Sample Date | Total Organic Carbon | Total Dissolved Solids | Total Suspended Solids | Total Alkalinity | Chloride | Nitrogen, as Ammonia | Ferric Iron | Ferrous Iron | Nitrate-Nitrite | Ortho-Phosphate | Total Phosphorus |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UAW19-80 | 5/6/2001 | 1 | 910 | 12 | 470 | 114 | 0.1 | 0.36 | 0.05 | 0.8 | 0.1 | 0.1 |
| UAW19-80 | 11/12/2001 | 2 | 930 | 14 | 420 | 102 | 0.06 | 1.7 | 0.04 | 1.8 | 0.05 | 0.03 |
| UAW19-80 (Dup) | 11/12/2001 | 7 | 2100 | 7 | 290 | 540 | 0.4 | 0.05 | 0.0088 | 4.3 | 0.02 | 0.02 |
| UAW20-60 | 5/7/2001 | 2 | 2100 | 16 | 440 | 141 | 0.1 | 0.27 | 0.05 | 3.8 | 0.03 | 0.1 |
| UAW20-60 | 11/14/2001 | 3 | 2300 | 8 | 420 | 147 | 0.07 | 0.05 | 0.019 | 5 | 0.02 | 0.02 |
| UAW20-60 (Dup) | 11/14/2001 | 3 | 2400 | 15 | 420 | 142 | 0.06 | 0.15 | 0.029 | 4.9 | 0.02 | 0.1 |
| UAW21-30 | 5/5/2001 | 0.5 | 1500 | 110 | 440 | 519 | 0.2 | 0.92 | 0.05 | 0.2 | 0.1 | 0.06 |
| UAW21-30 | 11/11/2001 | 2 | 560 | 62 | 310 | 91.5 | 0.09 | 5.4 | 0.13 | 0.8 | 0.2 | 0.2 |
| UAW21-80 | 5/5/2001 | 0.3 | 700 | 13 | 360 | 79.6 | 0.8 | 1.9 | 0.099 | 0.03 | 0.1 | 0.06 |
| UAW21-80 | 11/11/2001 | 2 | 740 | 17 | 330 | 71.8 | 1 | 3 | 0.05 | 0.1 | 0.06 | 0.08 |
| UAW22-20 | 10/13/2001 | 13 | 2600 | 750 | 400 | 1330 | 55 | 38.4 | 3 | 0.1 | 0.02 | 1.8 |
| UAW22-20 | 11/13/2001 | 12 | 3100 | 100 | 480 | 1420 | 72 | 31.6 | 0.0099 | 0.1 | 0.5 | 0.8 |
| UAW23-20 | 10/12/2001 | 4 | 2200 | 12 | 240 | 447 | 0.2 | 0.15 | 0.0044 | 4.5 | 0.1 | 0.04 |
| UAW23-20 | 11/14/2001 | 4 | 2100 | 10 | 250 | 413 | 0.2 | 1.8 | 0.16 | 4.7 | 0.1 | 0.02 |
| UAW24-70 | 10/13/2001 | 1 | 620 | 10 | 350 | 99.1 | 0.06 | 0.26 | 0.1 | 0.02 | 0.1 | 0.1 |
| UAW24-70 | 11/15/2001 | 2 | 540 | 15 | 280 | 76 | 0.1 | 1 | 0.05 | 0.1 | 0.07 | 0.08 |
| UAW25-20 | 10/13/2001 | 6 | 1700 | 17 | 460 | 569 | 36 | 3.5 | 0.025 | 0.9 | 0.2 | 0.4 |
| UAW25-20 | 11/13/2001 | 7 | 1600 | 26 | 530 | 635 | 19 | 6.4 | 0.05 | 0.2 | 0.8 | 0.7 |
| SS-1 (Seep) | 10/11/2001 | NA | 2400 | 3100 | 480 | 763 | 14 | 81.7 | 8.3 | 0.1 | 1 | 0.05 |
| SS-5 (Seep) | 10/11/2001 | NA | 1800 | 3600 | 370 | 504 | 53 | 18.8 | 5 | 0.02 | 2.6 | 0.1 |

Notes:
NA Not Analyzed

**Table 5-13**
**Summary of Surface Water Analytical Results**
Morton International, Inc.
Reading, Ohio
**Units µg/l**

| | | VOCs | | | | | | SVOCs | | Pesticides/PCBs | Inorganics | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample Location** | **Sample Date** | **1,1,1-Trichloroethane** | **Acetone** | **Chloroform** | **cis-1,2-Dichloroethene** | **Dibromochloromethane** | **Trichloroethene** | **1,4-Dioxane** | **bis(2-Ethylhexyl) phthalate** | **Pesticides/PCBs** | **Barium--Dissolved** | **Beryllium--Dissolved** | **Copper--Dissolved** | **Mercury--Dissolved** | **Total Sulfide--Dissolved** | **Zinc--Dissolved** |
| | ***EDQL*** | ***88*** | ***78,000*** | ***79*** | ***NE*** | ***6400*** | ***75*** | ***NE*** | ***2.1*** | ***-*** | ***5,000*** | ***7.6*** | ***5*** | ***0.0013*** | ***NE*** | ***58.9*** |
| | ***MCL*** | ***200*** | ***NE*** | ***80 [1]*** | ***70*** | ***80 [1]*** | ***5*** | ***NE*** | ***NE*** | ***-*** | ***2,000*** | ***4*** | ***1000*** | ***2*** | ***NE*** | ***5000*** |
| | ***Region 9 PRG*** | ***790*** | ***610*** | ***0.16*** | ***61*** | ***0.13*** | ***1.6*** | ***NE*** | ***4.8*** | ***-*** | ***2,600*** | ***73*** | ***1400*** | ***11*** | ***NE*** | ***11000*** |
| WS-1A | 3/25/2004 | 0.26 J | 6.3 J | 0.23 J | <0.5 | <1 | <1 | <10 | 0.67 J | ND | 56.6 | <5* | <25* | <0.2 | 900 B | 16.4 |
| WS-2A | 3/26/2004 | 0.19 J | <10 | <1 | <0.5 | <1 | 0.33 J | <10 | <10 | ND | 57.2 | <5* | <25* | <0.2* | <1000 | 16.2 |
| WS-3A | 3/26/2004 | 0.24 J | <10 | <1 | <0.5 | 0.86 J | 0.33 J | <10 | 1.4 J | ND | 59.2 | <5* | <25* | <0.2* | <1000 | 14.5 |
| WS-4A | 3/26/2004 | 0.23 J | 1.2 J | <1 | <0.5 | 0.82 J | 0.33 J | 1.1 J | 0.55 J | ND | 61.8 | <5* | <25* | <0.2* | 740 B | 17.4 |
| WS-5A | 3/25/2004 | 0.39 J | <10* | 0.24 J | 0.26 J | <1 | 0.24 J | <10 | 0.94 J | ND | 54.6 | <5* | <25* | <0.2* | <1000 | 16 |
| WS-6A | 3/25/2004 | 0.4 J | <10* | 0.26 J | <0.5 | <1 | 0.24 J | <10 | 0.58 J | ND | 53 | <5* | <25* | <0.2 | <1000 | 15.3 |
| WS-6A BLIND DUP | 3/25/2004 | 0.4 J | 5.8 J | 0.23 J | <0.5 | <1 | 0.25 J | <10 | 0.58 J | ND | 56 | <5* | <25* | <0.2* | 1400 | 23.1 |

Notes:
1-MCL is for total trihalomethanes(THMs), the sum of bromoform, chloroform, bromodichloromethane, and dibromemethane
NE = No Level Established
J - VOCs, SVOC - indicates concentration was measured below the detection limit and is estimated.
B- Inorganics - indicates concentration was measured below the detection limit and is estimated.
ND - Not detected
<10 - Indicates constituent not detected at or above indicated detection limit.
* = Indicates that Environmental Standards qualified the data as a "non-detect" as part of the 10% data validation.
The analyte was detected in a field and/or laboratory blank at a similar level. The only validation qualifiers that have been annotated into the summary tables are qualifications of detected compounds. Please refer to Appendix D for excerpts from the "Quality Assurance Review (Environmental Standards, 2004) and to review data qualification of "non-detect" results

**Table 5-14**
**Summary of Geotechnical Results**
Morton International, Inc.
Reading, Ohio

| Sample Identification | Date | pH (solid) | Total Organic Carbon (mg/kg) | Cation Exchange Capacity meq/100g | Percent Solids by Weight | Percent Moisture | Atterberg | | | Particle Size Analysis | | Soil Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | LL | PL | PI | Maximum Particle Size (mm) | Percentage (%) < 0.075 mm (silts and clays) | |
| STR01-15' | 3/8/2001 | 8.8 | 590 | 19.2 | 96.0 | 4.17 | U | U | N | 19 | 8.6 | Poorly Graded Sand (SP): brown (10YR5/2), dry, ~ 90% medium to fine sand, ~5% fine gravel, ~5% fines |
| STR01-29' | 3/8/2001 | 7.8 | 2500 | 10.5 | 88.7 | 12.71 | 31 | 13 | 18 | 9.5 | 72.2 | Sandy Lean Clay (CL): dark greenish gray (5GY3/1) dry, ~90% high to medium plasticity fines, ~10% medium sand, abundant medium and fine gravel (mafic angular to subrounded), few iron-colored mottles, very hard |
| STR01-47' | 3/9/2001 | 9.6 | 290 | 8.5 | 88.0 | 13.61 | U | U | N | 25 | 1.4 | Poorly Graded Sand (SP): dark grayish brown (10 YR 4/2), moist to wet, ~100% medium grained sand, trace fines, with some gravel |
| STR01-58' | 3/9/2001 | 9.1 | 8100 | 36.1 | 79.1 | 26.48 | U | U | N | 2 | 61.6 | Silt (ML): greenish gray (10Y5/1) wet, ~100% low plasticity fines with organic silt (OH) laminations, black (2.5Y2.5/1) |
| STR01-77' | 3/9/2001 | 7.9 | 9200 | 8.2 | 76.8 | 30.17 | 46 | 22 | 24 | 0.15 | 99.6 | Clay (CL): dark greenish gray (10Y4/1), wet, 100% medium plasticity fines, soft, homogeneous some white shell (?) fragments. |
| STR01-92.5' | 3/9/2001 | 9.2 | 5200 | 8.9 | 82.8 | 20.74 | 34 | 17 | 17 | 0.425 | 97.7 | Lean Clay (CL): dark greenish gray (10Y3/1), moist, ~95% high to medium plasticity fines, ~5% medium sand, hard, blocky, massive |
| STR01-114' | 3/9/2001 | 9.4 | 630 | 25.8 | 80.6 | 24.05 | U | U | N | 4.75 | 24.4 | Silty Sand (SM): light olive brown (2.5Y5/6), wet, fine laminations, dark organic odor |
| STR02-22' | 3/13/2001 | 7.6 | 3900 | 7.3 | 88.4 | 13.08 | 28 | 15 | 14 | 9.5 | 64.7 | Sandy Lean Clay (CL): dark olive gray (5Y3/2), wet, 90% medium plasticity fines, 10% medium sand, moist, hard, trace gravel |

**Table 5-14**
**Summary of Geotechnical Results**
Morton International, Inc.
Reading, Ohio

| Sample Identification | Date | pH (solid) | Total Organic Carbon (mg/kg) | Cation Exchange Capacity meq/100g | Percent Solids by Weight | Percent Moisture | Atterberg | | | Particle Size Analysis | | Soil Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | LL | PL | PI | Maximum Particle Size (mm) | Percentage (%) < 0.075 mm (silts and clays) | |
| STR02-55' | 3/13/2001 | 9.4 | 480 | 29.7 | 85.0 | 17.65 | U | U | N | 2 | 9.8 | Poorly Graded Sand (SP): light olive brown (2.5Y5/4), wet, 90% fine to medium sand, 10% fines |
| STR03-16' | 3/14/2001 | 9.4 | 3000 | 10.5 | 88.6 | 12.88 | 23 | 15 | 9 | 9.5 | 71.5 | Sandy Lean Clay (CL): [till], ~80% medium to high plasticity fines, ~ 20% medium sand and fine gravel, some black staining, very hard |
| STR03-37' | 3/19/2001 | 8.2 | 970 | 10.6 | 89.3 | 12.00 | 27 | 16 | 11 | 19 | 68.7 | Sandy Lean Clay (CL): [till], dark grayish brown (2.5Y4/2), ~80% medium to high plasticity fines, ~ 20% medium sand and fine gravel, few gray mottles, increasing sand content, very hard, blocky |
| STR03-58.5' | 3/19/2001 | 8.3 | 630 | 16.5 | 86.9 | 15.07 | U | U | N | 9.5 | 6.0 | Poorly Graded Sand (SP): yellowish brown (10Y4/4) wet, 95% fine medium sand, 5% low plasticity fines, trace gravel (sandstone) |
| STR04-22.5' | 3/19/2001 | 7.7 | 3300 | 9.5 | 88.5 | 12.99 | 27 | 15 | 13 | 25 | 57.1 | Sandy Lean Clay (CL): [till], dark greenish gray (10Y4/1), moist, ~70% fines, ~30% sand and gravel, hard |
| STR04-53.5' | 3/20/2001 | 7.8 | 7600 | 20.4 | 80.8 | 23.72 | U | U | N | 4.75 | 99.2 | Silt (ML): dark greenish gray (10Y4/1), moist, ~100% low plasticity fines, weak bedding, homogeneous, firm to hard (loess?) |
| STR04-88' | 3/20/2001 | 8.5 | 2500 | 15.6 | 91.4 | 9.45 | 21 | 13 | 8 | 19 | 60.4 | Sandy Lean Clay (CL) to Lean Clay (CL): [till], dark greenish gray (10Y3/1), ~70% medium plasticity fines, ~30% sand and gravel, very hard, no structure |
| STR05-7' | 3/10/2001 | 5.9 | 1500 | 16.5 | 84.8 | 17.95 | 24 | U | 24 | 2 | 53.5 | Silty Sand (SM): olive brown (2.5Y4/4), moist, 60% fine sand, 40% fines, massive, some mottling of dark organics |

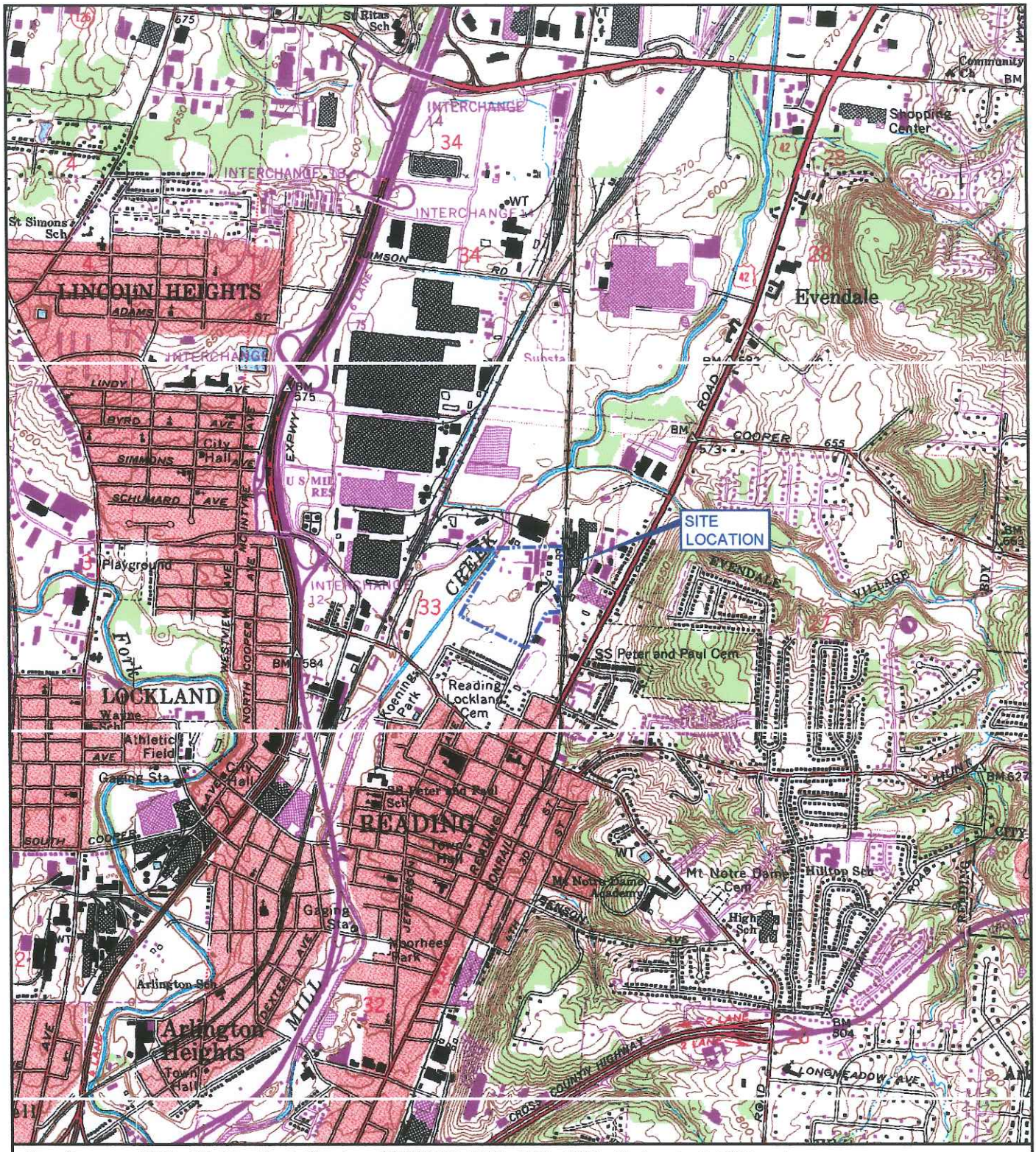
**Table 5-14**
**Summary of Geotechnical Results**
Morton International, Inc.
Reading, Ohio

| Sample Identification | Date | pH (solid) | Total Organic Carbon (mg/kg) | Cation Exchange Capacity meq/100g | Percent Solids by Weight | Percent Moisture | Atterberg | | | Particle Size Analysis | | Soil Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | LL | PL | PI | Maximum Particle Size (mm) | Percentage (%) < 0.075 mm (silts and clays) | |
| STR05-17.5' | 3/10/2001 | 8 | 4400 | 6.6 | 88.7 | 12.73 | 28 | 16 | 12 | 9.5 | 70.5 | Sandy Lean Clay (CL): [till] olive brown (2.5Y4/3), dry, hard, ~80% high to medium plasticity fines, ~10% medium sand, ~10% fine gravel |
| STR05-35.5' | 3/10/2001 | 9.5 | 3400 | 5.3 | 91.1 | 9.79 | 17 | 13 | 4 | 9.5 | 63.9 | Silty Clay (CL): dark greenish gray (10Y4/1), moist, with sand and 1/2"-1" gravel [till?], hard |
| STR06-7.5' | 3/11/2001 | 9.3 | 2200 | 11.1 | 87.3 | 14.56 | 25 | 15 | 10 | 9.5 | 71.2 | Sandy Clay (CL): light olive brown (2.5YR5/4), light gray mottling, moist to wet, 70% fines, 25% fine sand, 5% gravel (1"-2"), hard |
| STR06-45.5' | 3/11/2001 | 8.7 | 13000 | 5.4 | 76.1 | 31.37 | 45 | 24 | 21 | silt/clay | 100.0 | Silt (ML): dark greenish gray (10Y4/1) wet, 100% low plasticity fines,soft, massive |
| STR06-76' | 3/11/2001 | 9.6 | 640 | 26.2 | 87.0 | 14.98 | U | U | N | 19 | 22.7 | Poorly Graded Sand (SP): yellowish brown (10Y5/4), 80% fine sand, 20% medium sand, trace fines, 6" interbeds of silty clay |
| STR06-87.5' | 3/11/2001 | 9.4 | 3300 | 17.5 | 90.0 | 11.06 | 21 | 13 | 8 | 19 | 60.6 | Sandy Clay (CL); [till], dark gray (5Y4/1) moist, 90% low plasticity fines, 10% fine sand, trace gravel 1"-2" subangular, hard |
| STR08-17.5' | 3/26/2001 | 8 | 4000 | 6.2 | 89.5 | 11.70 | 24 | 14 | 11 | 9.5 | 71.5 | Sandy Lean Clay (CL): [till], dark greenish gray (10Y4/1), moist, ~85% high plasticity fines, ~15% fine sand and gravel, hard |
| STR08-44' | 3/26/2001 | 7.9 | 3600 | 6.3 | 80.3 | 24.49 | U | U | N | 9.5 | 97.3 | Silt (ML): dark greenish gray (10Y3/1), moist, ~100% low to medium plasticity fines, homogeneous |
| STR11-6' | 8/20/2001 | 7.9 | 2000 | 15.1 | 81.1 | 23.29 | U | U | N | 4.75 | 38.7 | Clayey Sand (SC): dark brown, wet, ~85 poorly graded fine to medium sand, ~10% clay, ~5% calcareous pebbles, loose to slightly firm |
| STR11-9' | 8/20/2001 | 8.1 | 4300 | 5.5 | 80.9 | 23.56 | 44 | 21 | 23 | 19 | 91.1 | Clay (CH): grayish brown, damp, still, plastic, slightly mottled with dark gray clay |

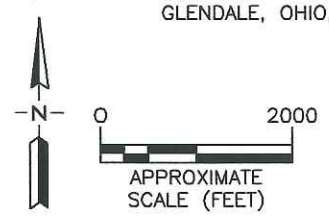
**Table 5-14**
**Summary of Geotechnical Results**
Morton International, Inc.
Reading, Ohio

| Sample Identification | Date | pH (solid) | Total Organic Carbon (mg/kg) | Cation Exchange Capacity meq/100g | Percent Solids by Weight | Percent Moisture | Atterberg | | | Particle Size Analysis | | Soil Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | LL | PL | PI | Maximum Particle Size (mm) | Percentage (%) < 0.075 mm (silts and clays) | |
| STR11-53' | 8/20/2001 | 8.3 | 420 | 4.2 | 90.8 | 10.14 | U | U | N | 37.5 | 10.0 | Gravelly Sand (SW): brown to dark brown, saturated,~90% fine to medium grained sand, ~10% fine to very coarse gravel (up to ~4" diameter), loose |
| STR11-63' | 8/20/2001 | 8.1 | 4100 | 7.3 | 90.5 | 10.49 | 22 | 13 | 10 | 19 | 44.5 | Sandy Gravelly Clay (CL): greenish gray to dark green, dry to damp, ~70% clay, ~20% very fine to coard grained sand, ~10% gravel, very stiff, nonplastic to slightly plastic, very hard, locally <1/4" diameter (granitic), glacial till |
| STR11-77' | 8/21/2001 | 7.3 | 7200 | 8.3 | 78.2 | 27.87 | U | U | N | 0.425 | 99.3 | Silty Clay (CL): dark gray, wet to saturated, ~70% - 60% clay, ~30% - 40% silt, locally stiff to locally friable, slightly plastic |
| STR11-83' | 8/21/2001 | 7.8 | 960 | 5.9 | 83.1 | 20.33 | U | U | N | 9.5 | 37.2 | Sand (SP): brown, saturated, very fine to medium grained, loose to moderately compact, well-bedded with silt laminae locally |
| STR11-102' | 8/21/2001 | 7.7 | 1200 | 7.8 | 81.4 | 22.89 | U | U | N | 2 | 43.6 | Sand (SP): brown, fine to medium grained, saturated, loose to slightly compact |
| SS-1 | 10/11/2001 | 7.9 | 3900 | -- | 85.5 | 16.31 | 25 | 15 | 11 | 9.5 | 67.2 | No Descriptions Provided |

Notes:
Analytical Methods: American Society for Testing and Materials (ASTM) Soil and Rock (1), ASTM Volumes 04.08 and 04.09 and SW-846 9081.
LL = Liquid Limit in percent
PL = Plastic Limit in percent
PI = Plasticity Index
U = unable to be determined
N = non-plastic




Map Source: USGS 7.5 Min. Quad Sheets: CINCINNATI EAST, OHIO, 1961 Photorevised 1981 and GLENDALE, OHIO, 1965 Photorevised 1987.



QUADRANGLE LOCATION

GEOMATRIX

SITE LOCATION MAP

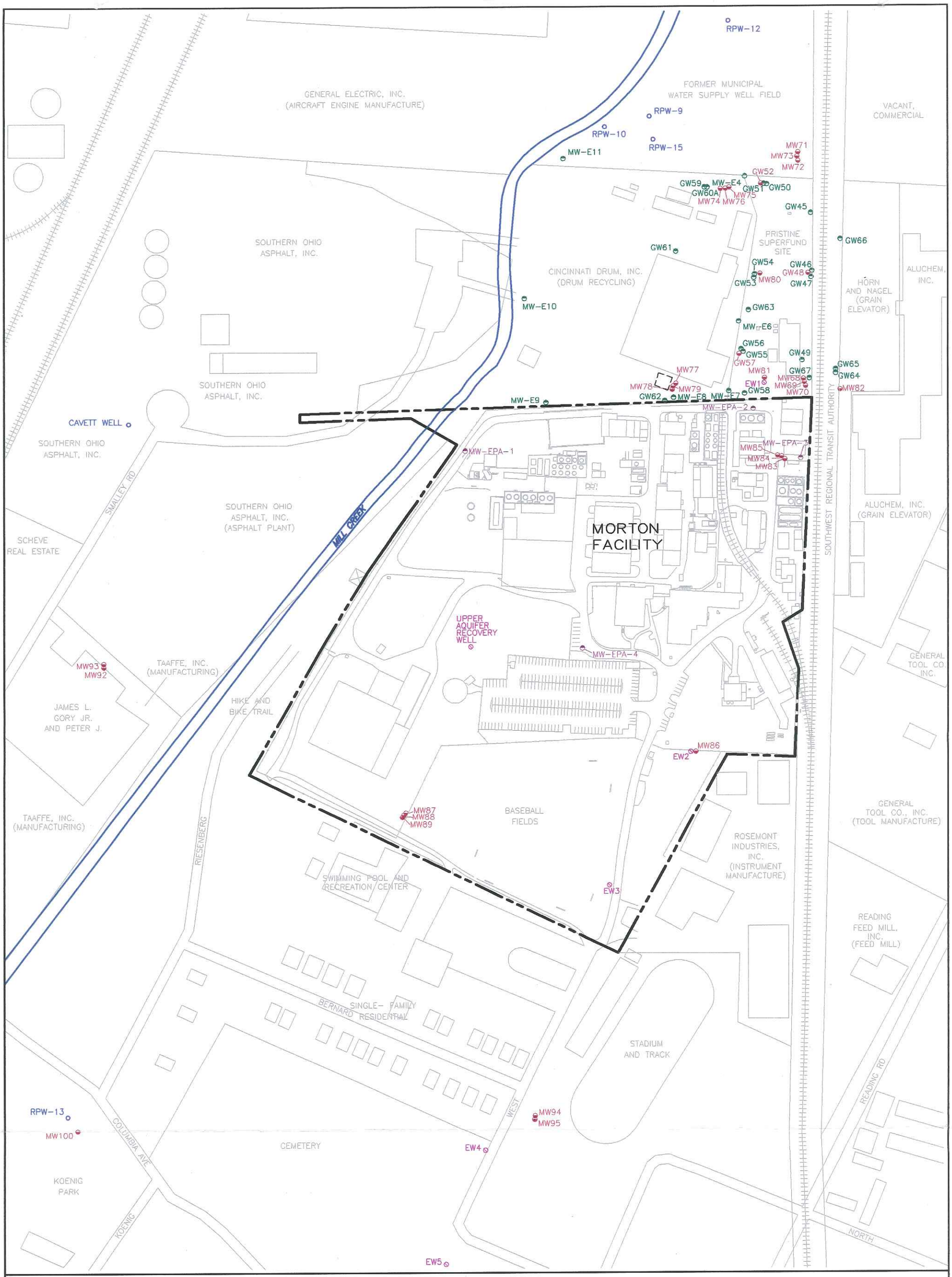
PREPARED FOR

ROHM AND HAAS CO. – READING, OHIO

Project No. 7168

Figure No. 2–1

7168A01–rps




## EXPLANATION

- RPW-15 — MUNICIPAL WELL LOCATION AND IDENTIFICATION NUMBER (ABANDONED)
- CAVETT WELL — NON-MUNICIPAL SUPPLY WELL LOCATION
- RECOVERY WELL — MORTON FACILITY SHALLOW AQUIFER RECOVERY WELL LOCATION
- MORTON FACILITY PROPERTY BOUNDARY
- MW-EPA-1 — PRE-FI MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (FOR WELLS STILL EXTANT)
- GW50 — PRISTINE UPPER AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- MW71 — PRISTINE LOWER AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- EW1 — PRISTINE EXTRACTION WELL LOCATION AND IDENTIFICATION NUMBER

0 240 APPROXIMATE SCALE (FEET)

-N-

Base Map Source: American Process Design, Inc., Cincinnati, OH., Proj. No. 16151, 410, 6/4/98.

SITE VICINITY MAP

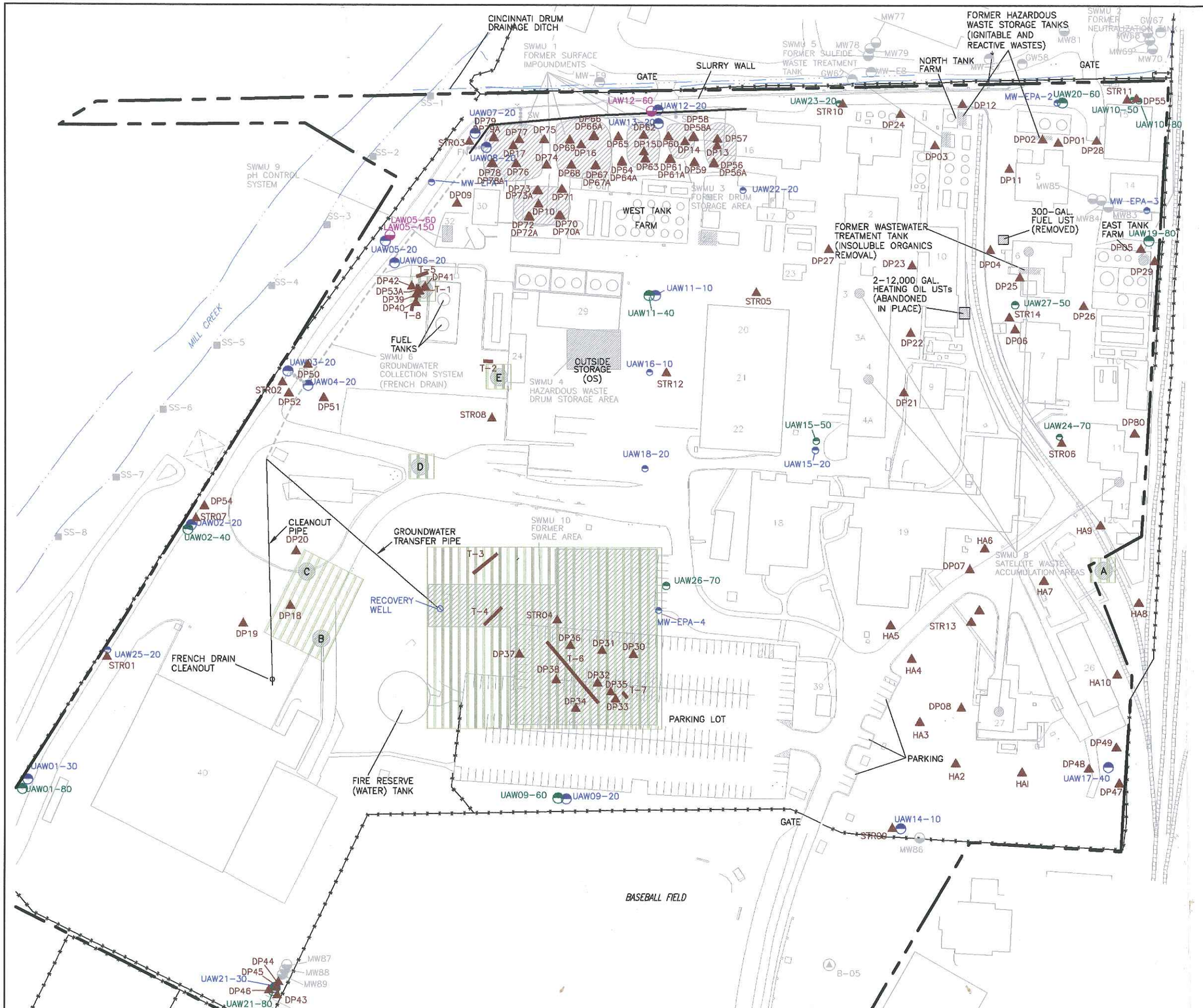
PREPARED FOR

ROHM AND HAAS CO.
READING, OHIO

GEOMATRIX

| Project No. | Figure |
|---|---|
| 7168 | 2-3 |

7168B02-rps




Base Map Source: Abercrombie & Associates, Inc., May 2001

0 60 120
APPROXIMATE SCALE (FEET)

-N-

## EXPLANATION

- UAW11-10 — UPPER AQUIFER MONITORING WELL LOCATION COMPLETED IN SHALLOW SAND
- UAW11-40 — UPPER AQUIFER MONITORING WELL LOCATION COMPLETED IN LOWER SAND
- LAW12-60 — LOWER AQUIFER MONITORING WELL LOCATION
- RECOVERY WELL LOCATION
- STR09 — SOIL BORING LOCATION AND IDENTIFICATION NUMBER
- T-3 — TRENCH LOCATION
- MW-EPA-1 — UPPER AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (PRC, 1993)
- SW — FRENCH DRAIN AND SLURRY WALL LOCATION SOIL BORING SERIES
- MORTON FACILITY PROPERTY BOUNDARY
- SS-2 — STREAM STATION LOCATION
- B-05 — BACKGROUND SAMPLE LOCATION
- GW58 — PRISTINE SHALLOW AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- MW70 — PRISTINE LOWER AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- IMPOUNDMENT – (FROM 1960 AERIAL PHOTO)
- A — LOCATION OF REPORTED WASTE BURIAL
- AREA OF SURFACE GEOPHYSICAL SURVEY

# ON-SITE MONITORING WELL AND SOIL SAMPLE LOCATION MAP

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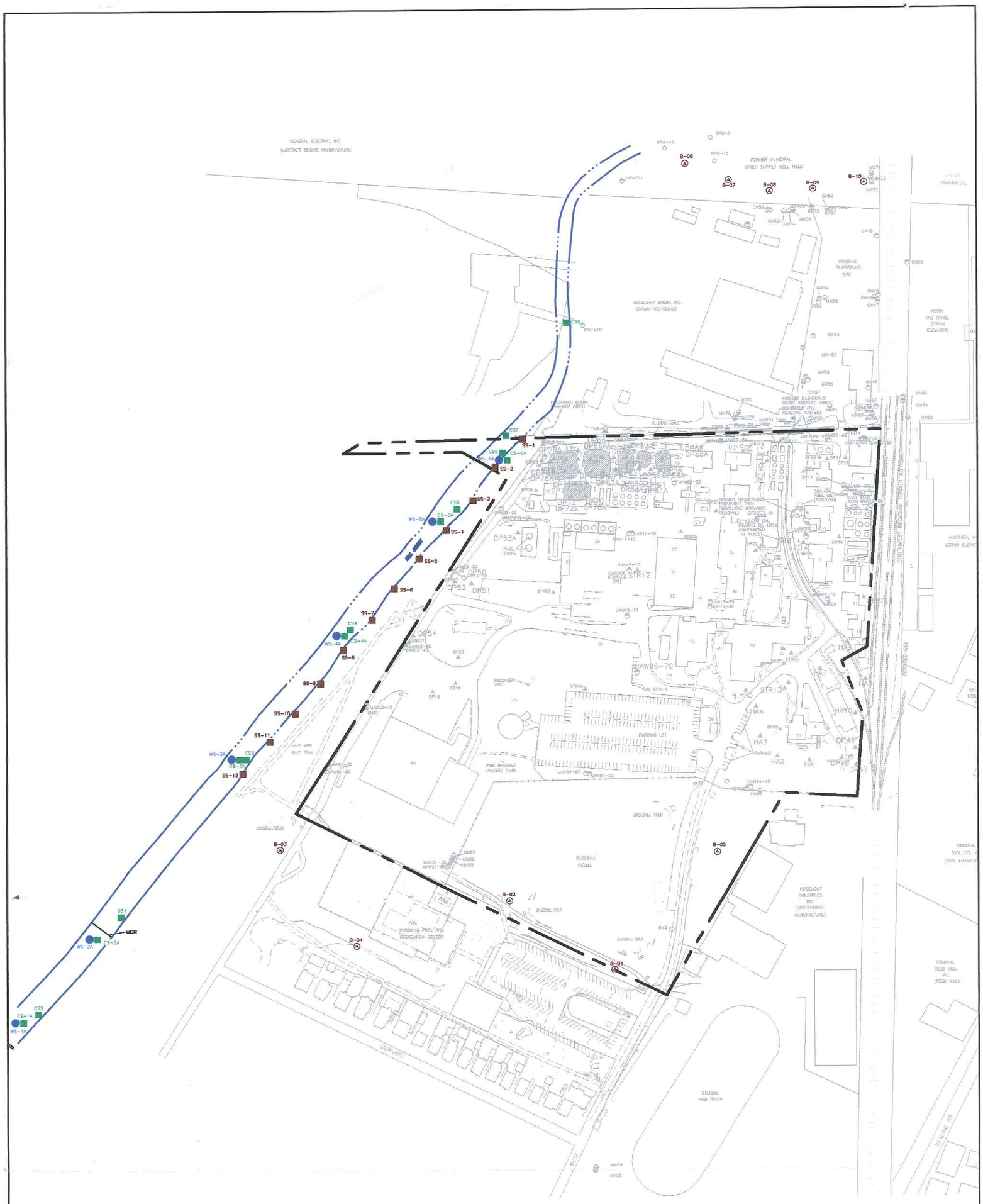
READING, OHIO

| GEOMATRIX | Project No. | Figure |
|---|---|---|
| | 7168 | 4-1 |

7168B03-rps




Base Map Source: Abercrombie & Associates, Inc., May 2001 and American Process Design, Inc., Cincinnati, OH, June 1998.

-N-

0 240

APPROXIMATE SCALE (FEET)

**EXPLANATION**

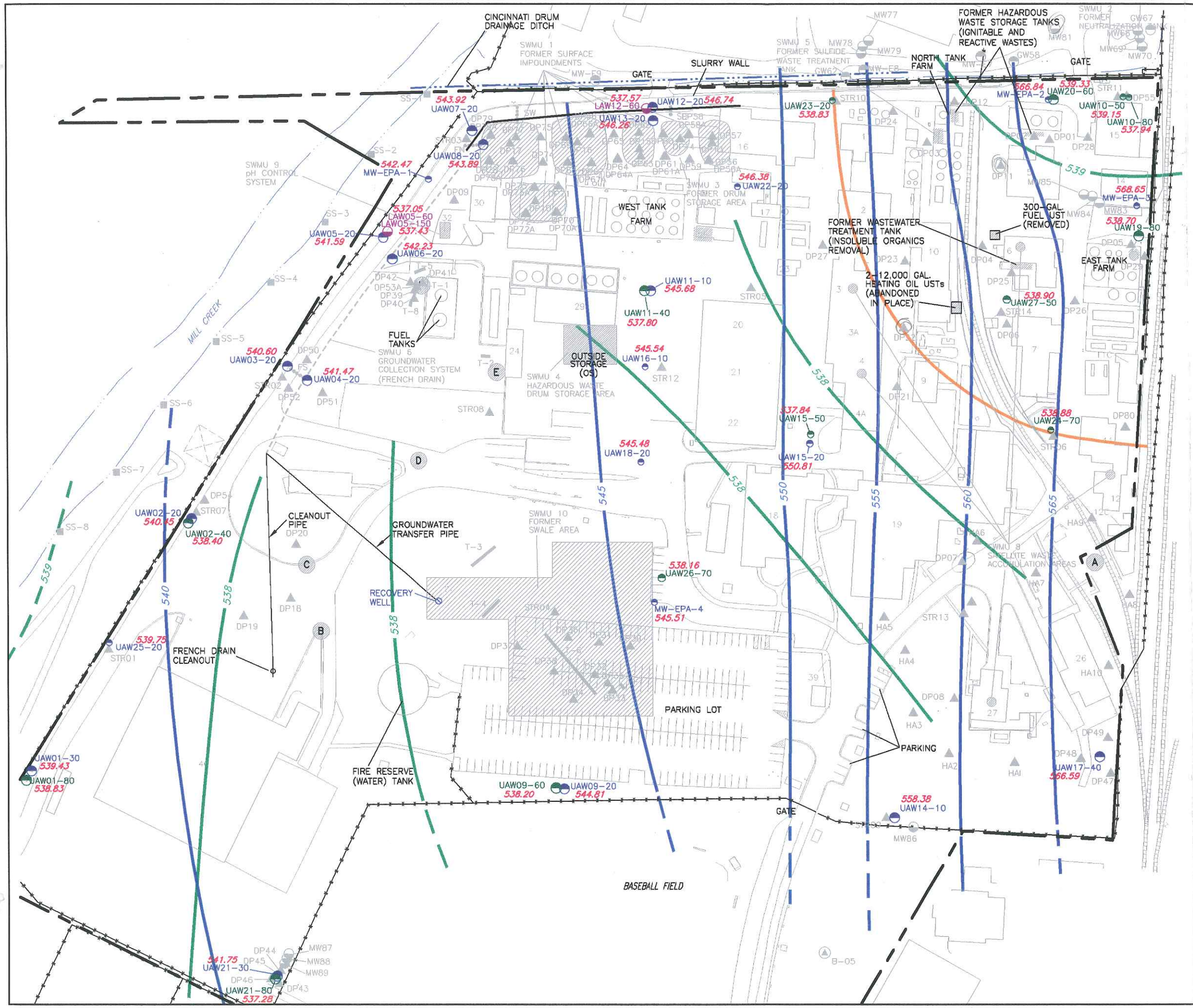
| | |
|---|---|
| B-06 | BACKGROUND SAMPLE LOCATION |
| WS-1A | SURFACE WATER SAMPLE LOCATION |
| CS-1A | CREEK BED SEDIMENT SAMPLE LOCATION |
| SS-1 | STREAM STATION (CREEK BANK SEDIMENT/ OR SEEP SAMPLE LOCATION) |
| | MORTON FACILITY PROPERTY BOUNDARY |

MILL CREEK AND BACKGROUND SAMPLE LOCATION MAP
PREPARED FOR
ROHM AND HAAS CO.
READING, OHIO

GEOMATRIX

| Project No. | Figure |
|---|---|
| 7168 | 4-2 |

7168304-rps




Base Map Source: Abercrombie & Associates, Inc., May 2001

0 60 120
APPROXIMATE SCALE (FEET)

-N-

## EXPLANATION

- UAW11-10 — SHALLOW UPPER AQUIFER SAND MONITORING WELL LOCATION
- UAW11-40 — DEEP UPPER AQUIFER SAND MONITORING WELL LOCATION
- LAW12-60 — LOWER AQUIFER MONITORING WELL LOCATION
- 539.43 — GROUNDWATER ELEVATION (FEET ABOVE MSL)
- 550 — GROUNDWATER ELEVATION CONTOUR FOR SHALLOW UPPER AQUIFER SAND
- 538 — GROUNDWATER ELEVATION CONTOUR FOR DEEP UPPER AQUIFER SAND
- APPROXIMATE NORTHEAST EXTENT OF CONTINUOUS SHALLOW UPPER AQUIFER SAND
- RECOVERY WELL LOCATION
- STR09 — SOIL BORING LOCATION AND IDENTIFICATION NUMBER
- T-3 — TRENCH LOCATION
- MW-EPA-1 — UPPER AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (PRC, 1993)
- SW — FRENCH DRAIN AND SLURRY WALL LOCATION SOIL BORING SERIES
- MORTON FACILITY PROPERTY BOUNDARY
- SS-2 — STREAM STATION LOCATION
- B-05 — BACKGROUND SAMPLE LOCATION
- GW58 — PRISTINE SHALLOW AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- MW70 — PRISTINE LOWER AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- IMPOUNDMENT – (FROM 1960 AERIAL PHOTO)
- A — LOCATION OF REPORTED WASTE BURIAL

# GROUNDWATER GRADIENT MAP
# MAY 27, 2004

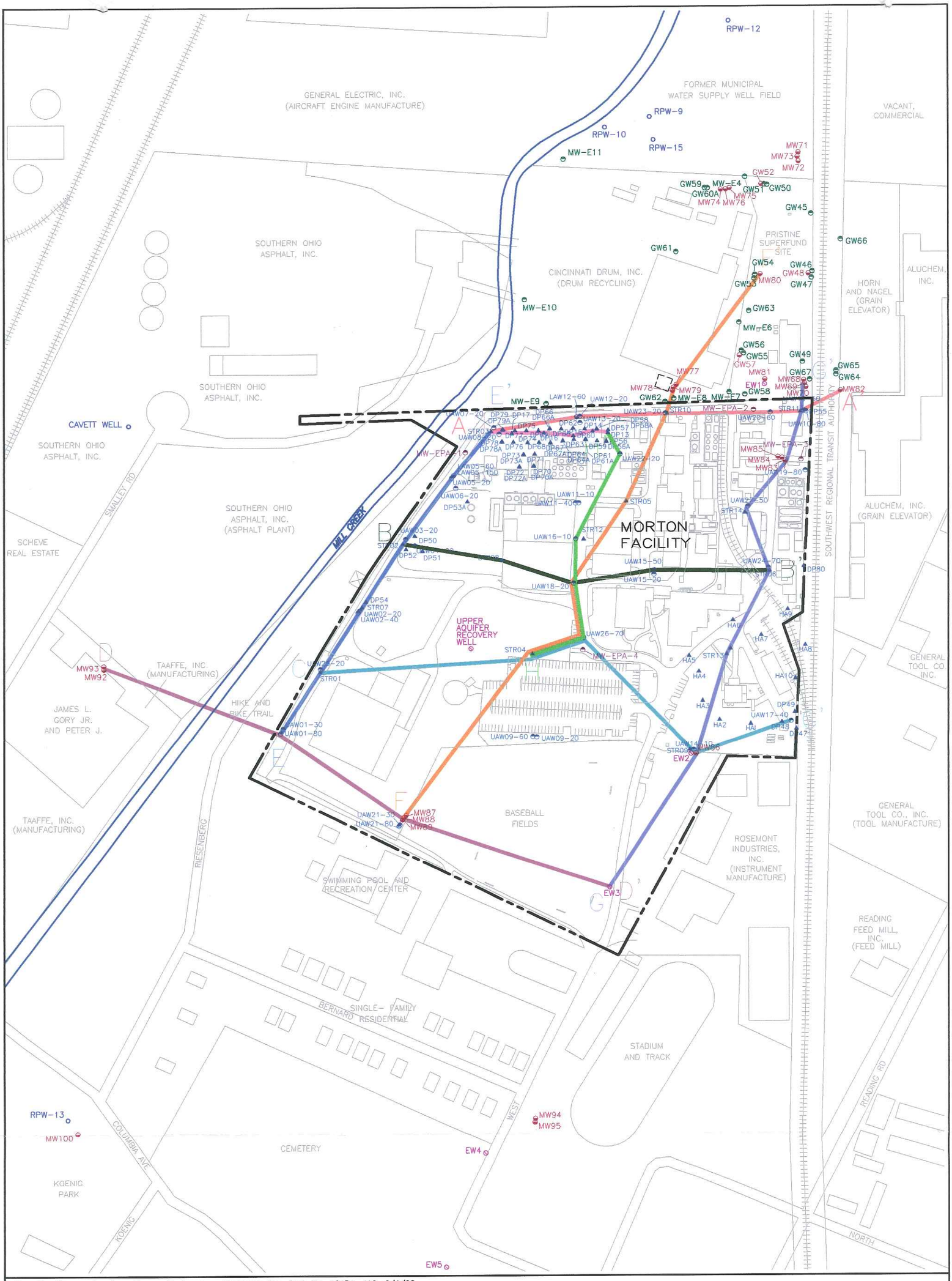
PREPARED FOR

ROHM AND HAAS CO.
READING, OHIO

GEOMATRIX

| Project No. | Figure |
|---|---|
| 7168 | 5-1 |

7168B13-rps




Base Map Source: American Process Design, Inc., Cincinnati, OH., Proj. No. 16151, 410, 6/4/98.

## EXPLANATION

- STR03 ▲ MORTON FACILITY SOIL BORING LOCATION
- UAW03-20 MORTON FACILITY UPPER AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- LAW12-60 MORTON FACILITY LOWER AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- CAVETT WELL NON-MUNICIPAL SUPPLY WELL LOCATION
- MW-EPA-1 MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- GW50 PRISTINE SHALLOW AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- MW71 PRISTINE LOWER AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- EW1 PRISTINE EXTRACTION WELL LOCATION AND IDENTIFICATION NUMBER
- MORTON FACILITY PROPERTY BOUNDARY

-N-

0 240

APPROXIMATE SCALE (FEET)

CROSS-SECTION LOCATION MAP

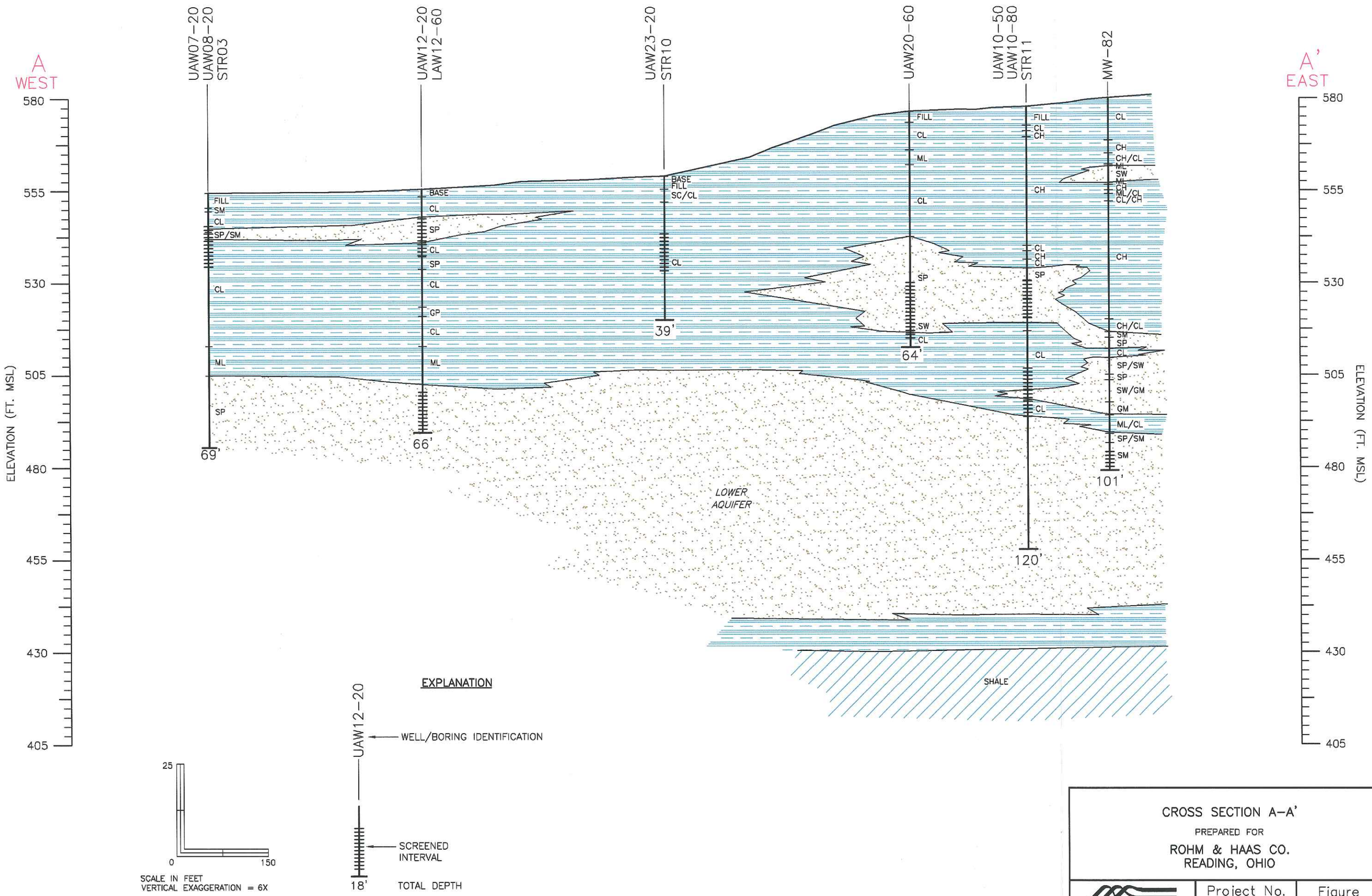
PREPARED FOR

ROHM AND HAAS CO.
READING, OHIO

GEOMATRIX

| Project No. | Figure |
|---|---|
| 7168 | 5-2 |

7168B01-rps




CROSS SECTION A–A'

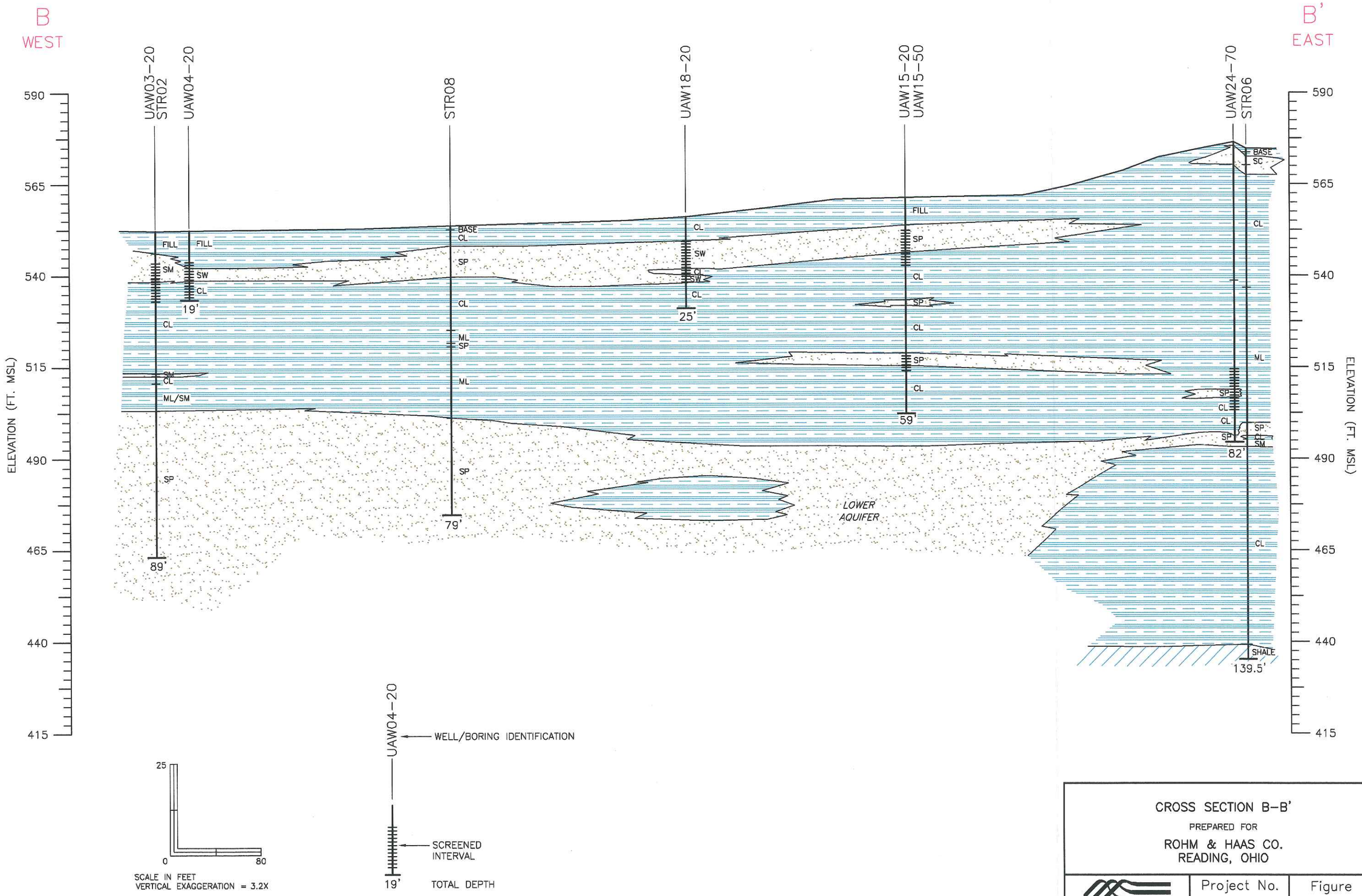
PREPARED FOR

ROHM & HAAS CO.
READING, OHIO

GEOMATRIX

| Project No. | Figure |
|---|---|
| 7168 | 5–3 |

7168806rps



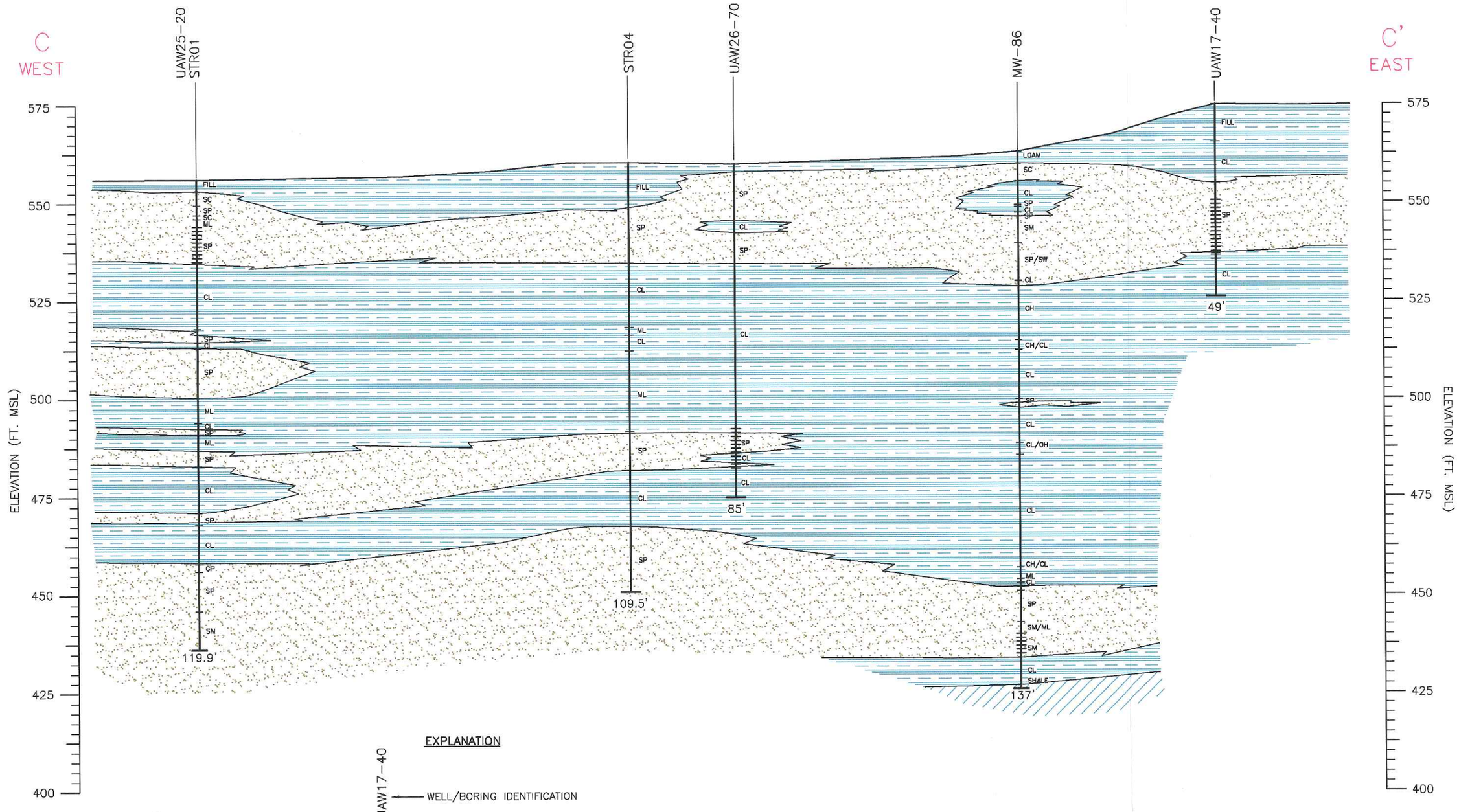

CROSS SECTION B–B'

PREPARED FOR

ROHM & HAAS CO.
READING, OHIO

| GEOMATRIX | Project No. | Figure |
|---|---|---|
| | 7168 | 5–4 |

7168B07rps




EXPLANATION

UAW17-40 — WELL/BORING IDENTIFICATION

SCREENED INTERVAL

49' TOTAL DEPTH

25 0 125

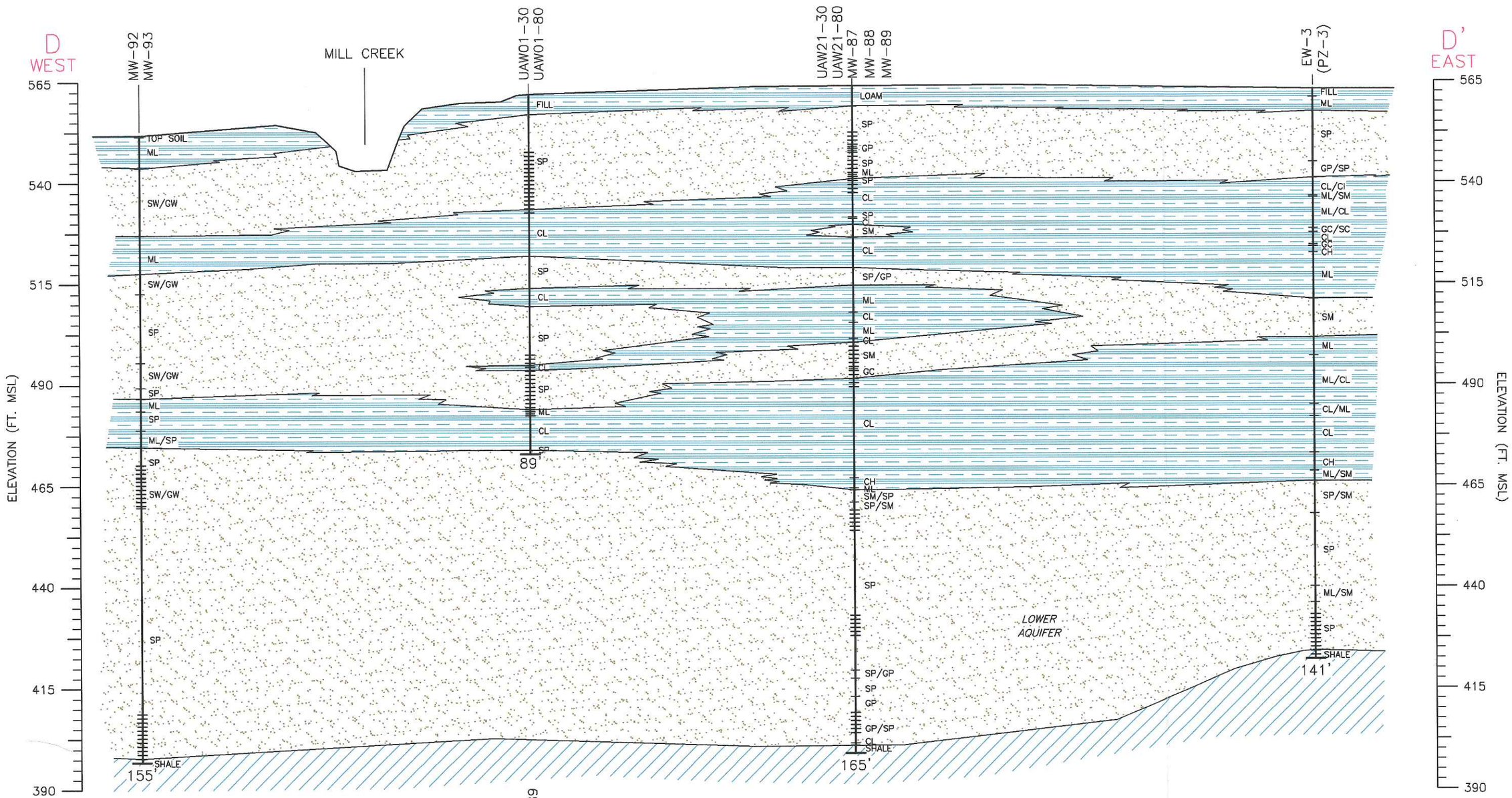
SCALE IN FEET
VERTICAL EXAGGERATION = 5X

CROSS SECTION C-C'

PREPARED FOR

ROHM & HAAS CO.
READING, OHIO

| GEOMATRIX | Project No. 7168 | Figure 5-5 | 7168B08rps |
|---|---|---|---|




EXPLANATION

MW-89 — WELL IDENTIFICATION

SCREENED INTERVAL

165' TOTAL DEPTH

25

0 125

SCALE IN FEET
VERTICAL EXAGGERATION = 5X

CROSS SECTION D-D'

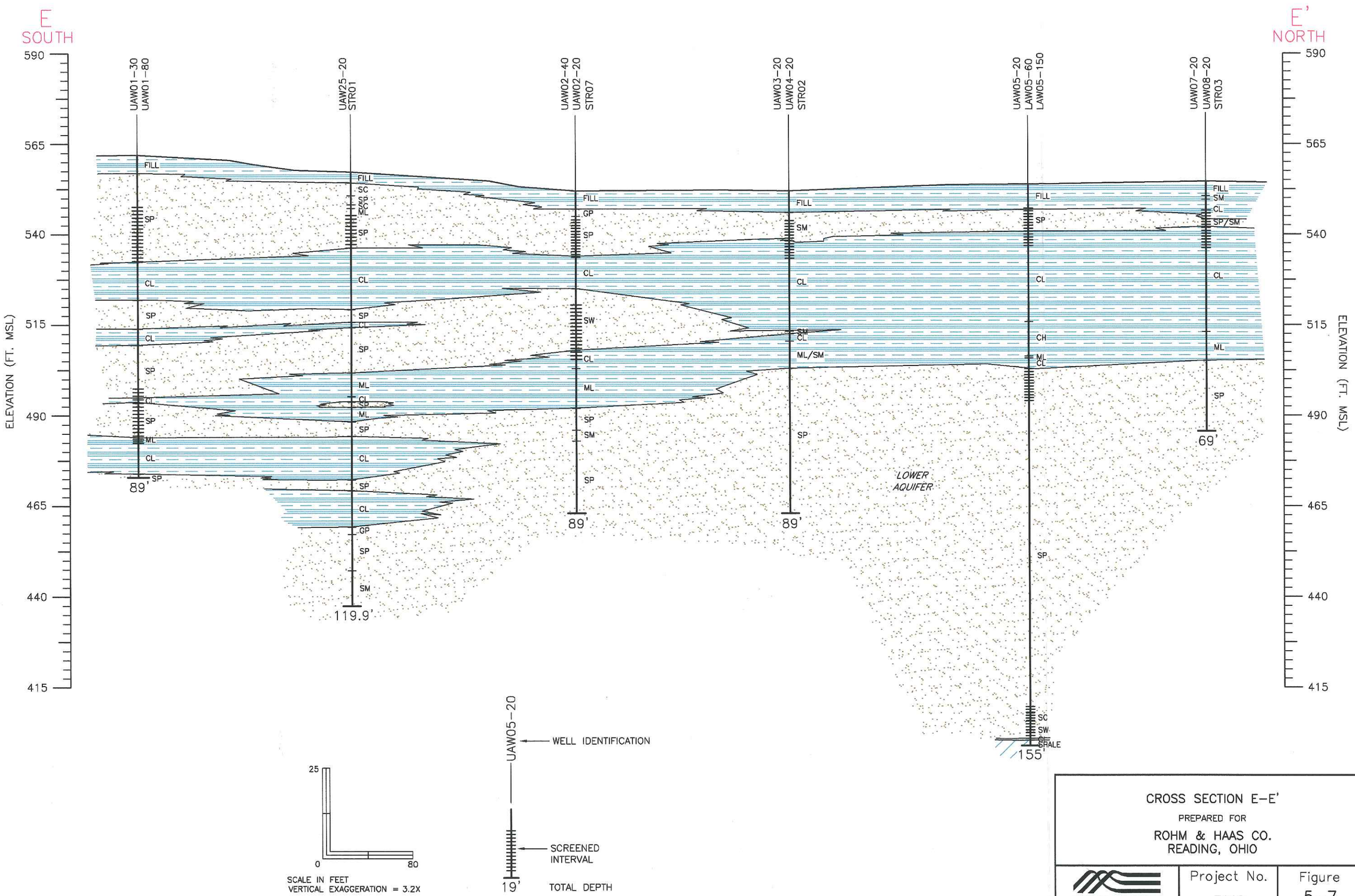
PREPARED FOR

ROHM & HAAS CO.
READING, OHIO

GEOMATRIX

| Project No. | Figure |
|---|---|
| 7168 | 5-6 |

7168B14ps




CROSS SECTION E–E'

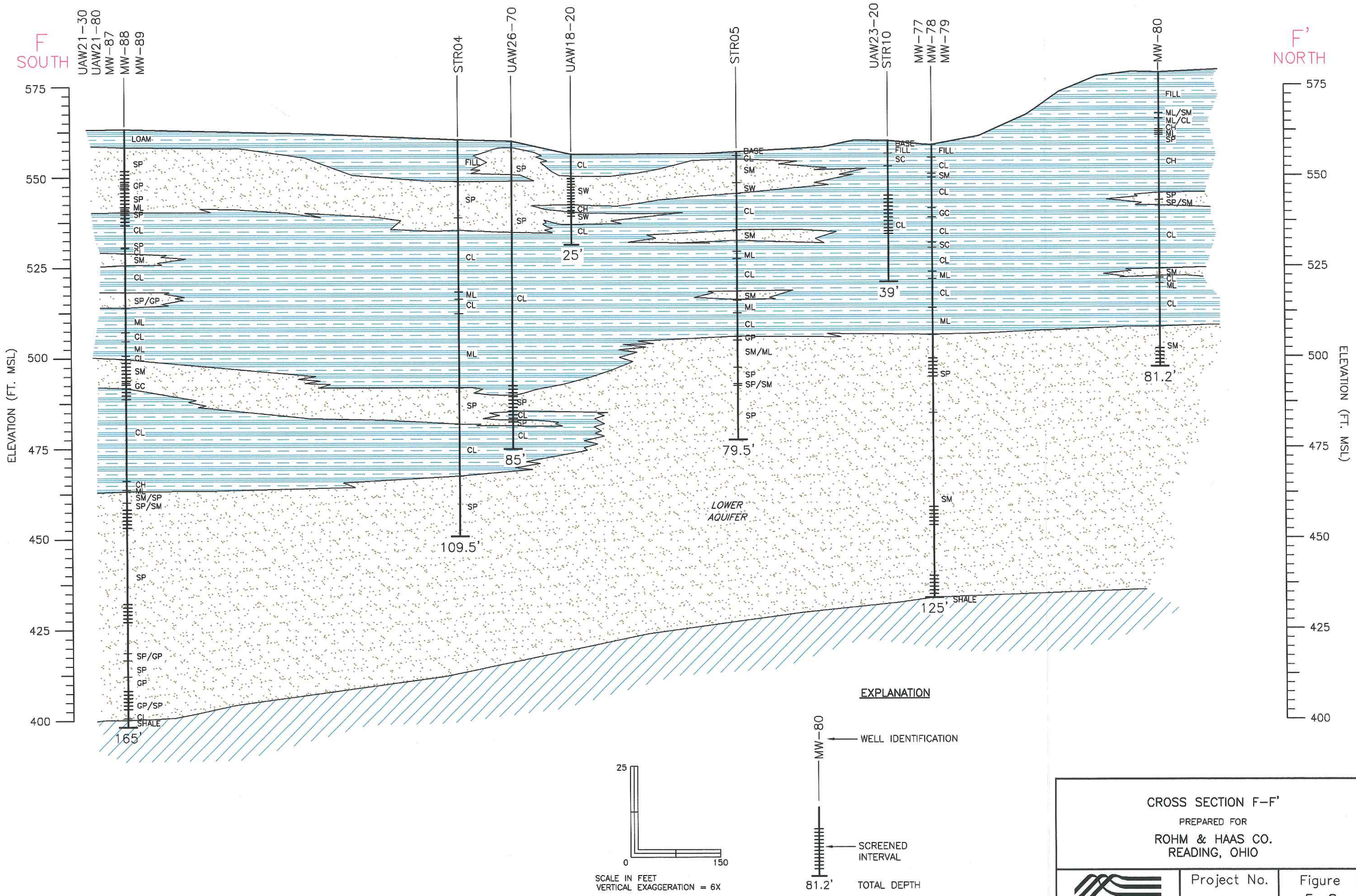
PREPARED FOR

ROHM & HAAS CO.
READING, OHIO

GEOMATRIX

| Project No. | Figure |
|---|---|
| 7168 | 5–7 |

7168B15rps




CROSS SECTION F–F'

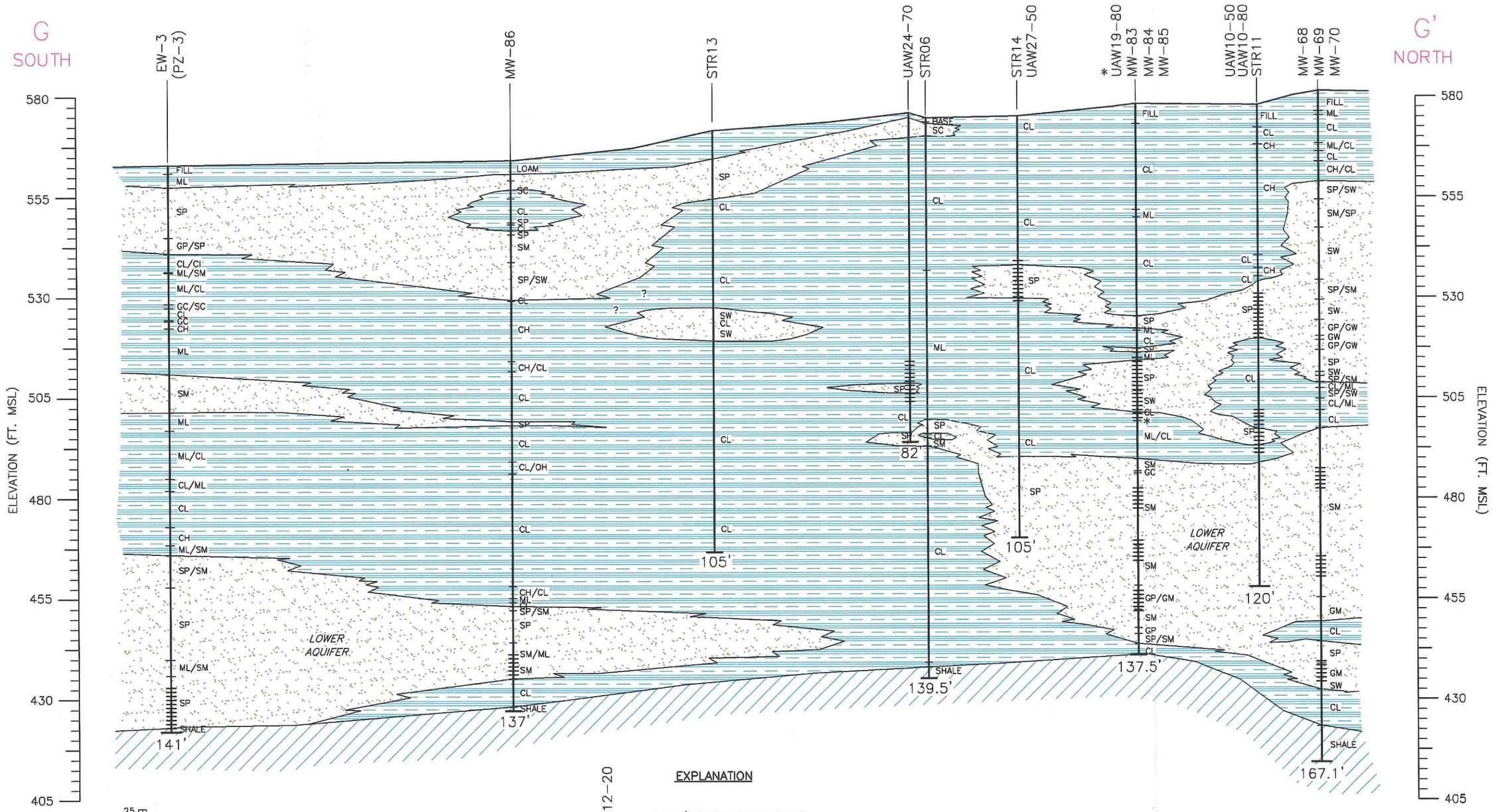
PREPARED FOR

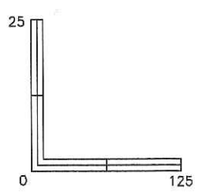
ROHM & HAAS CO.
READING, OHIO

GEOMATRIX

| Project No. | Figure |
|---|---|
| 7168 | 5–8 |

7168B09ps




SCALE IN FEET
VERTICAL EXAGGERATION = 5X

STRATIGRAPHY IS TAKEN FROM THE DEEPEST BORING OR MONITORING WELL UNLESS OTHERWISE NOTED

**EXPLANATION**

UAW12-20 — WELL/BORING IDENTIFICATION

SCREENED INTERVAL

18' — TOTAL DEPTH

NOTE:
THE ILLUSTRATED SCREEN SETTING ASSUMES THE PRESENCE OF A TRANSMISSIVE ZONE AT THE TARGETED DEPTH. THE ACTUAL SCREEN SETTING MAY BE ADJUSTED UP OR DOWN BASED ON THE DEPTH AND PRESENCE OF THE TARGETED ZONE, AS DISCUSSED IN THE TEXT.

* UAW19-80 STRATIGRAPHY 0-79'
MW-85 STRATIGRAPHY 79-139.5'

CROSS SECTION G-G'

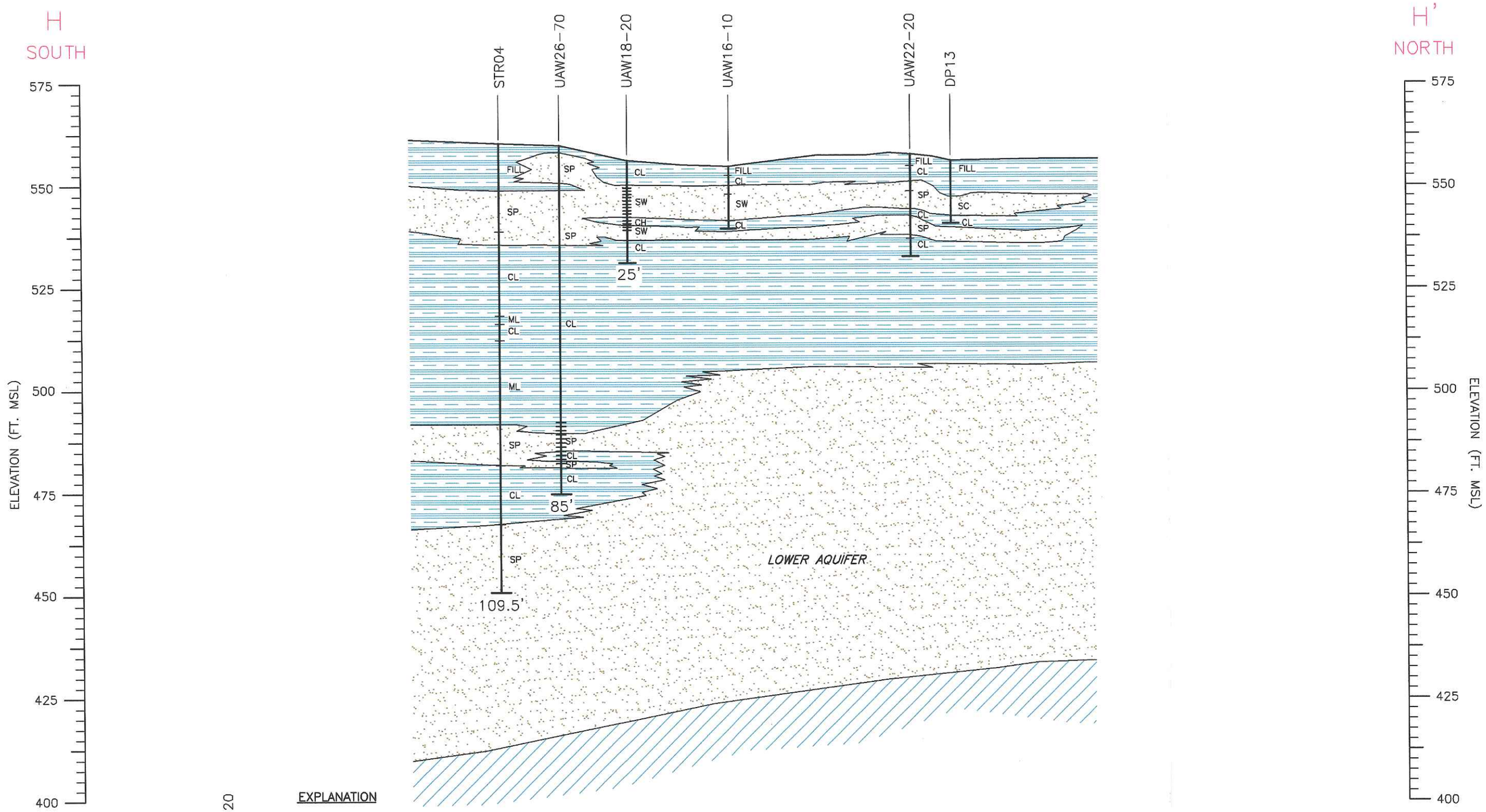
PREPARED FOR

ROHM & HAAS CO.
READING, OHIO

GEOMATRIX

| Project No. | Figure |
|---|---|
| 7168 | 5-9 |

7168B10rps




EXPLANATION

UAW18-20 — WELL IDENTIFICATION

SCREENED INTERVAL

25' TOTAL DEPTH

25 — 0 — 150

SCALE IN FEET
VERTICAL EXAGGERATION = 6X

CROSS SECTION H–H'

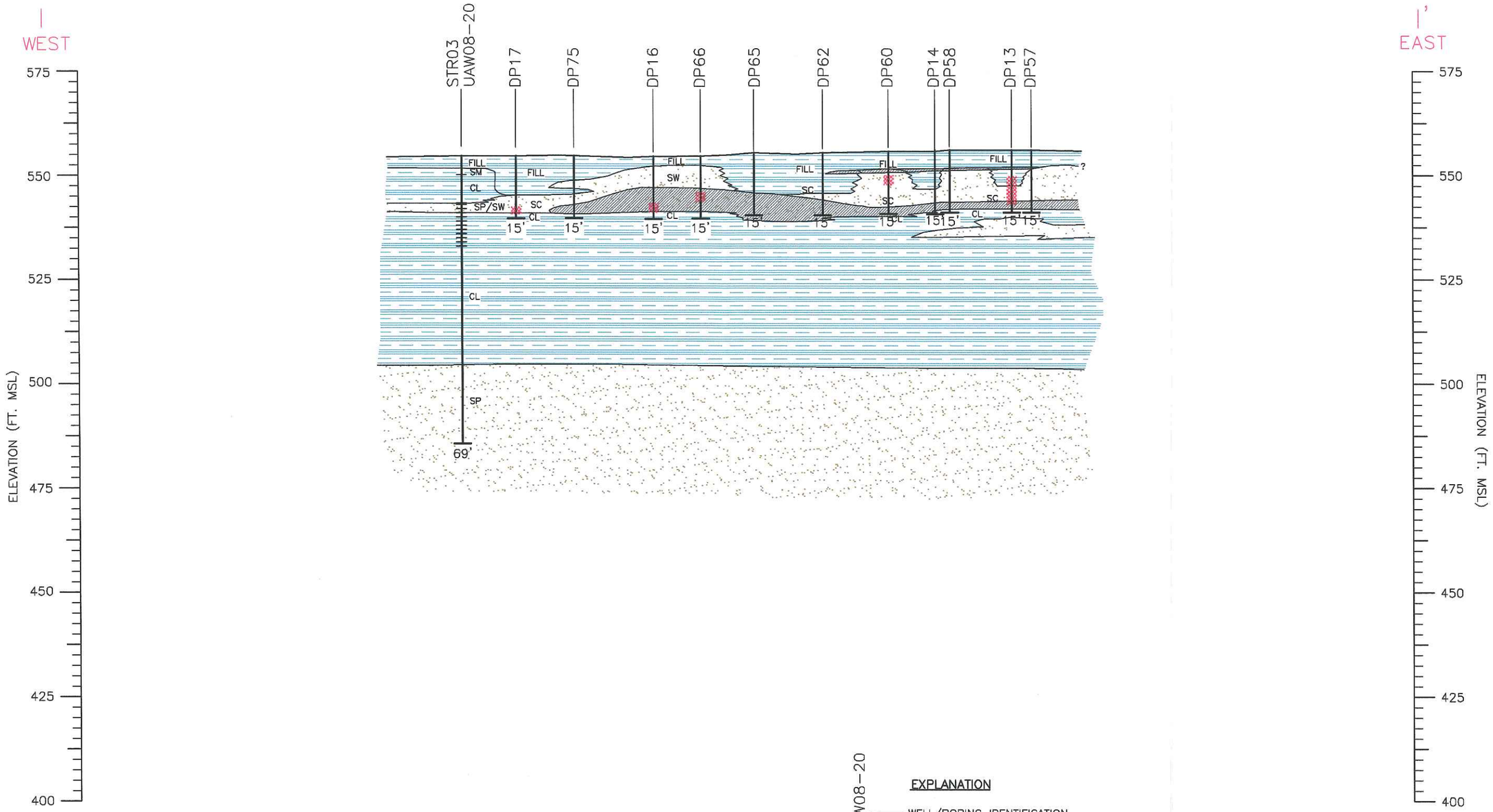
PREPARED FOR

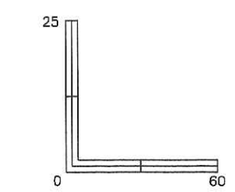
ROHM & HAAS CO.
READING, OHIO

GEOMATRIX

| Project No. | Figure |
|---|---|
| 7168 | 5–10 |

7168B11ps




SCALE IN FEET
VERTICAL EXAGGERATION = 2.4X

BLACK STAINING

PID READING > 100 ppm

NOTE:
BLACK STAINING MAY BE RELATED TO REDUCED METALS AND SULFIDES, NOT A DIRECT CORRELATION BETWEEN STAINING AND AND ORGANIC LEVELS IN SOIL OR GROUNDWATER

**EXPLANATION**

UAW08-20 — WELL/BORING IDENTIFICATION

SCREENED INTERVAL

69' — TOTAL DEPTH

CROSS SECTION I–I'

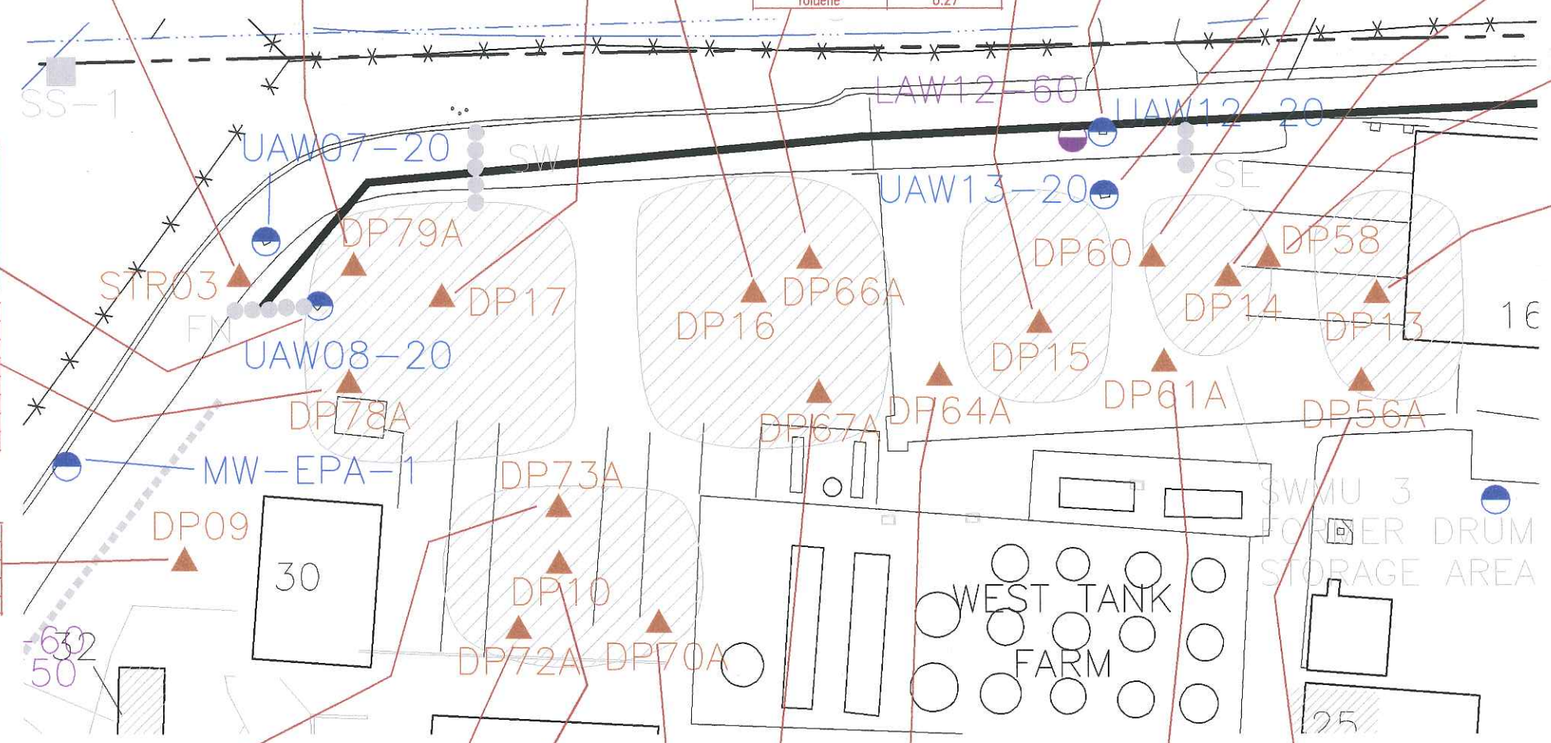
PREPARED FOR

ROHM & HAAS CO.
READING, OHIO

GEOMATRIX

| Project No. | Figure |
|---|---|
| 7168 | 5–11 |

7168B12ps




| STR03 | | |
|---|---|---|
| 3/14/01 | STR03-4' | STR03-12.5' |
| Acetone | <1 | 0.019 |
| Carbon disulfide | <0.25 | 0.0026 J |
| Chlorobenzene | 0.31 | 0.029 |
| Ethylbenzene | <0.25 | 0.01 |
| Toluene | <0.25 | 0.0057 |
| Xylenes (total) | <0.5 | 0.02 |

| DP79A | |
|---|---|
| 3/14/04 | DP79A-12-13' |
| Acetone | <1.1* |
| Benzene | 0.14 J |
| Carbon disulfide | 0.2 J |
| Chlorobenzene | 4.4 |
| Ethylbenzene | 0.48 |
| Isopropylbenzene | 0.05 J |
| Methyl acetate | 0.26 J |
| Methylcyclohexane | 0.22 J |
| Toluene | 0.47 |
| Xylenes (total) | 1.6 |

| DP17 | | |
|---|---|---|
| 7/30/01 | DP17-3' | DP17-13' |
| Acetone | <1 | 0.52 J |
| Acrylonitrile | <5.2 | 1.1 J |
| Benzene | <0.26 | 0.67 J |
| Carbon disulfide | <0.26 | 0.95 J |
| Chlorobenzene | <0.26 | 0.81 J |
| Ethylbenzene | <0.26 | 1.7 |
| Methylene chloride | 0.27 B | 0.41 J B |
| Toluene | 0.063 J | 35 |
| Xylenes (total) | 0.045 J | 9.1 |

| DP16 | | |
|---|---|---|
| 7/30/01 | DP16-2.8' | DP16-12.5' |
| Chlorobenzene | 0.0043 J | 1.5 J |
| Ethylbenzene | <0.0055 | 6.2 J |
| Methylene chloride | 0.0014 J B | 11 J B |
| Toluene | <0.0055 | 150 |
| Xylenes (total) | <0.071 | 24 J |

| DP15 | | |
|---|---|---|
| 7/29/01 | DP15-2' | DP15-9' |
| 2-Butanone | 0.0051 J | <1.2 |
| Acetone | 0.01 J | <1.2 |
| Benzene | 0.0017 J | <0.31 |
| Carbon disulfide | <0.0048 | 0.22 J |
| Methylene chloride | <0.0048 | 0.7 B |
| Toluene | <0.0048 | 0.44 |

| UAW13 | | |
|---|---|---|
| 3/24/01 | UAW13-20-1.5' | UAW13-20-11.5' |
| Acetone | 0.025 | <0.5 |
| Methylene chloride | <0.5 | 0.26 J B |
| Toluene | <0.5 | 0.15 J |

| DP66A | |
|---|---|
| 3/15/04 | DP66A-9.5-10.5' |
| Acetone | <1* |
| Benzene | 0.015 J |
| Carbon disulfide | 0.48 |
| Chlorobenzene | 0.049 J |
| Ethylbenzene | 0.023 J |
| Toluene | 0.27 |

| UAW12 | |
|---|---|
| 3/24/01 | UAW12-20-12' |
| Chlorobenzene | 0.86 |

| DP60A | |
|---|---|
| 3/15/04 | DP60A-6.6-7.4' |
| Acetone | <1.4* |
| Carbon disulfide | 0.27 J |
| Toluene | 4.2 |
| Xylenes (total) | 0.063 J |

| DP14 | | |
|---|---|---|
| 7/29/01 | DP14-3' | DP14-9' |
| Carbon disulfide | 1.5 | 0.89 |
| Methylene chloride | 0.18 J B | 0.76 |
| Toluene | 0.076 J | 0.23 J B |

| DP58 | |
|---|---|
| 3/15/04 | DP58A-8.5-9.5' |
| Acetone | <1.2* |
| Carbon disulfide | 0.48 |
| Chlorobenzene | 0.023 J |
| Methyl acetate | 0.15 J |
| Toluene | 0.3 J |

| DP13 | | |
|---|---|---|
| 7/29/01 | DP13-3' | DP13-11' |
| 2-Butanone | 0.0031 J | <21 |
| Acetone | 0.0085 J | <21 |
| Methylene chloride | <0.0053 | 5.7 B |
| Toluene | <0.0053 | 16 |

| UAW08 | |
|---|---|
| 3/24/01 | UAW08-20-13' |
| Benzene | 0.19 J |
| Carbon disulfide | 0.28 J |
| Chlorobenzene | 0.26 J |
| Ethylbenzene | 0.32 J |
| Toluene | 2 |
| Xylenes (total) | 1.5 |

| DP78A | |
|---|---|
| 3/14/04 | DP78A-9-10' |
| Acetone | <190* |
| Chlorobenzene | 7.2 J |
| Ethylbenzene | 4.8 J |
| Methylcyclohexane | 5.8 J |
| Toluene | 92 |
| Xylenes (total) | 18 J |

| DP09 | |
|---|---|
| 7/27/01 | DP09-12' |
| Carbon disulfide | 0.2 |
| Methyl acetate | 0.07 |
| Acetone | 4.1 |

| DP73A | |
|---|---|
| 3/14/04 | DP73A-12-13' |
| Acetone | <6.9* |
| Chlorobenzene | 0.25 J |
| Methylcyclohexane | 0.42 J |
| Toluene | 4.9 |
| Xylenes (total) | 0.31 J |

| DP72A | |
|---|---|
| 3/14/04 | DP72A-12-13' |
| Acetone | <1* |
| Ethylbenzene | 0.026 J |
| Methylcyclohexane | 4.7 |
| Toluene | 1.6 |
| Xylenes (total) | 0.044 J |

| DP70A | |
|---|---|
| 3/14/04 | DP70A-9-11' |
| Acetone | <1.2* |
| Carbon disulfide | 0.073 J |
| Isopropylbenzene | 0.029 J |
| Methylcyclohexane | 1.1 |
| Toluene | 0.036 J |

| DP64A | |
|---|---|
| 3/15/04 | DP64A-8.5-9.5' |
| Acetone | 0.73 J B |
| Chlorobenzene | 0.35 J |
| Ethylbenzene | 0.32 J |
| Isopropylbenzene | 0.05 J |
| Methylcyclohexane | 0.1 J |
| Toluene | 3.9 |
| Xylenes (total) | 1.4 |

| DP56A | |
|---|---|
| 3/15/04 | DP56A-9.5-10.5' |
| Acetone | <55* |
| Benzene | 0.93 J |
| Methylcyclohexane | 19 J |
| Toluene | 240 |

| DP10 | | | |
|---|---|---|---|
| 7/27/01 | DP10-2' | DP10-10' | DP10-10' Dup |
| 2-Butanone | 0.0037 J | 0.17 J B | 0.17 J B |
| Acetone | 0.0091 J | <1.1 | <1.1 |
| Toluene | 0.00056 J | 2.4 | 3.8 |
| Ethylbenzene | <0.0048 | 0.13 J | 0.084 J |
| Carbon disulfide | <0.0048 | 0.18 J | 0.095 J |
| Xylenes (total) | <0.0095 | 0.32 J | 0.2 J |

| DP67A | |
|---|---|
| 3/15/04 | DP67A-12.5-13.5' |
| Acetone | 4.1 J B |
| Chlorobenzene | 9.7 |
| Cyclohexane | 2.4 J |
| Ethylbenzene | 2.4 J |
| Methylcyclohexane | 21 |
| Toluene | 100 |
| Xylenes (total) | 11 |

| DP61A | | |
|---|---|---|
| 3/15/04 | DP61A-5-6' | DP61A-5-6' BLIND DUP |
| Acetone | 1 J B | <3.7* |

**Notes:**
Units: mg/kg
B = Method blank contamination. The associated method blank contains the target analyte at a reportable level.
J = Estimated result; result is less than reporting limit.
<1 = Constituent not detected at or above indicated reporting limit

* = Indicates that Environmental Standards qualified the data as a "non-detect" as part of the 10% data validation. The analyte was detected in a field and/or laboratory blank at a similar level. The only validation qualifiers that have been annotated into the figures are qualifications of detected compounds. Please refer to Appendix D for excerpts from the Quality Assurance Review (Environmental Standards, 2004) and to review data qualification of "non-detect" results.

0 20 40
APPROXIMATE SCALE (FEET)
N

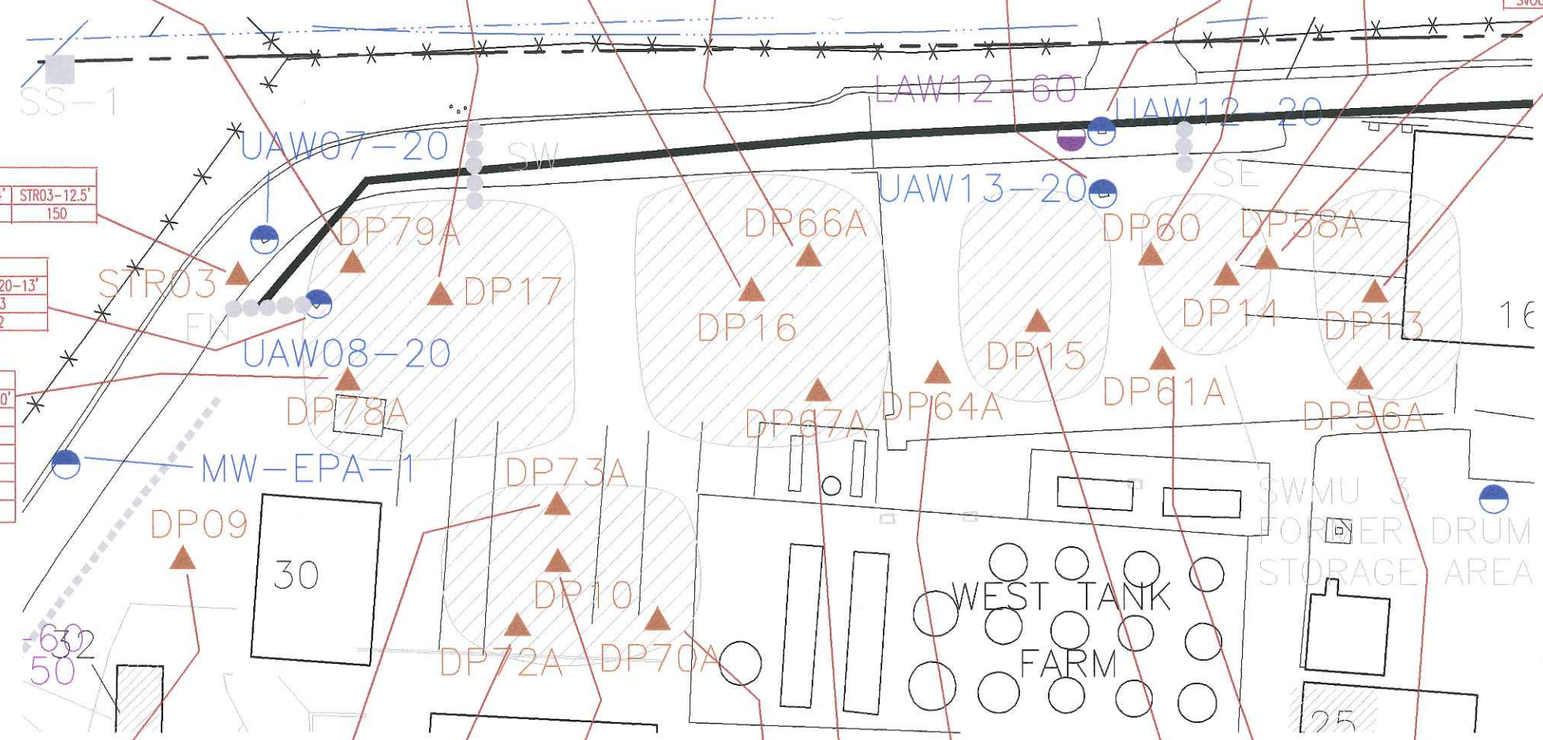
**EXPLANATION**

- UAW11-10 — UPPER AQUIFER MONITORING WELL LOCATION COMPLETED IN SHALLOW SAND
- UAW11-40 — UPPER AQUIFER MONITORING WELL LOCATION COMPLETED IN LOWER SAND
- LAW12-60 — LOWER AQUIFER MONITORING WELL LOCATION
- RECOVERY WELL LOCATION
- STR09 — SOIL BORING LOCATION AND IDENTIFICATION NUMBER
- T-3 — TRENCH LOCATION
- MW-EPA-1 — UPPER AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (PRC, 1993)
- SW — FRENCH DRAIN AND SLURRY WALL LOCATION SOIL BORING SERIES
- MORTON FACILITY PROPERTY BOUNDARY
- SS-2 — STREAM STATION LOCATION
- B-05 — BACKGROUND SAMPLE LOCATION
- GW50 — PRISTINE SHALLOW AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- MW71 — PRISTINE LOWER AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- IMPOUNDMENT – (FROM 1960 AERIAL PHOTO)
- A — LOCATION OF REPORTED WASTE BURIAL

Base Map Source: Abercrombie & Associates, Inc., May 2001

FORMER SURFACE IMPOUNDMENTS
VOCs DETECTED IN SOIL
PREPARED FOR
ROHM AND HAAS CO.
READING, OHIO

GEOMATRIX | Project No. 7168 | FIGURE 5-16 | 7168D05rps




| DP16 | | |
|---|---|---|
| 7/30/01 | DP16-2.8' | DP16-12.5' |
| bis(2-Ethylhexyl) phthalate | <0.35 | 26 |

| DP17 | | |
|---|---|---|
| 7/30/01 | DP17-3' | DP17-13' |
| 1,2-Dichlorobenzene | <0.39 | 21 J |
| 3-Methylphenol | <0.39 | 5.4 J # |
| 4-Methylphenol | <0.39 | 5.4 J # |
| Aniline | <0.39 | 3.9 J |
| bis(2-Ethylhexyl) phthalate | <0.39 | 26 |
| Phenol | <0.39 | 4.7 J |

| DP79A | |
|---|---|
| 3/14/2004 | DP79A-12-13' |
| 1,1'-Biphenyl | 4.2 J |
| 1,2-Dichlorobenzene | 11 J |
| Aniline | 5.9 J |

| DP66A | |
|---|---|
| 3/15/2004 | DP66A-9.5-10.5' |
| Benzaldehyde | 1.6 J |

| UAW13 | | |
|---|---|---|
| 3/24/01 | UAW13-20-1.5' | UAW13-20-11.5' |
| 1,2-Dichlorobenzene | <0.38 | 0.25 J |
| 2-Methylnaphthalene | <0.38 | 0.16 J |
| Aniline | <0.38 | 0.16 J |
| Benzo(a)anthracene | 0.26 J | <0.39 |
| Benzo(a)pyrene | 0.23 J | <0.39 |
| Benzo(b)fluoranthene | 0.24 J | <0.39 |
| Benzo(ghi)perylene | 0.14 J | <0.39 |
| Chrysene | 0.25 J | <0.39 |
| Fluoranthene | 0.52 | <0.39 |
| Indeno(1,2,3-cd)pyrene | 0.13 J | <0.39 |
| Phenanthrene | 0.22 J | <0.39 |
| Pyrene | 0.38 | <0.39 |

| UAW12 | |
|---|---|
| 3/24/01 | UAW12-20-12' |
| 1,2-Dichlorobenzene | 14 |
| 1,3-Dichlorobenzene | 0.26 J |
| 1,4-Dichlorobenzene | 1.3 |

| DP60A | |
|---|---|
| 3/15/2004 | DP60A-6.6-7.4' |
| 2-Methylnaphthalene | 1.2 J |

| DP14 | | |
|---|---|---|
| 7/29/01 | DP14-3' | DP14-9' |
| Aniline | <35 | 0.25 J |
| bis(2-Ethylhexyl) phthalate | 6.5 J | <1.5 |

| DP58A | |
|---|---|
| 3/15/2004 | DP58A-8.5-9.5' |
| SVOCs | ALL ND |

| DP13 | | |
|---|---|---|
| 7/29/01 | DP13-3' | DP13-11' |
| Acenaphthene | <0.39 | 0.069 J |
| Anthracene | <0.39 | 0.18 J |
| Benzo(a)anthracene | 0.07 J | 0.46 |
| Benzo(a)pyrene | <0.39 | 0.45 |
| Benzo(b)fluoranthene | 0.086 J | 0.49 |
| Benzo(ghi)perylene | <0.39 | 0.25 J |
| Benzo(k)fluoranthene | <0.39 | 0.23 J |
| bis(2-Ethylhexyl) phthalate | 0.16 J | 0.26 J |
| Chrysene | 0.076 J | 0.47 |
| Fluoranthene | 0.14 J | 1.1 |
| Fluorene | <0.39 | 0.063 J |
| Indeno(1,2,3-cd)pyrene | <0.39 | 0.22 J |
| Phenanthrene | <0.39 | 0.61 |
| Pyrene | 0.13 J | 0.85 |

| STR03 | | |
|---|---|---|
| 3/14/01 | STR03-4' | STR03-12.5' |
| bis(2-Ethylhexyl) phthalate | <0.38 | 150 |

| UAW08 | |
|---|---|
| 3/24/01 | UAW08-20-13' |
| 1,2-Dichlorobenzene | 2.3 |
| Aniline | 22 |

| DP78A | |
|---|---|
| 3/14/2004 | DP78A-9-10' |
| 1,1'-Biphenyl | 39 J |
| 1,2-Dichlorobenzene | 2800 |
| 1,3-Dichlorobenzene | 28 J |
| 1,4-Dichlorobenzene | 170 |
| Aniline | 4.2 J |
| bis(2-Ethylhexyl) phthalate | <50* |

| DP09 | |
|---|---|
| 7/27/01 | DP09-12' |
| 1,2-Dichlorobenzene | 0.13 J |
| 1,4-Dichlorobenzene | 0.073 J |
| bis(2-Ethylhexyl) phthalate | 0.072 J |

| DP73A | |
|---|---|
| 3/14/2004 | DP73A-12-13' |
| 1,1'-Biphenyl | 0.67 J |
| Aniline | 0.59 J |
| Benzaldehyde | 2.1 J |

| DP72A | |
|---|---|
| 3/14/2004 | DP72A-12-13' |
| Benzaldehyde | 1 J |
| bis(2-Ethylhexyl) phthalate | <7.2* |

| DP70A | |
|---|---|
| 3/14/2004 | DP70A-9-11' |
| Benzaldehyde | 0.68 J |
| bis(2-Ethylhexyl) phthalate | 3.2 B |

| DP10 | | | |
|---|---|---|---|
| 7/27/01 | DP10-2' | DP10-10' Dup | DP10-10' |
| bis(2-Ethylhexyl) phthalate | 0.16 J | 0.89 J | 1.5 |

| DP67A | |
|---|---|
| 3/15/2004 | DP67A-12.5-13.5' |
| 1,1'-Biphenyl | 10 J |
| Benzaldehyde | 9.3 J |
| bis(2-Ethylhexyl) phthalate | 12 J B |

| DP64A | |
|---|---|
| 3/15/2004 | DP64A-8.5-9.5' |
| SVOCs | All ND |

| DP56A | |
|---|---|
| 3/15/2004 | DP56A-9.5-10.5' |
| bis(2-Ethylhexyl) phthalate | <170* |

| DP61A | | |
|---|---|---|
| 3/15/2004 | DP61A-5-6' | DP61A-5-6' BLIND DUP |
| SVOCs | All ND | All ND |

| DP15 | | |
|---|---|---|
| 7/29/01 | DP15-2' | DP15-9' |
| bis(2-Ethylhexyl) phthalate | 0.23 J | <1.6 |
| Chrysene | 0.064 J | <1.6 |
| Di-n-octyl phthalate | 0.29 J | <1.6 |
| Fluoranthene | 0.13 J | <1.6 |
| Phenanthrene | 0.21 J | <1.6 |
| Phenol | 0.075 J | <1.6 |
| Pyrene | 0.11 J | <1.6 |

0 20 40
APPROXIMATE SCALE (FEET)

N

## EXPLANATION

- UAW11-10 — UPPER AQUIFER MONITORING WELL LOCATION COMPLETED IN SHALLOW SAND
- UAW11-40 — UPPER AQUIFER MONITORING WELL LOCATION COMPLETED IN LOWER SAND
- LAW12-60 — LOWER AQUIFER MONITORING WELL LOCATION
- RECOVERY WELL LOCATION
- STR09 — SOIL BORING LOCATION AND IDENTIFICATION NUMBER
- T-3 — TRENCH LOCATION
- MW-EPA-1 — UPPER AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (PRC, 1993)
- SW — FRENCH DRAIN AND SLURRY WALL LOCATION SOIL BORING SERIES
- MORTON FACILITY PROPERTY BOUNDARY
- SS-2 — STREAM STATION LOCATION
- B-D5 — BACKGROUND SAMPLE LOCATION
- GW50 — PRISTINE SHALLOW AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- MW71 — PRISTINE LOWER AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- IMPOUNDMENT – (FROM 1960 AERIAL PHOTO)
- A — LOCATION OF REPORTED WASTE BURIAL

Base Map Source: Abercrombie & Associates, Inc., May 2001

Notes:

Units: mg/kg

B = Method blank contamination. The associated method blank contains the target analyte at a reportable level.

J = Estimated result; result is less than reporting limit.

# = Co-Elution of 3-Methylphenol and 4-Methylphenol.

<1.6 = Constituent not detected at or above indicated reporting limit

ND = Non Detect.

* = Indicates that Environmental Standards qualified the data as a "non-detect" as part of the 10% data validation. The analyte was detected in a field and/or laboratory blank at a similar level. The only validation qualifiers that have been annotated into the figures are qualifications of detected compounds. Please refer to Appendix D for excerpts from the Quality Assurance Review (Environmental Standards, 2004) and to review data qualification of "non-detect" results.

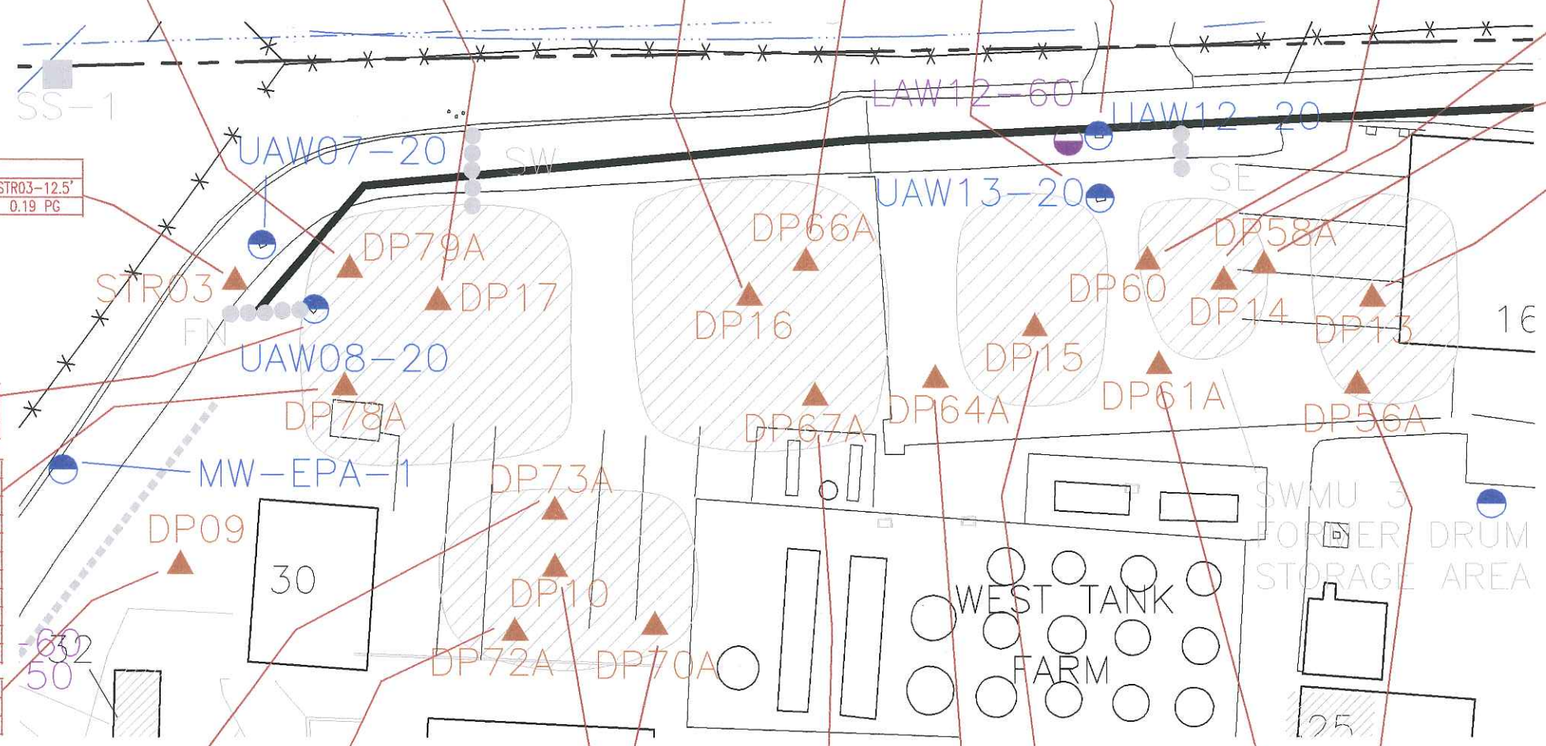
FORMER SURFACE IMPOUNDMENTS
SVOCs DETECTED IN SOIL

PREPARED FOR
ROHM AND HAAS CO.
READING, OHIO

GEOMATRIX

| Project No. | FIGURE |
|---|---|
| 7168 | 5-17 |

7168006rps




| DP79A | |
|---|---|
| 3/14/2004 | DP79A-12-13' |
| gamma-BHC (Lindane) | 0.16 |
| Dieldrin | 0.03 J |
| Endosulfan II | 0.032 J |
| Endosulfan sulfate | 0.48 PG |
| Endrin | 0.067 J PG |
| Heptachlor | 0.074 J |

| DP17 | | |
|---|---|---|
| 7/30/01 | DP17-3' | DP17-13' |
| 4,4'-DDE | 0.0018 J | <1.1 |

| DP66A | |
|---|---|
| 3/15/2004 | DP66A-9.5-10.5' |
| Aldrin | 0.26 PG |
| Dieldrin | 0.064 J |
| Endosulfan I | 0.75 PG |
| Endosulfan sulfate | 0.12 J |
| Endrin | 0.96 PG |
| gamma-Chlordane | 0.023 J |

| DP16 | | |
|---|---|---|
| 7/30/01 | DP16-2.8' | DP16-12.5' |
| 4,4'-DDT | <0.0018 | 0.78 J |
| Methoxychlor | <0.0035 | 4.5 PG |

| UAW13 | | |
|---|---|---|
| 3/24/01 | UAW13-20-1.5' | UAW13-20-11.5' |
| Aroclor 1260 | 0.028 J | <0.039 |

| UAW12 | |
|---|---|
| 3/24/01 | UAW12-20-12' |
| Aroclor 1242 | 0.26 |

| DP60A | |
|---|---|
| 3/15/2004 | DP60A-6.6-7.4' |
| 4,4'-DDD | 0.05 J |
| Endosulfan sulfate | 0.055 J |
| Endrin ketone | 0.37 PG |
| gamma-Chlordane | 0.26 PG |
| Methoxychlor | 0.17 J |

| DP14 | | |
|---|---|---|
| 7/29/01 | DP14-3' | DP14-9' |
| PCBs and Pest | all ND | all ND |

| DP58A | |
|---|---|
| 3/15/2004 | DP58A-8.5-9.5' |
| Pesticides and PCBs | All ND |

| DP13 | | |
|---|---|---|
| 7/29/01 | DP13-3' | DP13-11' |
| Chlorobenzilate | <0.0039 | 10 PG |

| STR03 | | |
|---|---|---|
| 3/14/01 | STR03-4' | STR03-12.5' |
| Endrin aldehyde | <0.0079 | 0.19 PG |

| UAW08 | |
|---|---|
| 3/24/01 | UAW08-20-13' |
| Aroclor 1016 | 0.016 J |

| DP78A | |
|---|---|
| 3/14/2004 | DP78A-9-10' |
| alpha-BHC | 0.2 PG |
| beta-BHC | 0.18 PG |
| Endosulfan I | 0.14 |
| Endosulfan II | 1 PG |
| Endosulfan sulfate | 0.36 |
| Endrin | 0.034 J |
| Endrin ketone | 0.35 PG |
| gamma-Chlordane | 0.7 PG |
| Methoxychlor | 0.78 PG |

| DP09 | |
|---|---|
| 7/27/01 | DP09-12' |
| PCBs and Pest | all ND |

| DP73A | |
|---|---|
| 3/14/2004 | DP73A-12-13' |
| 4,4'-DDD | 0.04 J |
| 4,4'-DDE | 0.095 J |
| Aldrin | 0.098 J |
| beta-BHC | 0.25 PG |
| Dieldrin | 0.059 J |
| Endrin aldehyde | 0.22 PG |
| gamma-Chlordane | 0.089 J |
| Heptachlor epoxide | 0.066 J |
| Methoxychlor | 0.11 J |

| DP72A | |
|---|---|
| 3/14/2004 | DP72A-12-13' |
| 4,4'-DDE | 0.064 J |
| Endosulfan I | 0.54 PG |
| Endrin ketone | 0.3 PG |
| gamma-Chlordane | 0.16 J PG |

| DP67A | |
|---|---|
| 3/15/2004 | DP67A-12.5-13.5' |
| Endosulfan II | 29 PG |
| Endrin | 3.1 |
| gamma-Chlordane | 0.68 J PG |

| DP15 | | |
|---|---|---|
| 7/29/01 | DP15-2' | DP15-9' |
| PCBs and Pest | all ND | all ND |

| DP64A | |
|---|---|
| 3/15/2004 | DP64A-8.5-9.5' |
| Pesticides and PCBs | All ND |

| DP56A | |
|---|---|
| 3/15/2004 | DP56A-9.5-10.5' |
| 4,4'-DDD | 0.16 J |
| 4,4'-DDE | 2 |
| 4,4'-DDT | 3.9 PG |
| alpha-Chlordane | 0.14 J |
| Endosulfan II | 1.9 PG |
| Endrin | 0.92 PG |
| Endrin ketone | 1 PG |
| gamma-Chlordane | 1.7 |
| Methoxychlor | 5.5 PG |

| DP10 | | | |
|---|---|---|---|
| 7/27/01 | DP10-2' | DP10-10' | DP10-10' Dup |
| beta-BHC | <0.0019 | <0.2 | 0.0038 J |

| DP70A | |
|---|---|
| 3/14/2004 | DP70A-9-11' |
| Pesticides and PCBs | All ND |

| DP61A | | |
|---|---|---|
| 3/15/2004 | DP61A-5-6' | DP61A-5-6' BLIND DUP |
| Endrin | <0.21 | 0.095 J |

**Notes:**

Units: mg/kg

J = Estimated result; result is less than reporting limit

PG = The percentage difference between the original and confirmation analyses is greater than 40%

ND = Non Detect.

<0.21 = Constituent not detected at or above indicated reporting limit

0 20 40

APPROXIMATE SCALE (FEET)

N

## EXPLANATION

- UAW11-10 — UPPER AQUIFER MONITORING WELL LOCATION COMPLETED IN SHALLOW SAND
- UAW11-40 — UPPER AQUIFER MONITORING WELL LOCATION COMPLETED IN LOWER SAND
- LAW12-60 — LOWER AQUIFER MONITORING WELL LOCATION
- RECOVERY WELL LOCATION
- STR09 — SOIL BORING LOCATION AND IDENTIFICATION NUMBER
- T-3 — TRENCH LOCATION
- MW-EPA-1 — UPPER AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (PRC, 1993)
- SW — FRENCH DRAIN AND SLURRY WALL LOCATION SOIL BORING SERIES
- MORTON FACILITY PROPERTY BOUNDARY
- SS-2 — STREAM STATION LOCATION
- B-05 — BACKGROUND SAMPLE LOCATION
- GW50 — PRISTINE SHALLOW AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- MW71 — PRISTINE LOWER AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- IMPOUNDMENT – (FROM 1960 AERIAL PHOTO)
- A — LOCATION OF REPORTED WASTE BURIAL

Base Map Source: Abercrombie & Associates, Inc., May 2001

FORMER SURFACE IMPOUNDMENTS
PCBs/PESTICIDES DETECTED IN SOIL

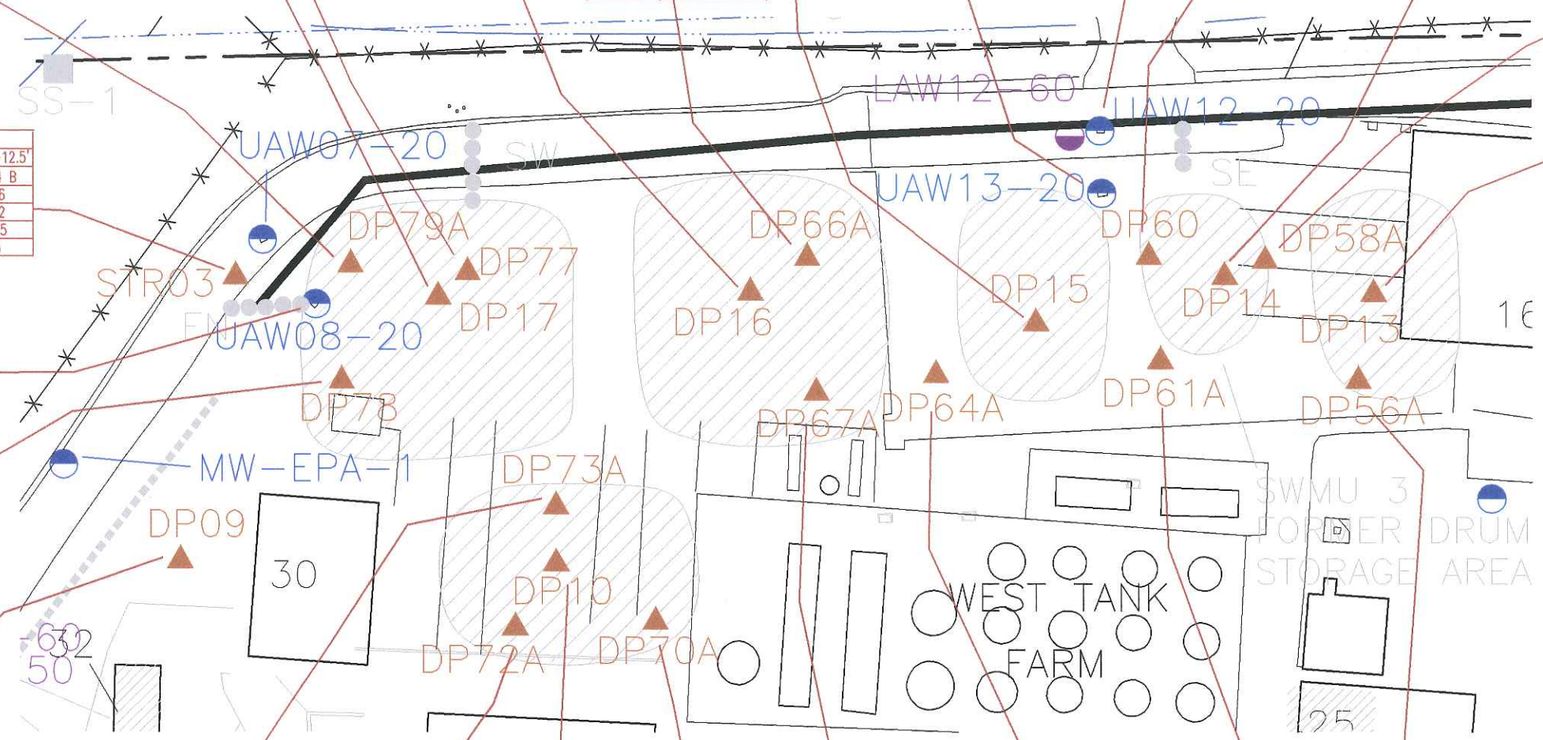
PREPARED FOR
ROHM AND HAAS CO.
READING, OHIO

GEOMATRIX

Project No. 7168

FIGURE 5-18

7168D07rps




| DP79A | |
|---|---|
| 3/14/2004 | DP79A-12-13' |
| Arsenic | 2.9 |
| Chromium | 388 |
| Lead | 45.1 |
| Tin | 1230 J |
| Vanadium | 13.2 |

| DP17 | | |
|---|---|---|
| 7/30/01 | DP17-3' | DP17-13' |
| Arsenic | 6.7 | 6.5 |
| Chromium | 13.2 | 55.2 |
| Lead | 31.2 | 57.6 |
| Tin | 2.4 B | 4150 |
| Vanadium | 19.1 | 11.4 |

| DP77 | |
|---|---|
| 3/13/2004 | DP77-14.6-15' |
| Arsenic | NA |
| Chromium | 9 J |
| Lead | NA |
| Tin | NA |
| Vanadium | NA |

| DP16 | | |
|---|---|---|
| 7/30/01 | DP16-2.8' | DP16-12.5' |
| Arsenic | 3.3 | 4.7 |
| Chromium | 4.9 | 7.1 |
| Lead | 3.5 | 11.9 |
| Tin | 2.5 B | 2250 |
| Vanadium | 6.4 | 7 |

| DP66A | |
|---|---|
| 3/15/2004 | DP66A-9.5-10.5' |
| Arsenic | 1.8 |
| Chromium | 5.5 |
| Lead | 3.4 |
| Tin | 420 J |
| Vanadium | 4.4 B |

| DP15 | | |
|---|---|---|
| 7/29/01 | DP15-2' | DP15-9' |
| Arsenic | 5.8 | 1.5 |
| Chromium | 11.3 | 12.3 |
| Lead | 29.9 | 52.2 |
| Tin | 46.2 | 283 |
| Vanadium | 16.2 | 13.9 |

| UAW13 | | |
|---|---|---|
| 3/24/01 | UAW13-20-1.5' | UAW13-20-11.5' |
| Arsenic | 4.9 | 0.75 B |
| Chromium | 11.2 | 3.9 |
| Lead | 15.4 | 3 |
| Tin | 18.1 | 11.5 B |
| Vanadium | 17.3 | 6.1 |

| UAW12 | |
|---|---|
| 3/24/01 | UAW12-20-12' |
| Arsenic | 0.75 B |
| Chromium | 3.8 |
| Lead | 3.1 |
| Tin | 7.6 B |
| Vanadium | 5.9 B |

| DP60A | |
|---|---|
| 3/15/2004 | DP60A-6.6-7.4' |
| Arsenic | 2.5 |
| Chromium | 1.1 |
| Lead | 15.9 |
| Tin | 1230 J |
| Vanadium | 1.2 B |

| DP14 | | |
|---|---|---|
| 7/29/01 | DP14-3' | DP14-9' |
| Arsenic | 14.3 | 2.1 |
| Chromium | 9.9 | 14.9 |
| Lead | 39.8 | 7.8 |
| Tin | 78.6 | 299 |
| Vanadium | 20 | 14.8 |

| DP58A | |
|---|---|
| 3/15/2004 | DP58A-8.5-9.5' |
| Arsenic | 3.2 |
| Chromium | 26.1 |
| Lead | 51 |
| Tin | 720 J |
| Vanadium | 21.4 |

| DP13 | | |
|---|---|---|
| 7/29/01 | DP13-3' | DP13-11' |
| Arsenic | 5.4 | 1.4 |
| Chromium | 7.8 | 2.3 |
| Lead | 11.4 L | 5.9 |
| Tin | 17 | 887 |
| Vanadium | 12.5 | 1.6 B |

| STR03 | | |
|---|---|---|
| 3/14/01 | STR03-4' | STR03-12.5' |
| Arsenic | 3.4 | 0.94 B |
| Chromium | 10 | 7.6 |
| Lead | 7.6 | 2.2 |
| Tin | 1.3 B | 225 |
| Vanadium | 14.5 | 6 |

| UAW08 | |
|---|---|
| 3/24/01 | UAW08-20-13' |
| Arsenic | 2 |
| Chromium | 51.7 |
| Lead | 6.1 |
| Tin | 24.8 |
| Vanadium | 10.8 |

| DP78A | |
|---|---|
| 3/14/2004 | DP78A-9-10' |
| Arsenic | 3.4 |
| Chromium | 143 |
| Lead | 31.4 |
| Tin | 1330 J |
| Vanadium | 4.8 B |

| DP09 | |
|---|---|
| 7/27/01 | DP09-12' |
| Arsenic | 1.2 |
| Chromium | 5.5 |
| Lead | 3.8 |
| Tin | NA |
| Vanadium | 7.5 |

| DP73A | |
|---|---|
| 3/14/2004 | DP73A-12-13' |
| Arsenic | 1.3 |
| Chromium | 4.6 |
| Lead | 2.8 |
| Tin | 286 J |
| Vanadium | 5.9 |

| DP72A | |
|---|---|
| 3/14/2004 | DP72A-12-13' |
| Arsenic | 0.77 B |
| Chromium | 6.2 |
| Lead | 2.2 |
| Tin | 411 J |
| Vanadium | 5.8 |

| DP70A | |
|---|---|
| 3/14/2004 | DP70A-9-11' |
| Arsenic | 1.1 |
| Chromium | 5 |
| Lead | 2.7 |
| Tin | 490 J |
| Vanadium | 6 |

| DP67A | |
|---|---|
| 3/15/2004 | DP67A-12.5-13.5' |
| Arsenic | 0.85 B |
| Chromium | 4.1 |
| Lead | 2.6 |
| Tin | 1210 J |
| Vanadium | 5 B |

| DP64A | |
|---|---|
| 3/15/2004 | DP64A-8.5-9.5' |
| Arsenic | 1.2 |
| Chromium | 7 |
| Lead | 3.8 |
| Tin | 701 J |
| Vanadium | 8.6 |

| DP56A | |
|---|---|
| 3/15/2004 | DP56A-9.5-10.5' |
| Arsenic | 2.4 |
| Chromium | 0.87 |
| Lead | 3.5 |
| Tin | 852 J |
| Vanadium | 0.72 B |

| DP61A | | |
|---|---|---|
| 3/15/2004 | DP61A-5-6' | DP61A-5-6' BLIND DUP |
| Arsenic | 1.2 | 1.9 |
| Chromium | 0.56 B | 0.54 B |
| Lead | 3.3 | 6.1 |
| Tin | 186 J | 522 J |
| Vanadium | 0.57 B | 0.46 B |

| DP10 | | | |
|---|---|---|---|
| | DP10-2' | DP10-10' | DP10-10' Blind Dup |
| Metals | 7/27/01 | 7/27/01 | 7/27/01 |
| Arsenic | 4.3 | 0.74 B | 1.2 |
| Chromium | 6.6 | 7.9 | 6.9 |
| Lead | 7.7 | 2.9 | 2.7 |
| Tin | 27.2 | 531 | 273 |
| Vanadium | 10.7 | 5.7 B | 6.5 |

0 20 40
APPROXIMATE SCALE (FEET)

N

## EXPLANATION

- UAW11-10 — UPPER AQUIFER MONITORING WELL LOCATION COMPLETED IN SHALLOW SAND
- UAW11-40 — UPPER AQUIFER MONITORING WELL LOCATION COMPLETED IN LOWER SAND
- LAW12-60 — LOWER AQUIFER MONITORING WELL LOCATION
- RECOVERY WELL LOCATION
- STR09 — SOIL BORING LOCATION AND IDENTIFICATION NUMBER
- T-3 — TRENCH LOCATION
- MW-EPA-1 — UPPER AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (PRC, 1993)
- SW — FRENCH DRAIN AND SLURRY WALL LOCATION SOIL BORING SERIES
- MORTON FACILITY PROPERTY BOUNDARY
- SS-2 — STREAM STATION LOCATION
- B-05 — BACKGROUND SAMPLE LOCATION
- GW50 — PRISTINE SHALLOW AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- MW71 — PRISTINE LOWER AQUIFER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- IMPOUNDMENT – (FROM 1960 AERIAL PHOTO)
- A — LOCATION OF REPORTED WASTE BURIAL

Base Map Source: Abercrombie & Associates, Inc., May 2001

* = Indicates that Environmental Standards qualified the data as a "non-detect" as part of the 10% data validation. The analyte was detected in a field and/or laboratory blank at a similar level. The only validation qualifiers that have been annotated into the figures are qualifications of detected compounds. Please refer to Appendix D for excerpts from the Quality Assurance Review (Environmental Standards, 2004) and to review data qualification of "non-detect" results.

Notes:

Units: mg/kg
J = Method blank contamination. The associated method blank contains the target analyte at a reportable level.
B = Estimated result; result is less than reporting limit.
L = Serial dilution of a digestate in the analytical batch indicates that physical and chemical interferences are present.
NA = Not Analyzed

INORGANIC COMPOUND RESULTS FOR TRENCH T-1 EXCAVATION SAMPLES ARE ON SEPARATE FIGURE

FORMER SURFACE IMPOUNDMENTS
INORGANIC COMPOUNDS DETECTED IN SOIL

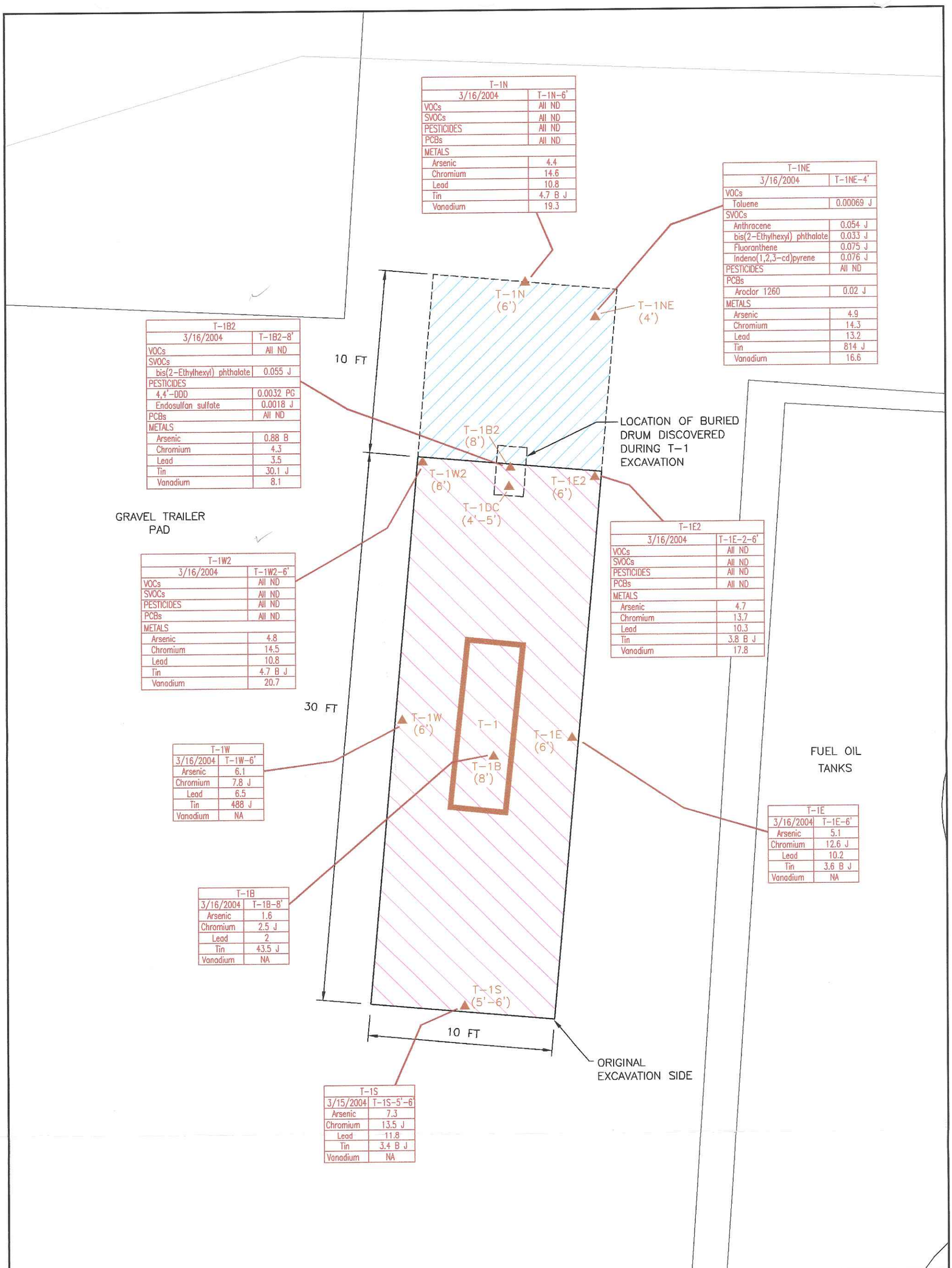
PREPARED FOR
ROHM AND HAAS CO.
READING, OHIO

GEOMATRIX

Project No. 7168

FIGURE 5-19

7168D08rps




| T-1N | |
|---|---|
| 3/16/2004 | T-1N-6' |
| VOCs | All ND |
| SVOCs | All ND |
| PESTICIDES | All ND |
| PCBs | All ND |
| METALS | |
| Arsenic | 4.4 |
| Chromium | 14.6 |
| Lead | 10.8 |
| Tin | 4.7 B J |
| Vanadium | 19.3 |

| T-1NE | |
|---|---|
| 3/16/2004 | T-1NE-4' |
| VOCs | |
| Toluene | 0.00069 J |
| SVOCs | |
| Anthracene | 0.054 J |
| bis(2-Ethylhexyl) phthalate | 0.033 J |
| Fluoranthene | 0.075 J |
| Indeno(1,2,3-cd)pyrene | 0.076 J |
| PESTICIDES | All ND |
| PCBs | |
| Aroclor 1260 | 0.02 J |
| METALS | |
| Arsenic | 4.9 |
| Chromium | 14.3 |
| Lead | 13.2 |
| Tin | 814 J |
| Vanadium | 16.6 |

| T-1B2 | |
|---|---|
| 3/16/2004 | T-1B2-8' |
| VOCs | All ND |
| SVOCs | |
| bis(2-Ethylhexyl) phthalate | 0.055 J |
| PESTICIDES | |
| 4,4'-DDD | 0.0032 PG |
| Endosulfan sulfate | 0.0018 J |
| PCBs | All ND |
| METALS | |
| Arsenic | 0.88 B |
| Chromium | 4.3 |
| Lead | 3.5 |
| Tin | 30.1 J |
| Vanadium | 8.1 |

| T-1W2 | |
|---|---|
| 3/16/2004 | T-1W2-6' |
| VOCs | All ND |
| SVOCs | All ND |
| PESTICIDES | All ND |
| PCBs | All ND |
| METALS | |
| Arsenic | 4.8 |
| Chromium | 14.5 |
| Lead | 10.8 |
| Tin | 4.7 B J |
| Vanadium | 20.7 |

| T-1E2 | |
|---|---|
| 3/16/2004 | T-1E-2-6' |
| VOCs | All ND |
| SVOCs | All ND |
| PESTICIDES | All ND |
| PCBs | All ND |
| METALS | |
| Arsenic | 4.7 |
| Chromium | 13.7 |
| Lead | 10.3 |
| Tin | 3.8 B J |
| Vanadium | 17.8 |

| T-1W | |
|---|---|
| 3/16/2004 | T-1W-6' |
| Arsenic | 6.1 |
| Chromium | 7.8 J |
| Lead | 6.5 |
| Tin | 488 J |
| Vanadium | NA |

| T-1E | |
|---|---|
| 3/16/2004 | T-1E-6' |
| Arsenic | 5.1 |
| Chromium | 12.6 J |
| Lead | 10.2 |
| Tin | 3.6 B J |
| Vanadium | NA |

| T-1B | |
|---|---|
| 3/16/2004 | T-1B-8' |
| Arsenic | 1.6 |
| Chromium | 2.5 J |
| Lead | 2 |
| Tin | 43.5 J |
| Vanadium | NA |

| T-1S | |
|---|---|
| 3/15/2004 | T-1S-5'-6' |
| Arsenic | 7.3 |
| Chromium | 13.5 J |
| Lead | 11.8 |
| Tin | 3.4 B J |
| Vanadium | NA |

-N-

0 5
APPROXIMATE SCALE (FEET)

## EXPLANATION

T-1N ▲ SOIL CONFIRMATION SAMPLE LOCATION AND IDENTIFICATION NUMBER

T-1 TRENCH LOCATION

ORIGINALLY PLANNED T-1 EXCAVATION

ADD-ON TO ORIGINAL EXCAVATION BASED ON NEW DISCOVERY OF BURIED DRUMS ON NORTH END

Notes for VOCs, SVOCs and Pesticide Results

J = Estimated result; result is less than reporting limit.
PG = The percentage difference between the original and confirmation analyses is greater than 40%
All ND = There were no reportable detections.

Notes for Inorganic Results

J = Method blank contamination. The associated method blank contains the target analyte at a reportable level.
B = Estimated result; result is less than reporting limit.

Base Map Source: Abercrombie & Associates, Inc., May 2001

CONFIRMATION SOIL SAMPLING RESULTS
TRENCH T-1 EXCAVATION
PREPARED FOR
ROHM AND HAAS CO.
READING, OHIO

GEOMATRIX

| Project No. | FIGURE |
|---|---|
| 7168 | 5-20 |

7168805rps