GIS REGISTRY INFORMATION

SITE NAME: Metso Minerals Industries, Inc

BRRTS #: 03-41-548444 **FID # (if appropriate):** 241008570

COMMERCE # (if appropriate):

CLOSURE DATE:

STREET ADDRESS: 3073 South Chase Ave

CITY: Milwaukee, 53207

SOURCE PROPERTY GPS COORDINATES (meters in WTM91 projection): X= 690403 Y= 281771

CONTAMINATED MEDIA: Groundwater [ ] Soil [ ] Both [X]

OFF-SOURCE GW CONTAMINATION >ES: [ ] Yes [X] No

IF YES, STREET ADDRESS 1:

GPS COORDINATES (meters in WTM91 projection): X= Y=

OFF-SOURCE SOIL CONTAMINATION >Generic or Site-Specific RCL (SSRCL): [ ] Yes [X] No

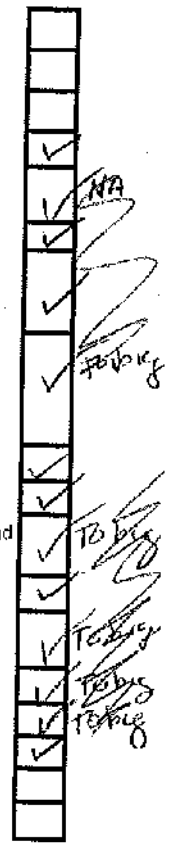
IF YES, STREET ADDRESS 1:

GPS COORDINATES (meters in WTM91 projection): X= Y=

CONTAMINATION IN RIGHT OF WAY: [ ] Yes [X] No

DOCUMENTS NEEDED:

- [ ] **Closure Letter, and any conditional closure letter or denial letter issued**
- [ ] **Copy of any maintenance plan referenced in the final closure letter.**
- [ ] **Copy of (soil or land use) deed notice *if any required as a condition of closure***
- [ ] **Copy of most recent deed, including legal description, for all affected properties**
- [ ] **Certified survey map or relevant portion of the recorded plat map (*if referenced in the legal description*) for all affected properties**
- [ ] **County Parcel ID number, *if used for county*, for all affected properties**
- [ ] **Location Map** which outlines all properties within contaminated site boundaries on USGS topographic map or plat map in sufficient detail to permit the parcels to be located easily (8.5x14" if paper copy). If groundwater standards are exceeded, the map must also include the location of all municipal and potable wells within 1200' of the site.
- [ ] **Detailed Site Map(s) for all affected properties,** showing buildings, roads, property boundaries, contaminant sources, utility lines, monitoring wells and potable wells. (8.5x14", if paper copy) This map shall also show the location of all contaminated public streets, highway and railroad rights-of-way in relation to the source property and in relation to the boundaries of groundwater contamination exceeding ch. NR 140 ESs and soil contamination exceeding ch. NR 720 generic or SSRCLs.
- [ ] **Tables of Latest Groundwater Analytical Results (no shading or cross-hatching)**
- [ ] **Tables of Latest Soil Analytical Results (no shading or cross-hatching)**
- [ ] **Isoconcentration map(s), *if required for site investigation (SI)*** (8.5x14" if paper copy). The isoconcentration map should have flow direction and extent of groundwater contamination defined. **If not available, include the latest extent of contaminant plume map.**
- [ ] **GW: Table of water level elevations, with sampling dates, and free product noted if present**
- [ ] **GW: Latest groundwater flow direction/monitoring well location map (should be 2 maps if maximum variation in flow direction is greater than 20 degrees)**
- [ ] **SOIL: Latest horizontal extent of contamination exceeding generic or SSRCLs, with one contour**
- [ ] **Geologic cross-sections, *if required for SI.*** (8.5x14' if paper copy)
- [ ] **RP certified statement that legal descriptions are complete and accurate**
- [ ] **Copies of off-source notification letters (if applicable)**
- [ ] **Letter informing ROW owner of residual contamination (if applicable)**(public, highway or railroad ROW)



BG 3-26-07

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor
Scott Hassett, Secretary
Gloria L. McCutcheon, Regional Director

Southeast Region Headquarters
2300 N. Dr. Martin Luther King, Jr. Drive
Milwaukee, Wisconsin 53212-3128
Telephone 414-263-8500
FAX 414-263-8606
TTY 711

August 16, 2007

In Reply, Refer to: FID#241008570
BRRTS#02-41-525746
03-41-548443
03-41-548444
BRR/ERP&LUST

Mr. Michael Doro
Metso Minerals Industries, Inc.
3073 S Chase Avenue
Milwaukee, WI 53207

SUBJECT: Final Case Closure with Land Use Limitations or Conditions,
Metso Minerals Industries Site, 3073 S Chase Avenue, Milwaukee, WI 53207

Dear Mr. Doro:

On June 5, 2007, the Wisconsin Department of Natural Resources (Department) Southeast Region Closure Committee reviewed the above referenced case for closure. This committee reviews environmental remediation cases for compliance with state laws and standards to maintain consistency in the closure of these cases. On July 11, 2007, the Department issued a conditional closure letter which listed the remaining requirements to achieve case closure. On August 1, 2007, the Department received the required documentation.

Based on the correspondence and data provided, it appears that your case meets the requirements of ch. NR 726, Wisconsin Administrative Code. The Department considers this case closed and no further investigation or remediation is required at this time.

Please be aware that pursuant to s. 292.12 Wisconsin Statutes, compliance with the requirements of this letter is a responsibility to which you and any subsequent property owners must adhere. If these requirements are not followed or if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety, welfare, or the environment, the Department may take enforcement action under s. 292.11 Wisconsin Statutes to ensure compliance with the specified requirements, limitations or other conditions related to the property or this case may be reopened pursuant to s. NR 726.09, Wis. Adm. Code. It is the Department's intent to conduct inspections in the future to ensure that the conditions included in this letter including compliance with referenced maintenance plans are met.

Please note that the degree and extent of perchloroethene (PCE) contamination in soil is not completely defined to the north and east of soil boring B6, however, no additional investigation related to this contamination is required at this time.

The most recent soil samples that were collected on this property contained contaminants at concentrations that exceeded NR 720.11, Table 2, Wis. Adm. Code, soil standards at various locations across the property. Therefore, pursuant to s. 292.12(2)(c), Wis. Stats., the property described above may not be used or developed for a residential, commercial, agricultural or

other non-industrial use, unless (at the time that the non-industrial use is proposed) an investigation is conducted, to determine the degree and extent of contamination that remains on the property, and remedial action is taken as necessary to meet all applicable non-industrial soil cleanup standards. If soil in the specific locations described above is excavated in the future, the property owner at the time of excavation must sample and analyze the excavated soil to determine if residual contamination remains. If sampling confirms that contamination is present the property owner at the time of excavation will need to determine whether the material would be considered solid or hazardous waste and ensure that any storage, treatment or disposal is in compliance with applicable statutes and rules. In addition, all current and future owners and occupants of the property need to be aware that excavation of the contaminated soil may pose an inhalation or other direct contact hazard and as a result special precautions may need to be taken during excavation activities to prevent a health threat to humans.

Pursuant to s. 292.12(2)(a), Wis. Stats., the pavement or other impervious cap that currently exists in the location shown on the attached map shall be maintained in compliance with the attached cap maintenance and materials handling plan in order to minimize the infiltration of water and prevent additional groundwater contamination that would violate the groundwater quality standards in ch. NR 140, Wis. Adm. Code, and to prevent direct contact with residual soil contamination that might otherwise pose a threat to human health.

Recent groundwater monitoring data at this site indicates exceedances of the NR 140 enforcement standard (ES) for the following substances: arsenic, benzene, cis - 1,2 dichloroethene, 1,2 dichloroethane, ethylbenzene, MTBE, naphthalene, trimethylbenzene, toluene and vinyl chloride.

Your site will be listed on the DNR Remediation and Redevelopment GIS Registry of Closed Remediation Sites. Information that was submitted with your closure request application will be included on the GIS Registry. To review the sites on the GIS Registry web page, visit http://dnr.wi.gov/org/aw/rr/gis/index.htm. If your property is listed on the GIS Registry because of remaining contamination and you intend to construct or reconstruct a well, you will need prior Department approval in accordance with s. NR 812.09(4)(w), Wis. Adm. Code. To obtain approval, Form 3300-254 needs to be completed and submitted to the DNR Drinking and Groundwater program's regional water supply specialist. This form can be obtained on-line http://www.dnr.state.wi.us/org/water/dwg/3300254.pdf or at the web address listed above for the GIS Registry.

Recent groundwater monitoring data at this site indicates exceedances of the NR 140 preventive action limit (PAL) for the following substances: trichloroethene (TCE), PCE, chrysene, xylene, chromium, lead and barium at various wells on the property, but compliance with the NR 140 enforcement standards for these substances. The Department may grant an exemption to a PAL for a substance of public health concern, other than nitrate, pursuant to s. NR 140.28(2)(b), Wis. Adm. Code, if all of the following criteria are met:

1. The measured or anticipated increase in the concentration of the substance will be minimized to the extent technically and economically feasible.

2. Compliance with the PAL is either not technically or economically feasible.

3. The enforcement standard for the substance will not be attained or exceeded at the point of standards application.

4. Any existing or projected increase in the concentration of the substance above the background concentration does not present a threat to public health or welfare.

Based on the information you provided, the Department believes that the above criteria have been or will be met because of the remedial actions taken at he site and the presence of an impervious barrier limiting future infiltration at the site. Therefore, pursuant to s. NR 140.28(2)(b), Wis. Adm. Code, an exemption to the PAL is granted for the following substances: trichloroethene (TCE), PCE, chrysene, xylene, chromium, lead and barium at various wells on the property. This letter serves as your exemption.

Section 101.143, Wis. Stats., requires that PECFA claimants seeking reimbursement of interest costs, for sites with petroleum contamination, submit a final reimbursement claim within 120 days after they receive a closure letter on their site. For claims not received by the PECFA Program within 120 days of the date of this letter, interest costs after 60 days of the date of this letter will not be eligible for PECFA reimbursement. If there is equipment purchased with PECFA funds remaining at the site, contact the Commerce PECFA Program to determine the method for salvaging the equipment.

The Department appreciates your efforts to restore the environment at this site. If you have any questions regarding this closure decision or anything outlined in this letter, please contact Andy Boettcher at (414) 263-8541.

Sincerely,

James A. Schmidt

James A Schmidt
SER Remediation & Redevelopment Team Supervisor

cc: Ms. Toni Schoen, Arcadis, 126 N Jefferson St. Suite 400, Milwaukee, WI 53202
Bill Phelps, DG/2

Cap Maintenance and Materials Handling Plan

This Cap Maintenance and Materials Handling Plan (Plan) is applicable to the property located at 3073 South Chase Avenue in the city of Milwaukee, Milwaukee County, Wisconsin ("Property"). The Site location is depicted on Figure 1. A copy of this Plan shall be kept at all times on file in the offices of: (1) the owner of the Property, its successors and assigns (hereinafter identified collectively as the "Owner"); (2) the Property manager, if any; and (3) the Property. The Plan shall be made available by the Owner to contractors, utilities and maintenance personnel, and any other public or private persons or entities authorized to perform work at the Property.

The purpose of the Cap Maintenance Plan is to provide a strategy to ensure that the Cap continues to function as a barrier to surface water infiltration, and potential exposure to the residual contamination in the impacted soil. The Cap includes the asphalt pavement surfaces and buildings placed over the unsaturated soil. The unsaturated soil is defined as extending from the ground surface to approximately 11 feet below ground surface.

The purpose of the Materials Handling Plan is to describe the procedures and controls necessary to ensure the continued effectiveness of the Cap constructed at the Property as an engineered barrier and to provide information on the proper handling and management of remaining impacted soil and groundwater at the Site.

Summary of Property Conditions

Investigation activities have been completed at the Property by ARCADIS. Based on the investigation results, the property conditions can be summarized as follows:

- The Property covers approximately 24 acres and is generally flat. The entire Property is enclosed with a chain-link fence. The Property is developed with multiple contiguous buildings constructed of concrete, sheet metal, steel, and/or brick that cover approximately 484,000 square feet.

- The geology at the Property consists of a homogeneous silty clay unit with some silt seams, and limited changes in composition. These changes consist of differences in grain size (more silt and/or clay), and the presence of some localized silt lenses. Fill was encountered in limited areas and extended from the surface to 2 to 6 feet below ground surface depending on location. In the northern portion of the Property where the former foundry buildings were located, fill was generally found to be the deepest and included metal, foundry sands, and glass. Fill was generally absent in the southern portion of the Property and beneath the buildings.

- Groundwater is located approximately 4 to 17 feet below land surface.

- Sources of impacted soil are attributed to historical facility operations. Several contaminants of concern were identified in the unsaturated soil including chlorinated and petroleum volatile organic compounds (CVOCs and PVOCs, respectively), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), cyanide, and lead.

Cap Maintenance Plan

The following activities are required to ensure the Cap continues to function as a barrier to surface water infiltration, and potential exposure to the residual contamination in the impacted soil.

Annual Inspections. Not less than annually, the Property shall be inspected by the Owner to ensure that the integrity of the Cap is maintained and that no significant fissures or cracks develop in the asphalt or building floor slabs, which would allow a materially significant increase in the infiltration and percolation of precipitation or surface water into the unsaturated soil.

Any disturbances or significant fissures or cracks in the asphalt or building foundations shall be noted. An inspection log, which shall be used to track observations of the Cap, is attached to this Plan. Upon completion of the inspection by the Owner, a brief report shall be prepared which identifies the date of the inspection, the individuals conducting the inspection, and any significant disturbances, fissures, or cracks in the Cap.

Repairs to Capped Area. If, during the annual inspection or other routine inspections of the Property, the Cap is observed to have been disturbed or significant fissures or cracks are observed in the asphalt or building foundations, the Owner shall arrange to have repairs made to such areas, in a manner consistent with this Cap Maintenance Plan.

A corrective action report, which may be used to track repairs to the Cap, is attached to this Plan. A copy of the corrective action report shall be maintained on file by the Owner, Property manager, if any, and at the Property. Such repairs shall be carried out within a reasonable period of time, not to exceed 120 days, subject to weather and seasonal considerations.

Required Activities

The following allowed activities must comply with all listed requirements:

Landscaping Maintenance. In the event the Owner desires to install trees, shrubs, fencing or retaining walls, or perform other landscaping that will extend into and disturb the unsaturated soil, all such work shall be undertaken in accordance with the requirements of the Cap Maintenance and Materials Handling Plan. For any such work, the following steps shall be taken:

1. The contractor performing the work shall be provided with a copy of this Cap Maintenance and Materials Handling Plan by the Owner and shall prepare a health and safety plan, appropriate for the work being performed.

2. Any unsaturated soil or granular materials, which are excavated, shall be separated and segregated to the extent practicable so that they may be replaced upon completion of the work. All excavated unsaturated soil shall be, at a minimum, placed onto plastic sheeting and covered, or placed into a watertight container such as a covered roll-off box prior to use as onsite backfill or being transported offsite for disposal.

3. Upon completion of the work, previously excavated impacted soil may be backfilled provided, however, that the backfilled soil maintains the compaction characteristics of the surrounding soil. The impacted soil, as well as any additional clean soil or granular fill material necessary to backfill to grade, shall be backfilled in such a manner as to maintain the original depth of the impacted soil as the case may be. The surface of the backfill area shall be restored in a manner consistent with the original Cap condition. Any previously excavated impacted soil, which are not backfilled or otherwise made a part of the Cap shall be properly characterized and managed in accordance with state law.

4. A memorandum or report shall be prepared describing the work performed, identifying the person(s) performing the work and the date of the work, and confirming that the Cap Maintenance and Materials Handling Plan was adhered to in completion of the work. A copy of the report shall be kept on file by the Owner, the Property manger, if any, and at the Property.

Construction or Installation of Buildings, Structures or Other Improvements. Buildings, structures, or other improvements may be constructed or installed on the Property using footings or other foundations in the following manner:

1. The contractor performing the work shall be provided with a copy of this Cap Maintenance Plan by the Owner and shall prepare a health and safety plan, appropriate to the work being performed.

2. Materials used in the pavement or foundation shall not contain any hazardous substances. Any unsaturated soil or granular materials, which are excavated, shall be separated and segregated to the extent practicable so that they may be replaced upon completion of the work. All excavated unsaturated soil shall be, at a minimum, placed onto plastic sheeting and covered, or placed into a watertight container such as a covered roll-off box prior to use as onsite backfill or being transported offsite for disposal.

3. Upon completion of the work, previously excavated impacted soil may be backfilled provided, however, that the backfilled soil maintains the compaction characteristics of the surrounding soil. The impacted soil, as well as any additional clean soil or granular fill material necessary to backfill to grade, shall be backfilled in such a manner as to maintain the original depth of the impacted soil as the case may be.

The surface of the backfill area shall be restored in a manner consistent with the original Cap condition (i.e., covered with asphalt or concrete pavement). Any previously excavated impacted soil, which are not backfilled or otherwise made a part of the Cap shall be properly characterized and managed in accordance with state law.

4. A memorandum or report shall be prepared describing the work performed, identifying the person(s) performing the work and the date of the work, and confirming that the Cap Maintenance and Materials Handling Plan was adhered to in completion of the work. A copy of the report shall be kept on file by the Owner, the Property manager (if any), and at the Property.

Replacement and Repair of Engineered Barriers. If it becomes necessary or desirable to replace or repair the Cap (engineered barrier), the repair or replacement shall be undertaken in the following manner:

1. The contractor performing the work shall be provided with a copy of this Cap Maintenance and Materials Handling Plan by the Owner and shall prepare a health and safety plan, appropriate to the work being performed.

2. Any unsaturated soil or granular materials, which are excavated from beneath the Cap, shall be separated and segregated to the extent practicable so that they may be replaced upon completion of the work. All excavated unsaturated soil shall be, at a minimum, placed onto plastic sheeting and covered, or placed into a watertight container such as a covered roll-off box prior to use as onsite backfill or being transported offsite for disposal.

3. Upon completion of the work, previously excavated unsaturated soil may be placed back into the excavation provided, however, that the replaced unsaturated soil maintains the compaction characteristics of the surrounding unsaturated soil. The unsaturated soil or granular material, as well as any additional clean soil or granular material necessary to bring the excavation back to grade, shall be placed in the excavation in such a manner as to maintain the original depth of the unsaturated soil or granular material as the case may be. The surface of the area of the excavation shall be restored in a manner consistent with the original Cap condition (i.e., covered with asphalt or concrete pavement). Any previously excavated unsaturated soil, or excavated granular material that has been commingled, mixed or otherwise in contact with unsaturated soil, which is not placed back in the excavation or which is not otherwise made a part of the Cap, along with any groundwater encountered and removed during construction, shall be properly characterized and managed in accordance with state law.

4. A memorandum report shall be prepared describing the work performed, identifying the person(s) performing the work and the date of the work, and confirming that the Cap Maintenance and Materials Handling Plan was adhered to in completion of the work. A copy of the report shall be kept on file by the Owner, the Property manager, if any, and at the Property.

Utility Installations or Repairs. No utility repairs or installation of new or replacement utilities shall be conducted on the Property until after the utility and any contractor(s) for the utility have acknowledged receipt of a copy of this Cap Maintenance Plan. The utility repairs or installation(s) shall be conducted in strict conformance with the standards set forth below with respect to excavations into and/or beneath the Cap, such excavations are to be undertaken in the following manner:

1. The contractor performing the work shall be provided with a copy of this Cap Maintenance and Materials Handling Plan by the Owner and shall prepare a health and safety plan, appropriate to the work being performed.

2. Any impacted soil, which is excavated, or clean fill above the impacted soil, which are excavated, shall be separated and segregated to the extent practicable so that they may be replaced upon completion of the work. All impacted soil that is excavated shall be, at a minimum, placed onto plastic sheeting and covered, or placed into a watertight container such as a covered roll-off box prior to use as onsite backfill or being transported offsite for disposal.

3. Upon completion of such work, the impacted soil may be placed back into the excavation provided, however, that the impacted soil shall maintain the compaction characteristics of the surrounding impacted soil. Similarly, the clean fill above the impacted soil may be placed back into the excavation in order to bring the excavation back to grade. The surface of the area of the excavation shall be restored in a manner consistent with the original Cap condition (i.e., covered with asphalt or concrete pavement).

4. Any excavation of soil beneath the unsaturated soil shall be conducted in accordance with the health and safety plan. Any such soil excavated from beneath the unsaturated soil shall be segregated, properly characterized, and managed in accordance with state law. Any other soil which has been commingled, mixed or otherwise have come into contact with soil excavated from beneath unsaturated soil shall be properly characterized and managed in accordance with state law. Additionally, any groundwater impacted by such activities shall be managed in accordance with state law.

5. Clean fill used in connection with utility installation or construction shall not include any granular or porous material but may include low strength flowable fill or other fill with low hydraulic conductivity.

6. If the utility installation or construction involves any disturbance of the seals used to seal the entrance of utility lines and the structures on the Property, such seals shall be replaced with new seals of like or superior quality.

7. The utility contractor shall prepare a memorandum report describing the work performed, identifying the person performing the work and the date of the work, and confirming that the Cap Maintenance and Materials Handling Plan was adhered to in completion of the work. A copy of the report shall be kept on file with the utility contractor, the Owner, the Property manager.

Subsurface Drilling Procedures and Requirements. During subsurface drilling activities at the Property, drilling contractors shall maintain compliance with the following requirements to ensure the integrity of the Cap and to avoid any potential cross contamination of soil and groundwater:

1. The contractor performing the work shall be provided with a copy of this Cap Maintenance and Materials Handling Plan by the Owner and shall prepare a health and safety plan, appropriate to the work being performed. The work shall be supervised onsite by a qualified engineer or geologist.

2. All contractor personnel conducting or participating in work must be trained in hazardous site work as required by OSHA 29 CFR 1910.120 or its successor regulation. All soil sampling and drilling activities shall be conducted in accordance with ASTM D1586-99 or its successor standard, and the specified environmental requirements contained in this document.

3. All drill cuttings and water/drilling mud generated during completion of the boring shall be transferred to appropriate 55-gallon drums or other suitable containers for storage, and shall be managed in accordance with state law.

4. Following completion of the boring and sample collection, the borehole shall be properly abandoned, in accordance with state law, with hydrated bentonite or a cement-based grout mixture pumped from the bottom of the boring to surface elevation concurrently with or prior to withdrawal of casing pipe.

5. All drill casings, rods, samplers, tools, rig, and any equipment that comes in contact (directly or indirectly) with the subsurface soil and groundwater shall be steam cleaned prior to set up for drilling. The same steam cleaning protocols shall be followed before leaving the Property following completion of work. Steam cleaning shall be conducted in such a manner as to collect and contain residuals (water and soil) to prevent surface soil contamination. Residuals shall be drummed and managed in accordance with state law.

6. A memorandum report shall be prepared describing the work performed, identifying the person(s) performing the work and the date of the work, and confirming that the Cap Maintenance and Materials Handling Plan was adhered to in completion of the work. A copy of the report shall be kept on file by the Owner, the Property manager (if any), and at the Property.

Replacement of Engineered Barriers. If future redevelopment activities at the Property require removal and replacement of the existing Cap, the replacement barrier shall be, at a minimum, equivalent in quality of materials, material thickness, and impermeability to the barriers described above. The results of the barrier replacement activities shall be documented in a written report, and kept onsite.

Materials Handling Plan

In general, all redevelopment and construction activities shall incorporate protection of human health and the environment. To address the materials of concern, the following general actions shall be taken at the Property:

Health and Safety

All environmental consultants/environmental contractors involved in construction activities shall have their own health and safety plan (HASP) to deal with contingencies that may arise at the Property. The HASPs shall reflect standards of care recognized in the trades while working at an environmentally impacted property.

Waste Characterization

Prior to the start of construction where soil or groundwater will be encountered at the Site, a waste determination shall be made for impacted media in accordance with Sec. NR 615.06 of the Wisconsin Administrative Code. The purpose of the determination will be to classify impacted media as either solid or hazardous waste. The determination shall be made based on the sources of impact, if known, and analytical testing.

Soil Handling

Soil may be excavated during grading activities, installation of utilities, and installation or removal of foundations. All excavated soil shall be used as backfill at the Property to the extent practicable, if it will be placed beneath a new asphalt or concrete surface. Soil that contains separate-phase product or that is heavily stained and exhibits poor engineering properties shall be transported offsite to a treatment/disposal facility. All impacted soil that is excavated and stockpiled onsite for any reason shall be, at a minimum, placed onto plastic sheeting and covered, or placed into a watertight container such as a covered roll-off box. Management of contaminated soil that is excavated and either stockpiled onsite or replaced when the construction work is completed is regulated under Chapter NR 718 of the Wisconsin Administrative Code.

Groundwater Handling

Construction activities, including excavations, shall be designed to avoid or minimize any groundwater table interaction. Dewatering or pumping of groundwater shall be avoided to the maximum extent practicable.

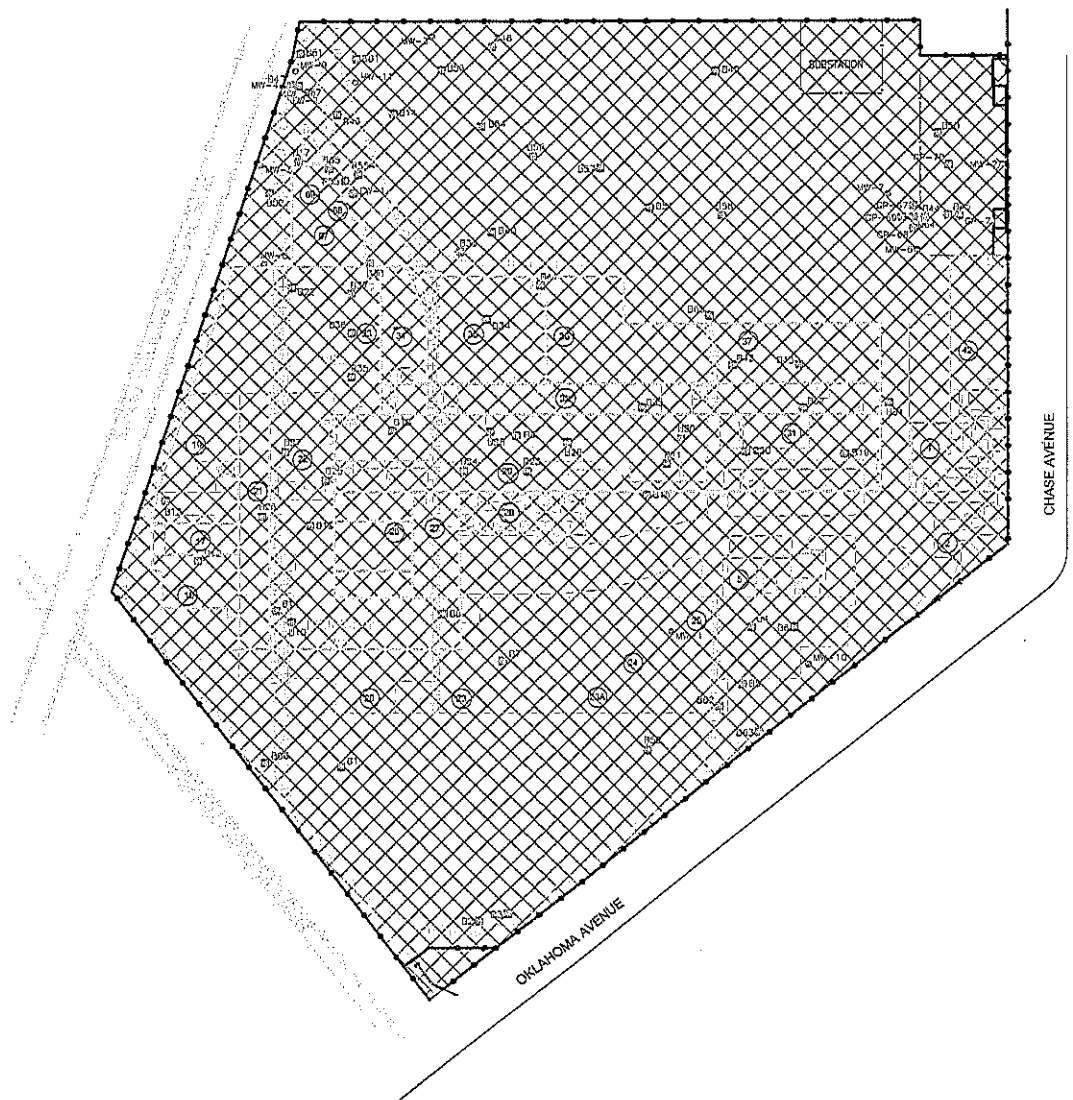
Groundwater encountered during construction shall be properly characterized and managed in accordance with the regulatory requirements. If high groundwater levels require pumping of water during construction (e.g., from foundation or utility excavations), all water shall be, at a minimum, treated through

a filter and discharged to the sanitary sewer. Groundwater shall be containerized pending analysis and subsequent disposal, or shall be treated through a filter and aqueous phase carbon prior to discharge to the sanitary sewer. Contractor shall obtain a discharge permit from the Milwaukee Metropolitan Sewerage District (MMSD) before discharging.

Cap Maintenance and Materials Handling Plan

Contact Information

Site Owner and Operator:	Industrial Properties, LLC 3073 South Chase Avenue Milwaukee, WI 53207 Mr. Michael Doro Telephone: 414 744.1146
Consultant:	ARCADIS U.S., Inc. 126 North Jefferson Street, Suite 400 Milwaukee, Wisconsin 53202 Project Manager: James E. Bannantine, PG Telephone: 414 276.7742
WDNR:	Wisconsin Department of Natural Resources Southeast Region Office 2300 North Martin Luther King Drive Milwaukee, WI 53212 Project Manager: Andrew Boettcher Telephone: 414 263.8500



LEGEND

- BUILDING NUMBER
- SOIL BORING LOCATION
- MONITORING WELL LOCATION
- ABANDONED MONITORING WELL LOCATION
- EXTRACTION WELL LOCATION
- APPROXIMATE PROPERTY LINE
- RAILROAD TRACK
- FENCE LINE
- LIMITS OF ENGINEERED BARRIER (ASPHALT AND BUILDINGS)

NOTES
1. BASE MAP CREATED FROM CAD FILE PROVIDED BY METSO MINERALS, INC.

0 80 160
SCALE IN FEET

REV.	ISSUED DATE	DESCRIPTION	KEYPLAN	SEAL

ARCADIS
126 North Jefferson Street, Suite 400
Milwaukee, Wisconsin 53202
Tel: 414-276-7742 Fax: 414-276-7603
www.arcadis-us.com

METSO MINERALS INDUSTRIES, INC.
3073 SOUTH CHASE AVENUE
MILWAUKEE, WISCONSIN

PROJECT MANAGER	DEPARTMENT MANAGER	LEAD DESIGN PROF.	CHECKED BY
J. BANNANTINE	M. MAIERLE	T. SCHOEN	T. SCHOEN
SHEET TITLE		TASK/PHASE NUMBER	DRAWN BY
EXTENT OF ENGINEERED BARRIER CAP		0002.W014	C. MCKEOUGH
		PROJECT NUMBER	DRAWING NUMBER
		WI001085	14

© 2006 ARCADIS G&M, INC.

Cap Maintenance Inspection Form

Inspector's Name: _____

Date of Inspection: _____

Time of Inspection: _____

Inspection Checklist

1. Asphalt Cover (exterior of buildings): Walk the entire cover and perimeter.

   - Are there any cracks or breaks in the asphalt cover?_____
   - Are there any signs of uneven surfaces (depressions or bumps) or asphalt breakdown?_____
   - Are there any signs of excessive erosion of cover or vegetated perimeter? _____
   - Are there any deep-rooted or woody plants established on the cover or at the perimeter?_____
   - Are there any signs of burrowing animals?_____

2. Concrete Cover (interior of buildings): Walk the entire cover and perimeter.

   - Are there any cracks or breaks in the asphalt cover?_____
   - Are there any signs of uneven surfaces (depressions or bumps) or asphalt breakdown?_____
   - Are there any signs of excessive erosion of cover or vegetated perimeter? _____
   - Are there any deep-rooted or woody plants established on the cover or at the perimeter?_____
   - Are there any signs of burrowing animals?_____

3. Settlement or subsidence:

   - Are there any physical signs of settlement or subsidence? _____

3. Asphalt and Concrete Cover: Walk the cover perimeter outlet.

   - Is there evidence of erosion? _____
   - Does silt accumulation prevent run-off? _____
   - Are there signs of ponding? _____

4. Any deficiencies? _____
   _____

5. Comments: _____
   _____
   _____

6. Corrective Action Required (Complete Corrective Action Form): _____
   _____
   _____
   _____

7. Inspector's Signature: _____

Completed form shall be retained as required with maintenance records.

Cap Maintenance
Corrective Action Work Order Form

Report Number: _____
Date of Initial Inspection: _____
Name of Inspector: _____

Note: If Corrective Action cannot be completed within 30 days of the Initial Inspection Date, a Corrective Action Plan must be prepared and maintained in the operating record.

Corrective Action Work Order

Type of problem: _____

_____

Required upgrade: _____

_____

Corrective action assigned to: _____ _____
Name Date

Corrective Action Completion Report

Received on: _____ By: _____
Completed on: _____
Comments: _____

_____

_____

By: _____ _____
Name Date

Reinspection Report

Observations: _____

_____

Comments: _____

_____

_____

Inspector: _____
Signature Date

Completed form shall be retained as required with maintenance records.

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor
Scott Hassett, Secretary
Gloria L. McCutcheon, Regional Director

Southeast Region Headquarters
2300 N. Dr. Martin Luther King, Jr. Drive
Milwaukee, Wisconsin 53212-3128
Telephone 414-263-8500
FAX 414-263-8606
TTY 711

July 11, 2007

In Reply, Refer to: FID#241008570
BRRTS#02-41-525746
03-41-548443
03-41-548444
BRR/ERP&LUST

Mr. Michael Doro
Metso Minerals Industries, Inc.
3073 S Chase Avenue
Milwaukee, WI 53207

SUBJECT: Conditional Case Closure, Metso Minerals Industries Site, 3073 S Chase Avenue, Milwaukee, WI 53207

Dear Mr. Doro:

On June 5, 2007, the Wisconsin Department of Natural Resources (WDNR) Southeast Region Closure Committee reviewed the above referenced case for closure. This committee reviews environmental remediation cases for compliance with state laws and standards to maintain consistency in the closure of these cases. On July 10, 2007 the Department received the revised figure requested by the WDNR.

After careful review of the closure request, the Closure Committee has determined that the Polycyclic Aromatic Hydrocarbons (PAHs), volatile organic compounds (VOCs) and metals contamination on the site from the industrial use of the property appears to have been investigated and remediated to the extent practicable under site conditions. Your case has been remediated to Department standards in accordance with s. NR 726.05, Wis. Adm. Code and will be closed if the following conditions are satisfied:

- The monitoring wells at the site must be properly abandoned in compliance with ch. NR 141, Wis. Adm. Code. Documentation of well abandonment must be submitted to Andrew Boettcher on Form 3300-5B found at www.dnr.state.wi.us/org/water/dwg/gw/ or provided by the Department of Natural Resources.

- Any remaining purge water, waste and/or soil piles generated as part of site investigation or remediation activities must be removed from the site and disposed of or treated in accordance with Department of Natural Resources' rules. Once that work is completed, please send appropriate documentation regarding the treatment or disposal of the remaining purge water, waste and/or soil piles.

When the above conditions have been satisfied, please submit the appropriate documentation (for example, well abandonment forms, disposal receipts, copies of correspondence, etc.) to verify that applicable conditions have been met, and your case will be closed. Your site will be listed on the DNR Remediation and Redevelopment GIS Registry of Closed Remediation Sites. Information that was submitted with your closure request application will be included on the GIS Registry. To review the site on the GIS Registry web page, visit http://maps.dnr.state.wi.us/brrts.

Section 101.143, Wis. Stats., requires that PECFA claimants seeking reimbursement of interest costs, for sites with petroleum contamination, submit a final reimbursement claim within 120 days after they receive a closure letter on their site. For claims not received by the PECFA Program within 120 days of the date of this letter, interest costs after 60 days of the date of this letter will not be eligible for PECFA reimbursement. If there is equipment purchased with PECFA funds remaining at the site, contact the Commerce PECFA Program to determine the method for salvaging the equipment.

Please be aware that the case may be reopened pursuant to s. NR 726.09, Wis. Adm. Code, if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety, or welfare or to the environment.

We appreciate your efforts to restore the environment at this site. If you have any questions or concerns regarding this letter, please contact me at (414) 263- 8541.

Sincerely,

Andrew F Boettcher
Hydrogeologist – RR/SER

Cc: Ms. Toni Schoen, Arcadis, 126 N Jefferson St. Suite 400, Milwaukee, WI 53202

J

* 0 8 9 5 2 5 0 7 *

DOC.# 08952507

REGISTER'S OFFICE | SS
Milwaukee County, WI

RECORDED 02/04/2005 09:40AM

JOHN LA FAVE
REGISTER OF DEEDS

AMOUNT: 13.00

Recording Area

Name and Return Address
Donald H. West
Darnieder, West, Davis & Geraghty
735 North Water Street, Suite 930
Milwaukee, WI 53202

506-0012-115-1
Parcel Identification Number (PIN)

This is not homestead property.

State Bar of Wisconsin Form 1-2003
WARRANTY DEED

Document Number | Document Name

THIS DEED, made between Metso Minerals Industries, Inc., a Delaware corporation, as successor to Nordberg, Inc., a Delaware corporation, formerly known as Process Machinery Company ("Grantor," whether one or more), and Industrial Properties, LLC, a Wisconsin limited liability company ("Grantee," whether one or more).

Grantor, for a valuable consideration, conveys to Grantee the following described real estate, together with the rents, profits, fixtures and other appurtenant interests, in Milwaukee County, State of Wisconsin ("Property")

See Exhibit A attached hereto and made a part hereof.

TRANSFER
$14,400.00
FEE

Grantor warrants that the title to the Property is good, indefeasible in fee simple and free and clear of encumbrances except: municipal and zoning ordinances and agreements entered under them, recorded easements for the distribution of utility and municipal services, recorded building and use restriction and covenant, general taxes in the year of closing and those matter disclosed in Chicago Title Insurance A.L.T.A. Commitment no. 1185854 / COM REVISED 01/24/05.

Dated January 27, 2005.

Metso Minerals Industries, Inc.

* _____ (SEAL)

* By: Hannu Melarti, President (SEAL)

* _____ (SEAL)

* _____ (SEAL)

AUTHENTICATION

Signature(s) _____

_____

authenticated on _____

_____

* _____

TITLE: MEMBER STATE BAR OF WISCONSIN

(If not, _____ authorized by Wis. Stat. § 706.06)

THIS INSTRUMENT DRAFTED BY:

Todd A. Dillmann

_____

ACKNOWLEDGMENT

STATE OF GEORGIA)
) ss.
GWINNETT COUNTY)

Personally came before me on January 27, 2005, the above-named Hannu Melarti

_____

to me known to be the person(s) who executed the foregoing instrument and acknowledged the same.

Deanna M Tuten

* Deanna Tuten

Notary Public, State of Georgia
My Commission (is permanent) (expires: July 5, 2005)

EXHIBIT A

LOTS 12, 13, 14, 15, 16, 17, 18, 19 AND 23 AND PART OF LOTS 8, 11, 20, 21, AND 22 IN ELLIOTT'S SUBDIVISION PLUS PART OF VACATED PORTION OF SOUTH CHASE AVENUE AND THE NORTH 1/2 OF VACATED WEST OKLAHOMA AVENUE, ALL IN THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 8, AND THE SOUTH 1/2 OF VACATED WEST OKLAHOMA AVENUE AND LANDS IN THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 17, ALL IN TOWN 6 NORTH, RANGE 22 EAST, IN THE CITY OF MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN BOUNDED AND DESCRIBED AS FOLLOWS:
COMMENCING AT THE SOUTHEAST CORNER OF THE SOUTHEAST 1/4 OF SAID SECTION 8; THENCE SOUTH 89°21'46" WEST ALONG THE SOUTH LINE OF SAID SOUTHEAST 1/4 SECTION 33.00 FEET TO THE WEST LINE OF SOUTH CHASE AVENUE AND THE POINT OF BEGINNING OF THE LANDS TO BE DESCRIBED; THENCE NORTH ALONG SAID WEST LINE 27.00 FEET TO A POINT; THENCE EAST ALONG SAID WEST LINE 4.00 FEET TO A POINT; THENCE NORTH ALONG SAID WEST LINE 312.05 FEET TO A POINT; THENCE WEST ALONG SAID WEST LINE 4.00 FEET TO A POINT; THENCE NORTH ALONG SAID WEST LINE 286.40 FEET TO THE SOUTH LINE OF LANDS DESCRIBED IN DOCUMENT NO. 7528675; THENCE WEST ALONG SAID SOUTH LINE 123.00 FEET TO A POINT; THENCE NORTH ALONG SAID SOUTH LINE 12.50 FEET TO A POINT; THENCE NORTH 89°57'05" WEST ALONG SAID SOUTH LINE 700.87 FEET TO THE WEST LINE OF LANDS DESCRIBED IN DOCUMENT NO. 7528675; THENCE NORTH ALONG SAID WEST LINE 204.66 FEET TO A POINT; THENCE NORTH 10°24'02" EAST ALONG SAID WEST LINE 73.20 FEET TO A POINT; THENCE NORTH 18°15'34" EAST ALONG SAID WEST LINE 34.65 FEET TO A POINT; THENCE WEST 2.76 FEET TO THE EAST LINE OF THE SOOLINE RAILROAD COMPANY; THENCE SOUTH 18°12'39" WEST ALONG SAID EAST LINE 896.32 FEET TO A POINT; THENCE SOUTHWESTERLY 204.24 FEET ALONG SAID EAST LINE AND THE ARC OF A CURVE WHOSE CENTER LIES TO THE NORTHWEST, WHOSE RADIUS IS 3487.87 FEET AND WHOSE CHORD BEARS SOUTH 19°53'18" WEST 204.21 FEET TO THE NORTHEASTERLY LINE OF UNION PACIFIC RAILROAD COMPANY; THENCE SOUTH 38°02'00" EAST ALONG SAID NORTHEAST LINE 666.78 FEET TO THE NORTHWESTERLY LINE OF WEST OKLAHOMA AVENUE; THENCE NORTH 51°47'40" EAST ALONG SAID NORTHWEST LINE 943.56 FEET TO THE WEST LINE OF SOUTH CHASE AVENUE; THENCE NORTH 00°10'48" WEST ALONG SAID WEST LINE 36.96 FEET TO THE POINT OF BEGINNING.
CONTAINING 23.9523 ACRES.

TAX KEY NO. 506-0012-115-1

ADDRESS: 3073 S. CHASE AVENUE

CERTIFICATE NO. 284284

STATE OF WISCONSIN
MILWAUKEE COUNTY

OFFICE OF
REGISTER OF DEEDS

SEAL

I, the undersigned Register of Deeds of Milwaukee County, hereby certify that this document is a true and correct copy of the original on file or record in this office.

Witness my hand and official seal this

FEB 23 2006

John La Fave

SE 08-6-22 506 - 537 506-06

ATLAS P. 506

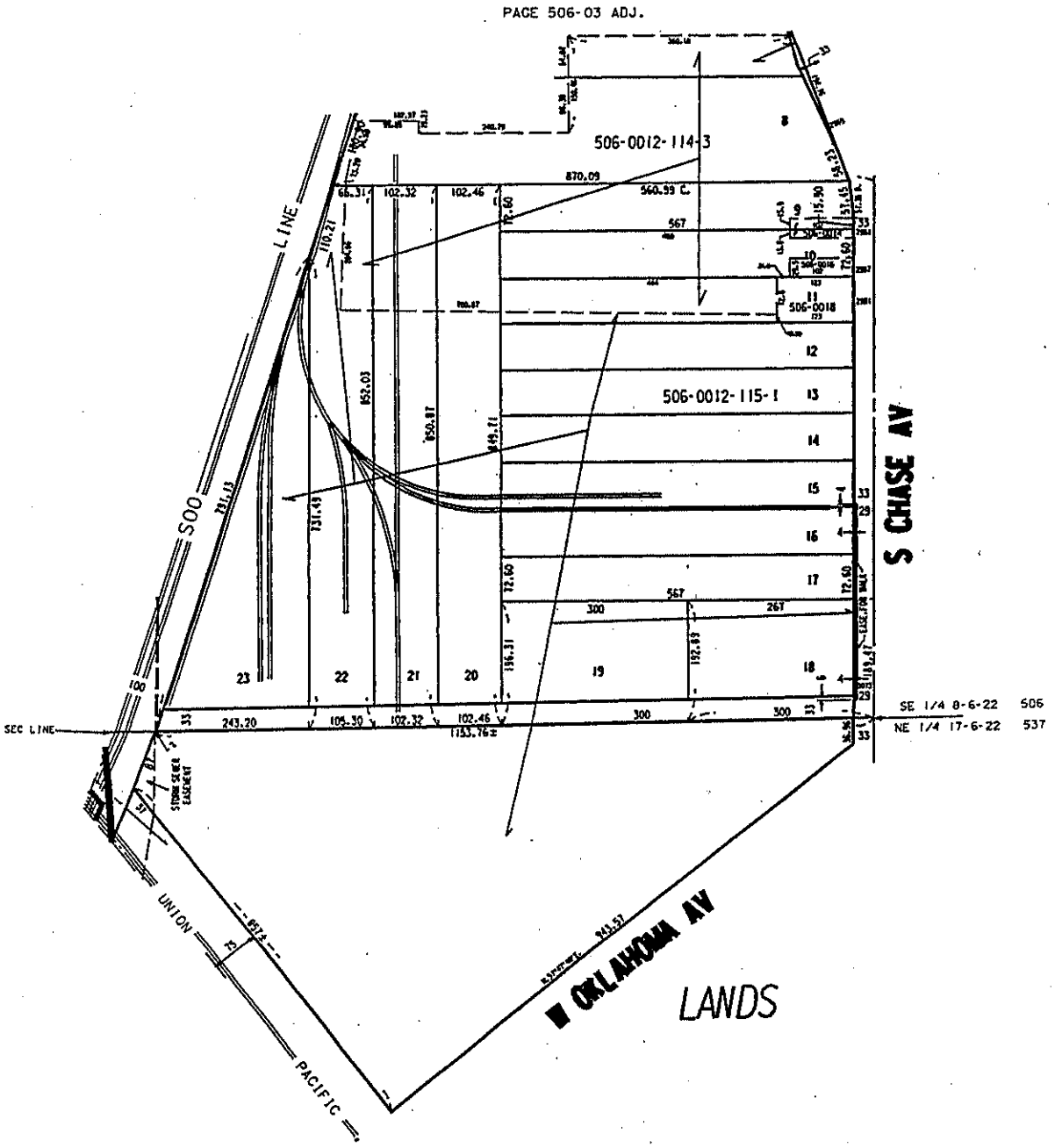
SCALE 1" = 200'

NE 17-6-22

ATLAS P. 537

SEP 29 2000

ELLIOTT'S SUBDIVISION

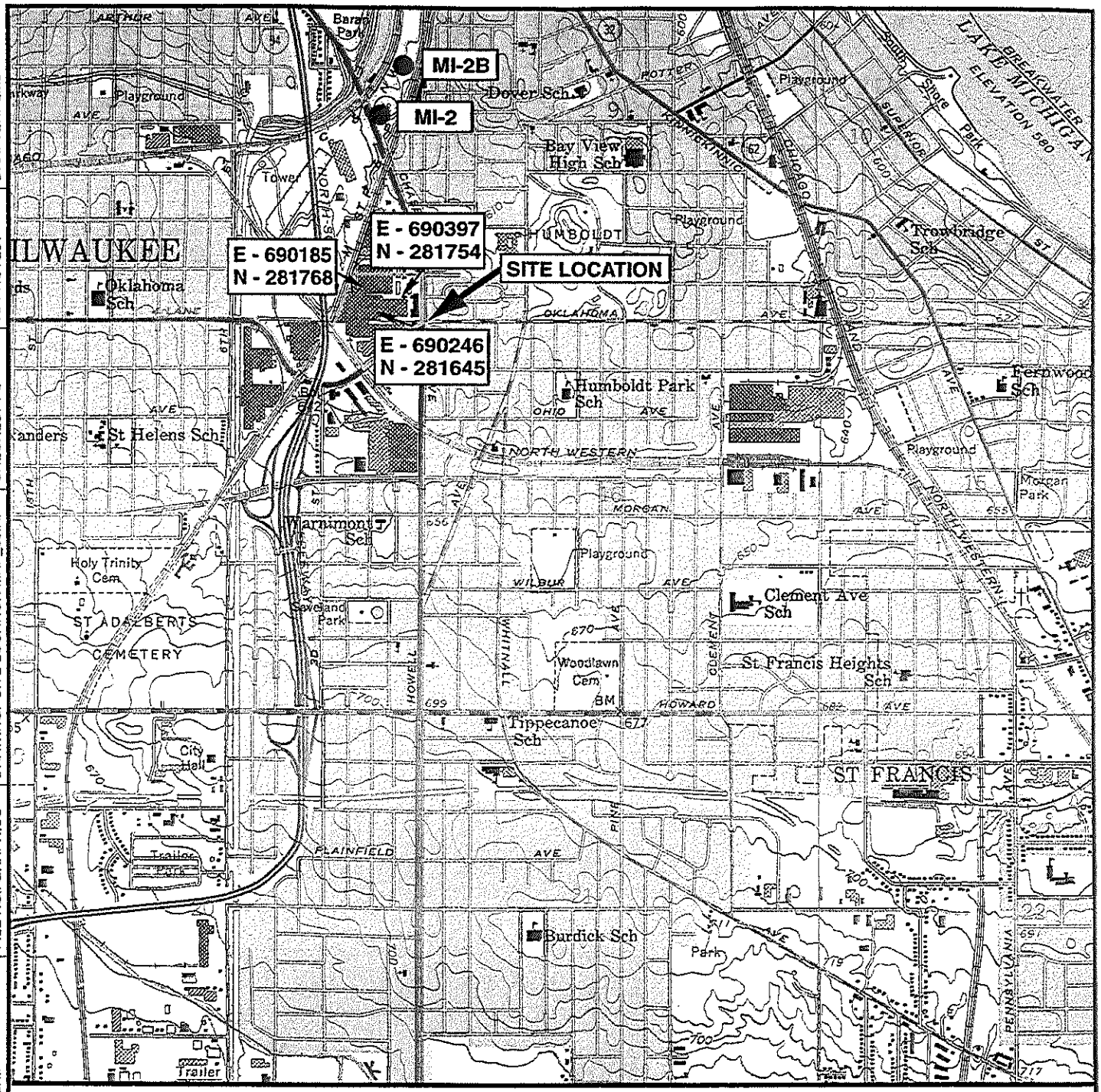


99-314

12-16-99

ASSESSOR'S OFFICE

CITY OF MILWAUKEE



SOURCE: USGS 7.5 Minute Topographic Map, GREENDALE, WISCONSIN Quadrangle, 1958, Photo revised 1971 and 1976
Used RR GIS Registry website to get WTM83/91 coordinates.

N

0 500 1000 2000

APPROXIMATE SCALE IN FEET

LEGEND

● **LOCATION OF PRIVATE WELL**

WISCONSIN

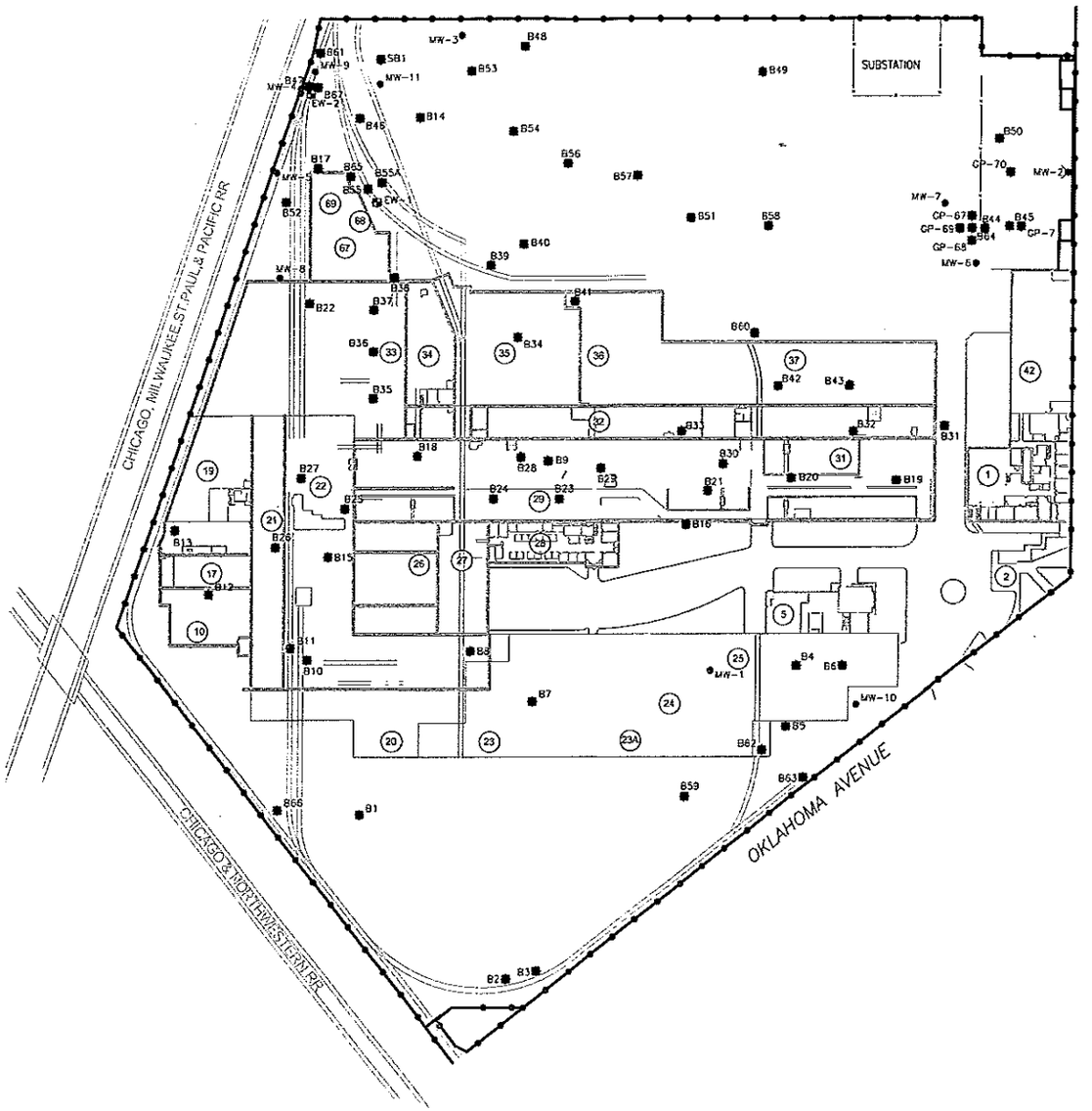
ARCADIS

SITE LOCATION MAP

METSO MINERALS INDUSTRIES, INC.
3073 SOUTH CHASE AVENUE
MILWAUKEE, WISCONSIN 53207

FIGURE
1

DWG DATE: 08JAN07 | PN: METSOWI1085\GRIP | FILE NO.: GRAPHICS | DRAWING: SITE LOCATION MAP_06.AI | CHECKED: PL | APPROVED: | DRAFTER: LMB



LEGEND

- EXTRACTION WELL
- MONITORING WELL
- ABANDONED MONITORING WELL
- SOIL BORING

0 80 160
SCALE IN FEET

REV. ISSUED DATE DESCRIPTION	KEYPLAN	SEAL	ARCADIS 126 North Jefferson Street, Suite 400 Milwaukee, Wisconsin 53202 Tel: 414-276-7742 Fax: 414-276-7603 www.arcadis-us.com	METSO MINERALS INDUSTRIES, INC. 3073 SOUTH CHASE AVENUE MILWAUKEE, WISCONSIN	PROJECT MANAGER: J. BANNANTINE DEPARTMENT MANAGER: M. MAIERLE SHEET TITLE: SITE PLAN VIEW	LEAD DESIGN PROF.: D. GABARDI TASK/PHASE NUMBER: 0002.W0014 PROJECT NUMBER: W1001085	CHECKED BY: D. GABARDI DRAWN BY: C. MCKEOUGH DRAWING NUMBER: 2

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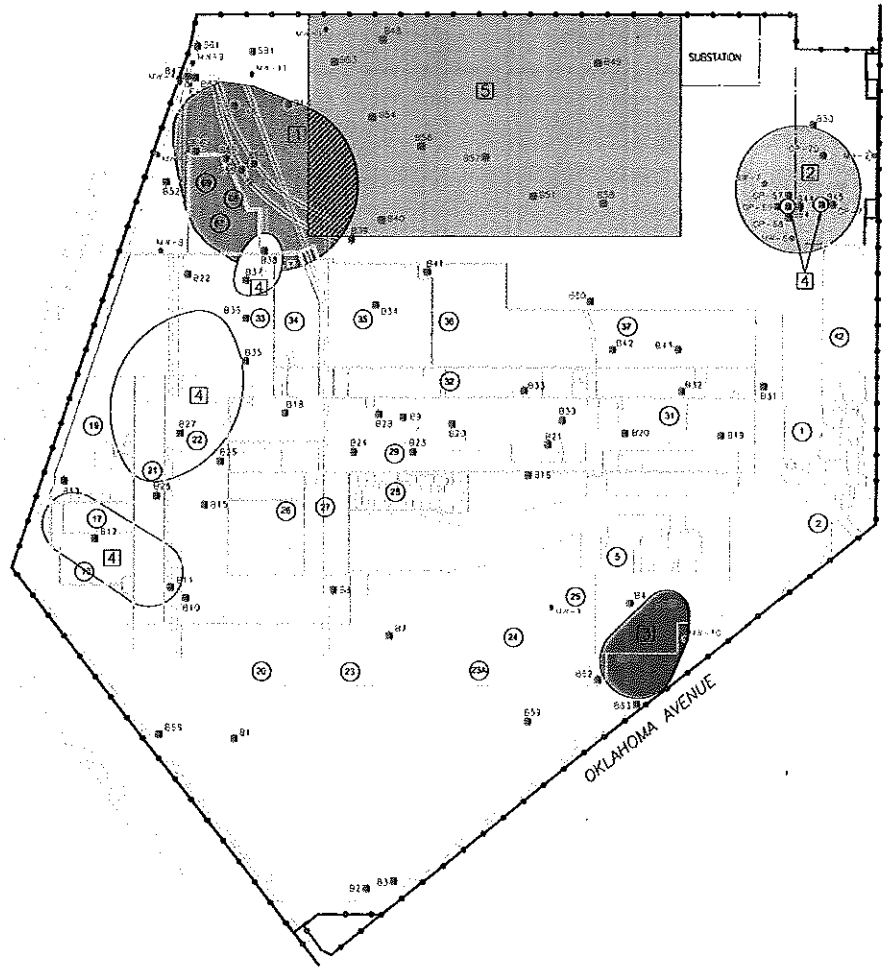
AREAS OF CONCERN

1. ESTIMATED LATERAL EXTENT OF PETROLEUM-IMPACTED SOILS. PRODUCT APPEARS TO BE FUEL OIL, BUT MAY ALSO CONTAIN DIELECTRIC FLUID.
2. ESTIMATED LATERAL EXTENT OF SOIL IMPACT FROM GASOLINE UST RELEASE.
3. ESTIMATED LATERAL EXTENT OF CHLORINATED VOC SOIL IMPACT FROM WASHWATER WASTE COOLANT UST.
4. ESTIMATED LATERAL EXTENT OF CHLORINATED VOC SOIL IMPACT FROM HISTORICAL PLANT OPERATIONS.
5. APPROXIMATE LOCATION OF FOUNDRY BUILDING OPERATIONS. SOME BUILDING MATERIALS WERE LIKELY BURIED IN PLACE.
6. LUBRICATING AND CUTTING OILS LEAKED INTO SUBSURFACE PITS, ACCORDING TO PLANT WORKERS.
7. SITE-WIDE ARSENIC CONCENTRATIONS EXCEED INDUSTRIAL DIRECT CONTACT STANDARDS. - SOURCE OF IMPACTS UNKNOWN



LEGEND

- EXTRACTION WELL
- MONITORING WELL
- ABANDONED MONITORING WELL
- SOIL BORING

0 80 160
SCALE IN FEET

Last Plotted: (UTC-06:00)Central Time (US & Canada) Current Plotted: ByDate Data/Time: Wed, 20 Jun 2007 - 2:23pm Page Setup: GRAPH-11x17 Plot Scale: 0.1728 ' / Inch Legend File: FIGURE 3.ADC Path/Name: C:\Documents\Metso\Mil1085\investigation\cad\Finished Drawings\FIG3 REVISED 06-26.dwg
© 2006 ARCADIS G&M, INC.

REV.	ISSUED DATE	DESCRIPTION

KEYPLAN

SCAL.

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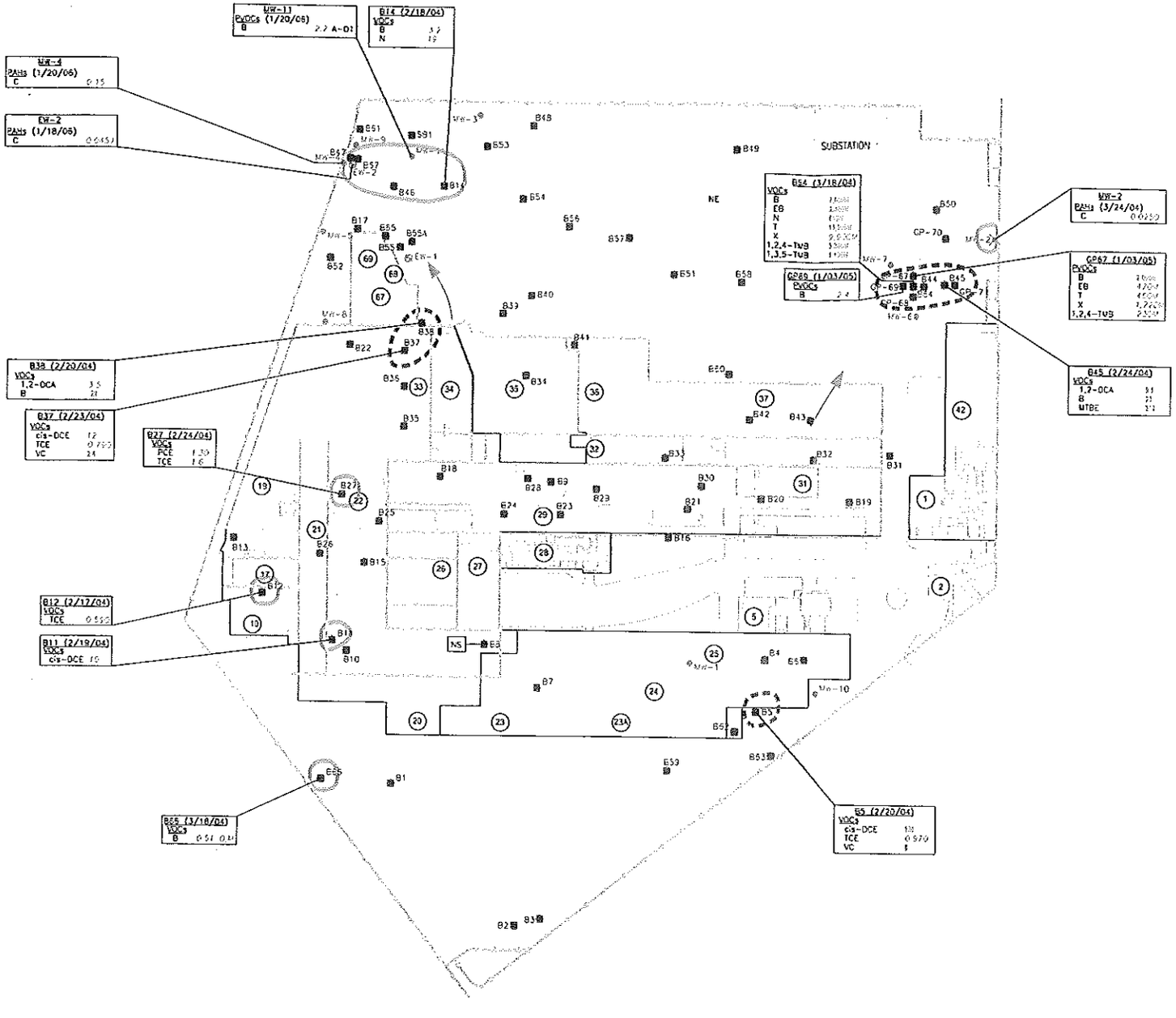
METSO MINERALS INDUSTRIES, INC.
3073 SOUTH CHASE AVENUE
MILWAUKEE, WISCONSIN

SHEET TITLE
SUMMARY OF AREAS OF CONCERN

PROJECT MANAGER	DEPARTMENT MANAGER	LEAD DESIGN PROF.	CHECKED BY
J. DAMMANN	M. MACKIE	B. CASARDI	B. CASARDI
		TASK/PHASE NUMBER	DRAWN BY
		0002.M011	C. MCKEOUGH
		PROJECT NUMBER	DRAWING NUMBER
		WI001085	3

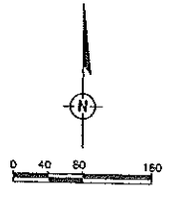


KEY

- MONITORING WELL
- ABANDONED MONITORING WELL
- SOIL BORING
- EXTRACTION WELL
- (42) BUILDING NUMBER
- 109 CONCENTRATION EXCEEDS NR 140 PREVENTIVE ACTION LIMIT
- 100 CONCENTRATION EXCEEDS NR 140 ENFORCEMENT STANDARD
- ESTIMATED EXTENT OF GROUNDWATER CONCENTRATIONS ABOVE ENFORCEMENT STANDARD
- ESTIMATED EXTENT OF GROUNDWATER CONCENTRATIONS ABOVE PREVENTIVE ACTION LIMIT
- GROUNDWATER FLOW DIRECTION

1,2-DCA	1,2-DICHLOROETHANE
1,2,4-TMB	1,2,4-TRIMETHYLBENZENE
1,3,5-TMB	1,3,5-TRIMETHYLBENZENE
A-01	LABORATORY FOAMING AGENT PRESENT
B	BENZENE
BP	BENZO(A)PYRENE
BF	BENZO(B)FLOURANTHENE
C	CHRYSENE
cis-DCE	cis-1,2-DICHLOROETHENE
EB	ETHYLBENZENE
LNAPL	LIGHT NONAQUEOUS PHASE LIQUID
M	SAMPLE pH IS GREATER THAN 2
MTBE	METHYL TERT-BUTYL ETHER
N	NAPHTHALENE
PAH	POLYCYCLIC AROMATIC HYDROCARBONS
PVOC	PETROLEUM VOLATILE ORGANIC HYDROCARBONS
Q	CONCENTRATION IS BETWEEN THE LIMIT OF DETECTION AND LIMIT OF QUANTITATION
T	TOLUENE
TCE	TRICHLOROETHENE
VC	VINYL CHLORIDE
VOC	VOLATILE ORGANIC COMPOUND
X	XYLENE

NOTES
1. CONCENTRATIONS ARE REPORTED IN MICROGRAMS PER LITER.
2. METHYL CHLORIDE WAS REPORTED IN SELECT RESULTS, HOWEVER THIS IS A COMMON LABORATORY CONTAMINANT.
3. BASE MAP CREATED FROM CAD FILE PROVIDED BY METSO MINERALS, INC.



User Name: crogerson
Last Revised: Fri, 16 Jan 2009 - 8:16am (JMS rev)
Current Picture - ByColor
Date/Time - Tue, 07 Jan 2007 - 3:11pm
Page Setup: CANON-11X17
Plot Date: A-(S)-(ACADDWF).ctb
Layout Tab: (FIGURE 3) GROUNDWATER
Path Name: G:\Projects\Metso\WI1001\Investigation\cad\VOC Package\SOIL-GW RESULTS-2.dwg
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REV	ISSUED DATE	DESCRIPTION

KEYPLAN

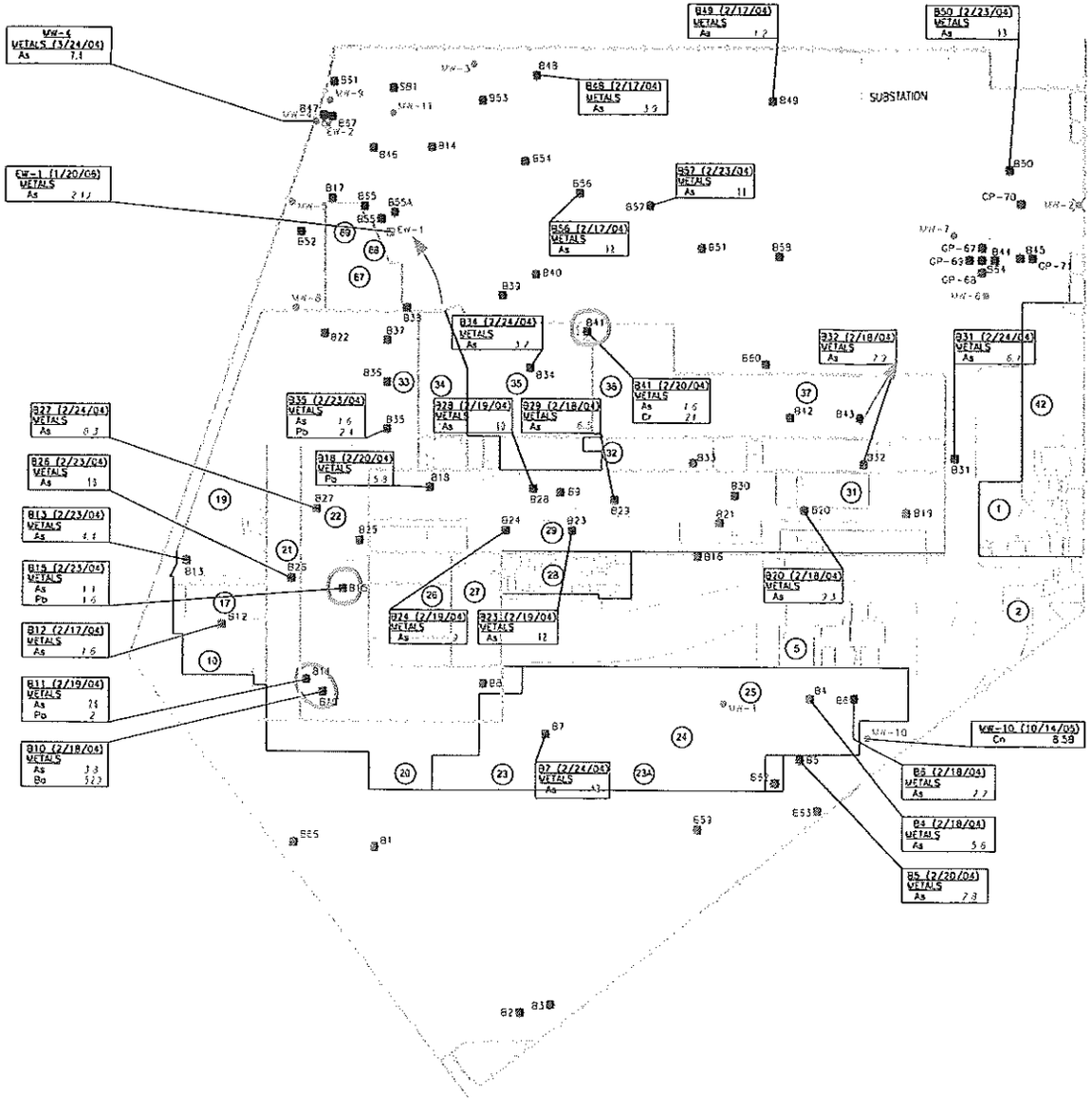
SEAL

ARCADIS
126 North Jefferson Street, Suite 400
Milwaukee, Wisconsin 53202
Tel: 414-276-7742 Fax: 414-276-7603
www.arcadis-us.com

METSO MINERAL INDUSTRIES, INC.
3073 SOUTH CHASE AVENUE
MILWAUKEE, WISCONSIN

PROJECT MANAGER: J. BARRARDE	DEPARTMENT MANAGER: M. MAERLE
LEAD DESIGN PROF.: T. SCHOEN	CHECKED BY: T. SCHOEN
TASK/PHASE NUMBER: 0002.WI01	DRAWN BY: C. MCKEOUGH
PROJECT NUMBER: WI001085	DRAWING NUMBER: 3

SHEET TITLE
SUMMARY OF GROUNDWATER VOC AND PAH ANALYTICAL RESULTS



KEY

(42)	BUILDING NUMBER
⊕	MONITORING WELL
⊗	ABANDONED MONITORING WELL
■	SOIL BORING
⊕	EXTRACTION WELL
100	CONCENTRATION EXCEEDS NR 140 PREVENTIVE ACTION LIMIT
100	CONCENTRATION EXCEEDS NR 140 ENFORCEMENT STANDARD
	ESTIMATED EXTENT OF GROUNDWATER CONCENTRATIONS ABOVE PREVENTIVE ACTION LIMIT
	GROUNDWATER FLOW DIRECTION

A	ANALYTE DETECTED IN METHOD BLANK
As	ARSENIC
B	ANALYTE WAS DETECTED IN METHOD BLANK
Ba	BARIUM
Cn	CYANIDE
Cr	CHROMIUM
J	ESTIMATED CONCENTRATION
Pb	LEAD
PCB	POLYCHLORINATED BIPHENYLS

NOTES
1. CONCENTRATIONS ARE REPORTED IN MICROGRAMS PER LITER.
2. ONLY DISSOLVED METALS REPORTED ABOVE NR140 PREVENTIVE ACTION LIMITS ARE POSTED.
3. ARSENIC DETERMINED BACKGROUND CONCENTRATIONS.
4. ALL TOTAL CYANIDE AND PCB RESULTS ARE POSTED.
5. BASE MAP CREATED FROM CAD FILE PROVIDED BY METSO MINERALS, INC.

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REV ISSUED DATE DESCRIPTION

KEYPLAN

SEAL

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Milwaukee, Wisconsin 53202
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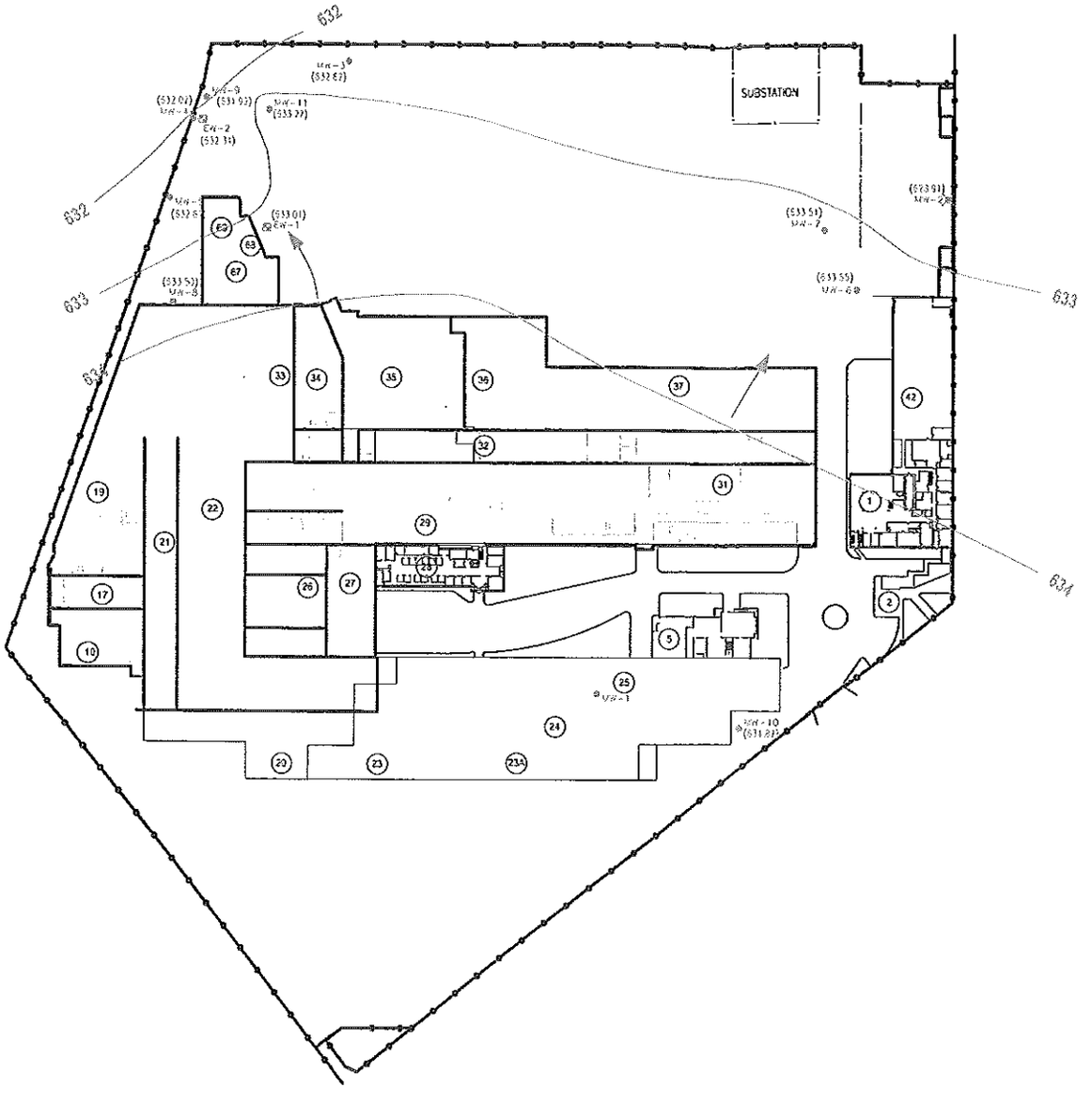
www.arcadis-us.com

METSO MINERALS INDUSTRIES, INC.
3073 SOUTH CHASE AVENUE
MILWAUKEE, WISCONSIN

PROJECT MANAGER: J. BARRETTE	DEPARTMENT MANAGER: M. MAERLE
LEAD DESIGN PROF.: T. SCHOEN	CHECKED BY: T. SCHOEN
SHEET TITLE: SUMMARY OF GROUNDWATER DISSOLVED METALS, CYANIDE AND PCB ANALYTICAL RESULTS	TASK/PHASE NUMBER: 0002.00014
	DRAWN BY: C. MCKEOUGH
PROJECT NUMBER: W001085	DRAWING NUMBER: 4



LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- EXTRACTION WELL
- MONITORING WELL
- ABANDONED MONITORING WELL
- (42) BUILDING NUMBER
- GROUNDWATER CONTOUR LINE
- (533.51) GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)
- GROUNDWATER FLOW DIRECTION

NOTES
1. BASE MAP CREATED FROM CAD FILE PROVIDED BY METSO MINERALS, INC.
2. GROUNDWATER ELEVATION FROM MW-1 NOT USED

N

0 40 80 160

REV. ISSUED DATE DESCRIPTION	KEYPLAN	SEAL	ARCADIS 125 North Jefferson Street, Suite 400 Milwaukee, Wisconsin 53202 Tel: 414-276-7742 Fax: 414-276-7603 www.arcadis-us.com	METSO MINERALS INDUSTRIES, INC. 3073 SOUTH CHASE AVENUE MILWAUKEE, WISCONSIN	PROJECT MANAGER: J. BANNANTINE DEPARTMENT MANAGER: M. MAIERLE SHEET TITLE: GROUNDWATER ELEVATION CONTOUR MAP JANUARY 16, 2006	LEAD DESIGN PROF: P. LEAVAKER TASK/PHASE NUMBER: 0002.WI014 PROJECT NUMBER: WI001085	CHECKED BY: T. SCHOEN DRAWN BY: M. HULL DRAWING NUMBER: 5

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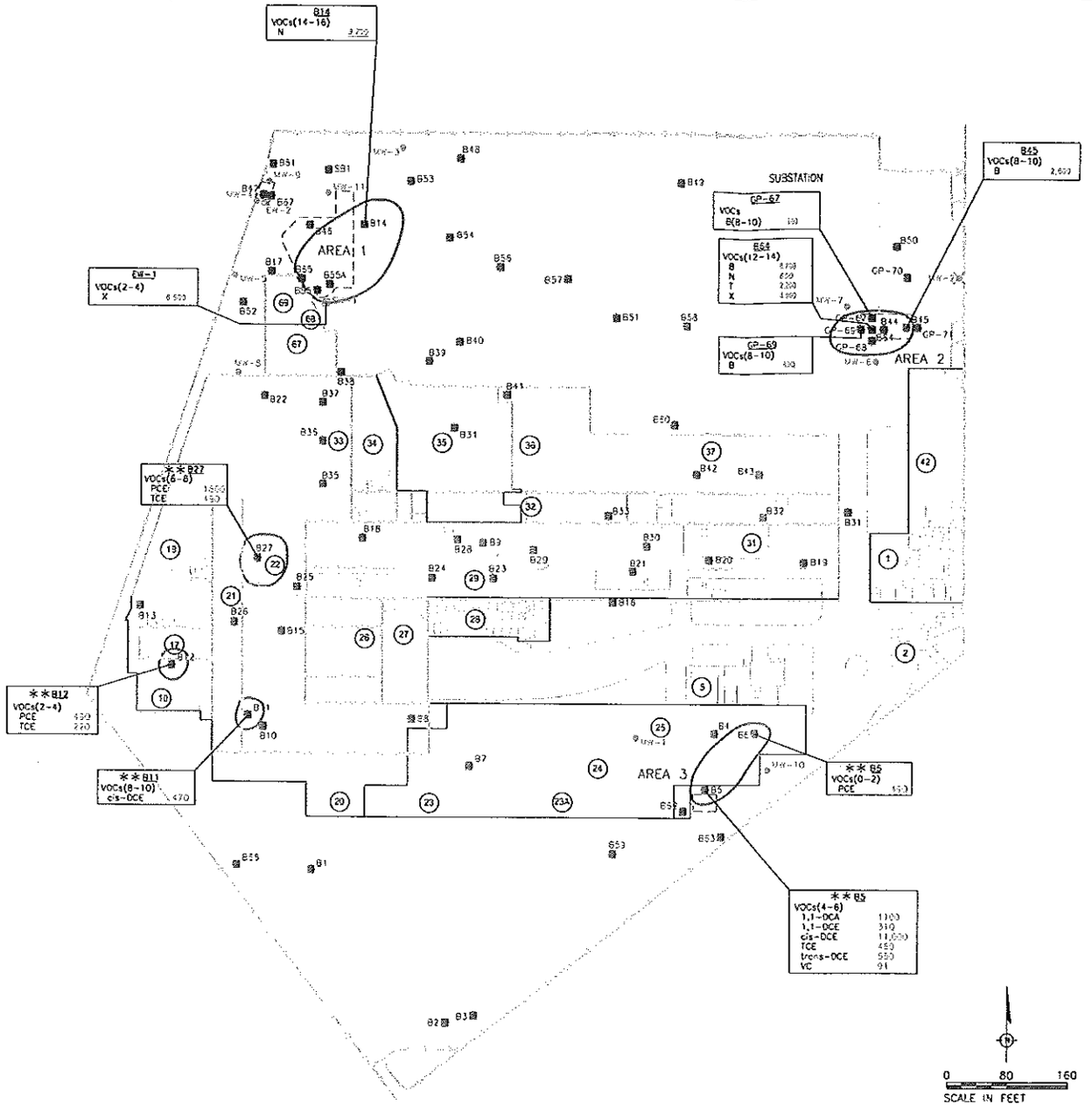

VOC KEY

VOC CONCENTRATIONS IN MICROGRAMS PER KILOGRAM

100	VOC CONCENTRATION EXCEEDS THE NR 746 SOIL CRITERIA (NR 746 CRITERIA IS THE REGULATORY INDICATOR FOR POTENTIAL FREE PHASE PRODUCT IN SOIL PORES)
100	VOC CONCENTRATION EXCEEDS THE NR 720 RCL (BASED ON GROUNDWATER PROTECTION PATHWAY)
100	CONCENTRATION EXCEEDS THE PROPOSED GROUNDWATER PATHWAY RCL FOR PAHs
100	CONCENTRATION EXCEEDS THE PROPOSED NON-INDUSTRIAL DIRECT CONTACT RCL
	ESTIMATED EXTENT OF VOC IMPACTED SOIL
	EXCAVATION LIMITS

LEGEND

(42)	BUILDING NUMBER
	MONITORING WELL
	ABANDONED MONITORING WELL
	SOIL BORING LOCATION
	EXTRACTION WELL
(2-4)	SOIL SAMPLE DEPTH (IN FEET BELOW LAND SURFACE)
1,1-DCA	1,1-DICHLOROETHANE
1,1-DCE	1,1-DICHLOROETHENE
1,2,4-TMB	1,2,4-TRIMETHYLBENZENE
1,3,5-TMB	1,3,5-TRIMETHYLBENZENE
B	BENZENE
cis-DCE	cis-1,2-DICHLOROETHENE
EB	ETHYLBENZENE
LNAPL	LIGHT NON-AQUEOUS PHASE LIQUID
N	NAPHTHALENE
PAH	POLYCYCLIC AROMATIC HYDROCARBON
PCE	TETRACHLOROETHENE
Q	CONCENTRATION IS BETWEEN THE LIMIT OF DETECTION AND LIMIT OF QUANTITATION
RCL	RESIDUAL CONTAMINANT LEVEL
T	TOLUENE
trans-DCE	trans-1,2-DICHLOROETHENE
TCE	TRICHLOROETHENE
VC	VINYL CHLORIDE
VOC	VOLATILE ORGANIC COMPOUND
X	XYLENE
**	CHLORINATED VOCs CLASSIFIED AS CLASS I CARCINOGEN. NO SOIL STANDARDS ESTABLISHED.

NOTES:
1. SOIL STANDARDS FOR NUMEROUS VOCs HAVE NOT BEEN ESTABLISHED. COMPOUNDS THAT REPRESENT A POTENTIAL CONCERN DUE TO THE NATURE OF THE CONSTITUENT OR THE CONSTITUENT CONCENTRATION ARE POSTED EVEN IF NO STANDARD IS ESTABLISHED. FOR A COMPLETE LIST OF ALL CONSTITUENTS DETECTED, REFER TO THE SOIL ANALYTICAL TABLES OR THE LABORATORY ANALYTICAL REPORTS.

2. BASE MAP CREATED FROM CAD FILE PROVIDED BY METSO MINERALS INDUSTRIES, INC.

User Name: pmcdough
Xref Names: FIGURE 6 (LAS Tech)
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REV. ISSUED DATE DESCRIPTION

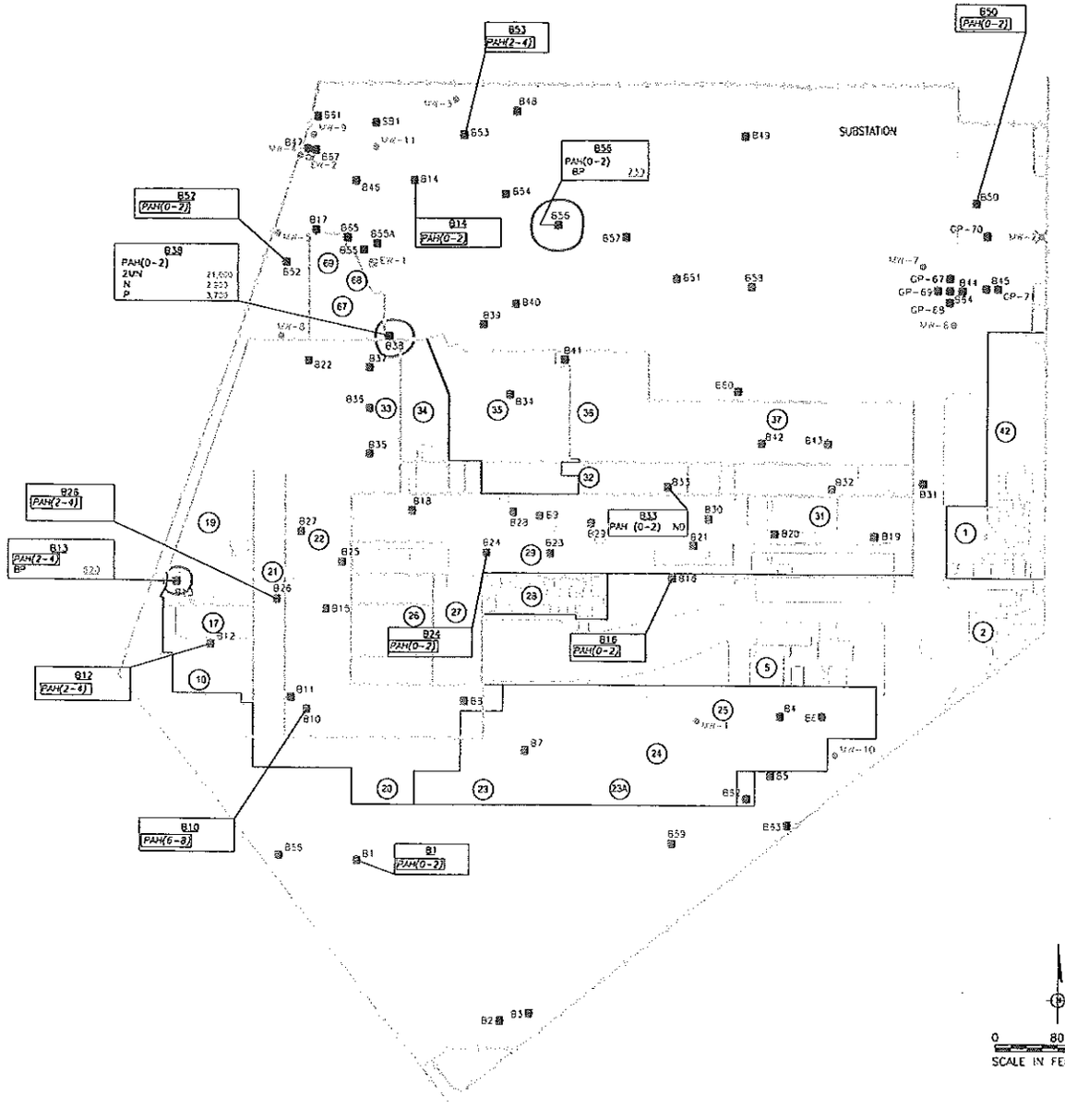
KEYPLAN

SEAL

ARCADIS
126 North Jefferson Street, Suite 400
Milwaukee, Wisconsin 53202
Tel: 414-276-7742 Fax: 414-276-7603
www.arcadis-us.com

METSO MINERALS INDUSTRIES, INC.
3073 SOUTH CHASE AVENUE
MILWAUKEE, WISCONSIN

PROJECT MANAGER	DEPARTMENT MANAGER	LEAD DESIGN PROF	CHECKED BY
J. BARRARINE	M. MAERLE	T. SCHOEN	T. SCHOEN
SHEET TITLE		TASK/PHASE NUMBER	DRAWN BY
SUMMARY OF SOIL VOC ANALYTICAL RESULTS		0004.WM01	C. MCKEOUGH
		PROJECT NUMBER	DRAWING NUMBER
		WI001085	6



PAH KEY

REFER TO TABLE 3 FOR CONCENTRATIONS OF ALL PAH CONSTITUENTS
PAH CONCENTRATIONS IN MICROGRAMS PER KILOGRAM

PAH	ONE OR MORE PAH CONSTITUENTS EXCEED GROUNDWATER PATHWAY RCLs
PAH	ONE OR MORE PAH CONSTITUENTS EXCEED NON-INDUSTRIAL DIRECT CONTACT RCLs
PAH	ONE OR MORE PAH CONSTITUENTS EXCEED INDUSTRIAL DIRECT CONTACT RCLs
	ESTIMATED EXTENT OF PAH IMPACTS REPORTED ABOVE THE INDUSTRIAL DIRECT CONTACT RCL OR GROUNDWATER PATHWAY RCL

LEGEND

(42)	BUILDING NUMBER
	MONITORING WELL
	ABANDONED MONITORING WELL
	SOIL BORING LOCATION
	EXTRACTION WELL
(2-4)	SOIL SAMPLE DEPTH (IN FEET BELOW LAND SURFACE)
2MN	2-METHYLNAPHTHALENE
BP	BENZO(A)PYRENE
LNAPL	LIGHT NON-AQUEOUS PHASE LIQUID
N	NAPHTHALENE
P	PHENANTHRENE
PAH	POLYCYCLIC AROMATIC HYDROCARBON
RCL	RESIDUAL CONTAMINANT LEVEL

NOTE:
1. BASE MAP CREATED FROM CAD FILE PROVIDED BY METSO MINERALS INDUSTRIES, INC.

REV	ISSUED DATE	DESCRIPTION	KEYPLAN	SEAL

ARCADIS
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METSO MINERALS INDUSTRIES, INC.
3073 SOUTH CHASE AVENUE
MILWAUKEE, WISCONSIN

PROJECT MANAGER	DEPARTMENT MANAGER	LEAD DESIGN PROF.	CHECKED BY
J. BANNAMINE	M. MAIERLE	E. SCHOEN	E. SCHOEN
SHEET TITLE		TASK/PHASE NUMBER	DRAWN BY
SUMMARY OF SOIL PAH ANALYTICAL RESULTS		0004.B0014	C. MCKEOUGH
		PROJECT NUMBER	DRAWING NUMBER
		WI001085	7

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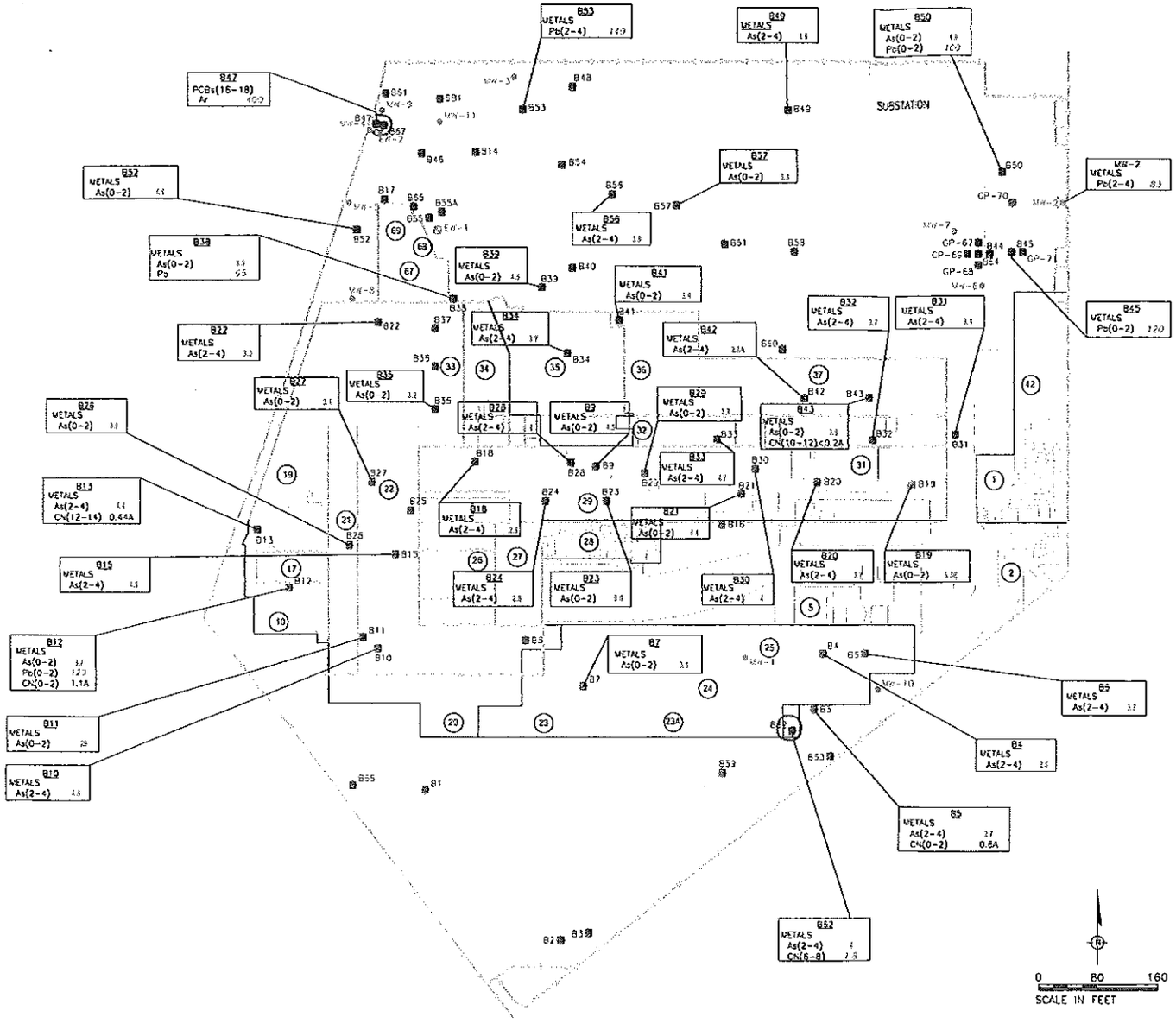

METALS KEY

METAL AND CYANIDE CONCENTRATIONS REPORTED IN MILLIGRAMS PER KILOGRAM.
PCB CONCENTRATIONS REPORTED IN MICROGRAMS PER KILOGRAM.

100	METAL CONCENTRATION EXCEEDS NON-INDUSTRIAL DIRECT CONTACT RCL
100	METAL CONCENTRATION EXCEEDS INDUSTRIAL DIRECT CONTACT RCL
	ESTIMATED EXTENT OF SOIL IMPACTS FOR LEAD ABOVE THE INDUSTRIAL DIRECT CONTACT FOR RCL, CYANIDE, OR PCBs

LEGEND

(42)	BUILDING NUMBER
	MONITORING WELL
	ABANDONED MONITORING WELL
	SOIL BORING LOCATION
	EXTRACTION WELL
(2-4)	SOIL SAMPLE DEPTH (IN FEET BELOW LAND SURFACE)
A	ANALYTE WAS DETECTED IN THE METHOD BLANK
Ar	AROCLOR1254
As	ARSENIC
CN	CYANIDE
E	ESTIMATED CONCENTRATION DUE TO MATRIX INTERFERENCES
Pb	LEAD
Q	CONCENTRATION IS BETWEEN THE LIMIT OF DETECTION AND LIMIT OF QUANTITATION
RCL	RESIDUAL CONTAMINANT LEVEL

NOTE:
1. SOIL STANDARDS FOR CYANIDE AND SELECT METALS HAVE NOT BEEN ESTABLISHED. COMPOUNDS THAT REPRESENT A POTENTIAL CONCERN DUE TO THE NATURE OF THE CONSTITUENT OR THE CONSTITUENT CONCENTRATION ARE POSTED EVEN IF NO STANDARD IS ESTABLISHED. FOR A COMPLETE LIST OF ALL CONSTITUENTS DETECTED, REFER TO THE SOIL ANALYTICAL TABLES OR THE LABORATORY ANALYTICAL REPORTS.

2. SOIL CYANIDE RESULTS WITH BLANK CONTAMINATION WERE NOT EVALUATED.

3. ARSENIC CONCENTRATIONS WERE ATTRIBUTED TO BACKGROUND LEVELS.

4. BASE MAP CREATED FROM CAD FILE PROVIDED BY METSO MINERALS, INC.

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Last Saved : 11:11a (Last Tech)
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REV	ISSUED DATE	DESCRIPTION

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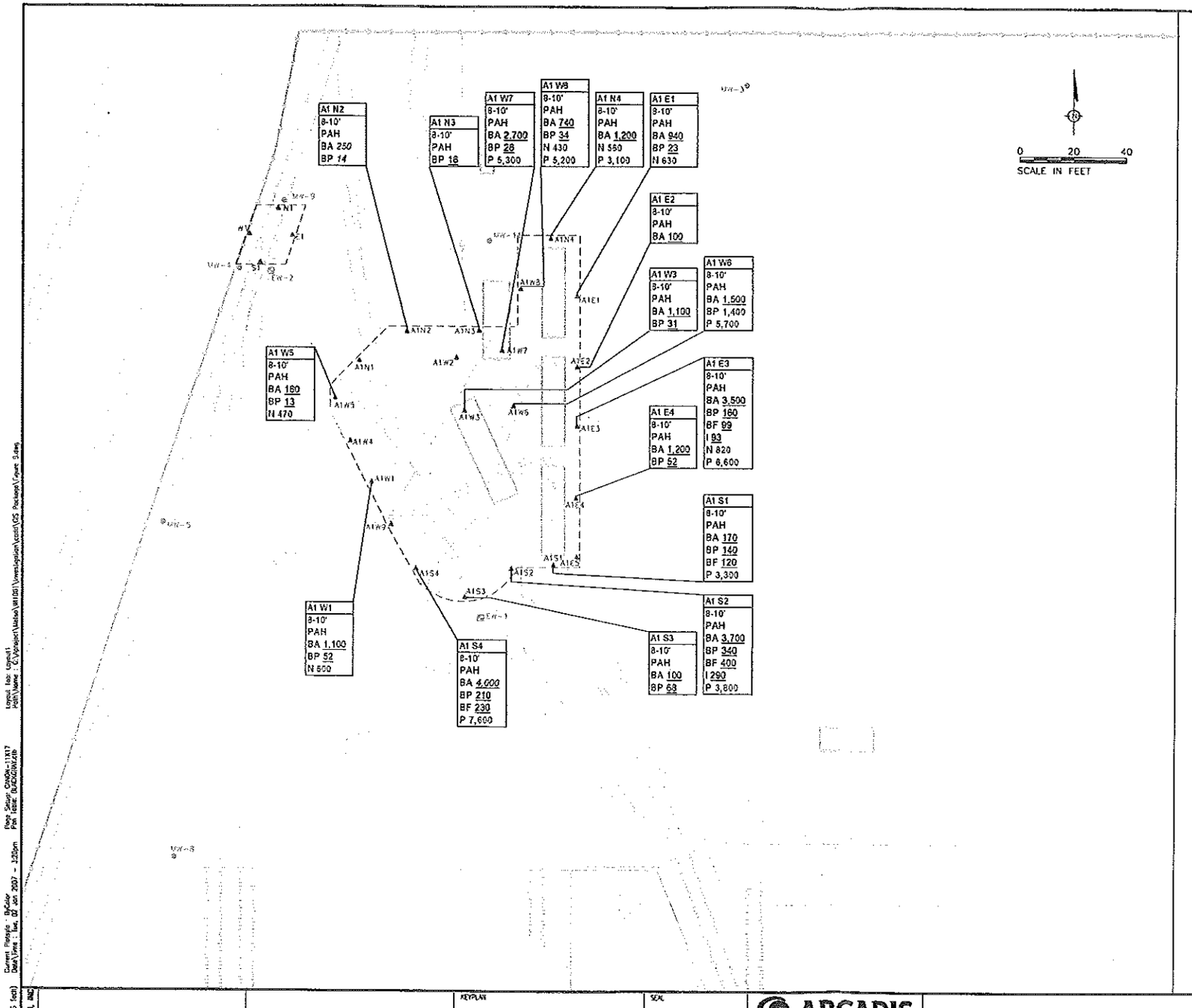
METSO MINERAL INDUSTRIES, INC.
3073 SOUTH CHASE AVENUE
MILWAUKEE, WISCONSIN

PROJECT MANAGER: J. BARRYMORE	DEPARTMENT MANAGER: M. MAERLE
LEAD DESIGN PROF.: T. SCHOEN	CHECKED BY: T. SCHOEN
SHEET TITLE: SUMMARY OF SOIL METALS AND CYANIDE ANALYTICAL RESULTS	TASK/PHASE NUMBER: 0002.W0014
	DRAWN BY: C. MCKEOUGH
PROJECT NUMBER: W001085	DRAWING NUMBER: 8



LEGEND

- BUILDING NUMBER
- SOIL CONFIRMATION SAMPLE LOCATION
- MONITORING WELL LOCATION
- EXTRACTION WELL LOCATION
- SUMP LOCATION
- SEWER MANHOLE
- APPROXIMATE PROPERTY LINE
- EXCAVATION LIMITS
- STORM LINE
- REMOVED WATER (FIRE SUPPRESSION) LINE
- REMOVED ELECTRICAL LINES (CASED IN CONCRETE) FOR FORMER TRANSFORMER
- BOILER BLOWDOWN LINE
- REMOVED PRODUCT LINE
- REMOVED STEAM LINE
- RAILROAD TRACK
- UNDERGROUND STORAGE TANK (REMOVED)

PAH KEY

PAH CONCENTRATIONS REPORTED IN MICROGRAMS PER KILOGRAM (ug/kg)

100	PAH CONCENTRATION EXCEEDS THE WDNR PROPOSED INDUSTRIAL DIRECT CONTACT RCL
100	PAH CONCENTRATION EXCEEDS THE WDNR PROPOSED NON-INDUSTRIAL DIRECT CONTACT RCL
100	PAH CONCENTRATION EXCEEDS THE WDNR PROPOSED GROUNDWATER PROTECTION RACL
(8-10')	SOIL SAMPLE DEPTH (IN FEET BELOW LAND SURFACE)
B	BENZENE
BA	BENZO(A)ANTHRACENE
BF	BENZO(B)FLUORANTHENE
BP	BENZO(A)PYRENE
I	INDENO(1,2,3-CD)PYRENE
N	NAPHTHALENE
2MN	2-METHYLNAPHTHALENE
P	PHENANTHRENE
PAH	POLYCYCLIC AROMATIC HYDROCARBON
RCL	RESIDUAL CONTAMINANT LEVEL
WDNR	WISCONSIN DEPARTMENT OF NATURAL RESOURCES

NOTES

1. BASE MAP CREATED FROM CAD FILE PROVIDED BY METSO MINERALS, INC.
2. ALL UTILITIES WITHIN EXCAVATION WERE REMOVED AND CAPPED, EXCEPT THE STORM SEWER LINE AND BOILER BLOWDOWN LINES, WHICH WERE REPLACED.

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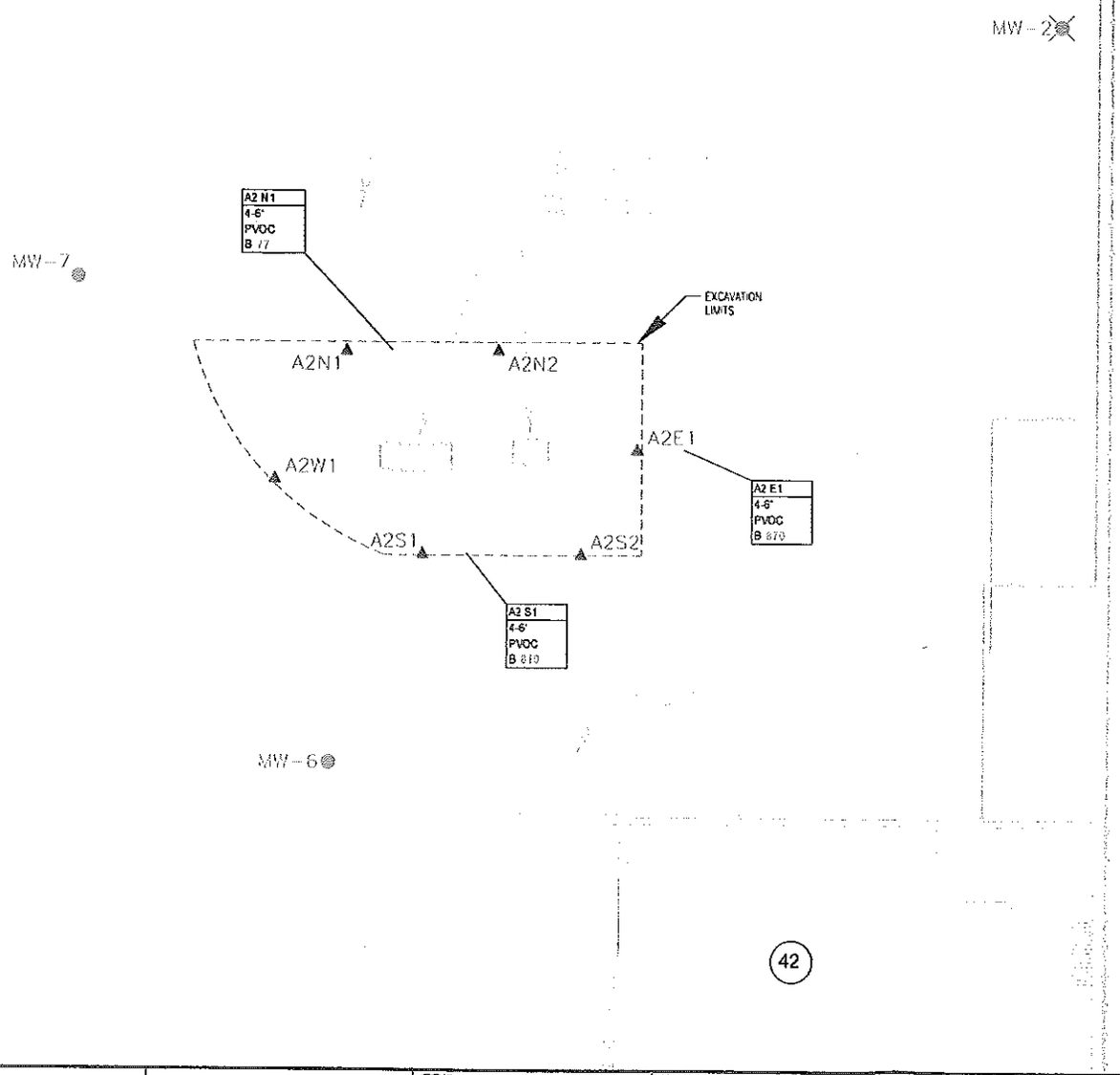
METSO MINERALS INDUSTRIES, INC.
3073 SOUTH CHASE AVENUE
MILWAUKEE, WISCONSIN

PROJECT MANAGER: J. BARRANTINE	DEPARTMENT MANAGER: M. MAERLE	LEAD DESIGN PROF.: E. SCHOCH	CHECKED BY: J. BARRANTINE
SHEET TITLE: AREA 1 SOIL POST REMEDIATION CONFIRMATION ANALYTICAL RESULTS		TASK/PHASE NUMBER: 0002.180114	DRAWN BY: C. MCKEOUGH
		PROJECT NUMBER: WI001085	DRAWING NUMBER: 9



LEGEND

68	BUILDING NUMBER
▲	SOIL CONFIRMATION SAMPLE LOCATION
●	MONITORING WELL LOCATION
⊠	ABANDONED MONITORING WELL LOCATION
- - - -	APPROXIMATE PROPERTY LINE
— — —	EXCAVATION LIMITS
	FENCE LINE
UST	UNDERGROUND STORAGE TANK

PVOC KEY

PVOC CONCENTRATIONS REPORTED IN MICROGRAMS PER KILOGRAM (ug/kg).

100	PVOC CONCENTRATION EXCEEDS THE NR720 RCL (BASED ON GROUNDWATER PROTECTION PATHWAY)
(4-6')	SOIL SAMPLE DEPTH (IN FEET BELOW LAND SURFACE)
B	BENZENE
PVOC	PETROLEUM VOLATILE ORGANIC COMPOUNDS
RCL	RESIDUAL CONTAMINANT LEVEL

NOTES

1. BASE MAP CREATED FROM CAD FILE PROVIDED BY METSO MINERALS, INC.
2. ALL SOIL SAMPLES WERE SUBMITTED FOR LABORATORY ANALYSIS OF PVOCs.

0 10 20
SCALE IN FEET

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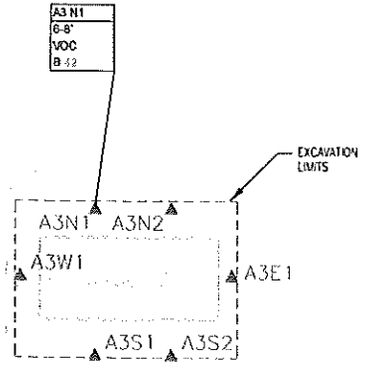
METSO MINERALS INDUSTRIES, INC.
3073 SOUTH CHASE AVENUE
MILWAUKEE, WISCONSIN

PROJECT MANAGER: J. BANNANTINE	DEPARTMENT MANAGER: M. WAERLE	LEAD DESIGN PROF: T. SCHOEN	CHECKED BY: J. BANNANTINE
SHEET TITLE: AREA 2 SOIL POST REMEDIATION PVOC CONFIRMATION ANALYTICAL RESULTS		TASK/PHASE NUMBER: 0002.W0014	DRAWN BY: C. MCKEOUGH
		PROJECT NUMBER: WI001085	DRAWING NUMBER: 10



MW-10

LEGEND

(68)	BUILDING NUMBER
▲	SOIL CONFIRMATION SAMPLE LOCATION
⊕	MONITORING WELL LOCATION
	APPROXIMATE PROPERTY LINE
	EXCAVATION LIMITS
	STORM SEWER LINE
	RAILROAD TRACK
UST	UNDERGROUND STORAGE TANK
	FLOOR DRAIN
	STORM MANHOLE

VOC AND CYANIDE KEY

VOC CONCENTRATIONS REPORTED IN MICROGRAMS PER KILOGRAM (ug/kg)

CYANIDE CONCENTRATIONS REPORTED IN MILLIGRAMS PER KILOGRAM (mg/kg)

120	VOC CONCENTRATION EXCEEDS THE NR720 RCL (BASED ON GROUNDWATER PROTECTION PATHWAY)
(6-8')	SOIL SAMPLE DEPTH (IN FEET BELOW LAND SURFACE)
B	BENZENE
RCL	RESIDUAL CONTAMINANT LEVEL
VOC	VOLATILE ORGANIC COMPOUNDS

NOTES

1. BASE MAP CREATED FROM CAD FILE PROVIDED BY METSO MINERALS, INC
2. ALL SOIL SAMPLES WERE SUBMITTED FOR LABORATORY ANALYSIS OF VOCs AND TOTAL CYANIDE
3. 15,000-GALLON WASHWATER UST REMOVED ON JULY 19, 2005.

N

0 10 20

SCALE IN FEET

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METSO MINERALS INDUSTRIES, INC.
3073 SOUTH CHASE AVENUE
MILWAUKEE, WISCONSIN

PROJECT MANAGER: J. BARRANTINE	DEPARTMENT MANAGER: M. MAERLE
LEAD DESIGN PROF.: T. SCHOEN	CHECKED BY: J. BARRANTINE
SHEET TITLE: AREA 3 SOIL POST REMEDIATION VOC CONFIRMATION ANALYTICAL RESULTS	TASK/PHASE NUMBER: 0002.WI01B
	DRAWN BY: C. MCKEOUGH
PROJECT NUMBER: WI001085	DRAWING NUMBER: 11

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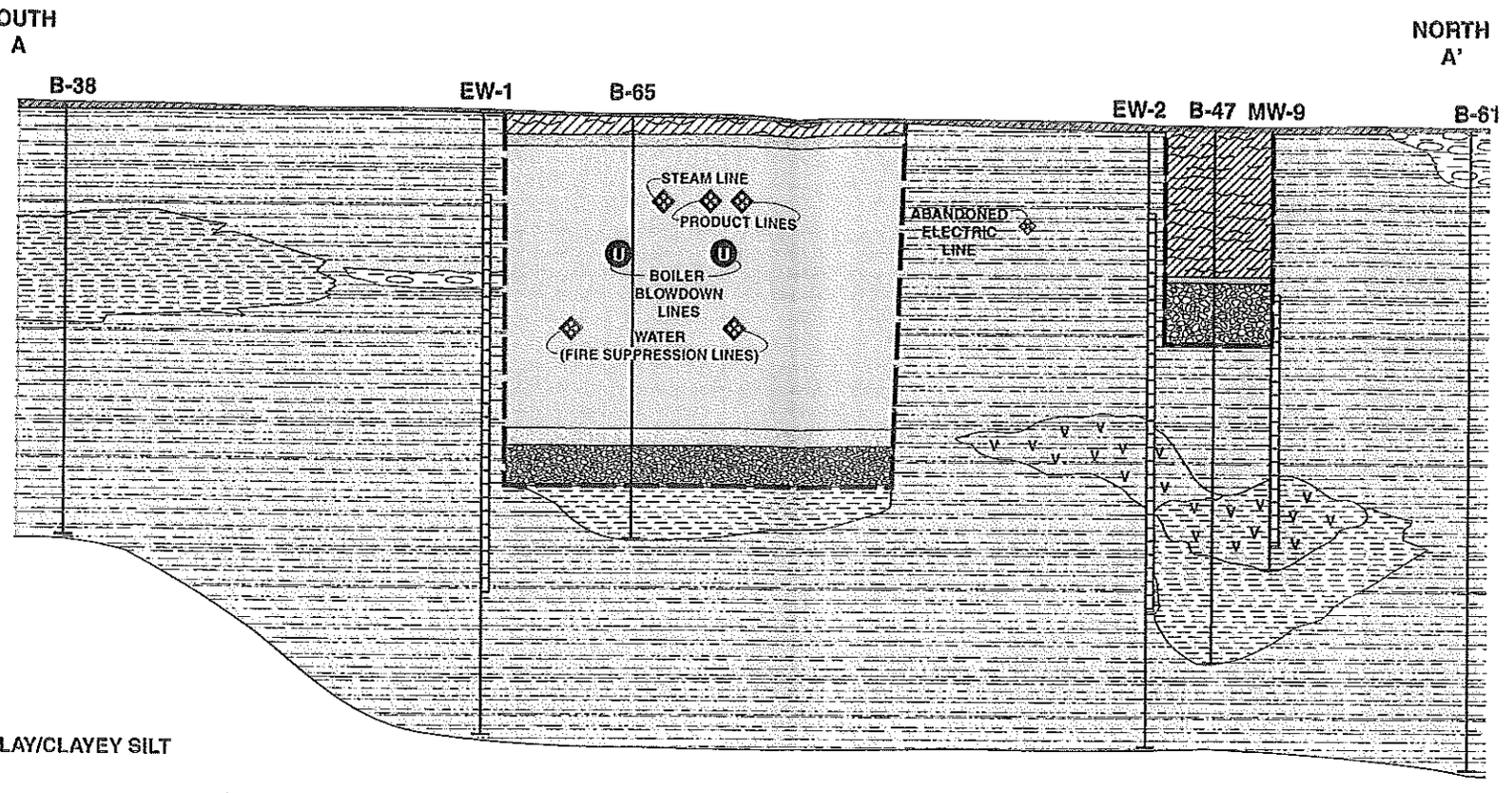
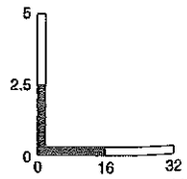


LEGEND

- SILTY CLAY/CLAYEY SILT
- CLAY
- SILT, SAND, GRAVEL
- CRUSHED STONE
- CLEAR STONE (< 2" diameter)
- ASPHALT
- RECONSOLIDATED SILT AND CLAY
- EXCAVATION LIMIT
- GEOTEXTILE FABRIC
- v ORGANICS
- WELL/BORING LOCATION
- SCREENED INTERVAL
- FORMER UTILITY - CAPPED & REMOVED
- UTILITY REPLACED
- LIGHT NON-AQUEOUS PHASE LIQUID (Pre-Remediation)



APPROXIMATE SCALE IN FEET
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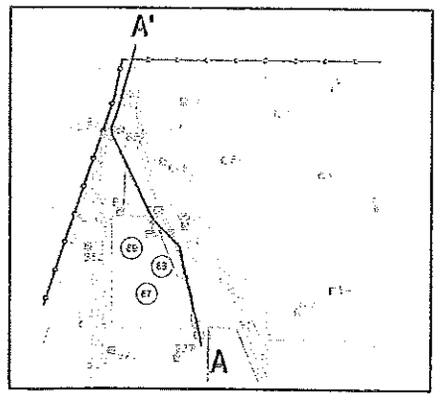

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GEOLOGIC CROSS-SECTION A-A'

METSO MINERALS INDUSTRIES, INC.
3073 SOUTH CHASE AVENUE
MILWAUKEE, WISCONSIN

FIGURE 12

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Table 2. Summary of Pre-Remediation Soil VOC Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring						B1	B2	B4
Sample Depth (feet)			Proposed	Proposed	Proposed	4-6'	2-4'	0-2'
Sample Date	NR 720	NR 746	Industrial	Non-Industrial	Groundwater	02/20/04	02/20/04	02/18/04
Area	RCL	Criteria	Direct Contact	Direct Contact	Protection	South of Building 20	Southern portion of Site	E side of Bldg 25
REC						2-20K FO UST	1K Xylol UST	Test track excavation
1,1-Dichloroethane	NE	NE	NE	NE	NE	<25	<25	<25
1,1-Dichloroethene	NE	NE	NE	NE	NE	<25	<25	<25
1,2,4-Trimethylbenzene	NE	83,000	NE	NE	NE	<25	<25	<25
1,3,5-Trimethylbenzene	NE	11,000	NE	NE	NE	<25	<25	<25
Benzene	5.5	8,500	NE	NE	NE	<25	<25	<25
cis-1,2-Dichloroethene	NE	NE	NE	NE	NE	<25	<25	<25
Ethylbenzene	2,900	4,600	NE	NE	NE	<25	<25	<25
Isopropylbenzene	NE	NE	NE	NE	NE	<25	<25	<25
Naphthalene	NE	2,700	110,000	20,000	400	<25	<25	<25
n-Butylbenzene	NE	NE	NE	NE	NE	<25	<25	<25
n-Propylbenzene	NE	NE	NE	NE	NE	<25	<25	<25
p-Isopropyltoluene	NE	NE	NE	NE	NE	<25	<25	<25
sec-Butylbenzene	NE	NE	NE	NE	NE	<25	<25	<25
Tetrachloroethene	NE	NE	NE	NE	NE	<25	<25	<25
Toluene	1,500	38,000	NE	NE	NE	<25	<25	<25
trans-1,2-Dichloroethene	NE	NE	NE	NE	NE	<25	<25	<25
Trichloroethene	NE	NE	NE	NE	NE	<25	<25	<25
Vinyl chloride	NE	NE	NE	NE	NE	<25	<25	<25
Xylene, o	4,100	42,000 (a)	NE	NE	NE	<25	<25	<25
Xylenes, m + p	4,100	42,000 (a)	NE	NE	NE	<50	<50	<50

All results are in micrograms per kilogram (µg/kg).

* Excavation as part of remediation activities.

(a) Add isomers together before comparing to criteria.

Bold Concentration exceeds the NR 720 RCL (NR 720 RCL is based on protection of groundwater pathway).

Underline Concentration exceeds the WDNR Proposed Non-Industrial Direct Contact RCL for Polycyclic Aromatic Hydrocarbons.

Italic Concentration exceeds the WDNR Proposed Groundwater Protection RCL for Polycyclic Aromatic Hydrocarbons.

Italic Concentration exceeds the NR 746 Soil Criteria (NR 746 criteria is the regulatory indicator of residual petroleum product in soil pores).

B Analyte was detected in the method blank.

K Detection limit may be elevated due to the presence of an unrequested analyte.

NA Not analyzed.

NE Not established.

Q Result is between the limit of detection and the limit of quantitation.

RCL Residual contaminant level.

REC Recognized environmental condition.

VOC Volatile organic compounds.

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Table 2. Summary of Pre-Remediation Soil VOC Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	B5	B6	B7	B8	B9	B10	B11
Sample Depth (feet)	4-6'	0-2'	10-12'	14-16'	6-8'	4-6'	8-10'
Sample Date	02/20/04	02/18/04	02/23/04	02/23/04	02/19/04	02/17/04	02/19/04
Area	E of Bldg 23A Washwater	E side of Bldg 25 Test track excavation,	Central Bldg 24	Bldg 25 near tracks	Bldg 31, East of B28	S end Bldg 22 Paint Booth,	Bldg 21 Paint
REC	UST	Paint Booth	Paint Booth	Milling machine pit	Machine Pit	Machine Pit	Booth
1,1-Dichloroethane	1,100	<25	<25	<25	<25	<25	<25
1,1-Dichloroethene	31 Q	<25	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	46 Q	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	<25	<25	<25	<25	<25	<25	<25
Benzene	<25	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	11,000	<25	<25	<25	<25	<25	47 Q
Ethylbenzene	<25	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	<25	<25	<25	<25	<25
Naphthalene	<25	<25	<25	<25	<25	340	<25
n-Butylbenzene	<25	<25	<25	<25	<25	<25	<25
n-Propylbenzene	<25	<25	<25	<25	<25	<25	<25
p-Isopropyltoluene	<25	<25	<25	<25	<25	<25	<25
sec-Butylbenzene	<25	<25	<25	<25	<25	<25	<25
Tetrachloroethene	<25	49 Q	<25	<25	<25	<25	<25
Toluene	<25	<25	<25	<25	<25	<25	<25
trans-1,2-Dichloroethene	550	<25	<25	<25	<25	<25	<25
Trichloroethene	460	<25	<25	<25	<25	<25	<25
Vinyl chloride	91	<25	<25	<25	<25	<25	<25
Xylene, o	<25	<25	<25	<25	<25	<25	<25
Xylenes, m + p	<50	<50	<50	<50	<50	<50	<50

All results are in micrograms per kilogram (µg/kg).

*	Excavation as part of remediation activities.
(a)	Add isomers together before comparing to criteria.
Bold	Concentration exceeds the NR 720 RCL (NR 720 RCL is based on protection of groundwater pathway).
Underline	Concentration exceeds the WDNR Proposed Non-Industrial Direct Contact RCL for Polycyclic Aromatic Hydrocarbons.
Italic	Concentration exceeds the WDNR Proposed Groundwater Protection RCL for Polycyclic Aromatic Hydrocarbons.
Italic	Concentration exceeds the NR 746 Soil Criteria (NR 746 criteria is the regulatory indicator of residual petroleum product in soil pores).
B	Analyte was detected in the method blank.
K	Detection limit may be elevated due to the presence of an unrequested analyte.
NA	Not analyzed.
NE	Not established.
Q	Result is between the limit of detection and the limit of quantitation.
RCL	Residual contaminant level.
REC	Recognized environmental condition.
VOC	Volatile organic compounds.

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Table 2. Summary of Pre-Remediation Soil VOC Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	B12	B13	B14	B15	B16	B18
Sample Depth (feet)	2-4'	12-14'	14-16'	10-12'	2-4'	4-6'
Sample Date	02/17/04	02/20/04	02/18/04	02/20/04	02/24/04	02/19/04
Area	Bldg 10	Between Bldgs 17 & 19	N of Bldg 34	Bldg 22	E Bldg 28	W end of Bldg 31
REC	Paint & Oil Store, Fuel Oil UST, Heat	Heat Treat, FO UST, CN Use	Fuel Oil UST,	Diesel Eng. Foundation, Paint	Foundation	Machinery/Pits
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25
1,1-Dichloroethene	<25	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	<25	<25	480	<25	<25	<25
1,3,5-Trimethylbenzene	<25	<25	<25	<25	<25	<25
Benzene	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	<25	<25	<25	<25	<25	<25
Ethylbenzene	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	310	<25	<25	<25
Naphthalene	<25	<25	*3,700*	<25	<25	<25
n-Butylbenzene	<25	<25	<25	<25	<25	<25
n-Propylbenzene	<25	<25	700	<25	<25	<25
p-Isopropyltoluene	<25	<25	<25	<25	<25	<25
sec-Butylbenzene	<25	<25	480	<25	<25	<25
Tetrachloroethene	49 Q	<25	<25	<25	<25	<25
Toluene	<25	<25	<25	<25	<25	<25
trans-1,2-Dichloroethene	<25	<25	<25	<25	<25	<25
Trichloroethene	220	<25	<25	<25	<25	<25
Vinyl chloride	<25	<25	<25	<25	<25	<25
Xylene, o	<25	<25	<25	<25	<25	<25
Xylenes, m + p	<50	<50	<50	<50	<50	<50

All results are in micrograms per kilogram (µg/kg).

* Excavation as part of remediation activities.

(a) Add isomers together before comparing to criteria.

Bold Concentration exceeds the NR 720 RCL (NR 720 RCL is based on protection of groundwater pathway).

Underline Concentration exceeds the WDNR Proposed Non-Industrial Direct Contact RCL for Polycyclic Aromatic Hydrocarbons.

Italic Concentration exceeds the WDNR Proposed Groundwater Protection RCL for Polycyclic Aromatic Hydrocarbons.

Italic Concentration exceeds the NR 746 Soil Criteria (NR 746 criteria is the regulatory indicator of residual petroleum product in soil pores).

B Analyte was detected in the method blank.

K Detection limit may be elevated due to the presence of an unrequested analyte.

NA Not analyzed.

NE Not established.

Q Result is between the limit of detection and the limit of quantitation.

RCL Residual contaminant level.

REC Recognized environmental condition.

VOC Volatile organic compounds.

Table 2. Summary of Pre-Remediation Soil VOC Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	B19	B20	B21	B22	B23	B24	B26	B27
Sample Depth (feet)	6-8'	4-6'	2-4'	8-10'	2-4'	4-6'	4-6'	6-8'
Sample Date	02/18/04	02/18/04	02/18/04	02/20/04	02/19/04	02/19/04	02/19/04	02/23/04
Area	Bldg 31	Bldg 31	Bldg 29	Bldg 22	Bldg 29	Bldg 29	Bldg 21	Bldg 22
REC	Former Foundations,	Former Foundations,	Foundation, Machinery	Paint Booth	Foundation/ Pits	Foundation	Diesel Eng. Foundation, Paint	Diesel Eng.
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25	<25	<25
1,1-Dichloroethene	<25	<25	<25	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	<25	<25	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	<25	<25	<25	<25	<25	<25	<25	<25
Benzene	<25	<25	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	<25	<25	<25	<25	<25	<25	<25	<25
Ethylbenzene	<25	<25	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	<25	<25	<25	<25	<25	<25
Naphthalene	<25	<25	200	<25	<25	<25	<25	<25
n-Butylbenzene	<25	<25	<25	<25	<25	<25	<25	<25
n-Propylbenzene	<25	<25	<25	<25	<25	<25	<25	<25
p-Isopropyltoluene	<25	<25	<25	<25	<25	<25	<25	<25
sec-Butylbenzene	<25	<25	<25	<25	<25	<25	<25	<25
Tetrachloroethene	<25	<25	<25	<25	<25	<25	<25	1,800
Toluene	<25	<25	28 Q	<25	<25	<25	<25	<25
trans-1,2-Dichloroethene	<25	<25	<25	<25	<25	<25	<25	<25
Trichloroethene	<25	<25	<25	<25	<25	<25	<25	490
Vinyl chloride	<25	<25	<25	<25	<25	<25	<25	<25
Xylene, o	<25	<25	<25	<25	<25	<25	<25	<25
Xylenes, m + p	<50	<50	<50	<50	<50	<50	<50	<50

All results are in micrograms per kilogram (µg/kg).

* Excavation as part of remediation activities.

(a) Add isomers together before comparing to criteria.

Bold Concentration exceeds the NR 720 RCL (NR 720 RCL is based on protection of groundwater pathway).

Underline Concentration exceeds the WDNR Proposed Non-Industrial Direct Contact RCL for Polycyclic Aromatic Hydrocarbons.

Italic Concentration exceeds the WDNR Proposed Groundwater Protection RCL for Polycyclic Aromatic Hydrocarbons.

Italic Concentration exceeds the NR 746 Soil Criteria (NR 746 criteria is the regulatory indicator of residual petroleum product in soil pores).

B Analyte was detected in the method blank.

K Detection limit may be elevated due to the presence of an unrequested analyte.

NA Not analyzed.

NE Not established.

Q Result is between the limit of detection and the limit of quantitation.

RCL Residual contaminant level.

REC Recognized environmental condition.

VOC Volatile organic compounds.

Table 2. Summary of Pre-Remediation Soil VOC Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	B28	B29	B30	B31	B32	B33	B34	B35
Sample Depth (feet)	4-6'	2-4'	0-2'	6-8'	2-4'	6-8'	4-6'	6-8'
Sample Date	02/19/04	02/18/04	02/18/04	02/23/04	02/18/04	02/24/04	02/23/04	02/20/04
Area	Bldg 31 Tracks,	Bldg 31 Leaking	Bldg 31 Leaking	E of Bldg 32	Bldg 32	Bldg 32	Bldg 35 Foundation,	Bldg 33 Diesel Eng.
REC	Machine Pits	Machine Pits	Machine Pits	Foundation	Foundation	Foundation	Former Oil House	Foundation
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25	<25	<25
1,1-Dichloroethene	<25	<25	<25	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	<25	<25	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	<25	<25	<25	<25	<25	<25	<25	<25
Benzene	<25	<25	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	<25	<25	<25	<25	<25	<25	<25	<25
Ethylbenzene	<25	<25	<25	<25	<25	<25	<25	<25
Isopropylbenzene	<25	<25	<25	<25	<25	<25	<25	<25
Naphthalene	<25	<25	<25	<25	<25	<25	<25	<25
n-Butylbenzene	<25	<25	<25	<25	<25	<25	<25	<25
n-Propylbenzene	<25	<25	<25	<25	<25	<25	<25	<25
p-Isopropyltoluene	<25	<25	<25	<25	<25	<25	<25	<25
sec-Butylbenzene	<25	<25	<25	<25	<25	<25	<25	<25
Tetrachloroethene	<25	<25	<25	<25	<25	<25	<25	<25
Toluene	<25	<25	<25	<25	<25	<25	<25	<25
trans-1,2-Dichloroethene	<25	<25	<25	<25	<25	<25	<25	<25
Trichloroethene	<25	<25	<25	<25	<25	<25	<25	<25
Vinyl chloride	<25	<25	<25	<25	<25	<25	<25	<25
Xylene, o	<25	<25	<25	<25	<25	<25	<25	<25
Xylenes, m + p	<50	<50	<50	<50	<50	<50	<50	<50

All results are in micrograms per kilogram (µg/kg).

* Excavation as part of remediation activities.

(a) Add isomers together before comparing to criteria.

Bold Concentration exceeds the NR 720 RCL (NR 720 RCL is based on protection of groundwater pathway).

Underline Concentration exceeds the WDNR Proposed Non-Industrial Direct Contact RCL for Polycyclic Aromatic Hydrocarbons.

Italic Concentration exceeds the WDNR Proposed Groundwater Protection RCL for Polycyclic Aromatic Hydrocarbons.

Italic Concentration exceeds the NR 746 Soil Criteria (NR 746 criteria is the regulatory indicator of residual petroleum product in soil pores).

B Analyte was detected in the method blank.

K Detection limit may be elevated due to the presence of an unrequested analyte.

NA Not analyzed.

NE Not established.

Q Result is between the limit of detection and the limit of quantitation.

RCL Residual contaminant level.

REC Recognized environmental condition.

VOC Volatile organic compounds.

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Table 2. Summary of Pre-Remediation Soil VOC Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	B36	B37	B38	B39	B41	B42	B43	B44*	B45
Sample Depth (feet)	10-12'	6-8'	6-8'	6-8'	12-14'	10-12'	8-10'	6-8'	8-10'
Sample Date	02/20/04	02/20/04	02/19/04	02/19/04	02/19/04	02/24/04	02/23/04	02/23/04	02/23/04
Area	Bldg 33 Asbestos	Bldg 33 Asbestos	N of Bldg 33	N of Bldg 35 7,200 G	Bldg 35 Paint	Bldg 37 Paint	Bldg 37 Manganese	N of Bldg 42	N of Bldg 42
REC	Use	Use	1K Unk UST	Unk UST	Shed	Booth	Works	Gas UST	Gas UST
1,1-Dichloroethane	<25	<25	<100 K	<25	<25	<25	<25	<2,000	<25
1,1-Dichloroethene	<25	<25	<100 K	<25	<25	<25	<25	<2,000	<25
1,2,4-Trimethylbenzene	<25	<25	<100 K	<25	<25	<25	<25	*350,000*	300
1,3,5-Trimethylbenzene	<25	<25	<100 K	<25	<25	<25	<25	*110,000*	33 Q
Benzene	<25	<25	<100 K	<25	<25	<25	<25	**74,000**	**2,600**
cis-1,2-Dichloroethene	<25	<25	<100 K	<25	<25	<25	<25	<2,000	<25
Ethylbenzene	<25	<25	<100 K	<25	<25	<25	<25	**170,000**	870
Isopropylbenzene	<25	<25	1,100 K	<25	<25	<25	<25	12,000	63 Q
Naphthalene	<25	<25	<100 K	<25	<25	<25	<25	*63,000*	94
n-Butylbenzene	<25	<25	<100 K	<25	<25	<25	<25	<2,000	<25
n-Propylbenzene	<25	<25	1,900 K	<25	<25	<25	<25	51,000	40 Q
p-Isopropyltoluene	<25	<25	<100 K	<25	<25	<25	<25	9,000	<25
sec-Butylbenzene	<25	<25	1,700 K	77	<25	<25	<25	5,100 Q	<25
Tetrachloroethene	<25	<25	<100 K	<25	<25	<25	<25	<2,000	<25
Toluene	<25	<25	<100 K	<25	<25	<25	<25	**530,000**	<25
trans-1,2-Dichloroethene	<25	<25	<100 K	<25	<25	<25	<25	<2,000	<25
Trichloroethene	<25	<25	<100 K	<25	<25	<25	<25	<2,000	<25
Vinyl chloride	<25	<25	<100 K	<25	<25	<25	<25	<2,000	<25
Xylene, o	<25	<25	<100 K	<25	<25	<25	<25	**220,000**	310
Xylenes, m + p	<50	<50	<200 K	<50	<50	<50	<50	**570,000**	730

All results are in micrograms per kilogram (µg/kg).

* Excavation as part of remediation activities.

(a) Add isomers together before comparing to criteria.

Bold Concentration exceeds the NR 720 RCL (NR 720 RCL is based on protection of groundwater pathway).

Underline Concentration exceeds the WDNR Proposed Non-Industrial Direct Contact RCL for Polycyclic Aromatic Hydrocarbons.

Italic Concentration exceeds the WDNR Proposed Groundwater Protection RCL for Polycyclic Aromatic Hydrocarbons.

Italic Concentration exceeds the NR 746 Soil Criteria (NR 746 criteria is the regulatory indicator of residual petroleum product in soil pores).

B Analyte was detected in the method blank.

K Detection limit may be elevated due to the presence of an unrequested analyte.

NA Not analyzed.

NE Not established.

Q Result is between the limit of detection and the limit of quantitation.

RCL Residual contaminant level.

REC Recognized environmental condition.

VOC Volatile organic compounds.

Table 2. Summary of Pre-Remediation Soil VOC Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	B46*	B48	B49	B50	B52	B53	B56
Sample Depth (feet)	8-10'	12-14'	6-8'	10-12'	12-14'	12-14'	10-12'
Sample Date	02/18/04	02/18/04	02/17/04	02/23/04	02/19/04	02/18/04	02/18/04
Area	NE of Bldg 69 Fuel Oil	N Property Border	N Property Border	N of Bldg 42 Fuel Oil	W of Bldg 69 Oil in Basement/	N of Bldg 34 Historical	N Parking Lot
REC	USTs	Historical ops	Historical ops	AST	Property	Gasoline Storage	Former Foundry
1,1-Dichloroethane	<50	<25	<25	<25	<25	<25	<25
1,1-Dichloroethene	<50	<25	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	1,300	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	<50	<25	<25	<25	<25	<25	<25
Benzene	<50	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene	<50	<25	<25	<25	<25	<25	<25
Ethylbenzene	<50	<25	<25	<25	<25	<25	<25
Isopropylbenzene	1,000	<25	<25	<25	<25	260	<25
Naphthalene	*4,000*	<25	<25	<25	<25	<25	<25
n-Butylbenzene	<50	<25	<25	<25	<25	<25	85
n-Propylbenzene	2,900	<25	<25	<25	<25	480	<25
p-Isopropyltoluene	<50	<25	<25	<25	<25	<25	<25
sec-Butylbenzene	2,000	<25	<25	<25	<25	490	<25
Tetrachloroethene	<50	<25	<25	<25	<25	<25	<25
Toluene	<50	<25	<25	<25	<25	<25	<25
trans-1,2-Dichloroethene	<50	<25	<25	<25	<25	<25	<25
Trichloroethene	<50	<25	<25	<25	<25	<25	<25
Vinyl chloride	<50	<25	<25	<25	<25	<25	<25
Xylene, o	<50	<25	<25	<25	<25	<25	<25
Xylenes, m + p	<100	<50	<50	<50	<50	<50	<50

All results are in micrograms per kilogram (µg/kg).

* Excavation as part of remediation activities.

(a) Add isomers together before comparing to criteria.

Bold Concentration exceeds the NR 720 RCL (NR 720 RCL is based on protection of groundwater pathway).

Underline Concentration exceeds the WDNR Proposed Non-Industrial Direct Contact RCL for Polycyclic Aromatic Hydrocarbons.

Italic Concentration exceeds the WDNR Proposed Groundwater Protection RCL for Polycyclic Aromatic Hydrocarbons.

Italic Concentration exceeds the NR 746 Soil Criteria (NR 746 criteria is the regulatory indicator of residual petroleum product in soil pores).

B Analyte was detected in the method blank.

K Detection limit may be elevated due to the presence of an unrequested analyte.

NA Not analyzed.

NE Not established.

Q Result is between the limit of detection and the limit of quantitation.

RCL Residual contaminant level.

REC Recognized environmental condition.

VOC Volatile organic compounds.

Table 2. Summary of Pre-Remediation Soil VOC Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	B57	B59	B60	B62	B63	B64	B66
Sample Depth (feet)	10-12'	12-14'	6-8'	10-12'	4-6'	12-14'	6-8'
Sample Date	02/23/04	02/20/04	02/24/04	02/23/04	03/17/04	03/17/04	03/17/04
Area	N Parking Lot Former	S. of Bldg 23A Former Drum	N of Bldg 37 (E of track)	Bldg 23A Washwater	SE of Bldg 23A	NW of Bldg 42	S of Bldg 21
REC	Foundry	Storage	275 g Fuel Oil AST	UST	Washwater UST	Gas UST	Fuel Oil UST
1,1-Dichloroethane	<25	<25	<25	<25	<25	<25	<25
1,1-Dichloroethene	<25	<25	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	<25	<25	<25	<25	<25	1,700 B	<25
1,3,5-Trimethylbenzene	<25	<25	<25	<25	<25	580	<25
Benzene	<25	<25	<25	<25	<25	**6,700**	<25
cis-1,2-Dichloroethene	<25	<25	<25	<25	<25	<25	<25
Ethylbenzene	<25	<25	<25	<25	<25	1,500	<25
Isopropylbenzene	<25	<25	<25	<25	<25	92	<25
Naphthalene	<25	<25	<25	<25	<25	*600*	<25
n-Butylbenzene	<25	<25	<25	<25	<25	<25	<25
n-Propylbenzene	<25	<25	<25	<25	<25	280	<25
p-Isopropyltoluene	<25	<25	<25	<25	<25	<25	<25
sec-Butylbenzene	<25	<25	<25	<25	<25	30 Q	<25
Tetrachloroethene	<25	<25	<25	<25	<25	<25	<25
Toluene	<25	<25	<25	<25	<25	**2,200**	<25
trans-1,2-Dichloroethene	<25	<25	<25	<25	<25	<25	<25
Trichloroethene	<25	<25	<25	<25	<25	100	<25
Vinyl chloride	<25	<25	<25	<25	<25	<25	<25
Xylene, o	<25	<25	<25	<25	<25	**1,200**	<25
Xylenes, m + p	<50	<50	<50	<50	<50	**3,700 B**	<50

All results are in micrograms per kilogram (µg/kg).

* Excavation as part of remediation activities.

(a) Add isomers together before comparing to criteria.

Bold Concentration exceeds the NR 720 RCL (NR 720 RCL is based on protection of groundwater pathway).

Underline Concentration exceeds the WDNR Proposed Non-Industrial Direct Contact RCL for Polycyclic Aromatic Hydrocarbons.

Italic Concentration exceeds the WDNR Proposed Groundwater Protection RCL for Polycyclic Aromatic Hydrocarbons.

Italic Concentration exceeds the NR 746 Soil Criteria (NR 746 criteria is the regulatory indicator of residual petroleum product in soil pores).

B Analyte was detected in the method blank.

K Detection limit may be elevated due to the presence of an unrequested analyte.

NA Not analyzed.

NE Not established.

Q Result is between the limit of detection and the limit of quantitation.

RCL Residual contaminant level.

REC Recognized environmental condition.

VOC Volatile organic compounds.

Table 2. Summary of Pre-Remediation Soil VOC Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	GP-67	GP-68	GP-69	GP-70	GP-71	EW-1	EW-2	MW-1	MW-2
Sample Depth (feet)	8-10'	8-10'	8-10'	8-10'	8-10'	2-4'	2-4'	16-18'	10-12'
Sample Date	01/03/05	01/03/05	01/03/05	01/03/05	01/03/05	01/06/05	01/06/05	03/16/04	03/16/04
Area	N of Bldg 42	N of Bldg 42	N of Bldg 42	N of Bldg 42	N of Bldg 42	E of Bldg 69	N of Bldg 69	Within Bldg 25	N of Bldg 42
REC	Gas UST	Gas UST	Gas UST	Gas UST	Gas UST	Fuel Oil UST	Fuel Oil UST	Washwater UST	Gas UST
1,1-Dichloroethane	NA	NA	NA	NA	NA	NA	NA	<25	<25
1,1-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	<25	<25
1,2,4-Trimethylbenzene	<25	<25	270	<25	<25	6,900 K	380	<25	<25
1,3,5-Trimethylbenzene	<25	<25	310	<25	<25	9,400 K	310	<25	<25
Benzene	**160**	<25	**43 Q**	<25	<25	<250 K	<25	<25	<25
cis-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	<25	<25
Ethylbenzene	<25	<25	<25	<25	<25	2,200 K	<25	<25	<25
Isopropylbenzene	NA	NA	NA	NA	NA	NA	NA	<25	<25
Naphthalene	NA	NA	NA	NA	NA	NA	NA	<25	<25
n-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	<25	<25
n-Propylbenzene	NA	NA	NA	NA	NA	NA	NA	<25	<25
p-Isopropyltoluene	NA	NA	NA	NA	NA	NA	NA	<25	<25
sec-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	<25	<25
Tetrachloroethene	NA	NA	NA	NA	NA	NA	NA	<25	<25
Toluene	<25	<25	<25	<25	<25	<250 K	<25	<25	<25
trans-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	<25	<25
Trichloroethene	NA	NA	NA	NA	NA	NA	NA	<25	<25
Vinyl chloride	NA	NA	NA	NA	NA	NA	NA	<25	<25
Xylene, o	<25	<25	<25	<25	<25	**1,300 K**	47 Q	<25	<25
Xylenes, m + p	<50	<50	520	<50	<50	**5,200 K**	130 Q	<50	<50

All results are in micrograms per kilogram (µg/kg).

* Excavation as part of remediation activities.

(a) Add isomers together before comparing to criteria.

Bold Concentration exceeds the NR 720 RCL (NR 720 RCL is based on protection of groundwater pathway).

Underline Concentration exceeds the WDNR Proposed Non-Industrial Direct Contact RCL for Polycyclic Aromatic Hydrocarbons.

Italic Concentration exceeds the WDNR Proposed Groundwater Protection RCL for Polycyclic Aromatic Hydrocarbons.

Italic Concentration exceeds the NR 746 Soil Criteria (NR 746 criteria is the regulatory indicator of residual petroleum product in soil pores).

B Analyte was detected in the method blank.

K Detection limit may be elevated due to the presence of an unrequested analyte.

NA Not analyzed.

NE Not established.

Q Result is between the limit of detection and the limit of quantitation.

RCL Residual contaminant level.

REC Recognized environmental condition.

VOC Volatile organic compounds.

Table 2. Summary of Pre-Remediation Soil VOC Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	MW-3	MW-5
Sample Depth (feet)	10-12'	2-4'
Sample Date	03/17/04	01/06/05
Area	N of Bldg 34	W of Bldg 69
REC	**Fuel Oil UST**	**Fuel oil UST**
1,1-Dichloroethane	<25	NA
1,1-Dichloroethene	<25	NA
1,2,4-Trimethylbenzene	<25	46 Q
1,3,5-Trimethylbenzene	<25	<25
Benzene	<25	<25
cis-1,2-Dichloroethene	<25	NA
Ethylbenzene	<25	<25
Isopropylbenzene	360	NA
Naphthalene	<25	NA
n-Butylbenzene	1,200	NA
n-Propylbenzene	610	NA
p-Isopropyltoluene	<25	NA
sec-Butylbenzene	760	NA
Tetrachloroethene	<25	NA
Toluene	<25	40 Q
trans-1,2-Dichloroethene	<25	NA
Trichloroethene	<25	NA
Vinyl chloride	<25	NA
Xylene, o	<25	35 Q
Xylenes, m + p	<50	<50

All results are in micrograms per kilogram (µg/kg).

* Excavation as part of remediation activities.

(a) Add isomers together before comparing to criteria.

Bold Concentration exceeds the NR 720 RCL (NR 720 RCL is based on protection of groundwater pathway).

Underline Concentration exceeds the WDNR Proposed Non-Industrial Direct Contact RCL for Polycyclic Aromatic Hydrocarbons.

Italic Concentration exceeds the WDNR Proposed Groundwater Protection RCL for Polycyclic Aromatic Hydrocarbons.

Italic Concentration exceeds the NR 746 Soil Criteria (NR 746 criteria is the regulatory indicator of residual petroleum product in soil pores).

B Analyte was detected in the method blank.

K Detection limit may be elevated due to the presence of an unrequested analyte.

NA Not analyzed.

NE Not established.

Q Result is between the limit of detection and the limit of quantitation.

RCL Residual contaminant level.

REC Recognized environmental condition.

VOC Volatile organic compounds.

Table 3. Summary of Pre-Remediation Soil PAH Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring Sample Depth (feet) Sample Date Area REC	Proposed Direct Contact Industrial RCL	Proposed Direct Contact Non-Industrial RCL	Proposed Protection Groundwater RCL	B1 0-2' 02/20/04 S of Bldg 20 2-20K FO UST	B4 2-4' 02/18/04 E end of Bldg 25 Test Track Excavation	B5 0-2' 02/20/04 E of Bldg 23A Washwater UST
1-Methylnaphthalene	70,000,000	1,100,000	23,000	10 Q	<8.1	NA
2-Methylnaphthalene	40,000,000	600,000	20,000	11 Q	<8.7	570
Acenaphthene	60,000,000	900,000	38,000	<14	<13	<140
Acenaphthylene	360,000	18,000	700	<23	<21	<160
Anthracene	300,000,000	5,000,000	3,000,000	<14	<13	<190
Benzo(a)anthracene	3,900	88	17,000	69	<6.9	<130
Benzo(a)pyrene	390	8.8	48,000	*95*	<6.9	<58
Benzo(b)fluoranthene	3,900	88	360,000	*92*	<7.5	<170
Benzo(g,h,i)perylene	39,000	1,800	6,800,000	67	<14	<160
Benzo(k)fluoranthene	39,000	880	870,000	86	<10	<130
Chrysene	390,000	8,800	37,000	97	<8	<130
Dibenzo(a,h)anthracene	390	8.8	38,000	*21 Q*	<8.6	<69
Fluoranthene	40,000,000	600,000	500,000	130	<9.2	<150
Fluorene	40,000,000	600,000	100,000	<7.8	<6.9	<170
Indeno(1,2,3-cd)pyrene	3,900	88	680,000	59	<13	<240
Naphthalene	110,000	20,000	400	14 Q	<8.7	230 Q
Phenanthrene	390,000	18,000	1,800	67	<9.2	<180
Pyrene	30,000,000	500,000	8,700,000	120	<15	<160

All results are reported as micrograms per kilogram (µg/kg).

* Excavated as part of remediation activities.

BOLD Concentration exceeds the WDNR Proposed Groundwater Protection RCL for PAHs.

Italic Concentration exceeds the WDNR Proposed Non-Industrial Direct Contact RCL for PAHs.

Underline Concentration exceeds the WDNR Proposed Industrial Direct Contact RCL for PAHs.

NA Not analyzed.

PAH Polycyclic aromatic hydrocarbons.

Q Result is between the limit of detection and the limit of quantitation.

RCL Residual contaminant level.

REC Recognized environmental condition.

WDNR Wisconsin Department of Natural Resources.

Table 3. Summary of Pre-Remediation Soil PAH Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	B8	B10	B12	B13	B14
Sample Depth (feet)	2-4'	6-8'	2-4'	2-4'	0-2'
Sample Date	02/23/04	02/18/04	02/17/04	02/20/04	02/18/04
Area	Bldg 25 Near tracks	S end of Bldg 22	Bldg 10	Between Bldgs 17 & 19	N. of Bldg 34
REC	Milling machine pit	Paint Booth/ Machine Pit	Paint and Oil Store, Fuel Oil UST, Heat Treat	Heat Treat, FO UST, Cyanide Use	Existing AST, Fuel Oil UST
1-Methylnaphthalene	NA	<8.2	11 Q	11 Q	<8.4
2-Methylnaphthalene	<130	<8.8	13 Q	11 Q	<9
Acenaphthene	<140	<13	26 Q	47	<13
Acenaphthylene	<150	<21	<20	<22	<22
Anthracene	<190	64	55	150	<13
Benzo(a)anthracene	<130	49	*140*	*490*	37
Benzo(a)pyrene	<57	*33*	*140*	*620*	*58*
Benzo(b)fluoranthene	<170	21 Q	*160*	*880*	82
Benzo(g,h,i)perylene	<160	15 Q	130	460	79
Benzo(k)fluoranthene	<130	20 Q	160	660	66
Chrysene	<130	73	170	660	60
Dibenzo(a,h)anthracene	<69	<8.7	*44*	*180*	*23 Q*
Fluoranthene	<150	69	300	900	60
Fluorene	<170	31	28	28	<7.2
Indeno(1,2,3-cd)pyrene	<230	<13	*110*	*420*	61
Naphthalene	<150	<8.8	22 Q	18 Q	<9
Phenanthrene	<180	28 Q	250	780	30 Q
Pyrene	<150	160	250	920	51 Q

All results are reported as micrograms per kilogram (µg/kg).

* Excavated as part of remediation activities.

BOLD Concentration exceeds the WDNR Proposed Groundwater Protection RCL for PAHs.

Italic Concentration exceeds the WDNR Proposed Non-Industrial Direct Contact RCL for PAHs.

Underline Concentration exceeds the WDNR Proposed Industrial Direct Contact RCL for PAHs.

NA Not analyzed.

PAH Polycyclic aromatic hydrocarbons.

Q Result is between the limit of detection and the limit of quantitation.

RCL Residual contaminant level.

REC Recognized environmental conditions.

WDNR Wisconsin Department of Natural Resources.

Table 3. Summary of Pre-Remediation Soil PAH Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	B16	B18	B19	B20	B24	B26
Sample Depth (feet)	0-2'	0-2'	2-4'	2-4'	0-2'	2-4'
Sample Date	02/24/04	02/19/04	02/18/04	02/18/04	02/19/04	02/19/04
Area	E Bldg 28	W end of Bldg 31	Bldg 31	Bldg 31	Bldg 29	Bldg 21
REC	Foundation	Machinery/Pits	Former Foundations, Pits	Former Foundations, Pits	Foundation	Diesel Eng. Foundation/ Paint Booth
1-Methylnaphthalene	<8.3	<8.1	<8.3	<8.4	<42	8.7 Q
2-Methylnaphthalene	<8.9	<8.7	<8.9	<9	<45	<8.6
Acenaphthene	14 Q	<13	<13	<13	<66	21 Q
Acenaphthylene	<21	<21	<21	<22	<110	<21
Anthracene	37 Q	<13	<13	<13	<66	56
Benzo(a)anthracene	*130*	<7	<7.1	<7.2	<36	*230*
Benzo(a)pyrene	*140*	<7	<7.1	<7.2	*110 Q*	*300*
Benzo(b)fluoranthene	*110*	<7.6	<7.7	<7.8	<39	*240*
Benzo(g,h,i)perylene	91	<14	<14	<14	<72	210
Benzo(k)fluoranthene	120	<10	<11	<11	<54	230
Chrysene	150	<8	<8.2	<8.3	<41	290
Dibenzo(a,h)anthracene	*28 Q*	<8.6	<8.7	<8.9	<44	*59*
Fluoranthene	240	<9.3	<9.4	<9.6	<48	530
Fluorene	13 Q	<7	<7.1	<7.2	<36	13 Q
Indeno(1,2,3-cd)pyrene	75	<13	<13	<13	<66	*180*
Naphthalene	<8.9	<8.7	<8.9	<9	<45	12 Q
Phenanthrene	200	<9.3	<9.4	<9.6	<48	320
Pyrene	300	<15	<15	<16	<78	570

All results are reported as micrograms per kilogram (µg/kg).

* Excavated as part of remediation activities.

BOLD Concentration exceeds the WDNR Proposed Groundwater Protection RCL for PAHs.

Italic Concentration exceeds the WDNR Proposed Non-Industrial Direct Contact RCL for PAHs.

Underline Concentration exceeds the WDNR Proposed Industrial Direct Contact RCL for PAHs.

NA Not analyzed.

PAH Polycyclic aromatic hydrocarbons.

Q Result is between the limit of detection and the limit of quantitation.

RCL Residual contaminant level.

REC Recognized environmental conditions.

WDNR Wisconsin Department of Natural Resources.

Table 3. Summary of Pre-Remediation Soil PAH Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	B27	B28	B30	B31	B33	B34	B35	B36
Sample Depth (feet)	2-4'	0-2'	2-4'	2-4'	0-2'	2/23/2004	2-4'	2-4'
Sample Date	02/23/04	02/19/04	02/18/04	02/23/04	02/24/04	2-4'	02/20/04	02/20/04
Area	Bldg 22	Bldg 31	Bldg 31	E of Bldg 32	Bldg 32	Bldg 35	Bldg 33	Bldg 33
REC	Diesel Eng. Foundation	Tracks, Machine Pits	Leaking Machine Pits	Foundation	Foundation	Foundation/Former Oil House	Diesel Eng. Foundation	Asbestos Use
1-Methylnaphthalene	<8.4	<8.1	<8.1	<8.3	<8.4	NA	<8.6	<8.2
2-Methylnaphthalene	<9	<8.7	<8.7	<8.9	<9	<130	<9.2	<8.7
Acenaphthene	<13	<13	<13	<13	<13	<150	<13	<13
Acenaphthylene	<22	<21	<21	<21	<22	<160	<22	<21
Anthracene	<13	<13	<13	<13	<13	<190	<13	<13
Benzo(a)anthracene	<7.2	<6.9	<7	<7.1	<7.2	<130	<7.4	<7
Benzo(a)pyrene	<7.2	<6.9	<7	<7.1	<7.2	<58	<7.4	<7
Benzo(b)fluoranthene	<7.8	<7.5	<7.5	<7.7	<7.8	<170	<8	<7.6
Benzo(g,h,i)perylene	<14	<14	<14	<14	<14	<160	<15	<14
Benzo(k)fluoranthene	<11	<10	<10	<11	<11	<130	<11	<10
Chrysene	<8.2	<8	<8	<8.2	<8.3	<130	<8.5	<8
Dibenzo(a,h)anthracene	<8.8	<8.6	<8.6	<8.7	<8.9	<70	<9.1	<8.6
Fluoranthene	<9.6	<9.2	<9.3	<9.5	<9.7	<150	<9.8	<9.3
Fluorene	<7.2	<6.9	<7	<7.1	<7.2	<180	<7.4	<7
Indeno(1,2,3-cd)pyrene	<13	<13	<13	<13	<13	<240	<13	<13
Naphthalene	<9	<8.7	<8.7	<8.9	<9	<150	<9.2	<8.7
Phenanthrene	<9.6	<9.2	<9.3	<9.5	<9.7	<180	<9.8	<9.3
Pyrene	<16	<15	<15	<15	<16	<160	<16	<15

All results are reported as micrograms per kilogram (µg/kg).

* Excavated as part of remediation activities.

BOLD Concentration exceeds the WDNR Proposed Groundwater Protection RCL for PAHs.

Italic Concentration exceeds the WDNR Proposed Non-Industrial Direct Contact RCL for PAHs.

Underline Concentration exceeds the WDNR Proposed Industrial Direct Contact RCL for PAHs.

NA Not analyzed.

PAH Polycyclic aromatic hydrocarbons.

Q Result is between the limit of detection and the limit of quantitation.

RCL Residual contaminant level.

REC Recognized environmental conditions.

WDNR Wisconsin Department of Natural Resources.

Table 3. Summary of Pre-Remediation Soil PAH Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	B37	B38	B39	B43	B46*	B47*
Sample Depth (feet)	2-4'	0-2'	0-2'	2-4'	0-2'	0-2'
Sample Date	02/20/04	02/19/04	02/19/04	02/23/04	02/18/04	02/18/04
Area	Bldg 33	N of Bldg 33	N of Bldg 35	E End Bldg 37	NE of Bldg 69	N of Bldg 69
REC	Asbestos Use	1,000 G Unk UST	7,200 G Unk UST	Mn Works	FO USTs	Former USTs and PCB Transformers
1-Methylnaphthalene	<8.7	21,000	<8.1	<8.2	170	250
2-Methylnaphthalene	<9.3	**21,000**	<8.7	<8.8	150	300
Acenaphthene	<14	1,100	<13	<13	160 Q	23 Q
Acenaphthylene	<22	440 Q	<21	<21	<100	<20
Anthracene	<14	480 Q	<13	<13	120 Q	71
Benzo(a)anthracene	<7.4	<130	<6.9	<7	*120*	*190*
Benzo(a)pyrene	<7.4	<130	<6.9	<7	*160*	*220*
Benzo(b)fluoranthene	<8.1	<140	<7.5	<7.6	*190*	*240*
Benzo(g,h,i)perylene	<15	<260	<14	<14	200 Q	91
Benzo(k)fluoranthene	<11	<200	<10	<11	170 Q	230
Chrysene	<8.5	210 Q	<8	<8.1	170	240
Dibenzo(a,h)anthracene	<9.2	<160	<8.6	<8.6	*60 Q*	*33*
Fluoranthene	<9.9	210 Q	<9.3	<9.3	130 Q	310
Fluorene	<7.4	2,500	<6.9	<7	36 Q	24
Indeno(1,2,3-cd)pyrene	<14	<240	<13	<13	*160 Q*	85
Naphthalene	<9.3	**2,900**	<8.7	<8.8	48 Q	74
Phenanthrene	<9.9	**3,700**	<9.3	<9.3	130 Q	390
Pyrene	<16	580 Q	<15	<15	230 Q	320

All results are reported as micrograms per kilogram (µg/kg).

* Excavated as part of remediation activities.

BOLD Concentration exceeds the WDNR Proposed Groundwater Protection RCL for PAHs.

Italic Concentration exceeds the WDNR Proposed Non-Industrial Direct Contact RCL for PAHs.

Underline Concentration exceeds the WDNR Proposed Industrial Direct Contact RCL for PAHs.

NA Not analyzed.

PAH Polycyclic aromatic hydrocarbons.

Q Result is between the limit of detection and the limit of quantitation.

RCL Residual contaminant level.

REC Recognized environmental conditions.

WDNR Wisconsin Department of Natural Resources.

Table 3. Summary of Pre-Remediation Soil PAH Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	B49	B50	B52	B53	B56	B57
Sample Depth (feet)	0-2'	0-2'	0-2'	2-4'	0-2'	0-2'
Sample Date	02/17/04	02/23/04	02/19/04	02/18/04	02/18/04	02/23/04
Area	N Property Border Historical	N of Bldg 42	W of Bldg 69 Oil in Basement/	N of Bldg 34 Historical Gasoline	N Parking Lot	N Parking Lot
REC	Operations	Fuel Oil AST	Property Boundary	Storage	Former Foundry	Former Foundry
1-Methylnaphthalene	<8.3	<8.2	130	<8.3	NA	NA
2-Methylnaphthalene	<8.9	<8.8	200	13 Q	<120	<130
Acenaphthene	<13	<13	<13	<13	<130	<150
Acenaphthylene	<21	<21	<22	<21	<150	<160
Anthracene	<13	19 Q	15 Q	<13	<180	<190
Benzo(a)anthracene	<7.1	49	23 Q	*95*	*450*	<130
Benzo(a)pyrene	<7.1	*48*	*21 Q*	*180*	*730*	<58
Benzo(b)fluoranthene	<7.7	42	16 Q	*210*	*1,300*	<170
Benzo(g,h,i)perylene	<14	30 Q	<15	160	710	<160
Benzo(k)fluoranthene	<11	44	18 Q	180	*1,100*	<130
Chrysene	<8.2	56	25 Q	140	840	<130
Dibenzo(a,h)anthracene	<8.7	*9.5 Q*	<9.1	*49*	*180 Q*	<70
Fluoranthene	<9.5	110	49	130	440 Q	<150
Fluorene	<7.1	<7	17 Q	<7.1	<160	<170
Indeno(1,2,3-cd)pyrene	<13	27 Q	<13	*150*	*690 Q*	<240
Naphthalene	<8.9	<8.8	22 Q	16 Q	<140	<150
Phenanthrene	<9.5	70	86	74	220 Q	<180
Pyrene	<15	94	57	120	580	<160

All results are reported as micrograms per kilogram (µg/kg).

*	Excavated as part of remediation activities.
BOLD	Concentration exceeds the WDNR Proposed Groundwater Protection RCL for PAHs.
Italic	Concentration exceeds the WDNR Proposed Non-Industrial Direct Contact RCL for PAHs.
Underline	Concentration exceeds the WDNR Proposed Industrial Direct Contact RCL for PAHs.
NA	Not analyzed.
PAH	Polycyclic aromatic hydrocarbons.
Q	Result is between the limit of detection and the limit of quantitation.
RCL	Residual contaminant level.
REC	Recognized environmental conditions.
WDNR	Wisconsin Department of Natural Resources.

Table 3. Summary of Pre-Remediation Soil PAH Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	B60	B62	B66
Sample Depth (feet)	4-6'	2-4'	2-4'
Sample Date	02/24/04	02/23/04	03/17/04
Area	N of Bldg 37 (E of track)	Bldg 23A	S of Bldg 21
REC	**275 g FO AST**	**Washwater UST**	**Fuel Oil UST**
1-Methylnaphthalene	<8.4	NA	<8.7
2-Methylnaphthalene	<9	<130	<9.3
Acenaphthene	<13	<150	<14
Acenaphthylene	<22	<160	<22
Anthracene	<13	<200	<14
Benzo(a)anthracene	<7.2	<130	<7.5
Benzo(a)pyrene	<7.2	<61	<7.5
Benzo(b)fluoranthene	<7.8	<180	<8.1
Benzo(g,h,i)perylene	<14	<170	<15
Benzo(k)fluoranthene	<11	<140	<11
Chrysene	<8.3	<130	<8.6
Dibenzo(a,h)anthracene	<8.9	<73	<9.2
Fluoranthene	<9.6	<160	<10
Fluorene	<7.2	<180	30
Indeno(1,2,3-cd)pyrene	<13	<250	<14
Naphthalene	<9	<160	<9.3
Phenanthrene	<9.6	<190	71
Pyrene	<16	<160	<16

All results are reported as micrograms per kilogram (µg/kg).

*	Excavated as part of remediation activities.
BOLD	Concentration exceeds the WDNR Proposed Groundwater Protection RCL for PAHs.
Italic	Concentration exceeds the WDNR Proposed Non-Industrial Direct Contact RCL for PAHs.
Underline	Concentration exceeds the WDNR Proposed Industrial Direct Contact RCL for PAHs.
NA	Not analyzed.
PAH	Polycyclic aromatic hydrocarbons.
Q	Result is between the limit of detection and the limit of quantitation.
RCL	Residual contaminant level.
REC	Recognized environmental conditions.
WDNR	Wisconsin Department of Natural Resources.

Table 4. Summary of Pre-Remediation Soil Metals and Cyanide Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	NR 720	NR 720	B4	B5		B6	B7
Sample Depth (feet)	Industrial	Non-Industrial	2-4'	0-2'	2-4'	2-4'	0-2'
Sample Date	RCL	RCL	02/18/04	02/20/04	02/20/04	02/18/04	02/23/04
Area			E side of Bldg 25 Test track	Washwater UST	Washwater UST	E side of Bldg 25 Test track excavation,	Central Bldg 24
REC			Excavation	E of Bldg 23A	E of Bldg 23A	Paint Booth	Paint Booth
Arsenic	1.6	0.039	**2.8**	NA	**2.7**	**3.2**	**3.1**
Barium	NE	NE	78	NA	29	NA	NA
Cadmium	510	8	0.098 Q	NA	0.18 Q	0.16 Q	0.18 QA
Chromium	NE	16,000	8.3	NA	9.6	NA	NA
Copper	NE	NE	8.6	NA	11	NA	NA
Lead	500	50	4.6	NA	5.5	7	11
Manganese	NE	NE	270	NA	290	NA	NA
Mercury	NE	NE	0.013	NA	0.015	NA	NA
Nickel	NE	NE	NA	NA	NA	NA	NA
Selenium	NE	NE	0.83	NA	1.4	NA	NA
Silver	NE	NE	<0.028	NA	0.031 Q	NA	NA
Zinc	NE	NE	30	NA	36	NA	NA
Cyanide, Total	NE	NE	NA	0.60 A	NA	NA	NA

All results are reported in milligrams per kilogram (mg/kg).

*	Excavated as part of remediation activities.
Bold	Concentration exceeds the NR 720 Industrial Direct Contact RCL.
Italic	Concentration exceeds the NR 720 Non-Industrial Direct Contact RCL.
A	Analyte was detected in the method blank.
E	Estimated concentration due to matrix interferences.
NA	Not analyzed.
NE	Not established.
Q	Result is between the limit of detection and the limit of quantitation.
RCL	Residual contaminant level.

Table 4. Summary of Pre-Remediation Soil Metals and Cyanide Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	B9	B10	B11	B12	B13	
Sample Depth (feet)	0-2'	2-4'	0-2'	0-2'	2-4'	12-14'
Sample Date	02/19/04	02/17/04	02/19/04	02/17/04	02/20/04	02/20/04
Area	Bldg 31, East of B28	S end Bldg 22 Paint Booth,	Bldg 21	Bldg 10 Paint & Oil Store,	Between Bldgs 17 & 19 Heat Treat, FO UST,	Between Bldgs 17 & 19 Heat Treat, FO UST,
REC	Machine Pit	Machine Pit	Paint Booth	Fuel Oil UST, Heat	CN Use	CN Use
Arsenic	**4.5**	**4.4**	**29**	**6.7**	**4.4**	NA
Barium	NA	NA	NA	740	65	NA
Cadmium	0.21 Q	0.26 Q	0.35	0.88	0.32	NA
Chromium	NA	NA	NA	36	22	NA
Copper	NA	NA	NA	67	NA	NA
Lead	9	9.8	12	*120*	22	NA
Manganese	NA	NA	NA	NA	NA	NA
Mercury	NA	NA	NA	0.062	0.0097	NA
Nickel	NA	NA	NA	42	NA	NA
Selenium	NA	NA	NA	1.1	1.2	NA
Silver	NA	NA	NA	1.1	0.037 Q	NA
Zinc	NA	NA	NA	130	NA	NA
Cyanide, Total	NA	NA	NA	1.1 A	NA	0.44 A

All results are reported in milligrams per kilogram (mg/kg).

* Excavated as part of remediation activities.

Bold Concentration exceeds the NR 720 Industrial Direct Contact RCL.

Italic Concentration exceeds the NR 720 Non-Industrial Direct Contact RCL.

A Analyte was detected in the method blank.

E Estimated concentration due to matrix interferences.

NA Not analyzed.

NE Not established.

Q Result is between the limit of detection and the limit of quantitation.

RCL Residual contaminant level.

Table 4. Summary of Pre-Remediation Soil Metals and Cyanide Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	B15	B18	B19	B20	B21	B22	B23
Sample Depth (feet)	2-4'	2-4'	0-2'	2-4'	0-2'	2-4'	0-2'
Sample Date	02/20/04	02/19/04	02/18/04	02/18/04	02/18/04	02/20/04	02/19/04
Area	Bldg 22	W end of Bldg 31	Bldg 31	Bldg 31	Bldg 29	Bldg 33	Bldg 29
REC	Diesel Eng. Foundation, Paint	Machinery/Pits	Former Foundations,	Former Foundations, Pits	Foundation, Machinery	Paint Booth	Foundation/Pits
Arsenic	**4.8**	**2.9**	**5.5 E**	**3.7**	**4.4**	**3.3**	**6.6**
Barium	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.34	0.19 Q	0.15 Q	0.16 Q	0.27	0.24	0.31
Chromium	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA
Lead	16	6.1	10	8.2	31	8.2	9.9
Manganese	NA	NA	NA	NA	NA	NA	NA
Mercury	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	NA
Selenium	NA	NA	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA
Cyanide, Total	NA	NA	NA	NA	NA	NA	NA

All results are reported in milligrams per kilogram (mg/kg).

* Excavated as part of remediation activities.

Bold Concentration exceeds the NR 720 Industrial Direct Contact RCL.

Italic Concentration exceeds the NR 720 Non-Industrial Direct Contact RCL.

A Analyte was detected in the method blank.

E Estimated concentration due to matrix interferences.

NA Not analyzed.

NE Not established.

Q Result is between the limit of detection and the limit of quantitation.

RCL Residual contaminant level.

Table 4. Summary of Pre-Remediation Soil Metals and Cyanide Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	B24	B26	B27	B28	B29	B30	B31
Sample Depth (feet)	2-4'	0-2'	0-2'	2-4'	0-2'	2-4'	2-4'
Sample Date	02/19/04	02/19/04	02/23/04	02/19/04	02/18/04	02/18/04	02/23/04
Area	Bldg 29	Bldg 21 Diesel Eng.	Bldg 22 Diesel Eng.	Bldg 31 Tracks,	Bldg 31 Leaking	Bldg 31 Leaking	E of Bldg 32
REC	Foundation	Foundation, Paint	Foundation	Machine Pits	Machine Pits	Machine Pits	Foundation
Arsenic	2.8	3.9	3.1	4	3.2	4	3.8
Barium	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.20 Q	0.41	0.16 QA	0.29	0.17 Q	0.18 Q	0.24 QA
Chromium	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA
Lead	6.9	10	16	9.5	8.6	11	10
Manganese	NA	NA	NA	NA	NA	NA	NA
Mercury	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	NA
Selenium	NA	NA	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA
Cyanide, Total	NA	NA	NA	NA	NA	NA	NA

All results are reported in milligrams per kilogram (mg/kg).

* Excavated as part of remediation activities.

Bold Concentration exceeds the NR 720 Industrial Direct Contact RCL.

Italic Concentration exceeds the NR 720 Non-Industrial Direct Contact RCL.

A Analyte was detected in the method blank.

E Estimated concentration due to matrix interferences.

NA Not analyzed.

NE Not established.

Q Result is between the limit of detection and the limit of quantitation.

RCL Residual contaminant level.

Table 4. Summary of Pre-Remediation Soil Metals and Cyanide Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	B32	B33	B34	B35	B38	B39	B41	B42
Sample Depth (feet)	2-4'	2-4'	2-4'	0-2'	0-2'	0-2'	0-2'	2-4'
Sample Date	02/18/04	02/24/04	02/23/04	02/20/04	02/19/04	02/19/04	02/19/04	02/24/04
Area	Bldg 32	Bldg 32	Bldg 35	Bldg 33	N of Bldg 33	N of Bldg 35	Bldg 35	Bldg 37
REC	Foundation	Foundation	Foundation, Former Oil House	Diesel Eng. Foundation	1,000 G UST	7,200 G Unk UST	Paint Shed	Paint Booth
Arsenic	3.7	4.7	3.7	8.2	8.6	4.5	3.4	2.6 A
Barium	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.17 Q	0.095 QA	0.11 QA	0.45	0.65	0.19 Q	0.15 Q	0.18 QA
Chromium	NA	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA	NA
Lead	8	8.3	9	22	*95*	12	26	7.9
Manganese	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	NA	NA	NA	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA	NA
Cyanide, Total	NA	NA	NA	NA	NA	NA	NA	NA

All results are reported in milligrams per kilogram (mg/kg).

* Excavated as part of remediation activities.

Bold Concentration exceeds the NR 720 Industrial Direct Contact RCL.

Italic Concentration exceeds the NR 720 Non-Industrial Direct Contact RCL.

A Analyte was detected in the method blank.

E Estimated concentration due to matrix interferences.

NA Not analyzed.

NE Not established.

Q Result is between the limit of detection and the limit of quantitation.

RCL Residual contaminant level.

Table 4. Summary of Pre-Remediation Soil Metals and Cyanide Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	B43		B44*	B45	B47*	B49	B50
Sample Depth (feet)	0-2'	10-12'	0-2'	0-2'	0-2'	2-4'	0-2'
Sample Date	02/23/04	02/23/04	02/23/04	02/23/04	02/18/04	02/17/04	02/23/04
Area	Bldg 37	Bldg 37	N of Bldg 42	N of Bldg 42	N of Bldg 69	N Property Border	N of Bldg 42
REC	Mn Works	Mn Works	Gas UST	Gas UST	Former USTs/PCB Transformers	Historical ops	Fuel Oil AST
Arsenic	3.5	NA	NA	NA	7.8	3.6	4.6
Barium	NA	NA	NA	NA	NA	NA	NA
Cadmium	<0.074 A	NA	NA	NA	0.67	0.19 Q	0.23 QA
Chromium	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA
Lead	9.7	NA	*57*	*120*	**910**	8.4	*100*
Manganese	330	NA	NA	NA	NA	NA	NA
Mercury	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	NA
Selenium	NA	NA	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA
Cyanide, Total	NA	<0.2 A	NA	NA	NA	NA	NA

All results are reported in milligrams per kilogram (mg/kg).

* Excavated as part of remediation activities.

Bold Concentration exceeds the NR 720 Industrial Direct Contact RCL.

Italic Concentration exceeds the NR 720 Non-Industrial Direct Contact RCL.

A Analyte was detected in the method blank.

E Estimated concentration due to matrix interferences.

NA Not analyzed.

NE Not established.

Q Result is between the limit of detection and the limit of quantitation.

RCL Residual contaminant level.

Table 4. Summary of Pre-Remediation Soil Metals and Cyanide Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	B52	B53	B55	B56	B57	B62	
Sample Depth (feet)	0-2'	2-4'	0-2'	2-4'	0-2'	2-4'	6-8'
Sample Date	02/19/04	02/18/04	02/18/04	02/18/04	02/23/04	02/23/04	02/23/04
Area	W of Bldg 69	N of Bldg 34	E of Bldg 69	N Parking Lot	N Parking Lot	Bldg 23A	Bldg 23A
REC	Oil in Basement /Property	Historical Gasoline Storage	Oil in Basement	Former Foundry	Former Foundry	Washwater UST	Washwater UST
Arsenic	**4.1**	NA	**26**	**3.8**	**5.3**	**4**	NA
Barium	NA	NA	NA	NA	NA	54	NA
Cadmium	0.28	NA	0.75	0.16 Q	0.24 QA	0.17 QA	NA
Chromium	NA	NA	NA	NA	NA	21	NA
Copper	17	NA	140	15	28	16	NA
Lead	23	*140*	*340*	9.6	15	14	NA
Manganese	NA	NA	NA	NA	NA	330	NA
Mercury	NA	NA	NA	NA	NA	0.011	NA
Nickel	NA	NA	NA	NA	NA	NA	NA
Selenium	NA	NA	NA	NA	NA	1.4	NA
Silver	NA	NA	NA	NA	NA	0.055 Q	NA
Zinc	78	NA	220	44	79	47	NA
Cyanide, Total	NA	NA	NA	NA	NA	NA	1.8

All results are reported in milligrams per kilogram (mg/kg).

* Excavated as part of remediation activities.

Bold Concentration exceeds the NR 720 Industrial Direct Contact RCL.

Italic Concentration exceeds the NR 720 Non-Industrial Direct Contact RCL.

A Analyte was detected in the method blank.

E Estimated concentration due to matrix interferences.

NA Not analyzed.

NE Not established.

Q Result is between the limit of detection and the limit of quantitation.

RCL Residual contaminant level.

Table 4. Summary of Pre-Remediation Soil Metals and Cyanide Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	GP-67	GP-68	GP-69	GP-70	GP-71	MW-2	B67
Sample Depth (feet)	0-2'	0-2'	0-2'	0-2'	0-2'	2-4'	2-4'
Sample Date	01/03/05	01/03/05	01/03/05	01/03/05	01/03/05	03/16/04	3/16/2005
Area	Gas UST	Gas UST	Gas UST	Gas UST	Gas UST	Gas UST	N of Bldg 69 Former USTs/PCB Transformers
REC	**N of Bldg 42**	**N of Bldg 42**	**N of Bldg 42**	**N of Bldg 42**	**N of Bldg 42**	**N of Bldg 42**	
Arsenic	NA	NA	NA	NA	NA	NA	NA
Barium	NA	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA	NA
Chromium	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA
Lead	7.3	6.1	5.8	5.6	8.6	*83*	15
Manganese	NA	NA	NA	NA	NA	NA	NA
Mercury	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	NA
Selenium	NA	NA	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA
Cyanide, Total	NA	NA	NA	NA	NA	NA	NA

All results are reported in milligrams per kilogram (mg/kg).

* Excavated as part of remediation activities.

Bold Concentration exceeds the NR 720 Industrial Direct Contact RCL.

Italic Concentration exceeds the NR 720 Non-Industrial Direct Contact RCL.

A Analyte was detected in the method blank.

E Estimated concentration due to matrix interferences.

NA Not analyzed.

NE Not established.

Q Result is between the limit of detection and the limit of quantitation.

RCL Residual contaminant level.

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Table 5. Summary of Pre-Remediation Soil PCB Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	B38	B47	B48	B55
Sample Depth (feet)	12-14'	16-18'	12-14'	12-14'
Sample Date	02/19/04	02/18/04	02/18/04	02/18/04
Area	N of Bldg 33	N of Bldg 69	N Property Border	E of Bldg 69
REC	1,000 G UST	Former USTs/PCB Transformers	Historical Operations	Oil in basement
Aroclor 1016	<26	<32	<27	<28
Aroclor 1221	<26	<32	<27	<28
Aroclor 1232	<26	<32	<27	<28
Aroclor 1242	<26	<32	<27	<28
Aroclor 1248	<26	<32	<27	<28
Aroclor 1254	<26	40 Q	<27	<28
Aroclor 1260	<26	<32	<27	<28
Total PCBs	<26	40 Q	<27	<28

All results are reported in micrograms per kilogram (µg/kg).

PCB Polychlorinated biphenyls.

Q Result is between the limit of detection and the limit of quantitation.

REC Recognized environmental condition.

Table 6. Summary of Pre-Remediation LNAPL Sample Analytical Results, Metso Minerals 3073 South Chase Avenue, Milwaukee, Wisconsin.

Product		Bldg 68
Sample Location	**B47**	**Sump**
VOCs		
1,2,4-Trimethylbenzene	380 Q	NA
DRO (mg/kg)	570,000	NA
PCBs		
Total PCBs	7,600	<2,600
Aroclor 1254	7,600	<2,600
Density (g/mL)	1 g/mL	NA
Pattern Match	Similar to Weathered No. 2 Fuel Oil	Similar to Weathered No. 2 Fuel Oil

All results are reported in micrograms per kilogram unless otherwise noted.

DRO	Diesel range organics.
g/mL	Grams per milliliter.
LNAPL	Light non-aqueous phase liquid.
mg/kg	Milligrams per kilogram.
NA	Not analyzed.
PCBs	Polychlorinated biphenyls.
Q	Result is between the limit of detection and the limit of quantitation.
VOCs	Volatile organic compounds.

Table 7. Summary of Pre- and Post Remediation Groundwater VOC Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well ID			B1	B2	B4	B5	B6	B7
Sample Date			02/20/04	02/20/04	02/18/04	02/20/04	02/17/04	02/24/04
Area			South of Building 20	Southern portion of Site	E side of Bldg 25	E of Bldg 23A	E side of Bldg 25 Test Track Excavation, Paint Booth	Central Bldg 24
REC	NR 140 Enforcement Standard	NR 140 Preventive Action Limit	2-20 K Fuel Oil UST	1 K Xylol UST	Test Track Excavation	Waste Coolant/ Washwater UST		Paint Booth
1,1,1-Trichloroethane	200	40	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9
1,1-Dichloroethane	850	85	<0.75	<0.75	<0.75	17	<0.75	<0.75
1,1-Dichloroethene	7	0.7	<0.57	<0.57	<0.57	0.61 Q	<0.57	<0.57
1,2-Dichloroethane	5	0.5	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
1,2,4-Trimethylbenzene	480 (a)	96 (a)	<0.97	<0.97	<0.97	3.7	<0.97	<0.97
1,3,5-Trimethylbenzene	480 (a)	96 (a)	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83
Benzene	5	0.5	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
Chloroethane	400	80	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97
Chloroform	6	0.6	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
cis-1,2-Dichloroethene	70	7	<0.83	<0.83	<0.83	150	<0.83	<0.83
Dichlorodifluoromethane	1,000	200	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99
Di-isopropyl ether	NE	NE	<0.76	<0.76	<0.76	<0.76	<0.76	<0.76
Ethylbenzene	700	140	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54
Isopropylbenzene	NE	NE	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59
Methylene chloride	5	0.5	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43
Methyl-tert-butyl-ether	60	12	<0.61	<0.61	<0.61	<0.61	<0.61	1.2 Q
Naphthalene	40	8	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74
n-Butylbenzene	NE	NE	<0.93	<0.93	<0.93	<0.93	<0.93	<0.93
n-Propylbenzene	NE	NE	<0.81	<0.81	<0.81	<0.81	<0.81	<0.81
sec-Butylbenzene	NE	NE	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89
Tetrachloroethene	5	0.5	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45
Toluene	1,000	200	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67
trans-1,2-Dichloroethene	100	20	<0.89	<0.89	<0.89	8.4	<0.89	<0.89
Trichloroethene	5	0.5	<0.48	<0.48	<0.48	0.97 Q	<0.48	<0.48
Vinyl chloride	0.2	0.02	<0.18	<0.18	<0.18	8	<0.18	<0.18
Xylene, o	10,000 (a)	1,000 (a)	<0.83	<0.83	<0.83	0.93 Q	<0.83	<0.83
Xylenes, m + p	10,000 (a)	1,000 (a)	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8

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Table 7. Summary of Pre- and Post Remediation Groundwater VOC Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well ID	B10	B11	B12	B13	B14	B15	B16	B18
Sample Date	02/18/04	02/19/04	02/17/04	02/23/04	02/18/04	02/23/04	02/25/04	02/19/04
Area	S end Bldg 22	Bldg 21	Bldg 10	Between Bldgs 17 & 19	N of Bldg 34	Bldg 22	E Bldg 28	W end of Bldg 31
REC	Paint Booth, Machine Pit	Paint Booth	Paint & Oil Store, Fuel Oil UST, Heat Treat	Heat Treat, Fuel Oil UST, CN Use	Fuel Oil UST, Existing AST	Diesel Eng. Foundation, Paint Booth	Foundation	Machinery/ Pits
1,1,1-Trichloroethane	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9 &	<0.9
1,1-Dichloroethane	<0.75	7.5	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75
1,1-Dichloroethene	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57
1,2-Dichloroethane	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36 &	<0.36
1,2,4-Trimethylbenzene	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97
1,3,5-Trimethylbenzene	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83
Benzene	<0.41	<0.41	<0.41	<0.41	*3.2*	<0.41	<0.41	<0.41
Chloroethane	<0.97	14	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97
Chloroform	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
cis-1,2-Dichloroethene	<0.83	*10*	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83
Dichlorodifluoromethane	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	1.1 Q
Di-isopropyl ether	<0.76	<0.76	<0.76	<0.76	<0.76	<0.76	<0.76	<0.76
Ethylbenzene	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54
Isopropylbenzene	<0.59	<0.59	<0.59	<0.59	27	<0.59	<0.59	<0.59
Methylene chloride	<0.43	*0.86 Q*	<0.43	<0.43	<0.43	<0.43	*0.84 Q*	<0.43
Methyl-tert-butyl-ether	<0.61	1.8 Q	<0.61	1.5 Q	2.8	7.6	<0.61	<0.61
Naphthalene	<0.74	<0.74	<0.74	<0.74	*19*	<0.74	<0.74	<0.74
n-Butylbenzene	<0.93	<0.93	<0.93	<0.93	18	<0.93	<0.93	<0.93
n-Propylbenzene	<0.81	<0.81	<0.81	<0.81	46	<0.81	<0.81	<0.81
sec-Butylbenzene	<0.89	<0.89	<0.89	<0.89	14	<0.89	<0.89	<0.89
Tetrachloroethene	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45
Toluene	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67
trans-1,2-Dichloroethene	<0.89	0.92 Q	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89
Trichloroethene	<0.48	<0.48	*0.59 Q*	<0.48	<0.48	<0.48	<0.48	<0.48
Vinyl chloride	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18
Xylene, o	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83
Xylenes, m + p	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8

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Table 7. Summary of Pre- and Post Remediation Groundwater VOC Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well ID	B19	B20	B23	B24	B26	B27	B28
Sample Date	02/20/04	02/18/04	02/19/04	02/19/04	02/23/04	02/24/04	02/19/04
Area	Bldg 31 Former Foundations,	Bldg 31 Former Foundations,	Bldg 29 Foundation/	Bldg 29	Bldg 21 Diesel Eng. Foundation,	Bldg 22 Diesel Eng.	Bldg 31 Tracks,
REC	Pits	Pits	Pits	Foundation	Paint Booth	Foundation	Machine Pits
1,1,1-Trichloroethane	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9
1,1-Dichloroethane	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75
1,1-Dichloroethene	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57
1,2-Dichloroethane	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
1,2,4-Trimethylbenzene	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97
1,3,5-Trimethylbenzene	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83
Benzene	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
Chloroethane	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97
Chloroform	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
cis-1,2-Dichloroethene	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83
Dichlorodifluoromethane	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99
Di-isopropyl ether	<0.76	<0.76	<0.76	<0.76	<0.76	<0.76	<0.76
Ethylbenzene	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54
Isopropylbenzene	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59
Methylene chloride	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43
Methyl-tert-butyl-ether	2.1	0.97 Q	<0.61	0.68 Q	<0.61	4	0.76 Q
Naphthalene	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74
n-Butylbenzene	<0.93	<0.93	<0.93	<0.93	<0.93	<0.93	<0.93
n-Propylbenzene	<0.81	<0.81	<0.81	<0.81	<0.81	<0.81	<0.81
sec-Butylbenzene	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89
Tetrachloroethene	<0.45	<0.45	<0.45	<0.45	<0.45	*1.3 Q*	<0.45
Toluene	<0.67	<0.67	0.81 Q	<0.67	<0.67	<0.67	<0.67
trans-1,2-Dichloroethene	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89
Trichloroethene	<0.48	<0.48	<0.48	<0.48	<0.48	*1.6*	<0.48
Vinyl chloride	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18
Xylene, o	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83
Xylenes, m + p	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8

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Table 7. Summary of Pre- and Post Remediation Groundwater VOC Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well ID	B29	B30	B31	B32	B34	B35	B37	B38	B41
Sample Date	02/18/04	02/18/04	02/24/04	02/18/04	02/24/04	02/23/04	02/23/04	02/20/04	02/20/04
Area	Bldg 31	Bldg 31	E of Bldg 32	Bldg 32	Bldg 35	Bldg 33	Bldg 33	N of Bldg 33	Bldg 35
REC	Leaking Machine Pits	Leaking Machine Pits	Foundation	Foundation	Foundation, Former Oil House	Diesel Eng. Foundatio	Asbestos Use	1 K Unk UST	Paint Shed
1,1,1-Trichloroethane	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9
1,1-Dichloroethane	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75	1.2 Q	1.3 Q	<0.75
1,1-Dichloroethene	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57
1,2-Dichloroethane	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	*3.5*	<0.36
1,2,4-Trimethylbenzene	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97
1,3,5-Trimethylbenzene	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83
Benzene	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	**22**	<0.41
Chloroethane	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97	6.7	<0.97
Chloroform	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
cis-1,2-Dichloroethene	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	*12*	<0.83	<0.83
Dichlorodifluoromethane	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99
Di-isopropyl ether	<0.76	<0.76	<0.76	<0.76	<0.76	<0.76	<0.76	<0.76	<0.76
Ethylbenzene	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	3	<0.54
Isopropylbenzene	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	<0.59	21	<0.59
Methylene chloride	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43
Methyl-tert-butyl-ether	0.94 Q	1.1 Q	<0.61	<0.61	3.8	2.7	0.82 Q	<0.61	<0.61
Naphthalene	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	4.5	<0.74
n-Butylbenzene	<0.93	<0.93	<0.93	<0.93	<0.93	<0.93	<0.93	11	<0.93
n-Propylbenzene	<0.81	<0.81	<0.81	<0.81	<0.81	<0.81	<0.81	26	<0.81
sec-Butylbenzene	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	9.5	<0.89
Tetrachloroethene	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45
Toluene	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	0.92 Q	<0.67	<0.67
trans-1,2-Dichloroethene	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	1.1 Q	<0.89	<0.89
Trichloroethene	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	*0.79 Q*	<0.48	<0.48
Vinyl chloride	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	**2.8**	<0.18	<0.18
Xylene, o	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83
Xylenes, m + p	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8

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Table 7. Summary of Pre- and Post Remediation Groundwater VOC Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well ID	B42	B45	B46	B48	B49	B50	B52	B53
Sample Date	02/24/04	02/24/04	02/18/04	02/17/04	02/17/04	02/23/04	02/19/04	02/18/04
Area	Bldg 37	N of Bldg 42	NE of Bldg 69	N Property Border	N Property Border	N of Bldg 42	W of Bldg 69 Oil in basement/ Property boundary	N of Bldg 34 Historical Gasoline Storage
REC	Paint Booth	Gas UST	Fuel Oil USTs	Historical Ops	Historical Ops	Fuel Oil AST		
1,1,1-Trichloroethane	<0.9	<2.2	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9
1,1-Dichloroethane	<0.75	<1.9	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75
1,1-Dichloroethene	<0.57	<1.4	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57
1,2-Dichloroethane	<0.36	**9.9**	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
1,2,4-Trimethylbenzene	<0.97	<2.4	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97
1,3,5-Trimethylbenzene	<0.83	<2.1	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83
Benzene	<0.41	**25**	*1.6*	<0.41	<0.41	<0.41	<0.41	<0.41
Chloroethane	<0.97	<2.4	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97
Chloroform	<0.37	<0.92	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
cis-1,2-Dichloroethene	<0.83	<2.1	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83
Dichlorodifluoromethane	<0.99	<2.5	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99
Di-isopropyl ether	<0.76	6.7	<0.76	<0.76	<0.76	<0.76	<0.76	<0.76
Ethylbenzene	<0.54	<1.4	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54
Isopropylbenzene	<0.59	<1.5	13	<0.59	<0.59	<0.59	<0.59	33
Methylene chloride	<0.43	<1.1	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43
Methyl-tert-butyl-ether	<0.61	**310**	<0.61	<0.61	<0.61	<0.61	<0.61	<0.61
Naphthalene	<0.74	<1.8	3.2	1.3 Q	<0.74	<0.74	<0.74	<0.74
n-Butylbenzene	<0.93	<2.3	12	<0.93	<0.93	<0.93	<0.93	22
n-Propylbenzene	<0.81	<2	27	<0.81	<0.81	<0.81	<0.81	40
sec-Butylbenzene	<0.89	<2.2	9.4	<0.89	<0.89	<0.89	<0.89	18
Tetrachloroethene	<0.45	<1.1	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45
Toluene	<0.67	<1.7	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67
trans-1,2-Dichloroethene	<0.89	<2.2	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89
Trichloroethene	<0.48	<1.2	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48
Vinyl chloride	<0.18	<0.45	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18
Xylene, o	<0.83	<2.1	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83
Xylenes, m + p	<1.8	<4.5	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8

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Table 7. Summary of Pre- and Post Remediation Groundwater VOC Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well ID	B56	B57	B59	B60	B61	B63	B64	B66
Sample Date	02/17/04	02/23/04	02/23/04	02/24/04	03/18/04	03/18/04	03/18/04	03/18/04
Area	N Parking Lot	N Parking Lot	S. of Bldg 23A	N of Bldg 37 (E of	N of Bldg 69 Former USTs/	SE of Bldg 23A	NW of Bldg 42	S of Bldg 21
REC	Former Foundry	Former Foundry	Former Drum Storage	275 G Fuel Oil AST	PCB Transformers	Waste Coolant/ Washwaster UST	Gas UST	Fuel Oil UST
1,1,1-Trichloroethane	<0.9	<0.9	<0.9	<0.9	<0.9 M	<0.9 M	<90 M	<0.9 M
1,1-Dichloroethane	<0.75	<0.75	<0.75	<0.75	<0.75 M	<0.75 M	<75 M	<0.75 M
1,1-Dichloroethene	<0.57	<0.57	<0.57	<0.57	<0.57 M	<0.57 M	<57 M	<0.57 M
1,2-Dichloroethane	<0.36	<0.36	<0.36	<0.36	<0.36 M	<0.36 M	<36 M	<0.36 M
1,2,4-Trimethylbenzene	<0.97	<0.97	<0.97	<0.97	<0.97 M	<0.97 M	**3,300 M**	<0.97 M
1,3,5-Trimethylbenzene	<0.83	<0.83	<0.83	<0.83	<0.83 M	<0.83 M	**1,100 M**	<0.83 M
Benzene	<0.41	<0.41	<0.41	<0.41	<0.41 M	<0.41 M	**7,000 M**	*0.51 Q,M*
Chloroethane	<0.97	<0.97	<0.97	<0.97	<0.97 M	<0.97 M	<97 M	<0.97 M
Chloroform	<0.37	<0.37	<0.37	<0.37	<0.37 M	<0.37 M	<37 M	<0.37 M
cis-1,2-Dichloroethene	<0.83	<0.83	<0.83	<0.83	<0.83 M	<0.83 M	<83 M	<0.83 M
Dichlorodifluoromethane	<0.99	<0.99	<0.99	<0.99	<0.99 M	<0.99 M	<99 M	<0.99 M
Di-isopropyl ether	<0.76	<0.76	<0.76	<0.76	<0.76 M	<0.76 M	<76 M	<0.76 M
Ethylbenzene	<0.54	<0.54	<0.54	<0.54	<0.54 M	<0.54 M	**2,400 M**	<0.54 M
Isopropylbenzene	<0.59	<0.59	<0.59	<0.59	<0.59 M	<0.59 M	130 QM	<0.59 M
Methylene chloride	<0.43	<0.43	<0.43	<0.43	<0.43 M	<0.43 M	<43 M	<0.43 M
Methyl-tert-butyl-ether	<0.61	<0.61	<0.61	<0.61	<0.61 M	<0.61 M	<61 M	<0.61 M
Naphthalene	<0.74	<0.74	<0.74	<0.74	<0.74 M	<0.74 M	**610 M**	<0.74 M
n-Butylbenzene	<0.93	<0.93	<0.93	<0.93	<0.93 M	<0.93 M	280 QM	<0.93 M
n-Propylbenzene	<0.81	<0.81	<0.81	<0.81	<0.81 M	<0.81 M	470 M	<0.81 M
sec-Butylbenzene	<0.89	<0.89	<0.89	<0.89	<0.89 M	<0.89 M	<89 M	<0.89 M
Tetrachloroethene	<0.45	<0.45	<0.45	<0.45	<0.45 M	<0.45 M	<45 M	<0.45 M
Toluene	<0.67	<0.67	<0.67	<0.67	<0.67 M	<0.67 M	**13,000 M**	1.0 QM
trans-1,2-Dichloroethene	<0.89	<0.89	<0.89	<0.89	<0.89 M	<0.89 M	<89 M	<0.89 M
Trichloroethene	<0.48	<0.48	<0.48	<0.48	<0.48 M	<0.48 M	<48 M	<0.48 M
Vinyl chloride	<0.18	<0.18	<0.18	<0.18	<0.18 M	<0.18 M	<18 M	<0.18 M
Xylene, o	<0.83	0.96 Q	<0.83	<0.83	<0.83 M	<0.83 M	*2,700 M*	<0.83 M
Xylenes, m + p	<1.8	<1.8	<1.8	<1.8	<1.8 M	<1.8 M	*7,200 M*	<1.8 M

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Table 7. Summary of Pre- and Post Remediation Groundwater VOC Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well ID	GP-67	GP-69	GP-70	GP-71	EW-1			EW-2		
Sample Date	01/03/05	01/03/05	01/03/05	01/12/05	01/26/05	10/14/05	01/20/06	01/27/05	10/14/05	01/18/06
Area	Area 2	Area 2	Area 2	Area 2	E Bldg 69	E Bldg 69	E Bldg 69	N Bldg 69	N Bldg 69	N Bldg 69
REC					Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST
1,1,1-Trichloroethane	NA	NA	NA	NA	<0.9	NA	NA	<0.9	NA	NA
1,1-Dichloroethane	NA	NA	NA	NA	<0.75	NA	NA	<0.75	NA	NA
1,1-Dichloroethene	NA	NA	NA	NA	<0.57	NA	NA	<0.57	NA	NA
1,2-Dichloroethane	NA	NA	NA	NA	<0.36	NA	NA	<0.36	NA	NA
1,2,4-Trimethylbenzene	*230 M*	<0.39	<0.39	<0.39	<0.97	<0.25 Q	<1.2 A-0	<0.97	<0.25 Q	<0.25 ,QU
1,3,5-Trimethylbenzene	56 M	<0.4	<0.4	<0.4	<0.83	<0.19 Q	<0.95 A-0	<0.83	<0.19 Q	<0.19 ,QU
Benzene	**2,000 M**	*2.4*	0.31 Q	<0.14	0.45 Q	*0.65 Q,J*	<1.2 A-0	<0.41	<0.25 Q	<0.25 ,QU
Chloroethane	NA	NA	NA	NA	<0.97	NA	NA	<0.97	NA	NA
Chloroform	NA	NA	NA	NA	<0.37	NA	NA	<0.37	NA	NA
cis-1,2-Dichloroethene	NA	NA	NA	NA	<0.83	NA	NA	<0.83	NA	NA
Dichlorodifluoromethane	NA	NA	NA	NA	<0.99	NA	NA	<0.99	NA	NA
Di-isopropyl ether	NA	NA	NA	NA	<0.76	NA	NA	<0.76	NA	NA
Ethylbenzene	*470 M*	<0.4	<0.4	<0.4	<0.54	<0.22 Q	<1.1 A-0	<0.54	<0.22 Q	<0.22 ,QU
Isopropylbenzene	NA	NA	NA	NA	15	NA	NA	0.90 Q	NA	NA
Methylene chloride	NA	NA	NA	NA	<0.43	NA	NA	<0.43	NA	NA
Methyl-tert-butyl-ether	12 QM	2	<0.36	<0.36	<0.61	<0.23 Q	<1.2 A-0	<0.61	<0.23 Q	<0.23 ,QU
Naphthalene	NA	NA	NA	NA	4.7	NA	NA	<0.74	NA	NA
n-Butylbenzene	NA	NA	NA	NA	6.6	NA	NA	<0.93	NA	NA
n-Propylbenzene	NA	NA	NA	NA	17	NA	NA	1.1 Q	NA	NA
sec-Butylbenzene	NA	NA	NA	NA	8	NA	NA	<0.89	NA	NA
Tetrachloroethene	NA	NA	NA	NA	<0.45	NA	NA	<0.45	NA	NA
Toluene	*460 M*	0.74 Q	0.67 Q	<0.36	<0.67	<0.11 Q	<0.55 A-0	<0.67	<0.11 Q	0.14 QU,J
trans-1,2-Dichloroethene	NA	NA	NA	NA	<0.89	NA	NA	<0.89	NA	NA
Trichloroethene	NA	NA	NA	NA	<0.48	NA	NA	<0.48	NA	NA
Vinyl chloride	NA	NA	NA	NA	<0.18	NA	NA	<0.18	NA	NA
Xylene, o	520 M	<0.36	<0.36	<0.36	<0.83	NA	NA	<0.83	NA	NA
Xylenes, m + p	*1,300 M*	<0.74	<0.74	<0.74	<1.8	NA	NA	<1.8	NA	NA

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Table 7. Summary of Pre- and Post Remediation Groundwater VOC Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well ID	MW-1				MW-2			
Sample Date	03/24/04	01/26/05	10/14/05	01/20/06	03/24/04	01/26/05	10/14/05	01/20/06
Area	Within Bldg 25	Within Bldg 25	Within Bldg 25	Within Bldg 25	N of Bldg 42	N of Bldg 42	N of Bldg 42	N of Bldg 42
REC	Waste Coolant/ Washwater UST	Waste Coolant/ Washwater UST	Waste Coolant/ Washwater UST	Waste Coolant/ Washwater UST	Gas UST	Gas UST	Gas UST	Gas UST
1,1,1-Trichloroethane	<0.9	NA	<0.50	<0.50	<0.9	NA	NA	NA
1,1-Dichloroethane	<0.75	NA	<0.50	<0.50	<0.75	NA	NA	NA
1,1-Dichloroethene	<0.57	NA	<0.50	<0.50	<0.57	NA	NA	NA
1,2-Dichloroethane	<0.36	NA	<0.50	<0.50	<0.36	NA	NA	NA
1,2,4-Trimethylbenzene	<0.97	<0.39	<0.20	<0.20	<0.97	<0.39	<0.25	<0.25
1,3,5-Trimethylbenzene	<0.83	<0.4	<0.20	<0.20	<0.83	<0.4	<0.19	<0.19
Benzene	<0.41	<0.14	<0.20	<0.20	<0.41	<0.14	<0.25	<0.25
Chloroethane	<0.97	NA	<1.0	<1.0	<0.97	NA	NA	NA
Chloroform	<0.37	NA	<0.20	<0.20	<0.37	NA	NA	NA
cis-1,2-Dichloroethene	<0.83	NA	<0.50	<0.50	<0.83	NA	NA	NA
Dichlorodifluoromethane	<0.99	NA	<0.50	<0.50	<0.99	NA	NA	NA
Di-isopropyl ether	<0.76	NA	NA	NA	<0.76	NA	NA	NA
Ethylbenzene	<0.54	<0.4	<0.50	<0.50	<0.54	<0.4	<0.22	<0.22
Isopropylbenzene	<0.59	NA	<0.20	<0.20	<0.59	NA	NA	NA
Methylene chloride	<0.43	NA	<1.0	<1.0	<0.43	NA	NA	NA
Methyl-tert-butyl-ether	<0.61	<0.36	<0.50	<0.50	<0.61	<0.36	<0.23	<0.23
Naphthalene	<0.74	NA	<0.25	<0.25	<0.74	NA	NA	NA
n-Butylbenzene	<0.93	NA	<0.20	<0.20	<0.93	NA	NA	NA
n-Propylbenzene	<0.81	NA	<0.50	<0.50	<0.81	NA	NA	NA
sec-Butylbenzene	<0.89	NA	<0.25	<0.25	<0.89	NA	NA	NA
Tetrachloroethene	<0.45	NA	<0.50	<0.50	<0.45	NA	NA	NA
Toluene	<0.67	<0.36	<0.20	<0.20	<0.67	<0.36	<0.11	<0.11
trans-1,2-Dichloroethene	<0.89	NA	<0.50	<0.50	<0.89	NA	NA	NA
Trichloroethene	<0.48	NA	<0.20	<0.20	<0.48	NA	NA	NA
Vinyl chloride	<0.18	NA	<0.20	<0.20	<0.18	NA	NA	NA
Xylene, o	<0.83	<0.36	NA	NA	<0.83	<0.36	NA	NA
Xylenes, m + p	<1.8	<0.74	NA	NA	<1.8	<0.74	NA	NA

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Table 7. Summary of Pre- and Post Remediation Groundwater VOC Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well ID	MW-3			MW-4				MW-5		
Sample Date	03/24/04	10/14/05	01/20/06	03/24/04	01/26/05	10/14/05	01/20/06	01/26/05	10/14/05	01/20/06
Area	N of Bldg 34	N of Bldg 34	N of Bldg 34	N of Bldg 69 Former USTs/PCB Transformers	N of Bldg 69 Former USTs/PCB Transformers	N of Bldg 69 Former USTs/PCB Transformers	N of Bldg 69 Former USTs/PCB Transformers	W of Bldg 69	W of Bldg 69	W of Bldg 69
REC	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST					Fuel Oil UST	Fuel Oil UST	Fuel Oil UST
1,1,1-Trichloroethane	<0.9	NA	NA	<0.9	NA	NA	NA	<0.9	NA	NA
1,1-Dichloroethane	<0.75	NA	NA	<0.75	NA	NA	NA	<0.75	NA	NA
1,1-Dichloroethene	<0.57	NA	NA	<0.57	NA	NA	NA	<0.57	NA	NA
1,2-Dichloroethane	<0.36	NA	NA	<0.36	NA	NA	NA	<0.36	NA	NA
1,2,4-Trimethylbenzene	<0.97	<0.25	<0.25	<0.97	<0.39	<0.25	<1.0 A-0	<0.97	<0.25	<0.25
1,3,5-Trimethylbenzene	<0.83	<0.19	<0.19	<0.83	<0.4	<0.19	<0.76 A-0	<0.83	<0.19	<0.19
Benzene	<0.41	<0.25	<0.25	<0.41	<0.14	<0.25	<1.0 A-0	<0.41	<0.25	<0.25
Chloroethane	<0.97	NA	NA	<0.97	NA	NA	NA	<0.97	NA	NA
Chloroform	<0.37	NA	NA	<0.37	NA	NA	NA	<0.37	NA	NA
cis-1,2-Dichloroethene	<0.83	NA	NA	<0.83	NA	NA	NA	<0.83	NA	NA
Dichlorodifluoromethane	<0.99	NA	NA	<0.99	NA	NA	NA	<0.99	NA	NA
Di-isopropyl ether	<0.76	NA	NA	<0.76	NA	NA	NA	<0.76	NA	NA
Ethylbenzene	<0.54	<0.22	<0.22	<0.54	<0.4	<0.22	<0.88 A-0	<0.54	<0.22	<0.22
Isopropylbenzene	<0.59	NA	NA	1.6 Q	NA	NA	NA	<0.59	NA	NA
Methylene chloride	<0.43	NA	NA	<0.43	NA	NA	NA	<0.43	NA	NA
Methyl-tert-butyl-ether	<0.61	<0.23	<0.23	<0.61	<0.36	<0.23	<0.92 A-0	<0.61	<0.23	<0.23
Naphthalene	<0.74	NA	NA	<0.74	NA	NA	NA	<0.74	NA	NA
n-Butylbenzene	<0.93	NA	NA	<0.93	NA	NA	NA	<0.93	NA	NA
n-Propylbenzene	<0.81	NA	NA	1.5 Q	NA	NA	NA	<0.81	NA	NA
sec-Butylbenzene	<0.89	NA	NA	<0.89	NA	NA	NA	<0.89	NA	NA
Tetrachloroethene	<0.45	NA	NA	<0.45	NA	NA	NA	<0.45	NA	NA
Toluene	<0.67	<0.11	<0.11	<0.67	<0.36	<0.11	<0.44 A-0	<0.67	<0.11	<0.11
trans-1,2-Dichloroethene	<0.89	NA	NA	<0.89	NA	NA	NA	<0.89	NA	NA
Trichloroethene	<0.48	NA	NA	<0.48	NA	NA	NA	<0.48	NA	NA
Vinyl chloride	<0.18	NA	NA	<0.18	NA	NA	NA	<0.18	NA	NA
Xylene, o	<0.83	NA	NA	<0.83	<0.36	NA	NA	<0.83	NA	NA
Xylenes, m + p	<1.8	NA	NA	<1.8	<0.74	NA	NA	<1.8	NA	NA

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Table 7. Summary of Pre- and Post Remediation Groundwater VOC Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well ID	MW-6		MW-7		MW-8		MW-9		MW-10
Sample Date	10/14/05	01/20/06	10/14/05	01/20/06	10/14/05	01/20/06	10/14/05	01/20/06	10/14/05
Area	N of Bldg 42	N of Bldg 42	N of Bldg 42	N of Bldg 42	W of Bldg 69	W of Bldg 69	N of Bldg 69	N of Bldg 69	E of Bldg 24
REC	Gas UST	Gas UST	Gas UST	Gas UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Waste Coolant/ Washwater UST
1,1,1-Trichloroethane	<0.50	NA	<0.50	NA	6.8	5.3	<0.50	NA	<0.50
1,1-Dichloroethane	<0.50	NA	<0.50	NA	<0.50	<0.50	<0.50	NA	<0.50
1,1-Dichloroethene	<0.50	NA	<0.50	NA	<0.50	<0.50	<0.50	NA	<0.50
1,2-Dichloroethane	<0.50	NA	<0.50	NA	<0.50	<0.50	<0.50	NA	<0.50
1,2,4-Trimethylbenzene	<0.20	<0.25	<0.20	<0.50 A-0	<0.20	<0.20	<0.20	<1.0 A-0	<0.20
1,3,5-Trimethylbenzene	<0.20	<0.19	<0.20	<0.38 A-0	<0.20	<0.20	<0.20	<0.76 A-0	<0.20
Benzene	<0.20	<0.25	<0.20	<0.50 A-0	<0.20	<0.20	<0.20	<1.0 A-0	<0.20
Chloroethane	<1.0	NA	<1.0	NA	<1.0	<1.0	<1.0	NA	<1.0
Chloroform	<0.20	NA	<0.20	NA	<0.20	<0.20	<0.20	NA	0.3 J
cis-1,2-Dichloroethene	<0.50	NA	<0.50	NA	<0.50	<0.50	<0.50	NA	<0.50
Dichlorodifluoromethane	<0.50	NA	<0.50	NA	<0.50	<0.50	<0.50	NA	<0.50
Di-isopropyl ether	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	<0.50	<0.22	<0.50	<0.44 A-0	<0.50	<0.50	<0.50	<0.88 A-0	<0.50
Isopropylbenzene	<0.20	NA	<0.20	NA	<0.20	<0.20	<0.20	NA	<0.20
Methylene chloride	<1.0	NA	<1.0	NA	<1.0	<1.0	<1.0	NA	<1.0 C
Methyl-tert-butyl-ether	<0.50	<0.23	<0.50	<0.46 A-0	<0.50	<0.50	<0.50	<0.92 A-0	<0.50
Naphthalene	<0.25	NA	<0.25	NA	<0.25	<0.25	<0.25	NA	<0.25
n-Butylbenzene	<0.20	NA	<0.20	NA	<0.20	<0.20	<0.20	NA	<0.20
n-Propylbenzene	<0.50	NA	<0.50	NA	<0.50	<0.50	<0.50	NA	<0.50
sec-Butylbenzene	<0.25	NA	<0.25	NA	<0.25	<0.25	<0.25	NA	<0.25
Tetrachloroethene	<0.50	NA	<0.50	NA	<0.50	<0.50	<0.50	NA	<0.50
Toluene	<0.20	<0.11	<0.20	<0.22 A-0	<0.20	<0.20	<0.20	<0.44 A-0	<0.20
trans-1,2-Dichloroethene	<0.50	NA	<0.50	NA	<0.50	<0.50	<0.50	NA	<0.50
Trichloroethene	<0.20	NA	<0.20	NA	<0.20	<0.20	<0.20	NA	<0.20
Vinyl chloride	<0.20	NA	<0.20	NA	<0.20	<0.20	<0.20	NA	<0.20
Xylene, o	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes, m + p	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Table 7. Summary of Pre- and Post Remediation Groundwater VOC Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well ID	MW-10 (continued)	MW-11	
Sample Date	01/20/06	10/14/05	01/20/06
Area	E of Bldg 24	N of Bldg 69	N of Bldg 69
REC	Waste Coolant/Washwater UST	Fuel Oil UST	Fuel Oil UST
1,1,1-Trichloroethane	<0.50	<0.50	NA
1,1-Dichloroethane	0.51 J	<0.50	NA
1,1-Dichloroethene	<0.50	<0.50	NA
1,2-Dichloroethane	<0.50	<0.50	NA
1,2,4-Trimethylbenzene	<0.20	<0.20	<1.0 A-0
1,3,5-Trimethylbenzene	<0.20	<0.20	<0.76 A-0
Benzene	<0.20	<0.20	*2.2 A-01*
Chloroethane	<1.0	<1.0	NA
Chloroform	0.33 J	<0.20	NA
cis-1,2-Dichloroethene	<0.50	<0.50	NA
Dichlorodifluoromethane	<0.50	<0.50	NA
Di-isopropyl ether	NA	NA	NA
Ethylbenzene	<0.50	<0.50	<0.88 A-0
Isopropylbenzene	<0.20	<0.20	NA
Methylene chloride	<1.0	<1.0	NA
Methyl-tert-butyl-ether	<0.50	<0.50	<0.92 A-0
Naphthalene	<0.25	<0.25	NA
n-Butylbenzene	<0.20	<0.20	NA
n-Propylbenzene	<0.50	<0.50	NA
sec-Butylbenzene	<0.25	<0.25	NA
Tetrachloroethene	<0.50	<0.50	NA
Toluene	<0.20	<0.20	<0.48 A-0
trans-1,2-Dichloroethene	<0.50	<0.50	NA
Trichloroethene	<0.20	<0.20	NA
Vinyl chloride	<0.20	<0.20	NA
Xylene, o	NA	NA	NA
Xylenes, m + p	NA	NA	NA

Footnotes on Page 12.

Table 7. Summary of Pre- and Post Remediation Groundwater VOC Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

All results are in micrograms per liter (µg/L).

(a)	Add isomers together before comparing to criteria.
Italic	Concentration exceeds the WDNR NR 140 Preventive Action Limit.
BOLD	Concentration exceeds the WDNR NR 140 Enforcement Standard.
A-O	Foaming agent present.
A-O1	Foaming agent present.
J	Concentration was reported between method detection limit and limit of quantification.
M	Sample pH is greater than 2.
NA	Not analyzed.
NE	Not established.
Q	Result is between the limit of detection and the limit of quantitation.
QU	Unquantitaed hydrocarbons present in the sample outside of the reported carbon range.
REC	Recognized environmental condition.
VOC	Volatile organic compounds.
WDNR	Wisconsin Department of Natural Resources.

Table 8. Summary of Pre- and Post Remediation Groundwater PAH Analytical Results, Metso Minerals, 3073 South Chase Avenue, Metso Minerals, Milwaukee, Wisconsin.

Well ID			EW-1			EW-2			MW-2
Sample Date	NR 140	NR 140	01/26/05	10/14/05	01/20/06	01/27/05	10/14/05	01/18/06	03/24/04
Area	Enforcement	Preventive	E of Bldg 69	E of Bldg 69	E of Bldg 69	N of Bldg 69	N of Bldg 69	N of Bldg 69	N of Bldg 42
REC	Standard	Action Limit	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Gas UST
1-Methylnaphthalene	NE	NE	120 D	86	31 L2	48 D	42	13	0.048 Q
2-Methylnaphthalene	NE	NE	91 D	67	18	21	38	10	0.092
Acenaphthene	NE	NE	5.1 Q,D	3.3	2.1 L2,	3.8 Q	2.9	1.1 J	<0.017
Anthracene	3,000	600	<4.5 D	0.68	0.38	5.7 Q	2.4	1.4	<0.019
Benzo (a) pyrene	0.2	0.02	**0.35**	<0.032	<0.084	<1.8	<0.032	<0.032	0.013 Q
Benzo(a)anthracene	NE	NE	<4.9 D	0.45	0.29 J	<2	1.4	<0.044	0.021 Q
Benzo(b)fluoranthene	0.2	0.02	**0.26**	<0.098	<0.26	<1.8	<0.098	<0.098	0.015 Q
Benzo(g,h,i)perylene	NE	NE	0.2	<0.12	<0.32	<2.1	<0.12	<0.12	<0.015
Benzo(k)fluoranthene	NE	NE	0.14	<0.049	<0.13	<1.9	0.067 J	<0.049	<0.018
Chrysene	0.2	0.02	<4.1 D	*0.075 J*	<0.11	**2.2 Q**	**0.3**	*0.045 J*	*0.025 Q*
Dibenzo(a,h)anthracen	NE	NE	0.071 Q	<0.13	<0.34	<2.2	<0.13	<0.13	<0.015
Fluoranthene	400	80	<4.2 D	5.2	1.6 L2	2.0 Q	14	4	0.048
Fluorene	400	80	8.9 Q,D	13	6.4	7.5	9.6	3.8	<0.016
Indeno(1,2,3-cd)pyrene	NE	NE	0.13	<0.062	<0.16	<1.7	<0.062	<0.062	<0.02
Naphthalene	40	8	<5.6 D	2	<1.1	<2.2	1.9	<0.40	0.039 Q
Phenanthrene	NE	NE	11 Q,D	6.4	1.7	19	13	3.7	0.036 Q
Pyrene	250	50	<4.1 D	1.9	0.84	10	1.6	0.55	0.050 Q

All results are in micrograms per liter (µg/L).

Italic	Concentration exceeds the WDNR NR 140 Preventive Action Limit.
BOLD	Concentration exceeds the WDNR NR 140 Enforcement Standard.
D	Analyte value from diluted analysis or surrogate result not applicable due to sample dilution.
J	Concentration was reported between method detection limit and limit of quantification.
L2	Laboratory control sample and/or laboratory control sample duplicate recovery was below acceptance limits.
NE	Not established.
PAH	Polycyclic aromatic hydrocarbons.
Q	Result is between the limit of detection and the limit of quantitation.
REC	Recognized environmental condition.
WDNR	Wisconsin Department of Natural Resources.

Table 8. Summary of Pre- and Post Remediation Groundwater PAH Analytical Results, Metso Minerals, 3073 South Chase Avenue, Metso Minerals, Milwaukee, Wisconsin.

Well ID	MW-3			MW-4			MW-5	
Sample Date	03/24/04	10/14/05	01/20/06	03/24/04	10/14/05	01/20/06	01/26/05	10/14/05
Area	N of Bldg 34	N of Bldg 34	N of Bldg 34	N of Bldg 69	N of Bldg 69	N of Bldg 69	W of Bldg 69	W of Bldg 69
REC	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Former USTs/ PCB	Former USTs/ PCB	Former USTs/ PCB	Fuel Oil UST	Fuel Oil UST
1-Methylnaphthalene	0.077	<0.32	<0.33 L2	21	<0.32	4.2	0.037 Q	<0.32
2-Methylnaphthalene	0.12	<0.31	<0.32	10	<0.31	1.1 J	0.036 Q	<0.31
Acenaphthene	<0.017	<0.33	<0.34 L2	<1.7	<0.33	0.37 J	<0.02	<0.33
Anthracene	<0.019	<0.038	<0.039	<1.9	<0.038	0.4	<0.018	<0.038
Benzo (a) pyrene	*0.038 Q*	<0.032	<0.033	<1.3	<0.032	<0.034	*0.023 Q*	<0.032
Benzo(a)anthracene	0.032 Q	<0.044	<0.045	<1.1	<0.044	0.24	0.021 Q	<0.044
Benzo(b)fluoranthene	*0.056*	<0.098	<0.10	<1.2	<0.098	<0.10	*0.026 Q*	<0.098
Benzo(g,h,i)perylene	0.039 Q	<0.12	<0.12	<1.5	<0.12	<0.13	<0.021	<0.12
Benzo(k)fluoranthene	0.039 Q	<0.049	<0.050	<1.8	<0.049	<0.052	<0.019	<0.049
Chrysene	*0.05*	<0.041	<0.042	<1.3	<0.041	*0.15*	*0.025 Q*	<0.041
Dibenzo(a,h)anthracene	<0.015	<0.13	<0.13	<1.5	<0.13	<0.14	<0.022	<0.13
Fluoranthene	0.085	<0.081	<0.083 L2	<1.2	<0.081	1.2	0.047 Q	<0.081
Fluorene	0.018 Q	<0.062	<0.063	2.5 Q	<0.062	1.3	<0.022	<0.062
Indeno(1,2,3-cd)pyrene	0.030 Q	<0.062	<0.063	<2	<0.062	<0.065	<0.017	<0.062
Naphthalene	0.025 Q	<0.40	<0.41	<2.3	<0.40	<0.42	0.031 Q	<0.40
Phenanthrene	0.083	<0.030	<0.031	8	<0.030	0.99	0.036 Q	<0.030
Pyrene	0.094	<0.044	<0.045	2.2 Q	<0.044	2.9	0.087	<0.044

All results are in micrograms per liter (µg/L).

Italic	Concentration exceeds the WDNR NR 140 Preventive Action Limit.
BOLD	Concentration exceeds the WDNR NR 140 Enforcement Standard.
D	Analyte value from diluted analysis or surrogate result not applicable due to sample dilution.
J	Concentration was reported between method detection limit and limit of quantification.
L2	Laboratory control sample and/or laboratory control sample duplicate recovery was below acceptance limits.
NE	Not established.
PAH	Polycyclic aromatic hydrocarbons.
Q	Result is between the limit of detection and the limit of quantitation.
REC	Recognized environmental condition.
WDNR	Wisconsin Department of Natural Resources.

Table 8. Summary of Pre- and Post Remediation Groundwater PAH Analytical Results, Metso Minerals, 3073 South Chase Avenue, Metso Minerals, Milwaukee, Wisconsin.

Well ID	MW-5 (continued)	MW-8		MW-9		MW-11	
Sample Date	01/20/06	10/14/05	01/20/06	10/14/05	01/20/06	10/14/05	01/20/06
Area	W of Bldg 69	W of Bldg 69	W of Bldg 69	N of Bldg 69	N of Bldg 69	N of Bldg 69	N of Bldg 69
REC	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST
1-Methylnaphthalene	<0.34 L2	<0.32	<0.34 L2	<0.32	<0.33 L2	<0.32	<0.33 L2
2-Methylnaphthalene	<0.33	<0.31	<0.33	<0.31	<0.32	<0.31	<0.32
Acenaphthene	<0.35 L2	<0.33	<0.35 L2	<0.33	<0.34 L2	<0.33	<0.34 L2
Anthracene	<0.041	<0.038	<0.040	<0.038	<0.040	<0.038	<0.040
Benzo (a) pyrene	<0.034	<0.032	<0.034	<0.032	<0.033	<0.032	<0.033
Benzo(a)anthracene	<0.047	<0.044	<0.046	<0.044	<0.046	<0.044	<0.046
Benzo(b)fluoranthene	<0.11	<0.098	<0.10	<0.098	<0.10	<0.098	<0.10
Benzo(g,h,i)perylene	<0.13	<0.12	<0.13	<0.12	<0.12	<0.12	<0.12
Benzo(k)fluoranthene	<0.053	<0.049	<0.052	<0.049	<0.051	<0.049	<0.051
Chrysene	<0.044	<0.041	<0.043	<0.041	<0.043	<0.041	<0.043
Dibenzo(a,h)anthracen	<0.14	<0.13	<0.14	<0.13	<0.14	<0.13	<0.14
Fluoranthene	<0.087 L2	<0.081	<0.085 L2	<0.081	<0.084 L2	<0.081	<0.084 L2
Fluorene	<0.067	<0.062	<0.065	<0.062	<0.065	<0.062	<0.065
Indeno(1,2,3-cd)pyrene	<0.067	<0.062	<0.065	<0.062	<0.065	<0.062	<0.065
Naphthalene	<0.43	<0.40	<0.42	<0.40	<0.42	<0.40	<0.42
Phenanthrene	<0.032	<0.030	<0.032	<0.030	<0.031	<0.030	<0.031
Pyrene	<0.047	<0.044	<0.046	<0.044	<0.046	<0.044	<0.046

All results are in micrograms per liter (µg/L).

Italic	Concentration exceeds the WDNR NR 140 Preventive Action Limit.
BOLD	Concentration exceeds the WDNR NR 140 Enforcement Standard.
D	Analyte value from diluted analysis or surrogate result not applicable due to sample dilution.
J	Concentration was reported between method detection limit and limit of quantification.
L2	Laboratory control sample and/or laboratory control sample duplicate recovery was below acceptance limits.
NE	Not established.
PAH	Polycyclic aromatic hydrocarbons.
Q	Result is between the limit of detection and the limit of quantitation.
REC	Recognized environmental condition.
WDNR	Wisconsin Department of Natural Resources.

Table 9. Summary of Pre- and Post Remediation Groundwater Dissolved Metals, Total Cyanide, and PCB Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	NR 140	NR 140	B4	B5	B6	B7	B10	B11
Sample Date	Enforcement	Preventive	02/18/04	02/20/04	02/18/04	02/24/04	02/18/04	02/19/04
Area	Standard	Action Limit	E End of Bldg. 25	E of Bldg 23A	E End of Bldg. 25	Central Bldg 24	S end of Bldg 22	Bldg 21
REC			Test Track Excavation	Washwater UST	Test Track Excavation, Paint Booth	Paint Booth	Paint Booth/ Machine Pit	Paint Booth
Dissolved Metals								
Arsenic	10	1	*5.6*	*7.8*	*7.7*	12	*3.8*	**24**
Barium	2,000	400	76	250	220	160	*520*	190 E
Cadmium	5	0.5	<0.24	<0.24	<0.24	<0.24	<0.24	0.22 Q
Chromium	100	10	2.3	3.2	1.7	2.3 A	3.2	1.3
Copper	1,300	130	NA	3.2	NA	NA	NA	NA
Lead	15	1.5	0.31 Q	0.22 Q	0.24 Q	0.32	0.58	*2*
Manganese	NE	NE	NA	30	NA	NA	NA	NA
Nickel	100	20	NA	NA	NA	NA	NA	NA
Selenium	50	10	1.0 Q	1.2 Q	<0.65	<0.65	3.5	2.2
Silver	50	10	0.46	<0.09	0.55 E	<0.09	1.3	<0.097
Zinc	NE	NE	NA	9.2	NA	NA	NA	NA
Total Cyanide	200	40	NA	<1.6 A	NA	NA	NA	NA
Total PCBs	NA	NA	NA	NA	NA	NA	NA	NA

All results are in micrograms per liter (µg/L).

Italic	Concentration exceeds the WDNR NR 140 Preventive Action Limit.
BOLD	Concentration exceeds the WDNR NR 140 Enforcement Standard.
A	Analyte was detected in the method blank.
B	Detected in method blank.
E	Estimated concentration due to matrix interferences.
J	Concentration estimated.
NA	Not analyzed.
NE	Not established.
PCBs	Polychlorinated Biphenyls.
Q	Result is between the limit of detection and the limit of quantitation.
REC	Recognized environmental condition.
WDNR	Wisconsin Department of Natural Resources.

Table 9. Summary of Pre- and Post Remediation Groundwater Dissolved Metals, Total Cyanide, and PCB Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	B12	B13	B15	B18	B20	B23	B24
Sample Date	02/17/04	02/23/04	02/23/04	02/20/04	02/18/04	02/19/04	02/19/04
Area	Bldg 10	Between Bldgs 17 & 19	Bldg 22	W end of Bldg 31	Bldg 31	Bldg 29	Bldg 29
REC	Paint & Oil Store, Fuel Oil UST, Heat Treat	Heat Treat, Fuel Oil UST, CN Use	Diesel Eng. Foundation, Paint Booth	Machinery/ Pits	Foundation/ Pits	Foundation/ Pits	Foundation
Dissolved Metals							
Arsenic	*1.6*	*4.4*	*1.1*	0.55 Q	*9.3*	**12**	*9*
Barium	28	77	90	40	110	140	170
Cadmium	<0.21	<0.24	<0.21	<0.21	<0.24	<0.24	<0.24
Chromium	0.52 Q	2.4 A	0.56 Q	1	1.6	1.4 A	2.0 A
Copper	0.88 Q A	NA	NA	NA	NA	NA	NA
Lead	0.27 Q	0.81	*1.6*	*5.8*	0.72	0.54	1.5
Manganese	NA	NA	NA	NA	NA	NA	NA
Nickel	0.64	NA	NA	NA	NA	NA	NA
Selenium	0.92 Q	1.3 Q	2.7	0.97 Q	0.80 Q	1.1 Q	1.6 Q
Silver	<0.097	<0.09	<0.097	<0.097	<0.09	<0.09	<0.09
Zinc	2.7 Q	NA	NA	NA	NA	NA	NA
Total Cyanide	NA	NA	NA	NA	NA	NA	NA
Total PCBs	NA	NA	NA	NA	NA	NA	NA

All results are in micrograms per liter (µg/L).

Italic	Concentration exceeds the WDNR NR 140 Preventive Action Limit.
BOLD	Concentration exceeds the WDNR NR 140 Enforcement Standard.
A	Analyte was detected in the method blank.
B	Detected in method blank.
E	Estimated concentration due to matrix interferences.
J	Concentration estimated.
NA	Not analyzed.
NE	Not established.
PCBs	Polychlorinated Biphenyls.
Q	Result is between the limit of detection and the limit of quantitation.
REC	Recognized environmental condition.
WDNR	Wisconsin Department of Natural Resources.

Table 9. Summary of Pre- and Post Remediation Groundwater Dissolved Metals, Total Cyanide, and PCB Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	B26	B27	B28	B29	B31	B32	B34	B35
Sample Date	02/23/04	02/24/04	02/19/04	02/18/04	02/24/04	02/18/04	02/24/04	02/23/04
Area	Bldg 21	Bldg 22	Bldg 31	Bldg 31	E of Bldg 32	Bldg 32	Bldg 35	Bldg 33
REC	Diesel Eng. Foundation/ Paint Booth	Diesel Eng. Foundation	Tracks, Machine Pits	Leaking Machine Pits	Foundation	Foundation	Foundation/ Former Oil House	Diesel Eng. Foundation
Dissolved Metals								
Arsenic	16	*8.3*	10	*6.5*	*6.1*	*7.9*	*3.7*	*1.6*
Barium	230	200	150	190	58	180	210	100
Cadmium	<0.24	<0.21	<0.24	<0.24	<0.24	<0.24	<0.21	<0.21
Chromium	5.7 A	1.1	2.2 A	1	3.4 A	1.7	1.4	3.8
Copper	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.65	1.5	0.23 Q	0.29 Q	0.51	0.69	1.2	*2.4*
Manganese	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	2.2	1.9	0.69 Q	1.1 Q	5.1	0.69 Q	2.6	2.9
Silver	<0.09	<0.097	<0.09	<0.09	<0.09	<0.09	<0.097	<0.097
Zinc	NA	NA	NA	NA	NA	NA	NA	NA
Total Cyanide	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	NA	NA	NA	NA	NA	NA	NA	NA

All results are in micrograms per liter (µg/L).

Italic	Concentration exceeds the WDNR NR 140 Preventive Action Limit.
BOLD	Concentration exceeds the WDNR NR 140 Enforcement Standard.
A	Analyte was detected in the method blank.
B	Detected in method blank.
E	Estimated concentration due to matrix interferences.
J	Concentration estimated.
NA	Not analyzed.
NE	Not established.
PCBs	Polychlorinated Biphenyls.
Q	Result is between the limit of detection and the limit of quantitation.
REC	Recognized environmental condition.
WDNR	Wisconsin Department of Natural Resources.

Table 9. Summary of Pre- and Post Remediation Groundwater Dissolved Metals, Total Cyanide, and PCB Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	B37	B41	B45	B48	B49	B50	B53	B56
Sample Date	02/23/04	02/20/04	02/24/04	02/17/04	02/17/04	02/23/04	02/18/04	02/17/04
Area	Bldg 33	Bldg 35	N of Bldg 42	N Property Border	N Property Border	N of Bldg 42	N of Bldg 34	N Parking Lot
REC	Asbestos Use	Paint Shed	Gas UST	Historical Operations	Historical Operations	Fuel Oil AST	Historical Gasoline Storage	Former Foundry
Dissolved Metals								
Arsenic	NA	*1.6*	NA	*3.9*	*1.2*	**13**	NA	**12**
Barium	NA	290	NA	40	49	77	NA	93
Cadmium	NA	<0.24	NA	<0.21	<0.21	<0.24	NA	<0.21
Chromium	NA	*24*	NA	0.26 Q	0.48 Q	5.2 A	NA	1.6
Copper	NA	NA	NA	NA	1.7 Q A	NA	NA	2.0 QA
Lead	NA	0.59	0.30 Q	0.36 Q	0.47 Q	0.42	<0.19	0.52 Q
Manganese	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	NA	2.8	NA	0.93 Q	0.74 Q	2.3	NA	1.6
Silver	NA	0.57	NA	<0.097	<0.097	<0.09	NA	<0.097
Zinc	NA	NA	NA	NA	3.8 Q	NA	NA	4.2 Q
Total Cyanide	<1.6 A	NA	NA	NA	NA	NA	NA	NA
Total PCBs	NA	NA	NA	NA	NA	NA	NA	NA

All results are in micrograms per liter (µg/L).

Italic	Concentration exceeds the WDNR NR 140 Preventive Action Limit.
BOLD	Concentration exceeds the WDNR NR 140 Enforcement Standard.
A	Analyte was detected in the method blank.
B	Detected in method blank.
E	Estimated concentration due to matrix interferences.
J	Concentration estimated.
NA	Not analyzed.
NE	Not established.
PCBs	Polychlorinated Biphenyls.
Q	Result is between the limit of detection and the limit of quantitation.
REC	Recognized environmental condition.
WDNR	Wisconsin Department of Natural Resources.

Table 9. Summary of Pre- and Post Remediation Groundwater Dissolved Metals, Total Cyanide, and PCB Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	B57	MW-1		MW-2			MW-3		
Sample Date	02/23/04	03/24/04	10/14/05	03/24/04	10/14/05	01/20/06	03/24/04	10/14/05	01/20/06
Area	N Parking Lot	Within Bldg 25	Within Bldg 25	N of Bldg 42	N of Bldg 42	N of Bldg 42	N of Bldg 34	N of Bldg 34	N of Bldg 34
REC	Former Foundry	Washwater UST	Washwater UST	Gas UST	Gas UST	Gas UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST
Dissolved Metals									
Arsenic	**11**	0.49 Q	<0.79	0.87	<0.79	<0.79	0.61	3.2	<0.79
Barium	300	180	NA	NA	NA	NA	NA	NA	NA
Cadmium	<0.24	<0.21	NA	NA	NA	NA	NA	NA	NA
Chromium	3.6 A	0.54 Q	NA	NA	NA	NA	NA	NA	NA
Copper	3.6	NA	NA	NA	NA	NA	NA	NA	NA
Lead	<0.096	0.48 Q	<1.4	1.5	2J	1.5 J	NA	<1.4	<1.4
Manganese	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	2.3	NA	NA	NA	NA	NA	NA	NA
Selenium	3.8	2.3 A	NA	NA	NA	NA	NA	NA	NA
Silver	<0.09	<0.097	NA	NA	NA	NA	NA	NA	NA
Zinc	11	NA	NA	NA	NA	NA	NA	NA	NA
Total Cyanide	NA	<1.6	8.5 J, B	NA	NA	NA	NA	NA	NA
Total PCBs	NA	NA	NA	NA	NA	NA	NA	NA	NA

All results are in micrograms per liter (µg/L).

Italic	Concentration exceeds the WDNR NR 140 Preventive Action Limit.
BOLD	Concentration exceeds the WDNR NR 140 Enforcement Standard.
A	Analyte was detected in the method blank.
B	Detected in method blank.
E	Estimated concentration due to matrix interferences.
J	Concentration estimated.
NA	Not analyzed.
NE	Not established.
PCBs	Polychlorinated Biphenyls.
Q	Result is between the limit of detection and the limit of quantitation.
REC	Recognized environmental condition.
WDNR	Wisconsin Department of Natural Resources.

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Table 9. Summary of Pre- and Post Remediation Groundwater Dissolved Metals, Total Cyanide, and PCB Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	MW-4		MW-5	MW-6		MW-7	MW-8	
Sample Date	03/24/04	10/14/05	10/14/05	10/14/05	01/20/06	10/14/05	10/14/05	01/20/06
Area	N of Bldg 69 Former USTs/ PCB	N of Bldg 69 Former USTs/ PCB	W of Bldg 69	NW of Bldg 42	NW of Bldg 42	NW of Bldg 42	W of Bldg 69	W of Bldg 69
REC	Transformers	Transformers	Fuel Oil UST	Gas UST	Gas UST	Gas UST	Fuel Oil UST	Fuel Oil UST
Dissolved Metals								
Arsenic	7.4	<0.79	<0.79	1.4 J	<0.79	<0.79	1.5 J	<0.79
Barium	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NA	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA	NA
Lead	NA	<1.4	<1.4	1.7 J	<1.4	<1.4	<1.4	<1.4
Manganese	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	NA	NA	NA	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA	NA
Total Cyanide	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	<0.24	NA	NA	NA	NA	NA	NA	NA

All results are in micrograms per liter (µg/L).

Italic	Concentration exceeds the WDNR NR 140 Preventive Action Limit.
BOLD	Concentration exceeds the WDNR NR 140 Enforcement Standard.
A	Analyte was detected in the method blank.
B	Detected in method blank.
E	Estimated concentration due to matrix interferences.
J	Concentration estimated.
NA	Not analyzed.
NE	Not established.
PCBs	Polychlorinated Biphenyls.
Q	Result is between the limit of detection and the limit of quantitation.
REC	Recognized environmental condition.
WDNR	Wisconsin Department of Natural Resources.

Table 9. Summary of Pre- and Post Remediation Groundwater Dissolved Metals, Total Cyanide, and PCB Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well/Boring	MW-9	MW-10	MW-11	EW-1		EW-2
Sample Date	10/14/05	10/14/05	10/14/05	10/14/05	01/20/06	10/14/05
Area	N of Bldg 69	E of Bldg 23A	N of Bldg 69	E of Bldg 69	E of Bldg 69	N of Bldg 69
REC	Fuel Oil UST	Washwater UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST
Dissolved Metals						
Arsenic	<0.79	<0.79	<0.79	3.4	2.1 J	<0.79
Barium	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA
Chromium	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA
Lead	<1.4	1.4 J	<1.4	<1.4	<1.4	<1.4
Manganese	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA
Selenium	NA	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA
Total Cyanide	NA	8.5 J, B	NA	NA	NA	NA
Total PCBs	NA	NA	NA	NA	NA	NA

All results are in micrograms per liter (µg/L).

Italic	Concentration exceeds the WDNR NR 140 Preventive Action Limit.
BOLD	Concentration exceeds the WDNR NR 140 Enforcement Standard.
A	Analyte was detected in the method blank.
B	Detected in method blank.
E	Estimated concentration due to matrix interferences.
J	Concentration estimated.
NA	Not analyzed.
NE	Not established.
PCBs	Polychlorinated Biphenyls.
Q	Result is between the limit of detection and the limit of quantitation.
REC	Recognized environmental condition.
WDNR	Wisconsin Department of Natural Resources.

Table 11. Summary of Post Remediation Soil VOC and Cyanide Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Sample ID			E1	N1	S1	W1	A1 E1	A1 E2
Sample Depth (feet)	NR 720	NR 746	8-10'	8-10'	8-10'	8-10'	8-10'	8-10'
Sample Date	RCL	Criteria	5/2/2005	5/2/2005	5/2/2005	5/2/2005	5/18/2005	5/18/2005
Area			N of Bldg 69	N of Bldg 69	N of Bldg 69	N of Bldg 69	E of Bldg 69	E of Bldg 69
REC			Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST
VOCs (µg/kg)								
1,1-Dichloroethane	NE	NE	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	NE	83,000	<30	<30	<31	<31	120	120 QU
1,3,5-Trimethylbenzene	NE	11,000	<30	<30	<31	<31	<29	<29 QU
Benzene	5.5	8,500	<30	<30	<31	<31	<29	<29 QU
cis-1,2-Dichloroethene	NE	NE	NA	NA	NA	NA	NA	NA
Ethylbenzene	2,900	4,600	<30	<30	<31	<31	<170 RL1	<120 QU
Methyl-tert-butyl-ether	NE	NE	<30	<30	<31	<31	<29	<29 QU
Toluene	1,500	38,000	170	34	<31	<31	<29	66 QU
trans-1,2-Dichloroethene	NE	NE	NA	NA	NA	NA	NA	NA
Vinyl chloride	NE	NE	NA	NA	NA	NA	NA	NA
Xylenes (total)	4,100	42,000 (a)	<90	<90	<94	<94	<87	<86 QU
Cyanide, Total (mg/kg)	NE	NE	NA	NA	NA	NA	NA	NA

(a) Add isomers together before comparing to criteria.

BOLD Concentration exceeds the NR 720 RCL (NR 720 RCL is based on protection of groundwater pathway).

mg/kg Milligrams per kilogram.

µg/kg Micrograms per kilogram.

NA Not analyzed.

NE Not established.

QU Unquantitated hydrocarbons present in the sample outside of the reported carbon range.

RCL Residual contaminant level.

REC Recognized environmental condition.

RL1 Reporting limit raised due to sample matrix effects.

VOC Volatile organic compounds.

Table 11. Summary of Post Remediation Soil VOC and Cyanide Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Sample ID	A1 E3	A1 E4	A1 E5	A1 N1	A1 N2	A1 N3	A1 N4	A1 S1
Sample Depth	8-10'	8-10'	8-10'	8-10'	8-10'	8-10'	8-10'	8-10'
Sample Date	5/18/2005	5/25/2005	5/25/2005	5/16/2005	5/18/2005	5/18/2005	5/18/2005	6/2/2005
Area	E of Bldg 69	E of Bldg 69	E of Bldg 69	E of Bldg 69	E of Bldg 69	E of Bldg 69	E of Bldg 69	E of Bldg 69
REC	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST
VOCs (µg/kg)								
1,1-Dichloroethane	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	1,100 QU	<29	<29	<30	66 QU	110 QU	660 QU	430 QU
1,3,5-Trimethylbenzene	<30 QU	<29	<29	<30	<27 QU	<27 QU	<58 QU	170 QU
Benzene	<30 QU	<29	<29	<30	<27 QU	<27 QU	<58 QU	<31 QU
cis-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	<1,400 QU	<29	<29	<30	<27 QU	<27 QU	<680 QU	<31 QU
Methyl-tert-butyl-ether	<30 QU	<29	<29	<30	<27 QU	<27 QU	<58 QU	<31 QU
Toluene	<30 QU	<29	<29	<30	<27 QU	<27 QU	230 QU	<31 QU
trans-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl chloride	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (total)	<89 QU	<88	<87	<89	<82 QU	<81 QU	<170 QU	<94 QU
Cyanide, Total (mg/kg)	NA	NA	NA	NA	NA	NA	NA	NA

(a)	Add isomers together before comparing to criteria.
BOLD	Concentration exceeds the NR 720 RCL (NR 720 RCL is based on protection of groundwater pathway).
mg/kg	Milligrams per kilogram.
µg/kg	Micrograms per kilogram.
NA	Not analyzed.
NE	Not established.
QU	Unquantitated hydrocarbons present in the sample outside of the reported carbon range.
RCL	Residual contaminant level.
REC	Recognized environmental condition.
RL1	Reporting limit raised due to sample matrix effects.
VOC	Volatile organic compounds.

Table 11. Summary of Post Remediation Soil VOC and Cyanide Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Sample ID	A1 S2	A1 S3	A1 S4	A1 W1	A1 W2	A1 W3	A1 W4	A1 W5
Sample Depth	8-10'	8-10'	8-10'	8-10'	8-10'	8-10'	8-10'	8-10'
Sample Date	6/2/2005	6/2/2005	6/2/2005	5/18/2005	5/16/2005	5/16/2005	5/18/2005	5/18/2005
Area	E of Bldg 69	E of Bldg 69	E of Bldg 69	E of Bldg 69	E of Bldg 69	E of Bldg 69	E of Bldg 69	E of Bldg 69
REC	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST
VOCs (µg/kg)								
1,1-Dichloroethane	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	590 QU	720 QU	1,100 QU	680 QU	<29	400 QU	160 QU	1,800 QU
1,3,5-Trimethylbenzene	160 QU	370 QU	350 QU	<30 QU	<29	<30 QU	<29 QU	<30 QU
Benzene	<30 QU	<63 QU	<160 QU	<30 QU	<29	<30 QU	<29 QU	<30 QU
cis-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	<540 QU	<63 QU	<160 QU	<810 QU	<29	<260 QU	<29 QU	<1,200 QU
Methyl-tert-butyl-ether	<30 QU	<63 QU	<160 QU	<30 QU	<29	<30 QU	<29 QU	<30 QU
Toluene	<30 QU	<63 QU	<160 QU	<30 QU	<29	<32 QU	<29 QU	<30 QU
trans-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl chloride	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (total)	240 QU	<190 QU	<480 QU	<91 QU	<88	<91 QU	<88 QU	<91 QU
Cyanide, Total (mg/kg)	NA	NA	NA	NA	NA	NA	NA	NA

(a)	Add isomers together before comparing to criteria.
BOLD	Concentration exceeds the NR 720 RCL (NR 720 RCL is based on protection of groundwater pathway).
mg/kg	Milligrams per kilogram.
µg/kg	Micrograms per kilogram.
NA	Not analyzed.
NE	Not established.
QU	Unquantitated hydrocarbons present in the sample outside of the reported carbon range.
RCL	Residual contaminant level.
REC	Recognized environmental condition.
RL1	Reporting limit raised due to sample matrix effects.
VOC	Volatile organic compounds.

Table 11. Summary of Post Remediation Soil VOC and Cyanide Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Sample ID	A1 W6	A1 W7	A1 W8	A1 W9	A2 E1	A2 N1	A2 N2	A2 S1
Sample Depth	8-10'	8-10'	8-10'	8-10'	4-6'	4-6'	4-6'	4-6'
Sample Date	5/18/2005	5/18/2005	5/18/2005	6/1/2005	6/16/2005	6/16/2005	6/16/2005	6/16/2005
Area	E of Bldg 69	E of Bldg 69	E of Bldg 69	E of Bldg 69	N of Bldg 42	N of Bldg 42	N of Bldg 42	N of Bldg 42
REC	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Gas UST	Gas UST	Gas UST	Gas UST
VOCs (µg/kg)								
1,1-Dichloroethane	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	950 QU	790 QU	1,700 QU	83 QU	<29	<29	<29	31
1,3,5-Trimethylbenzene	<30 QU	<30 QU	<30 QU	<35 QU	<29	<29	<29	<30
Benzene	<30 QU	<30 QU	<30 QU	<35 QU	**870**	**77**	<29	**810**
cis-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	<670 QU	<590 QU	<1,100 QU	<110 QU	<29	<29	<29	41
Methyl-tert-butyl-ether	<30 QU	<30 QU	<30 QU	<35 QU	<29	<29	<29	<30
Toluene	<30 QU	<30 QU	<30 QU	<35 QU	42	<29	<29	<30
trans-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl chloride	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (total)	<89 QU	<90 QU	<91 QU	<100 QU	<88	<88	<88	<90
Cyanide, Total (mg/kg)	NA	NA	NA	NA	NA	NA	NA	NA

(a) Add isomers together before comparing to criteria.

BOLD Concentration exceeds the NR 720 RCL (NR 720 RCL is based on protection of groundwater pathway).

mg/kg Milligrams per kilogram.

µg/kg Micrograms per kilogram.

NA Not analyzed.

NE Not established.

QU Unquantitated hydrocarbons present in the sample outside of the reported carbon range.

RCL Residual contaminant level.

REC Recognized environmental condition.

RL1 Reporting limit raised due to sample matrix effects.

VOC Volatile organic compounds.

Table 11. Summary of Post Remediation Soil VOC and Cyanide Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Sample ID	A2 S2	A2 W1	A3 E1	A3 N1	A3 N2	A3 S1
Sample Depth	4-6'	4-6'	6-8'	6-8'	6-8'	6-8'
Sample Date	6/16/2005	6/16/2005	7/21/2005	7/19/2005	7/21/2005	7/19/2005
Area	N of Bldg 42	N of Bldg 42	E of Bldg 23A	E of Bldg 23A	E of Bldg 23A	E of Bldg 23A
REC	Gas UST	Gas UST	Washwater UST	Washwater UST	Washwater UST	Washwater UST
VOCs (µg/kg)						
1,1-Dichloroethane	NA	NA	36	260	65	<29
1,2,4-Trimethylbenzene	<30	<30	<29	<29	<30	<29
1,3,5-Trimethylbenzene	<30	<30	<29	<29	<30	<29
Benzene	<30	<30	<29	**42**	<30	<29
cis-1,2-Dichloroethene	NA	NA	2,000	300	3,400	1,200
Ethylbenzene	<30	<30	<29	<29	<30	<29
Methyl-tert-butyl-ether	<30	40	<29	<29	<30	<29
Toluene	<30	<30	<29	39	<30	<29
trans-1,2-Dichloroethene	NA	NA	39	<29	57	<29
Vinyl chloride	NA	NA	130	<41	150	44
Xylenes (total)	<89	<89	<100	<98	<100	<98
Cyanide, Total (mg/kg)	NA	NA	<0.59	<0.58	<0.60	<0.58

(a) Add isomers together before comparing to criteria.

BOLD Concentration exceeds the NR 720 RCL (NR 720 RCL is based on protection of groundwater pathway).

mg/kg Milligrams per kilogram.

µg/kg Micrograms per kilogram.

NA Not analyzed.

NE Not established.

QU Unquantitated hydrocarbons present in the sample outside of the reported carbon range.

RCL Residual contaminant level.

REC Recognized environmental condition.

RL1 Reporting limit raised due to sample matrix effects.

VOC Volatile organic compounds.

Table 11. Summary of Post Remediation Soil VOC and Cyanide Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Sample ID	A3 S2	A3 W1
Sample Depth	6-8'	6-8'
Sample Date	7/21/2005	7/19/2005
Area	E of Bldg 23A	E of Bldg 23A
REC	Washwater UST	Washwater UST
VOCs (µg/kg)		
1,1-Dichloroethane	<30	<29
1,2,4-Trimethylbenzene	<30	<29
1,3,5-Trimethylbenzene	<30	<29
Benzene	<30	<29
cis-1,2-Dichloroethene	1,500	400
Ethylbenzene	<30	<29
Methyl-tert-butyl-ether	<30	<29
Toluene	<30	<29
trans-1,2-Dichloroethene	<30	<29
Vinyl chloride	180	210
Xylenes (total)	<100	<99
Cyanide, Total (mg/kg)	<0.60	<0.58

(a)	Add isomers together before comparing to criteria.
BOLD	Concentration exceeds the NR 720 RCL (NR 720 RCL is based on protection of groundwater pathway).
mg/kg	Milligrams per kilogram.
µg/kg	Micrograms per kilogram.
NA	Not analyzed.
NE	Not established.
QU	Unquantitated hydrocarbons present in the sample outside of the reported carbon range.
RCL	Residual contaminant level.
REC	Recognized environmental condition.
RL1	Reporting limit raised due to sample matrix effects.
VOC	Volatile organic compounds.

Table 12. Summary of Post Remediation Soil PAH Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Sample ID	Proposed	Proposed	Proposed	A1 E1	A1 E2	A1 E3	A1 E4	A1 E5
Sample Depth	Direct Contact	Direct Contact	Protection	8-10'	8-10'	8-10'	8-10'	8-10'
Sample Date	Industrial	Non-Industrial	Groundwater	05/18/05	05/18/05	05/18/05	05/25/05	05/25/05
Area	RCL	RCL	RCL	E of Bldg 69	E of Bldg 69	E of Bldg 69	E of Bldg 69	E of Bldg 69
REC				Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST
PAHs								
1-Methylnaphthalene	70,000,000	1,100,000	23,000	3,900	1,100	9,600	1,000	160
2-Methylnaphthalene	40,000,000	600,000	20,000	7,300	1,100	11,000	1,900	260
Acenaphthene	60,000,000	900,000	38,000	180	59	710	120	<58
Acenaphthylene	360,000	18,000	700	590	170	<1,000	<99	<99
Anthracene	300,000,000	5,000,000	3,000,000	370	140	1,800	300	19
Benzo(a)anthracene	3,900	88	17,000	*940*	*100*	*3,500*	*1,200*	75
Benzo(a)pyrene	390	8.8	48,000	*23*	<5.7	*160*	*52*	7.8
Benzo(b)fluoranthene	3,900	88	360,000	18	<5.7	*99*	76	9.2
Benzo(g,h,i)perylene	39,000	1,800	6,800,000	13	11	190	48	13
Benzo(k)fluoranthene	39,000	880	870,000	42	<5.7	300	120	12
Chrysene	390,000	8,800	37,000	170	31	540	290	23
Dibenzo(a,h)anthracene	390	8.8	38,000	<8.7	<8.6	<89	<8.8	<8.7
Fluoranthene	40,000,000	600,000	500,000	2,400	290	9,000	2,100	150
Fluorene	40,000,000	600,000	100,000	1,100	370	3,100	420	44
Indeno(1,2,3-cd)pyrene	3,900	88	680,000	10	<5.7	*93*	35	<5.8
Naphthalene	110,000	20,000	400	**630**	100	**820**	340	<35
Phenanthrene	390,000	18,000	1,800	1,600	410	**6,600**	930	83
Pyrene	30,000,000	500,000	8,700,000	300	160	2,800	330	42

All results are in micrograms per kilogram (µg/kg).

Underline	Concentration exceeds the WDNR Proposed Industrial Direct Contact RCL for PAHs.
Italic	Concentration exceeds the WDNR Proposed Non-Industrial Direct Contact RCL for PAHs.
BOLD	Concentration exceeds the WDNR Proposed Groundwater Protection RCL for PAHs.
NA	Not analyzed.
PAH	Polycyclic aromatic hydrocarbons.
Q	Result is between the limit of detection and the limit of quantitation.
RCL	Residual contaminant level.
REC	Recognized environmental condition.
WDNR	Wisconsin Department of Natural Resources.

Table 12. Summary of Post Remediation Soil PAH Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Sample ID	A1 N1	A1 N2	A1 N3	A1 N4	A1 S1	A1 S2	A1 S3	A1 S4
Sample Depth	8-10'	8-10'	8-10'	8-10'	8-10'	8-10'	8-10'	8-10'
Sample Date	05/16/05	05/18/05	05/18/05	05/18/05	06/02/05	06/02/05	06/02/05	06/02/05
Area	E of Bldg 69	E of Bldg 69	E of Bldg 69	E of Bldg 69	E of Bldg 69	E of Bldg 69	E of Bldg 69	E of Bldg 69
REC	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST
PAHs								
1-Methylnaphthalene	<35	<33	<33	8,100	5,800	2,200	1,500	16,000
2-Methylnaphthalene	<30	<27	120	11,000	10,000	2,900	2,300	**31,000**
Acenaphthene	<59	<55	<54	<580	440	<600	<320	840
Acenaphthylene	<100	<93	<92	<990	<530	<1000	<540	<1,100
Anthracene	<5.9	71	57	760	1,000	1,200	230	1,800
Benzo(a)anthracene	<5.9	*250*	18	*1,200*	*170*	*3,700*	*100*	*4,000*
Benzo(a)pyrene	<5.9	*14*	*16*	<58	*140*	*340*	*68*	*210*
Benzo(b)fluoranthene	<5.9	26	25	78	*120*	*400*	74	*230*
Benzo(g,h,i)perylene	<5.9	13	16	76	38	280	98	75
Benzo(k)fluoranthene	<5.9	8.7	32	98	210	550	100	390
Chrysene	<5.9	83	31	<58	180	1,000	160	1,100
Dibenzo(a,h)anthracene	<8.9	<8.2	<8.1	<87	<47	<90	<47	<96
Fluoranthene	<12	220	150	4,500	7,000	7,300	1,500	9,300
Fluorene	<12	92	75	2,300	2,200	1,800	500	4,300
Indeno(1,2,3-cd)pyrene	<5.9	12	10	62	52	*290*	69	66
Naphthalene	<35	<33	<33	**560**	<190	<360	<190	<390
Phenanthrene	<5.9	37	35	**3,100**	**3,300**	**3,800**	1,100	**7,600**
Pyrene	<5.9	290	280	820	1,600	3,300	570	3,400

All results are in micrograms per kilogram (µg/kg).

Underline	Concentration exceeds the WDNR Proposed Industrial Direct Contact RCL for PAHs.
Italic	Concentration exceeds the WDNR Proposed Non-Industrial Direct Contact RCL for PAHs.
BOLD	Concentration exceeds the WDNR Proposed Groundwater Protection RCL for PAHs.
NA	Not analyzed.
PAH	Polycyclic aromatic hydrocarbons.
Q	Result is between the limit of detection and the limit of quantitation.
RCL	Residual contaminant level.
REC	Recognized environmental condition.
WDNR	Wisconsin Department of Natural Resources.

Table 12. Summary of Post Remediation Soil PAH Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Sample ID	A1 W1	A1 W2	A1 W3	A1 W4	A1 W5	A1 W6	A1 W7	A1 W8
Sample Depth	8-10'	8-10'	8-10'	8-10'	8-10'	8-10'	8-10'	8-10'
Sample Date	05/18/05	05/16/05	05/16/05	05/18/05	05/18/05	05/18/05	05/18/05	05/18/05
Area	E of Bldg 69	E of Bldg 69	E of Bldg 69	E of Bldg 69	E of Bldg 69	E of Bldg 69	E of Bldg 69	E of Bldg 69
REC	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST	Fuel Oil UST
PAHs								
1-Methylnaphthalene	7,000	<35	1,100	<35	3,900	16,000	16,000	7,200
2-Methylnaphthalene	6,700	<29	1,400	<29	3,600	16,000	20,000	6,900
Acenaphthene	360	<59	140	<59	190	880	780	360
Acenaphthylene	<520	<100	<100	<100	550	<1,000	<510	<100
Anthracene	320	<5.9	280	<5.9	66	1,700	1,100	1,300
Benzo(a)anthracene	*1,100*	<5.9	*1,100*	<5.9	*180*	*1,500*	*2,700*	*740*
Benzo(a)pyrene	*52*	<5.9	*31*	<5.9	*13*	<60	*26*	*34*
Benzo(b)fluoranthene	41	<5.9	30	<5.9	12	69	48	31
Benzo(g,h,i)perylene	41	<5.9	15	<5.9	13	130	38	30
Benzo(k)fluoranthene	92	<5.9	50	<5.9	23	<60	58	45
Chrysene	380	<5.9	190	<5.9	29	480	480	270
Dibenzo(a,h)anthracene	<46	<8.8	<9.1	<8.8	<9.1	<89	<9.0	<9.1
Fluoranthene	690	<12	2,200	<12	460	8,400	2,300	9,000
Fluorene	2,200	<12	780	<12	1,200	3,800	3,600	4,300
Indeno(1,2,3-cd)pyrene	<30	<5.9	14	<5.9	10	<60	29	22
Naphthalene	**500**	<35	<36	<35	**470**	**1,400**	<180	**430**
Phenanthrene	980	<5.9	1,200	<5.9	290	**5,700**	**5,300**	**5,200**
Pyrene	360	<5.9	400	<5.9	250	2,100	4,800	980

All results are in micrograms per kilogram (µg/kg).

Underline	Concentration exceeds the WDNR Proposed Industrial Direct Contact RCL for PAHs.
Italic	Concentration exceeds the WDNR Proposed Non-Industrial Direct Contact RCL for PAHs.
BOLD	Concentration exceeds the WDNR Proposed Groundwater Protection RCL for PAHs.
NA	Not analyzed.
PAH	Polycyclic aromatic hydrocarbons.
Q	Result is between the limit of detection and the limit of quantitation.
RCL	Residual contaminant level.
REC	Recognized environmental condition.
WDNR	Wisconsin Department of Natural Resources.

Table 12. Summary of Post Remediation Soil PAH Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Sample ID	A1 W9	E1	N1	S1	W1
Sample Depth	8-10'	E1 8-10'	N1 8-10'	S1 8-10'	W1 8-10'
Sample Date	06/01/05	05/02/05	05/02/05	05/02/05	05/02/05
Area	E of Bldg 69				
REC	Fuel Oil UST				
PAHs					
1-Methylnaphthalene	<42	<36	<36	<38	<37
2-Methylnaphthalene	<35	<30	<30	<31	<31
Acenaphthene	<70	<60	<60	<63	<62
Acenaphthylene	<120	<100	<100	<110	<110
Anthracene	<7.0	<6.0	<6.0	<6.3	<6.2
Benzo(a)anthracene	<7.0	<6.0	<6.0	<6.3	<6.2
Benzo(a)pyrene	<7.0	<6.0	<6.0	<6.3	<6.2
Benzo(b)fluoranthene	<7.0	<6.0	<6.0	<6.3	<6.2
Benzo(g,h,i)perylene	<7.0	<6.0	<6.0	<6.3	<6.2
Benzo(k)fluoranthene	<7.0	<6.0	<6.0	<6.3	<6.2
Chrysene	<7.0	<6.0	<6.0	<6.3	<6.2
Dibenzo(a,h)anthracene	<10	<9.0	<9.0	<9.4	<9.4
Fluoranthene	<14	<12	<12	<13	<12
Fluorene	<14	<12	<12	<13	<12
Indeno(1,2,3-cd)pyrene	<7.0	<6.0	<6.0	<6.3	<6.2
Naphthalene	<42	<36	<36	<38	<37
Phenanthrene	<7.0	<6.0	<6.0	<6.3	<6.2
Pyrene	<7.0	<6.0	<6.0	<6.3	<6.2

All results are in micrograms per kilogram (µg/kg).

Underline	Concentration exceeds the WDNR Proposed Industrial Direct Contact RCL for PAHs.
Italic	Concentration exceeds the WDNR Proposed Non-Industrial Direct Contact RCL for PAHs.
BOLD	Concentration exceeds the WDNR Proposed Groundwater Protection RCL for PAHs.
NA	Not analyzed.
PAH	Polycyclic aromatic hydrocarbons.
Q	Result is between the limit of detection and the limit of quantitation.
RCL	Residual contaminant level.
REC	Recognized environmental condition.
WDNR	Wisconsin Department of Natural Resources.

Table 13. Summary of Post Remediation Building 68 Sump Water Analytical Results, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Sample Location Sample Date	Discharge Limits	Bldg 68 Sump 11/15/2005
VOCs (total)	<5	0.01469
SVOCs (total)	<5	0.02667
Oil & Grease	300	130

Concentrations are reported in milligrams per liter (mg/L).

* Discharge limits are published in Chapter 11 Discharge Regulations and Enforcement Procedures, Milwaukee Metropolitan Sewerage Distric, Amended April 25, 2005.

VOCs Volatile organic compounds.

SVOCs Semi-volatile organic compounds.

Table 10. Groundwater Elevation Data, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well	Date	Screen Interval (ft)	Ground Surface Elevation (ft amsl)	Top of Casing Elevation (ft amsl)	Depth to Water (ft)	Depth to Product (ft)	Water Level Elevation (ft amsl)
MW-1	3/22/04	15-20	638.96	638.74	21.92	NP	616.82
	3/24/04				21.14	NP	617.60
	1/25/05				6.08	NP	632.66
	1/16/06				16.99	NP	621.75
MW-2	3/22/04	17-27	639.50	639.14	10.32	NP	628.82
	3/24/04				14.11	NP	625.03
	11/3/04				10.68	NP	628.46
	1/3/05				9.99	NP	629.15
	1/25/05				10.22	NP	628.92
	10/10/05				10.12	NP	629.02
	1/16/06				10.23	NP	628.91
MW-3	3/22/04	20-30	639.40	639.03	10.50	NP	628.53
	3/24/04				27.94	NP	611.09
	11/3/04				6.81	NP	632.22
	10/10/05				7.12	NP	631.91
	1/16/06				6.41	NP	632.62
MW-4	3/22/04	8-18	638.70	638.37	6.51	NP	631.86
	3/24/04				6.44	NP	631.93
	1/25/05				6.68	NP	631.69
	10/10/05				6.75	NP	631.62
	1/16/06				6.35	NP	632.02
MW-5	1/12/05	3-13	638.66	638.10	5.08	NP	633.02
	1/25/05				5.30	NP	632.80
	10/10/05				5.57	NP	632.53
	1/16/06				5.28	NP	632.82
MW-6	10/10/05	7-22	639.44	639.15	19.05	NP	620.10
	1/16/06				5.60	NP	633.55
MW-7	10/10/05	8-18	639.47	639.12	4.24	NP	634.88
	1/16/06				5.61	NP	633.51
MW-8	10/10/05	7-17	638.86	638.43	4.79	NP	633.64
	1/16/06				4.93	NP	633.50
MW-9	10/10/05	6-16	638.51	638.26	6.68	NP	631.58
	1/16/06				6.27	NP	631.99
MW-10	10/10/05	4-14	639.55	639.20	6.35	NP	632.85
	1/16/06				4.33	NP	634.87
MW-11	10/10/05	7-17	639.09	638.78	6.08	NP	632.70
	1/16/06				5.51	NP	633.27

Footnotes on Page 2.

Table 10. Groundwater Elevation Data, Metso Minerals, 3073 South Chase Avenue, Milwaukee, Wisconsin.

Well	Date	Screen Interval (ft)	Ground Surface Elevation (ft amsl)	Top of Casing Elevation (ft amsl)	Depth to Water (ft)	Depth to Product (ft)	Water Level Elevation (ft amsl)
EW-1	1/12/05	3-18	639.37	638.78	5.18	NP	633.60
	1/25/05				5.38	NP	633.40
	10/10/05				5.33	NP	633.45
	1/16/06				5.77	NP	633.01
EW-2	1/12/05	3-18	638.81	638.28	5.73	NP	632.55
	1/25/05				6.18	NP	632.10
	10/10/05				6.33	NP	631.95
	1/16/06				5.94	NP	632.34

Water levels collected in March 2004 are not representative of static conditions.

ft Feet.

ft amsl Feet above mean sea level.

NP No product.

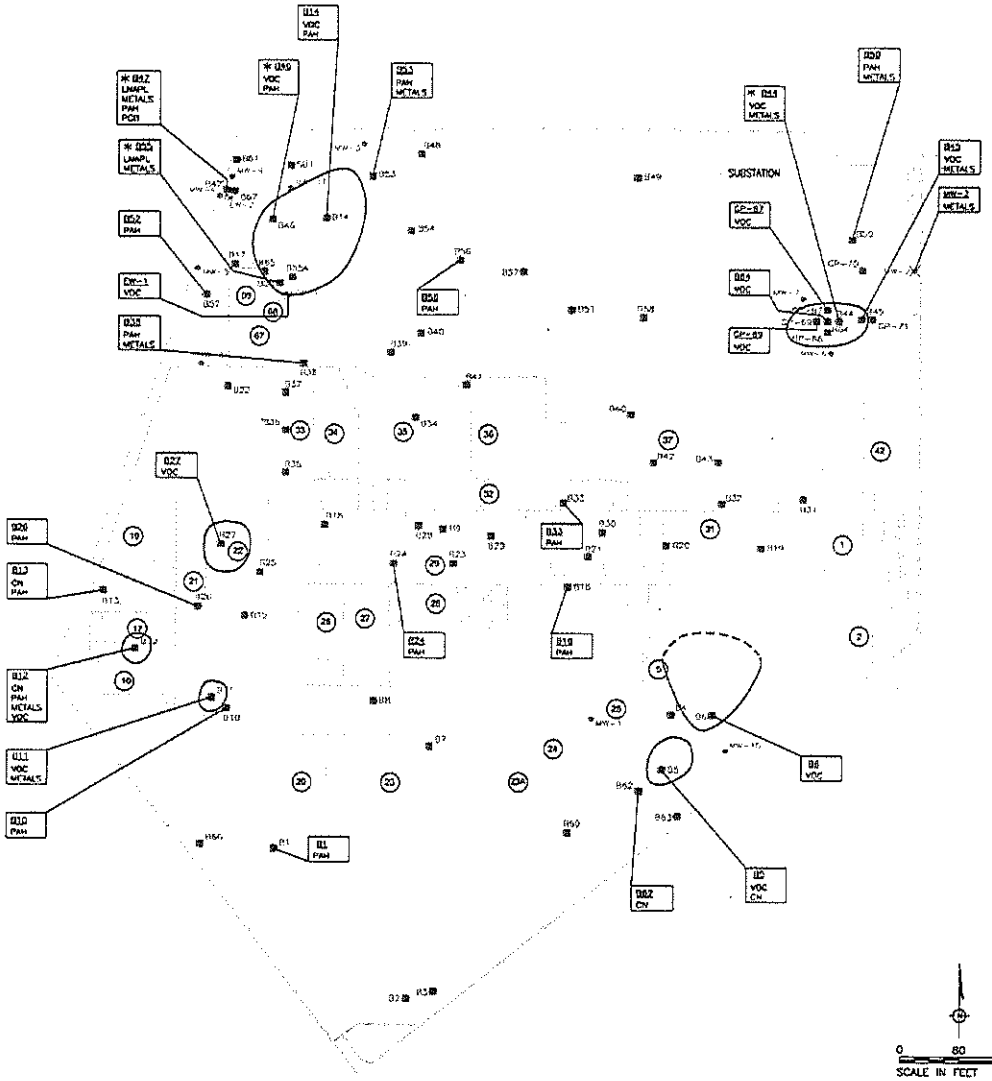
Certification of Legal Description

Parcel Identification Number: 506-0012-115-1

I, Robert J. Doro, managing member of DND Properties LLC, certify that the legal description provided on the attached Warranty Deed, Document No. 08952507, recorded on February 4, 2005 for 3073 South Chase Avenue, in Milwaukee, Wisconsin, accurately describes the complete parcel of the property.

By: DND Austrich Properties, LLC
Robert J. Doro
MANAGING MEMBER

Date: February 20, 2007



LEGEND

(42)	BUILDING NUMBER
*	MONITORING WELL
⊗	ABANDONED MONITORING WELL
⊠	SOIL BORING LOCATION
⊡	EXTRACTION WELL
CN	CYANIDE
LNAPL	LIGHT NON-AQUEOUS PHASE LIQUID
PAH	POLYCYCLIC AROMATIC HYDROCARBON
PCB	POLYCHLORINATED BIPHENYLS
VOC	VOLATILE ORGANIC COMPOUND
*	EXCAVATED
	ESTIMATED EXTENT OF VOC IMPACTED SOIL, DASHED WHERE INFERRED

0 80 160
SCALE IN FEET

NOTES:
1.SOIL STANDARDS FOR NUMEROUS VOCs HAVE NOT BEEN ESTABLISHED. COMPOUNDS THAT REPRESENT A POTENTIAL CONCERN DUE TO THE NATURE OF THE CONSTITUENT OR THE CONSTITUENT CONCENTRATION ARE POSTED EVEN IF NO STANDARD IS ESTABLISHED. FOR A COMPLETE LIST OF ALL CONSTITUENTS DETECTED, REFER TO THE SOIL ANALYTICAL TABLES OR THE LABORATORY ANALYTICAL REPORTS.

2. BASE MAP CREATED FROM CAD FILE PROVIDED BY METSO MINERALS INDUSTRIES, INC.

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REV.	ISSUED DATE	DESCRIPTION

KEYPLAN

SEAL

ARCADIS
135 North Jefferson Street, Suite 400
Milwaukee, Wisconsin 53202
Tel: 414-276-7742 Fax: 414-276-7603
www.arcadis-us.com

METSO MINERALS INDUSTRIES, INC.
3073 SOUTH CHASE AVENUE
MILWAUKEE, WISCONSIN

PROJECT MANAGER: J. BANNANTINE	DEPARTMENT MANAGER: M. MINERLE
LEAD DESIGN PROF.: T. SCHOEN	CHECKED BY: T. SCHOEN
SHEET TITLE: SUMMARY OF PRE-REMEDIATION SOIL VOC ANALYTICAL RESULTS	TASK/PHASE NUMBER: 0004.000014
	DRAWN BY: C. MOREDOCH
PROJECT NUMBER: W0001085	DRAWING NUMBER: 4

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Last Plotted: 7/17/2006 7:45:35 AM
Last Plotted By: JBANNANTINE
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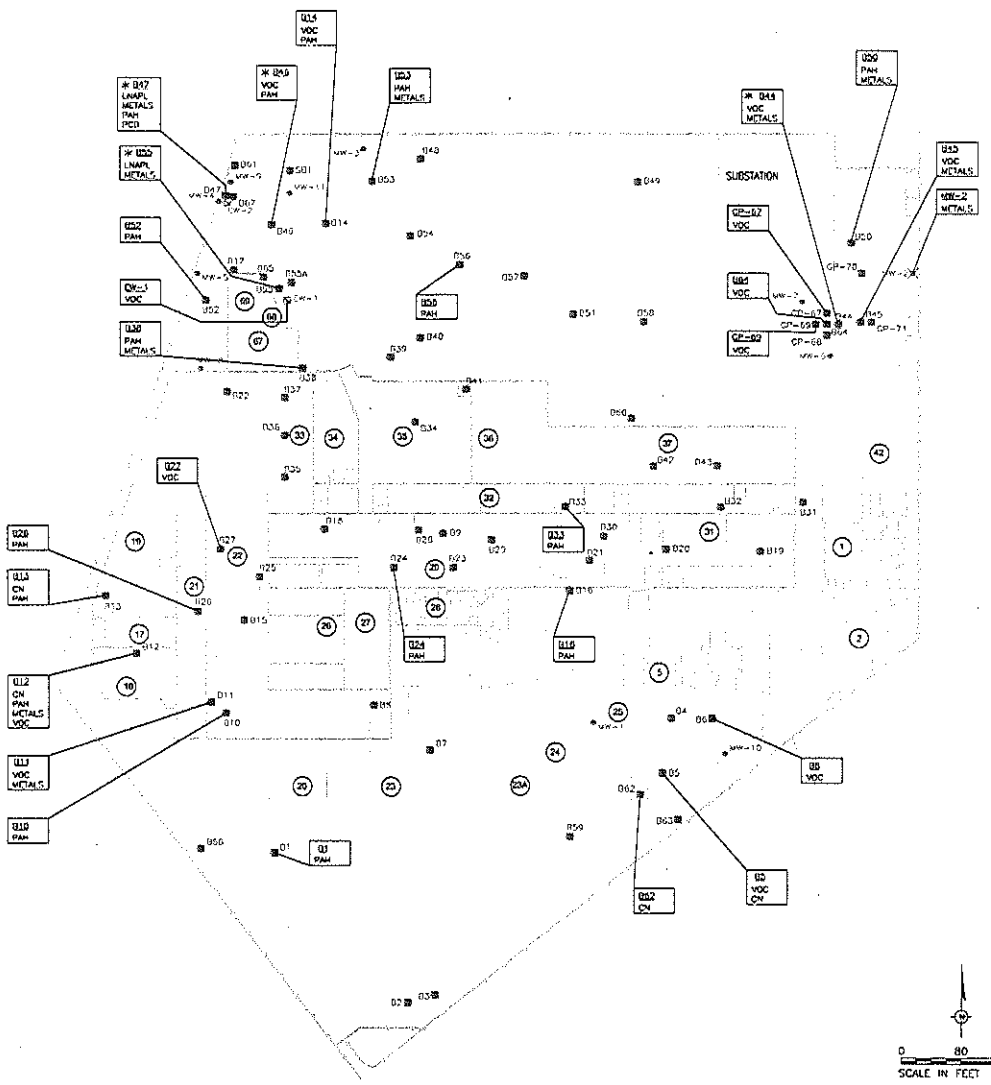

LEGEND

(42)	BUILDING NUMBER
⊕	MONITORING WELL
⊠	ABANDONED MONITORING WELL
⊠	SOIL BORING LOCATION
⊠	EXTRACTION WELL
CN	CYANIDE
LNAPL	LIGHT NON-AQUEOUS PHASE LIQUID
PAH	POLYCYCLIC AROMATIC HYDROCARBON
PCB	POLYCHLORINATED DIPHENYLS
VOC	VOLATILE ORGANIC COMPOUND
*	EXCAVATED

NOTES

1. BASE MAP CREATED FROM CAD FILE PROVIDED BY METSO MINERALS INDUSTRIES, INC.
2. REFER TO FIGURES 4, 5, AND 6 FOR INDIVIDUAL ANALYTES.

REV. ISSUED DATE DESCRIPTION	KEYPLAN	SEAL	ARCADIS 126 North Jefferson Street, Suite 400 Milwaukee, Wisconsin 53202 Tel. 414-276-7742 Fax 414-276-7603 www.arcadis-us.com	METSO MINERALS INDUSTRIES, INC. 3073 SOUTH CHASE AVENUE MILWAUKEE, WISCONSIN	PROJECT MANAGER J. BRANNANTINE	DEPARTMENT MANAGER M. MAIERLE	LEAD DESIGN PROF. T. SCHOEN
					SHEET TITLE SUMMARY OF SOIL ANALYSES WITH EXCEEDANCES	TASK/PHASE NUMBER 0004.M014	CHECKED BY T. SCHOEN
						PROJECT NUMBER WI001085	DRAWN BY C. MCNEOUGH
							DRAWING NUMBER

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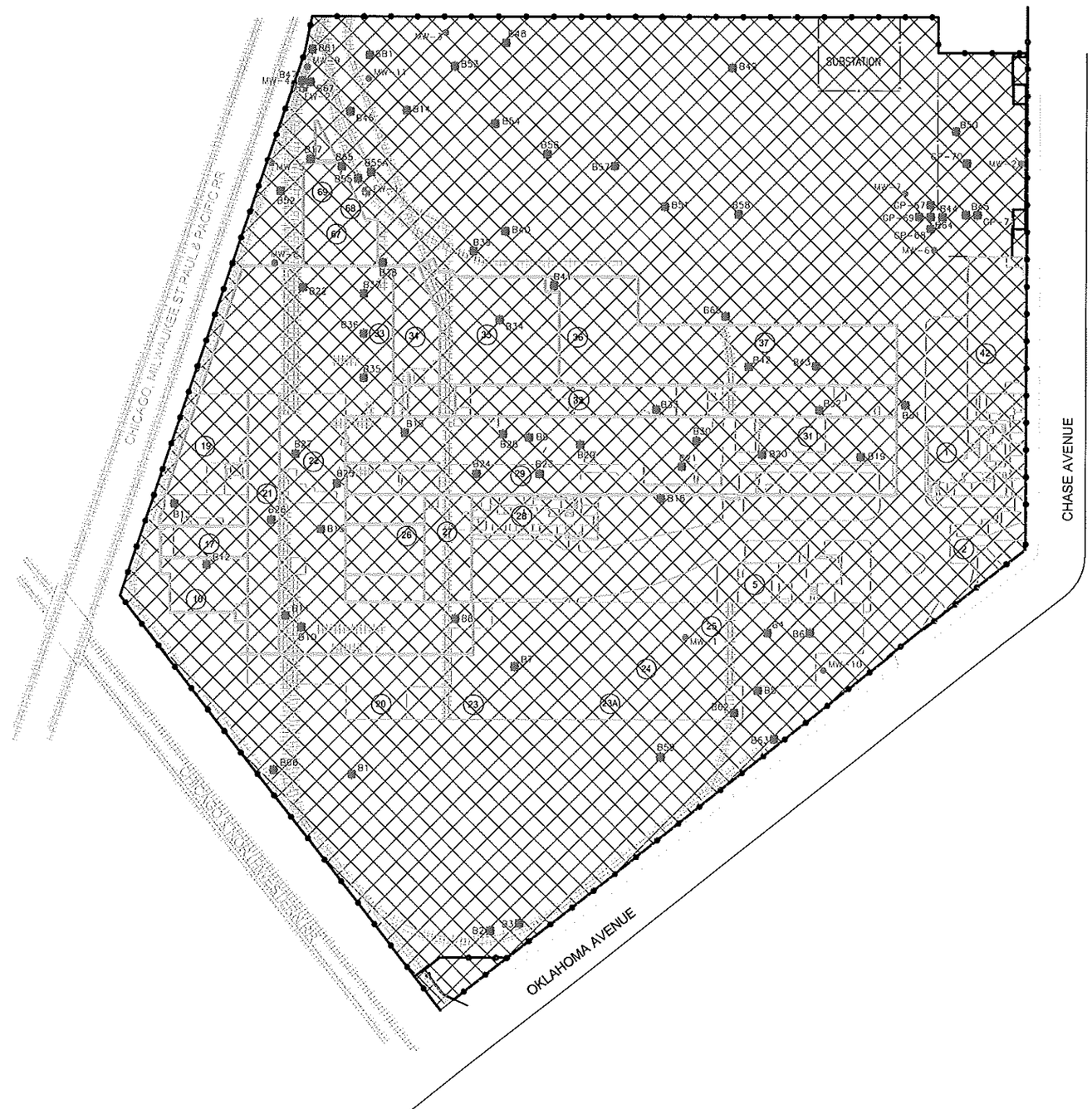

LEGEND

- (68) BUILDING NUMBER
- SOIL BORING LOCATION
- MONITORING WELL LOCATION
- ABANDONED MONITORING WELL LOCATION
- EXTRACTION WELL LOCATION
- APPROXIMATE PROPERTY LINE
- RAILROAD TRACK
- FENCE LINE
- LIMITS OF ENGINEERED BARRIER (ASPHALT AND BUILDINGS)

NOTES
1. BASE MAP CREATED FROM CAD FILE PROVIDED BY METSO MINERALS, INC.

N

0 80 160
SCALE IN FEET

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REV.	ISSUED DATE	DESCRIPTION

KEYPLAN

SEAL

ARCADIS
126 North Jefferson Street, Suite 400
Milwaukee, Wisconsin 53202
Tel: 414-276-7742 Fax: 414-276-7603
www.arcadis-us.com

METSO MINERALS INDUSTRIES, INC.
3073 SOUTH CHASE AVENUE
MILWAUKEE, WISCONSIN

PROJECT MANAGER	DEPARTMENT MANAGER	LEAD DESIGN PROF.	CHECKED BY
J. BANNANTINE	M. MAERLE	T. SCHOEN	T. SCHOEN
SHEET TITLE		TASK/PHASE NUMBER	DRAWN BY
EXTENT OF ENGINEERED BARRIER CAP		0002.WM014	C. MCKEOUGH
		PROJECT NUMBER	DRAWING NUMBER
		WI001085	14

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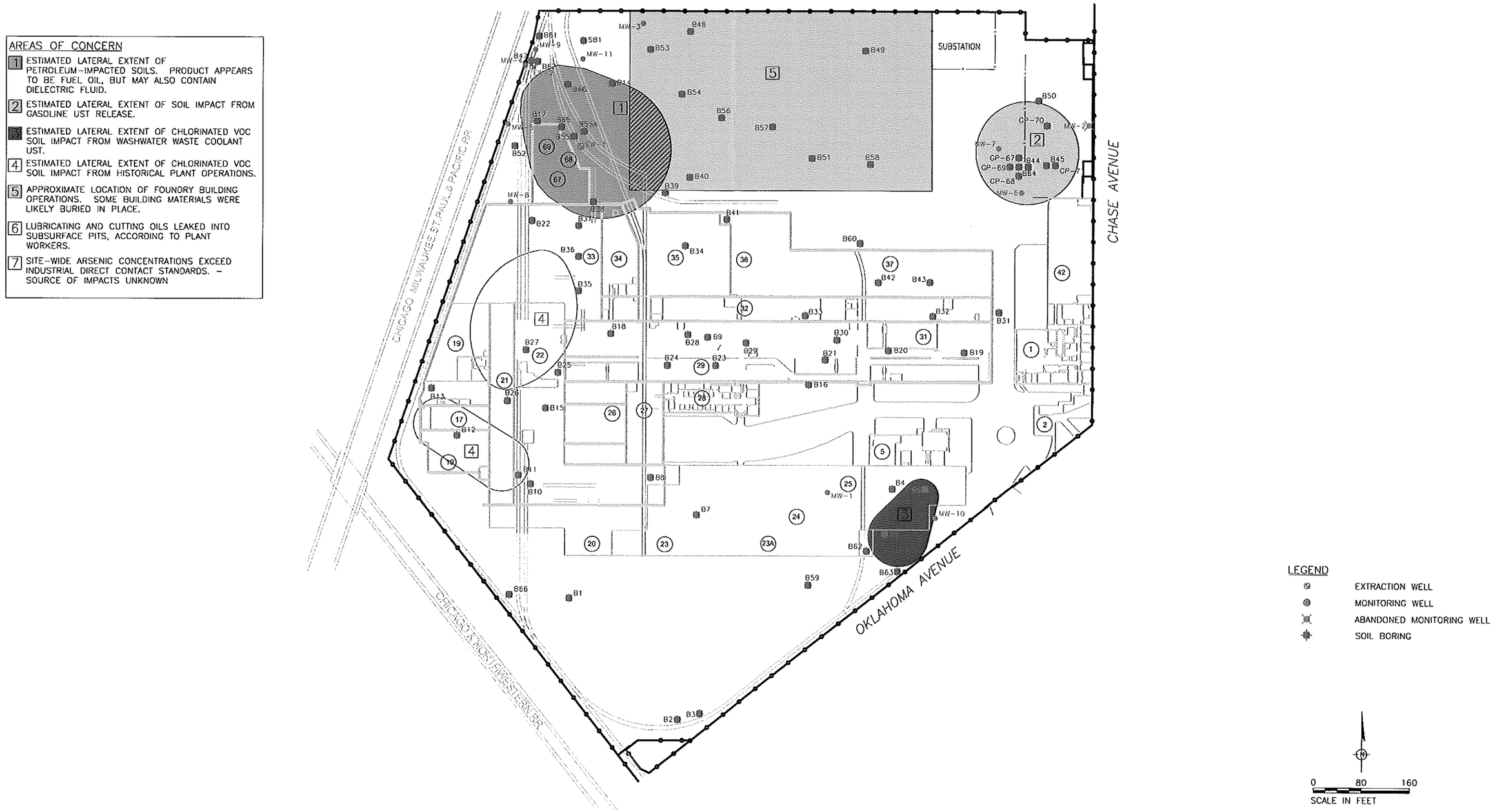

REV. ISSUED DATE DESCRIPTION	KEYPLAN	SEAL	ARCADIS 126 North Jefferson Street, Suite 400 Milwaukee, Wisconsin 53202 Tel: 414-276-7742 Fax: 414-276-7603 www.arcadis-us.com	METSO MINERALS INDUSTRIES, INC. 3073 SOUTH CHASE AVENUE MILWAUKEE, WISCONSIN	PROJECT MANAGER: J. BANNANTINE DEPARTMENT MANAGER: M. MAIERLE SHEET TITLE: SUMMARY OF AREAS OF CONCERN	LEAD DESIGN PROF.: D. GABARDI TASK/PHASE NUMBER: 0002.WI014 PROJECT NUMBER: WI001085	CHECKED BY: D. GABARDI DRAWN BY: C. MCKEOUGH DRAWING NUMBER: 3

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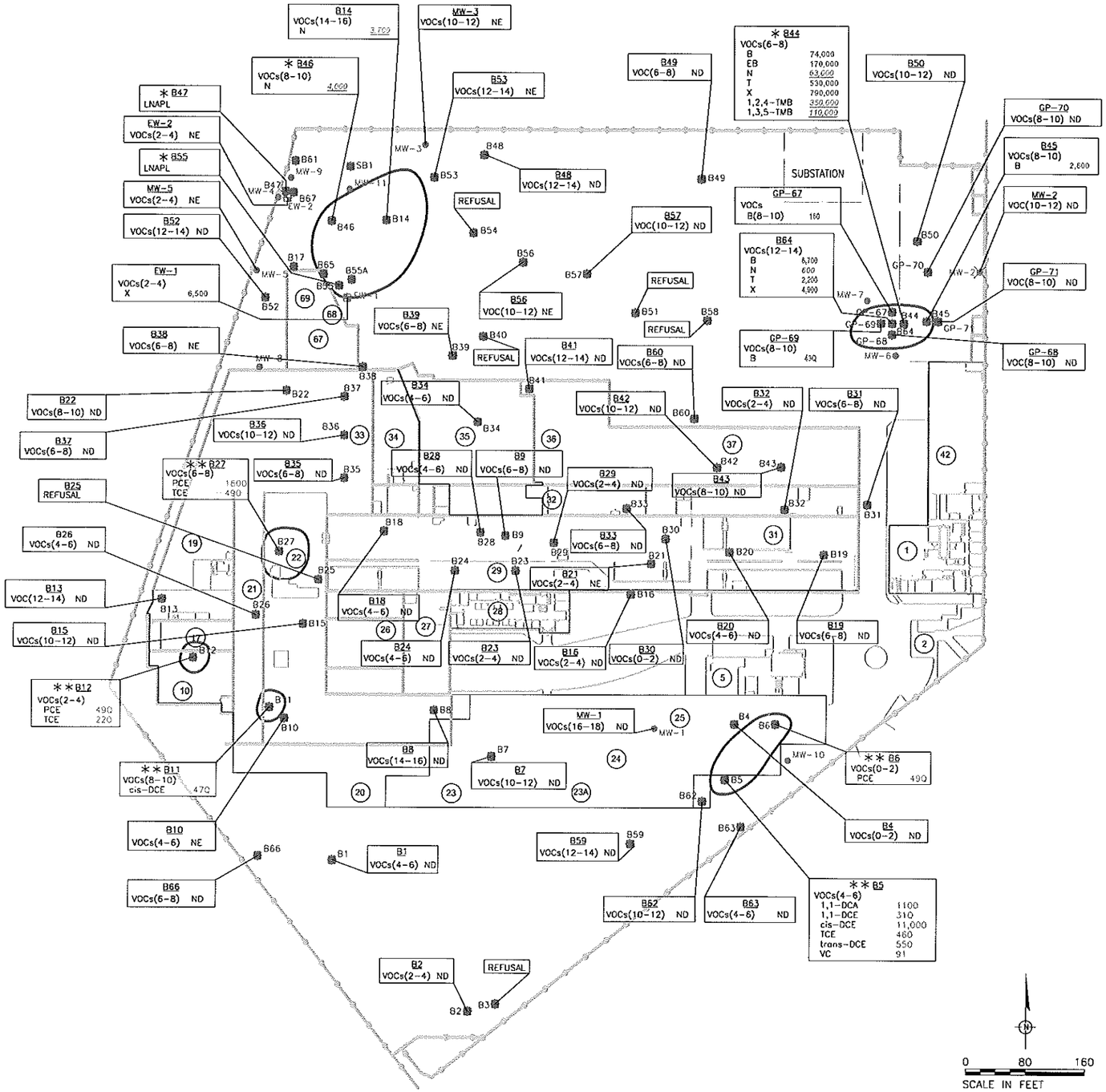

VOC KEY

VOC CONCENTRATIONS IN MICROGRAMS PER KILOGRAM

100	VOC CONCENTRATION EXCEEDS THE NR 746 SOIL CRITERIA (NR 746 CRITERIA IS THE REGULATORY INDICATOR FOR POTENTIAL FREE PHASE PRODUCT IN SOIL PORES)
100	VOC CONCENTRATION EXCEEDS THE NR 720 RCL (BASED ON GROUNDWATER PROTECTION PATHWAY)
100	CONCENTRATION EXCEEDS THE PROPOSED GROUNDWATER PATHWAY RCL FOR PAHs
100	CONCENTRATION EXCEEDS THE PROPOSED NON-INDUSTRIAL DIRECT CONTACT RCL
	ESTIMATED EXTENT OF VOC IMPACTED SOIL

LEGEND

(42)	BUILDING NUMBER
	MONITORING WELL
	ABANDONED MONITORING WELL
	SOIL BORING LOCATION
	EXTRACTION WELL
(2-4)	SOIL SAMPLE DEPTH (IN FEET BELOW LAND SURFACE)
1,1-DCA	1,1-DICHLOROETHANE
1,1-DCE	1,1-DICHLOROETHENE
1,2,4-TMB	1,2,4-TRIMETHYLBENZENE
1,3,5-TMB	1,3,5-TRIMETHYLBENZENE
B	BENZENE
cis-DCE	cis-1,2-DICHLOROETHENE
EB	ETHYLBENZENE
LNAPL	LIGHT NON-AQUEOUS PHASE LIQUID
N	NAPHTHALENE
ND	COMPOUND NOT DETECTED
NE	COMPOUNDS DETECTED BUT DID NOT EXCEED PUBLISHED STANDARDS, OR NO STANDARDS EXIST FOR THE DETECTED COMPOUND(S)
PAH	POLYCYCLIC AROMATIC HYDROCARBON
PCE	TETRACHLOROETHENE
Q	CONCENTRATION IS BETWEEN THE LIMIT OF DETECTION AND LIMIT OF QUANTITATION
RCL	RESIDUAL CONTAMINANT LEVEL
T	TOLUENE
trans-DCE	trans-1,2-DICHLOROETHENE
TCE	TRICHLOROETHENE
VC	VINYL CHLORIDE
VOC	VOLATILE ORGANIC COMPOUND
X	XYLENE
*	EXCAVATED
**	CHLORINATED VOCs CLASSIFIED AS CLASS I CARCINOGEN. NO SOIL STANDARDS ESTABLISHED.

NOTES:
1. SOIL STANDARDS FOR NUMEROUS VOCs HAVE NOT BEEN ESTABLISHED. COMPOUNDS THAT REPRESENT A POTENTIAL CONCERN DUE TO THE NATURE OF THE CONSTITUENT OR THE CONSTITUENT CONCENTRATION ARE POSTED EVEN IF NO STANDARD IS ESTABLISHED. FOR A COMPLETE LIST OF ALL CONSTITUENTS DETECTED, REFER TO THE SOIL ANALYTICAL TABLES OR THE LABORATORY ANALYTICAL REPORTS.

2. BASE MAP CREATED FROM CAD FILE PROVIDED BY METSO MINERALS INDUSTRIES, INC.

Layout Tab: (FIGURE 4) SOIL VOC
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METSO MINERALS INDUSTRIES, INC.
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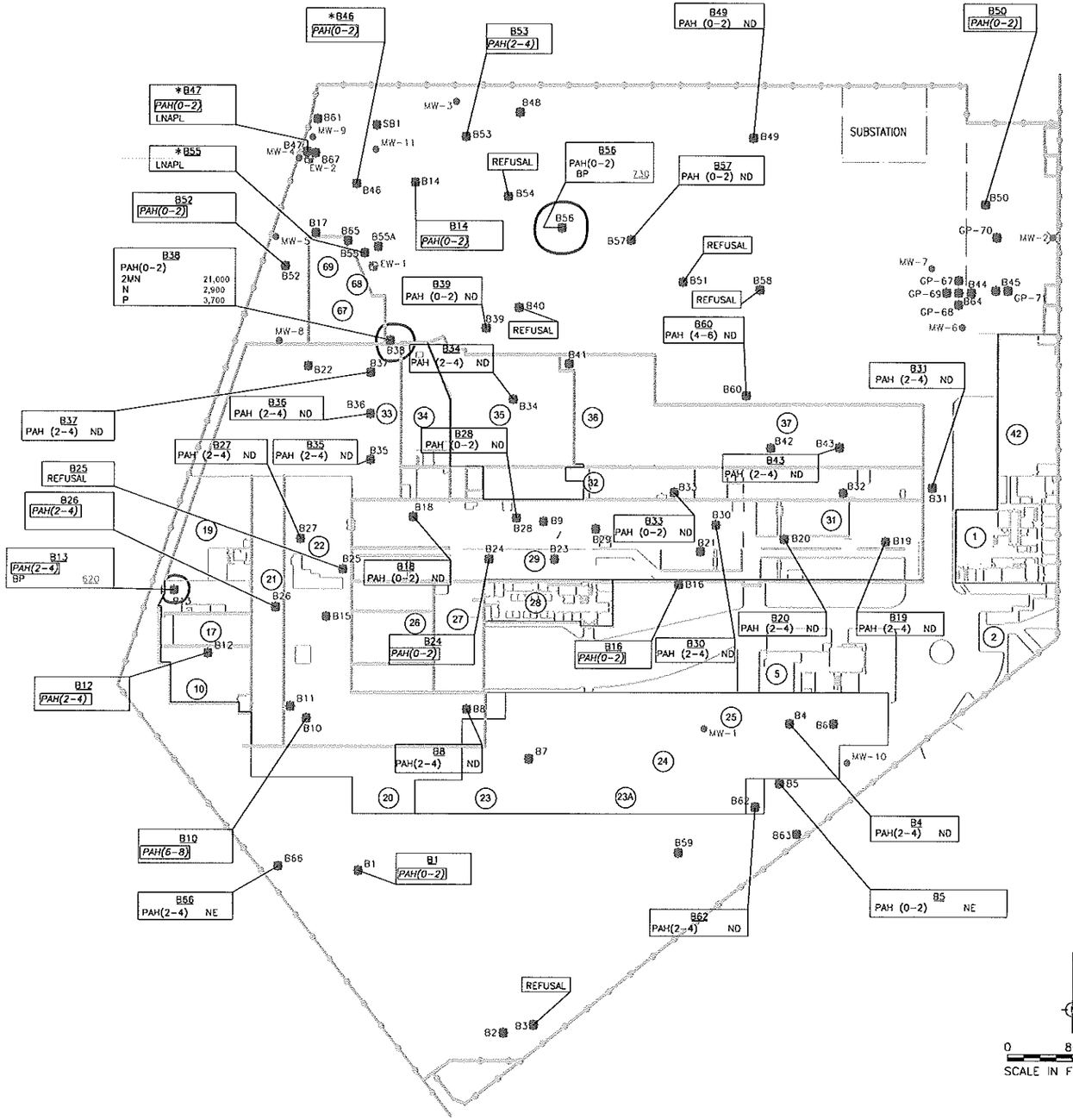
SHEET TITLE		TASK/PHASE NUMBER	DRAWN BY
SUMMARY OF PRE-REMEDIATION SOIL VOC ANALYTICAL RESULTS		0004.W0014	C. MCKEOUGH
		PROJECT NUMBER	DRAWING NUMBER
		W1001085	4



PAH KEY

REFER TO TABLE 3 FOR CONCENTRATIONS OF ALL PAH CONSTITUENTS
PAH CONCENTRATIONS IN MICROGRAMS PER KILOGRAM

PAH	ONE OR MORE PAH CONSTITUENTS EXCEED GROUNDWATER PATHWAY RCLs
PAH	ONE OR MORE PAH CONSTITUENTS EXCEED NON-INDUSTRIAL DIRECT CONTACT RCLs
PAH	ONE OR MORE PAH CONSTITUENTS EXCEED INDUSTRIAL DIRECT CONTACT RCLs
	ESTIMATED EXTENT OF PAH IMPACTS REPORTED ABOVE THE INDUSTRIAL DIRECT CONTACT RCL OR GROUNDWATER PATHWAY RCL

LEGEND

(42)	BUILDING NUMBER
	MONITORING WELL
	ABANDONED MONITORING WELL
	SOIL BORING LOCATION
	EXTRACTION WELL
(2-4)	SOIL SAMPLE DEPTH (IN FEET BELOW LAND SURFACE)
2MN	2-METHYLNAPHTHALENE
BP	BENZO(A)PYRENE
LNAPL	LIGHT NON-AQUEOUS PHASE LIQUID
N	NAPHTHALENE
ND	COMPOUND NOT DETECTED
NE	COMPOUNDS DETECTED BUT DID NOT EXCEED PUBLISHED STANDARDS, OR NO STANDARDS EXIST FOR THE DETECTED COMPOUND(S)
P	PHENANTHRENE
PAH	POLYCYCLIC AROMATIC HYDROCARBON
RCL	RESIDUAL CONTAMINANT LEVEL
*	EXCAVATED

NOTE:
1. BASE MAP CREATED FROM CAD FILE PROVIDED BY METSO MINERALS INDUSTRIES, INC.

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SHEET TITLE		TASK/PHASE NUMBER	DRAWN BY
SUMMARY OF PRE-REMEDIATION SOIL PAH ANALYTICAL RESULTS		0004.WI014	C. MCKEOUGH
		PROJECT NUMBER	DRAWING NUMBER
		WI001085	5

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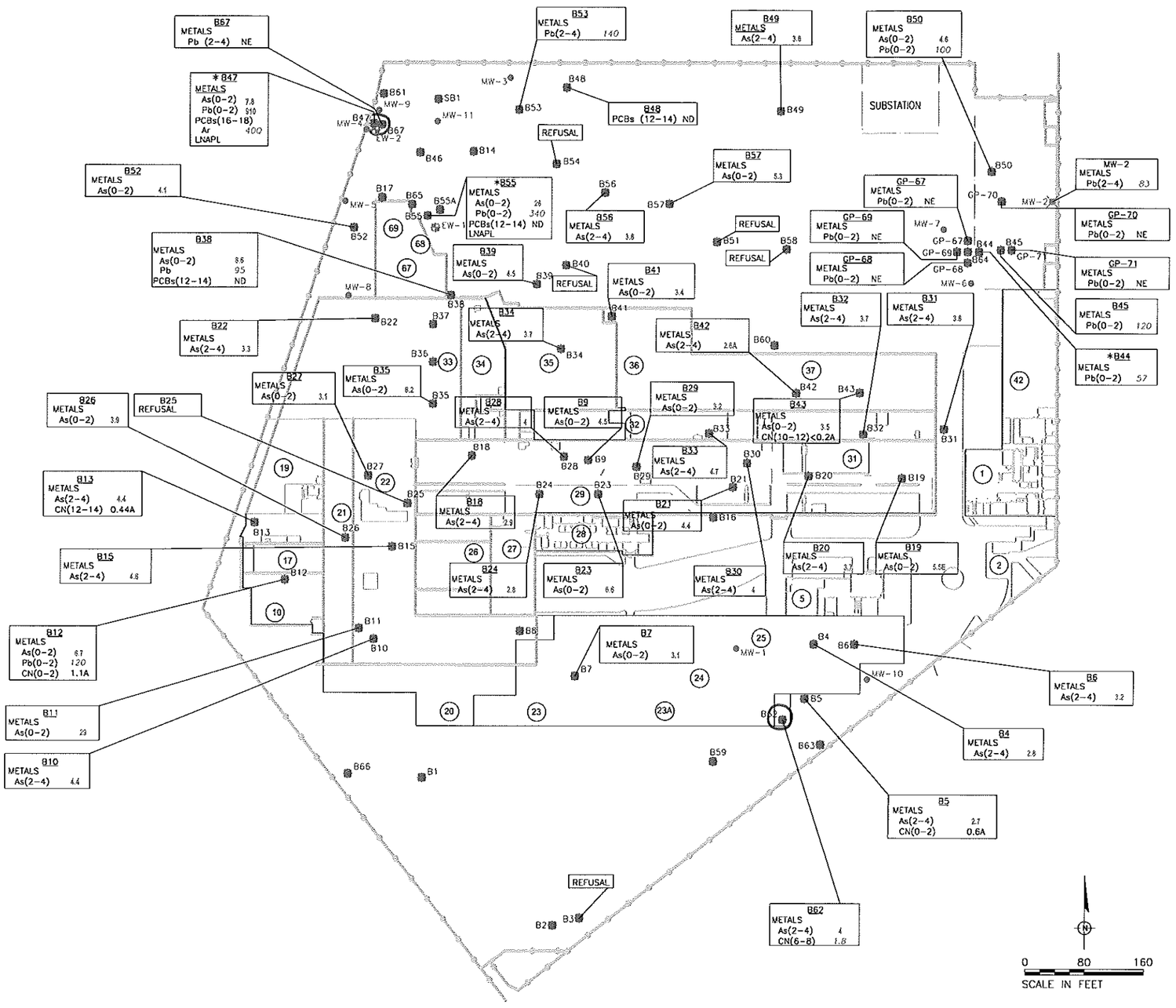

METALS KEY

METAL AND CYANIDE CONCENTRATIONS REPORTED IN MILLIGRAMS PER KILOGRAM.
PCB CONCENTRATIONS REPORTED IN MICROGRAMS PER KILOGRAM.

100	METAL CONCENTRATION EXCEEDS NON-INDUSTRIAL DIRECT CONTACT RCL
100	METAL CONCENTRATION EXCEEDS INDUSTRIAL DIRECT CONTACT RCL
~	ESTIMATED EXTENT OF SOIL IMPACTS FOR LEAD ABOVE THE INDUSTRIAL DIRECT CONTACT FOR RCL, CYANIDE, OR PCBs

LEGEND

(42)	BUILDING NUMBER
●	MONITORING WELL
⊗	ABANDONED MONITORING WELL
■	SOIL BORING LOCATION
⊞	EXTRACTION WELL
(2-4)	SOIL SAMPLE DEPTH (IN FEET BELOW LAND SURFACE)
A	ANALYTE WAS DETECTED IN THE METHOD BLANK
Ar	AROCLOR1254
As	ARSENIC
CN	CYANIDE
E	ESTIMATED CONCENTRATION DUE TO MATRIX INTERFERENCES
LNAPL	LIGHT NONAQUEOUS PHASE LIQUID
Pb	LEAD
PCBs	POLYCHLORINATED BIPHENYLS
Q	CONCENTRATION IS BETWEEN THE LIMIT OF DETECTION AND LIMIT OF QUANTITATION
RCL	RESIDUAL CONTAMINANT LEVEL
*	EXCAVATED

NOTE:
1. SOIL STANDARDS FOR CYANIDE, PCBs AND SELECT METALS HAVE NOT BEEN ESTABLISHED. COMPOUNDS THAT REPRESENT A POTENTIAL CONCERN DUE TO THE NATURE OF THE CONSTITUENT OR THE CONSTITUENT CONCENTRATION ARE POSTED EVEN IF NO STANDARD IS ESTABLISHED. FOR A COMPLETE LIST OF ALL CONSTITUENTS DETECTED, REFER TO THE SOIL ANALYTICAL TABLES OR THE LABORATORY ANALYTICAL REPORTS.

2. SOIL CYANIDE RESULTS WITH BLANK CONTAMINATION WERE NOT EVALUATED.

3. BASE MAP CREATED FROM CAD FILE PROVIDED BY METSO MINERALS, INC.

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Layout Tab: (FIGURE 6) SOIL2
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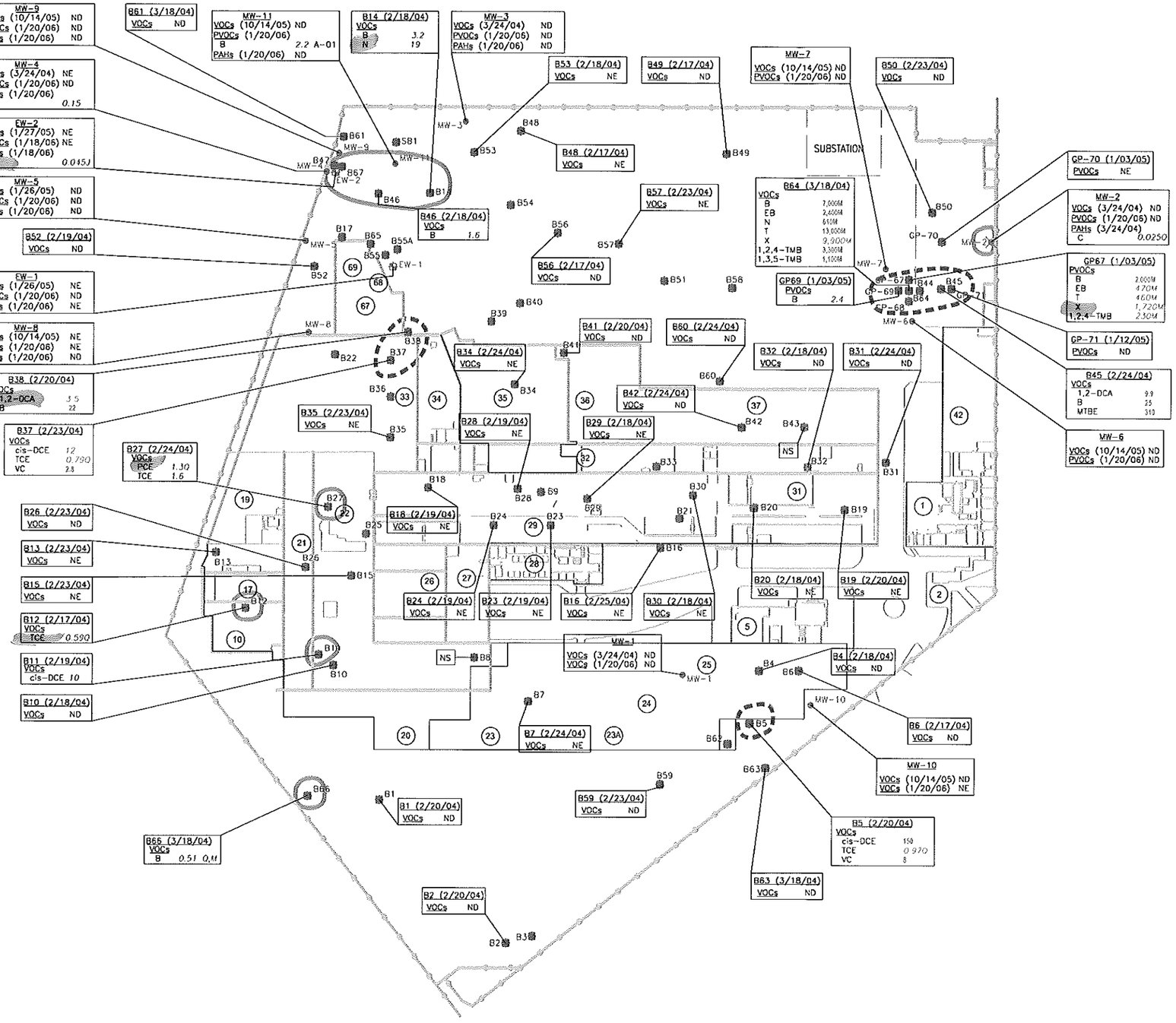
J. BANNANTINE	M. MAHERLE	T. SCHOEN	T. SCHOEN
SHEET TITLE		TASK/PHASE NUMBER	DRAWN BY
SUMMARY OF PRE-REMEDIATION SOIL METAL, CYANIDE AND PCB ANALYTICAL RESULTS		0002.W014	C. MCKEOUGH
		PROJECT NUMBER	DRAWING NUMBER
		W1001085	6



KEY

- MONITORING WELL
- ABANDONED MONITORING WELL
- SOIL BORING
- EXTRACTION WELL
- (42) BUILDING NUMBER
- *100* CONCENTRATION EXCEEDS NR 140 PREVENTIVE ACTION LIMIT
- 100 CONCENTRATION EXCEEDS NR 140 ENFORCEMENT STANDARD
- ESTIMATED EXTENT OF GROUNDWATER CONCENTRATIONS ABOVE ENFORCEMENT STANDARD
- ESTIMATED EXTENT OF GROUNDWATER CONCENTRATIONS ABOVE PREVENTIVE ACTION LIMIT

1,2-DCA	1,2-DICHLOROETHANE 5/.5
1,2,4-TMB	1,2,4-TRIMETHYLBENZENE
1,3,5-TMB	1,3,5-TRIMETHYLBENZENE
A-01	LABORATORY FOAMING AGENT PRESENT
B	BENZENE 5/.5
BP	BENZO(A)PYRENE .2/.02
BF	BENZO(B)FLOURANTHENE
C	CHRYSENE
cis-DCE	cis-1,2-DICHLOROETHENE 70/7
EB	ETHYLBENZENE
LNAPL	LIGHT NONAQUEOUS PHASE LIQUID
M	SAMPLE pH IS GREATER THAN 2
MTBE	METHYL TERT-BUTYL ETHER
N	NAPHTHALENE 100/10
ND	CONSTITUENTS NOT DETECTED
NE	CONSTITUENTS DETECTED, BUT CONCENTRATIONS ARE BELOW NR140 REGULATORY STANDARDS
PAH	POLYCYCLIC AROMATIC HYDROCARBONS
PVOC	PETROLEUM VOLATILE ORGANIC HYDROCARBONS
Q	CONCENTRATION IS BETWEEN THE LIMIT OF DETECTION AND LIMIT OF QUANTITATION
T	TOLUENE
TCE	TRICHLOROETHENE 5/.5
VC	VINYL CHLORIDE .2/.02
VOC	VOLATILE ORGANIC COMPOUND
X	XYLENE

NOTES
1. CONCENTRATIONS ARE REPORTED IN MICROGRAMS PER LITER.
2. ONLY CONCENTRATIONS REPORTED ABOVE NR140 PREVENTATIVE ACTION LIMITS ARE POSTED.
3. METHYL CHLORIDE WAS REPORTED IN SELECT RESULTS, HOWEVER THIS IS A COMMON LABORATORY CONTAMINANT.
4. BASE MAP CREATED FROM CAD FILE PROVIDED BY METSO MINERALS, INC.

0 80 160
SCALE IN FEET

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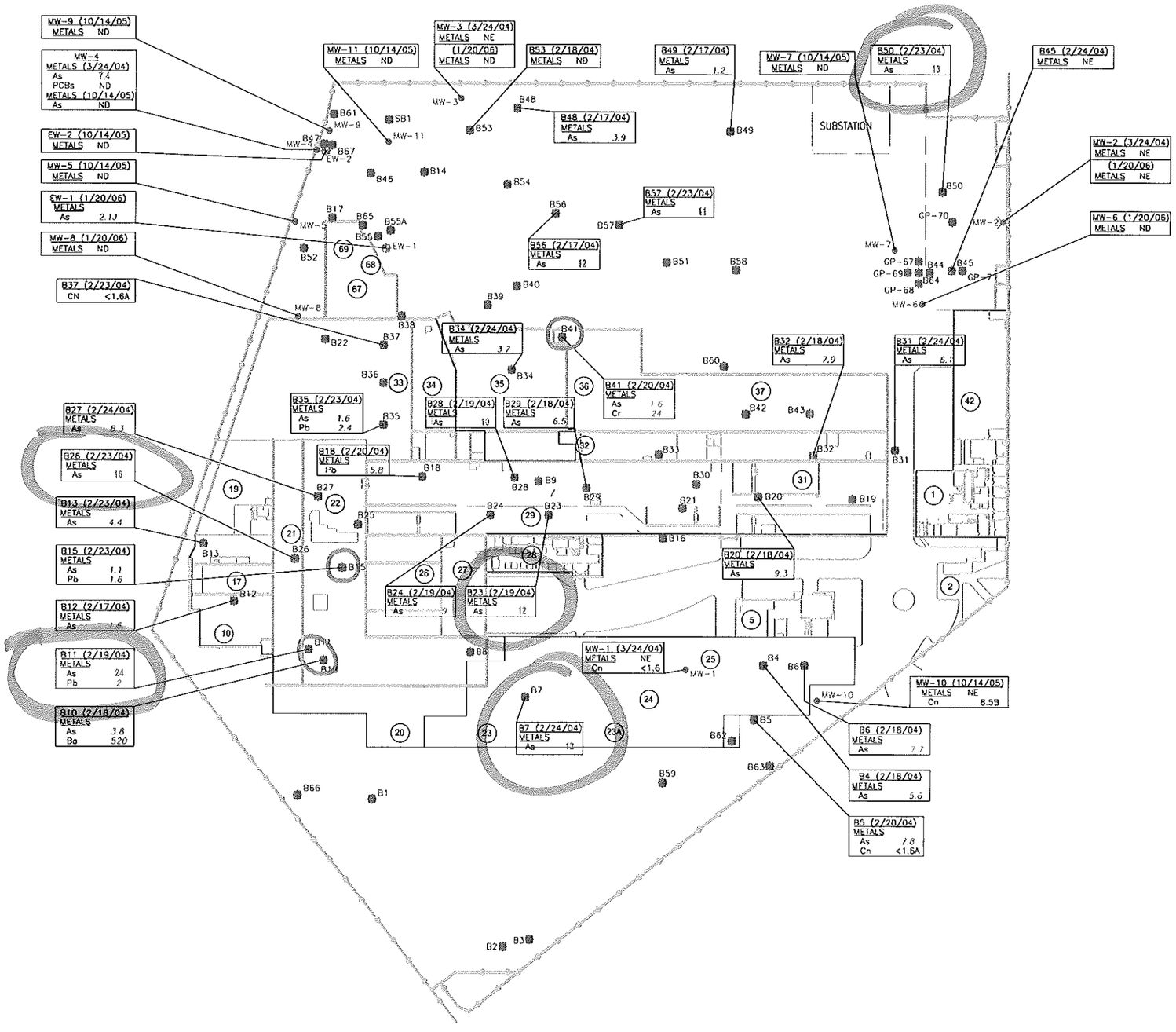
PROJECT MANAGER: J. BANNANTINE	DEPARTMENT MANAGER: M. MAERLE	LEAD DESIGN PROF.: T. SCHOEN	CHECKED BY: T. SCHOEN
SHEET TITLE: SUMMARY OF PRE- AND POST REMEDIATION GROUNDWATER VOC AND PAH ANALYTICAL RESULTS		TASK/PHASE NUMBER: 0002.WI014	DRAWN BY: C. MCKEOUGH
		PROJECT NUMBER: WI001085	DRAWING NUMBER: 7

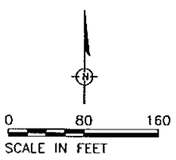
As



KEY

(42)	BUILDING NUMBER
●	MONITORING WELL
⊗	ABANDONED MONITORING WELL
■	SOIL BORING
▣	EXTRACTION WELL
100	CONCENTRATION EXCEEDS NR 140 PREVENTIVE ACTION LIMIT
100	CONCENTRATION EXCEEDS NR 140 ENFORCEMENT STANDARD
~	ESTIMATED EXTENT OF GROUNDWATER CONCENTRATIONS ABOVE PREVENTIVE ACTION LIMIT
A	ANALYTE DETECTED IN METHOD BLANK
As	ARSENIC 10 / 1
B	ANALYTE WAS DETECTED IN METHOD BLANK
Ba	BARIUM 2000 / 400
Cn	CYANIDE 200 / 40
Cr	CHROMIUM 100 / 10
J	ESTIMATED CONCENTRATION
ND	CONSTITUENTS NOT DETECTED
NE	CONSTITUENTS DETECTED, BUT CONCENTRATIONS ARE BELOW NR140 REGULATORY STANDARDS
Pb	LEAD 15 / 1.5
PCB	POLYCHLORINATED BIPHENYLS

NOTES
1. CONCENTRATIONS ARE REPORTED IN MICROGRAMS PER LITER.
2. ONLY DISSOLVED METALS REPORTED ABOVE NR140 PREVENTIVE ACTION LIMITS ARE POSTED.
3. ARSENIC DETERMINED BACKGROUND CONCENTRATIONS.
4. ALL TOTAL CYANIDE AND PCB RESULTS ARE POSTED.
5. BASE MAP CREATED FROM CAD FILE PROVIDED BY METSO MINERALS, INC.



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J. BANHANTINE	M. MAERLE	T. SCHOEN	T. SCHOEN
SHEET TITLE		TASK/PHASE NUMBER	DRAWN BY
SUMMARY OF PRE- AND POST REMEDIATION DISSOLVED METAL, CYANIDE, AND PCB ANALYTICAL RESULTS		0002.WI0014	C. MCKEOUGH
		PROJECT NUMBER	DRAWING NUMBER
		WI001085	8