Andy Boettcher
7/12

## GIS REGISTRY INFORMATION

**SITE NAME:** Former Mercury Marine Plant 18 Metal Shavings Area

**BRRTS # and FID #:** 02671894670 FID # 267008940

**CLOSURE DATE:** April 7, 2006

**STREET ADDRESS:** 105 Steel Craft Dr.

**CITY:** Hartford, WI 53027

**SOURCE PROPERTY GPS COORDINATES** (meters in WTM91 projection): X= 651975 Y= 317450

**OFF-SOURCE CONTAMINATION (>ES):** ☐ Yes ☒ No

**IF YES, STREET ADDRESS 1:** _____

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

**IF YES, STREET ADDRESS 2:** _____

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

**CONTAMINATION IN RIGHT OF WAY:** ☐ Yes ☒ No

**DOCUMENTS NEEDED:**

| | |
|---|---|
| **Closure Letter, and any conditional closure letter issued** | X |
| **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 in sufficient detail to permit the parcels to be located easily (8.5x14" if paper copy) | |
| **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) | |
| **Tables of Latest Groundwater Analytical Results (no shading or cross-hatching)** | |
| **Isoconcentration map(s), *if available from site investigation (SI)*** (8.5x14" if paper copy). The isoconcentration map should have flow direction and extent of contamination defined. **If not available, include the following 2 types of maps:** | |
| **Latest groundwater flow/monitoring well location map** | |
| **Latest extent of contaminant plume map** | |
| **Geologic cross-sections, *if available from 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)** | |
| **Copy of (soil or land use) deed restriction(s) or deed notice *if any required as a condition of closure.*** | X |

**State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES**

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

Plymouth Service Center
1155 Pilgrim Rd.
P.O. Box 408
Plymouth, Wisconsin 53073-0408
Telephone 920-892-8756
FAX 920-892-6638

April 7, 2006

Craig Dousharm
Mercury Marine, Corp.
P.O. Box 1939
Fond du Lac, WI 54936

Dear Mr. Dousharm:

Subject: Case closure (for two activities), former Mercury Marine Plant 18 Metal Shavings/Sewer Area, ~~BRRTS~~ #0267184670; Sitewide Chlorinated Area, BRRTS #0267000342. Production Test Cell Area is still open.

The department considers these two cases closed under NR 726 Wisconsin Administrative Code, based on the investigative and remedial documentation provided, having determined that no further action is necessary at the site at this time. However, 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 the environment. Note that the Production Test Cell Area is still open.

Monitoring Well Abandonment

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 Victoria Stovall on Form 3300-5B found at www.dnr.state.wi.us/org/water/dgw/gw/ or provided by the Department of Natural Resources. Don't abandon the wells associated with the Production Test Cell Area.

Deed Restriction

This property is closed with a deed restriction that requires the maintenance of a cap over remaining soil contamination at the metal shavings/sewer area. The deed restriction refers to a maintenance plan in Appendix A of the closure form on file with the department dated September 22, 2004.

Geographic Information System (GIS)

Information that was submitted with your closure request application will be included on the registry. To review the sites on the GIS Registry web page, visit

http://gomapout.dnr.state.wi.us/org/at/et/geo/gwur/index.htm

If you have any questions about this letter, please call me at 920-892-8756 extension 3023.

Sincerely,

John Feeney
Wisconsin Department of Natural Resources

Cc: SER File
Sigma Environmental Services, Inc.

DOC#: 903565

Recorded
OCT. 11,2001 AT 02:10PM

DOROTHY C. GONNERING
REGISTER OF DEEDS
WASHINGTON COUNTY, WI
Fee Amount: $23.00

Document Number

# DEED RESTRICTION

## Declaration of Restrictions

In Re: Part of the Northwest ¼ of Section 21, Town 10 North, Range 18 East, City of Hartford, Washington County, Wisconsin, bounded and described as follows: Commencing at the Southeast corner of the Northwest ¼of Section 21; thence South 89° 28' 25" West, 691.35 feet; thence South 00° 02' 05" East, 15.14 feet; thence South 84° 42' 55" West, 164.65 feet; thence North 45° 36' 40" West, 178.76 feet to a found cross cut in concrete and the point of beginning of the land to be described; thence Northwesterly 386.17 feet along the arc of a curve having a radius of 650.00 feet with its center point to the Southwest a central angle of 34° 02' 25" and a long chord bearing North 33° 20' 35" West, 380.52 feet to a found iron stake; thence North 84° 17' 35" West, 74.21 feet to a found iron stake; thence North 00° 51' 10" West, 90.74 feet; thence South 84° 17' 53" East, 375.08 feet to the corner of an existing building; thence South 04° 28' 12" West along the wall of said building, 157.77 feet; thence South 85° 31' 27" East along said wall, 209.82 feet; thence South 04° 28' 33" West, 226.74 feet; thence North 85° 31' 27" West, 268.89 feet to the point of beginning. Containing 125,662.6 square feet (2.88 acres) of land.

STATE OF WISCONSIN )
) ss
COUNTY OF WASHINGTON )

[County where document is signed]

Recording Area 23-7

SIGMA ENVIRONMENTAL
ATTN: JODI VANDERVELDEN
220 EAST RYAN RD
OAK CREEK WI 53154

Parcel Identification Number (PIN)

WHEREAS, Steel Craft Corporation is the owner of the above-described property.

WHEREAS, petroleum hydrocarbon and polycyclic aromatic hydrocarbon discharges have occurred on this property. Petroleum hydrocarbon and polycyclic aromatic hydrocarbon contaminated soil remains on this property at the location described on the attached **Exhibit I**.

WHEREAS, it is the desire and intention of the property owner to impose on the property restrictions which will make it unnecessary to conduct further soil remediation activities on the property at the present time.

NOW THEREFORE, the owner hereby declares that all of the property described above is held and shall be held, conveyed or encumbered, leased, rented, used, occupied and improved subject to the following limitation and restrictions:

> A soil cover has been constructed as a remedial action to address residual soil contamination on the property (See **Exhibit II**). Therefore, the following activities are prohibited on that portion of the property described above where a cap or cover has been placed, unless prior written approval has been obtained from the Wisconsin Department of Natural Resources or its successor or assign: (1) excavating or grading of the land surface; (2) filling on the capped area; (3) plowing for agricultural cultivation; and, (4) construction or installation of a building or other structure with a foundation that would sit on or be placed within the cap or cover. In addition, the cap or cover shall be maintained in compliance with a plan prepared and submitted to the Wisconsin Department of Natural Resources by a responsible party, as required by Section NR 724.13(2), Wis. Adm. Code (1997).

This restriction is hereby declared to be a covenant running with the land and shall be fully binding upon all persons acquiring the above-described property whether by descent, devise, purchase or otherwise. This restriction inures to the benefit of and is enforceable by the Wisconsin Department of Natural Resources, its successors or assigns. The Department, its successors or assigns, may initiate proceedings at law or in equity against any person or persons who violate or are proposing to violate this covenant, to prevent the proposed violation or to recover damages for such violation.

Any person who is or becomes owner of the property described above may request that the Wisconsin Department of Natural Resources or its successor issue a determination that one or more of the restrictions set forth in this covenant is no longer required. Upon the receipt of such a request, the Wisconsin Department of Natural Resources shall determine whether or not the restrictions contained herein can be extinguished. If the Department determines that the restrictions can be extinguished, an affidavit, attached to a copy of the Department's written determination, may be recorded by the property owner or other interested party to give notice that this deed restriction, or portions of this deed restriction, are no longer binding.

By signing this document, GENE WENDORFF asserts that he is duly authorized to sign this document on behalf of the property owner, Steel Craft Corporation.

IN WITNESS WHEREOF, the owner of the property has executed this Declaration of Restrictions, this 17TH day of SEPTEMBER ~~2004~~ 2001

STEEL CRAFT CORPORATION

Signature Gene Wendorff

(Printed Name) GENE WENDORFF

SECRETARY

Subscribed and sworn to before me this 17TH day of SEPTEMBER, ~~2000~~ 2001

David M Zingsheim

Notary Public, State of WISCONSIN

My commission expires 5/5/2002

DAVID M. ZINGSHEIM

Document Number

**SPECIAL WARRANTY AND QUIT CLAIM DEED**

*Title of Document*

DOC#: 853838

Recorded
APR. 20,2000 AT 11:45AM

DOROTHY C. GONNERING
REGISTER OF DEEDS
WASHINGTON COUNTY, WI
Fee Amount: $20.00
Transfer fee: $12000.00

20-6

Record this document with the Register of Deeds

Name and Return Address:

Bradley D. Page, Esq.
Davis & Kuelthau, s.c.
111 E. Kilbourn, Suite 1400
Milwaukee, WI 53202

36-2102-004-001
(Parcel Identification Number)

This Document was Drafted by:

James A. Parker, Esq.
Mayer, Brown & Platt
180 South LaSalle Street
Chicago, Illinois 60603

\\ODMA\WORLDOX\F:\DOCS\STEL_CRA\MERC_HUB\SPW_D.WPD

DOC#: 853838

Instrument Recorded By:
James A. Parker
Mayer, Brown & Platt
190 South LaSalle Street
Chicago, Illinois 60603

Order No:

# Special Warranty and Quit Claim Deed

For the consideration of Ten Dollars, and other valuable consideration,

BRUNSWICK CORPORATION, a Delaware corporation ("Grantor")

does hereby grant, bargain, sell and convey to

HARTFORD INVESTMENT COMPANY, LLC, a Wisconsin limited liability company ("Grantee")

the following real property located in Washington County, Wisconsin:

(see attached Exhibit A)

TRANSFER
$12,000.00
FEE

Grantor hereby binds itself to warrant and defend the title as against all acts of the Grantor or claimed by or through the Grantor herein and no other, except as set forth on Exhibit C.

For the consideration of Ten Dollars, and other valuable consideration, Grantor hereby quit claims to Grantee the following real property located in Washington County, Wisconsin:

(see attached Exhibit B)

Tax Key No. 36-2102-004-001.

Dated: April 19th, 2000

BRUNSWICK CORPORATION,
a Delaware corporation

By: _____
C.M. Berry, Assistant Secretary

Signed and sealed in the presence of:

Christine Bogdovitz

Jacquelyn Mohr

1007835.2 41800 2142C 94150737

A

STATE OF ILLINOIS )
LAKE COUNTY )

Personally came before me this 19th day of April, 2000, C.M. Berry, of Brunswick Corporation, to me known to be the person who executed the foregoing instrument and to me known to be such Assistant Secretary of such corporation acknowledged that she executed the foregoing instrument as such officer of such corporation, by its authority.

Elizabeth McGrail

Notary Public, Lake County, Illinois

My commission expires August 8, 2002.

[NOTARY SEAL]

"OFFICIAL SEAL"
ELIZABETH McGRAIL
NOTARY PUBLIC STATE OF ILLINOIS
My Commission Expires 08/08/2002

EXHIBIT A

That part of the SE 1/4 of the NW 1/4 and the SW 1/4 of the NE 1/4, all in section 21, Town 10 North, Range 18 East, City of Hartford, Washington County, Wisconsin and being in whole or in part of Block 'K' of A.M. Thomson Addition, O.L. 259 of ownership map of SW 1/4 of the NE 1/4 recorded on page 13 of Map Book 7, O.L. 266 of Assessor's plat of SE 1/4 of NW 1/4 recorded on page 17 of Map Book 7, which is bounded and described as follows:

Beginning at the center of said section 21; thence S 89 degrees 28' 25" W along the quarter section line, 58.50 feet; thence N 43 degrees 35' 00" W, 211.00 feet; thence N 85 degrees 37' 42" W, 732.63 feet; thence N 41 degrees 54' 14" W 359.60 feet; thence N 55 degrees 12' 00" W, 113.02 feet to a point on the East right-of-way line of Grand Avenue; thence N 00 degrees 51' 10" W along said line of Grand Avenue, 193.08 feet to a point on the Railroad right-of-way; thence S 84 degrees 37' 40" E along said railroad line, 1273.16 feet; thence easterly along the arc of a curve to the left, curve radius 3760.58 feet, chord bearing S 87 degrees 18' 43" E, chord distance 412.18 feet; thence easterly along the arc of a curve to the left, curve radius 3001.08 feet, chord bearing N 86 degrees 37' 50" E, chord distance 252.28 feet; thence easterly along the arc of a curve to the left, curve radius 3001.08 feet, chord bearing N 81 degrees 03' 36" E, chord distance 331.02 feet to a point on the west right-of-way line of Wilson Avenue; thence S 18 degrees 14' 00" W along said line of Wilson Avenue, 186.44 feet; thence S 04 degrees 22' 15" W along said line of Wilson Avenue, 339.64 feet; thence S 39 degrees 39' 50" W, 175.45 feet to a point on the quarter section line; thence S 89 degrees 20' 25" W along said quarter section line, 790.60 feet to the place of beginning.

PT 36-2102-004-001

EXHIBIT B

That part of the NE 1/4 of the SW 1/4 and the SE 1/4 of the NW 1/4, all in section 21, Town 10 North, Range 18 East, City of Hartford, Washington County, Wisconsin and being a part of Outlot 266 of the Assessor's plat of said SE 1/4 of the NW 1/4, which is bounded and described as follows:

Commencing at the center of said section 21; thence S 89 degrees 28' 25" W along the quarter section line, 58.50 feet to the place of beginning of lands herein described; thence continuing S 89 degrees 28' 25" W along said quarter section line, 632.85 feet; thence S 00 degrees 02' 05" E, 15.15 feet to a point on the bank of the Rubicon River; thence S 84 degrees 42' 56" W along a meander line of said river, 164.65 feet; thence N 45 degrees 36' 40" W along said meander line, 178.76 feet; thence northwesterly along the arc of a curve to the left, said curve being a meander of said river, curve radius 650.00 feet, chord bearing N 33 degrees 20' 35" W, chord distance 380.52 feet; thence N 84 degrees 17' 35" W along said meander line, 74.21 feet to a point on the east right-of-way line of Grand Avenue; thence N 00 degrees 51' 10" W along said line of Grand Avenue, 126.23 feet; thence S 55 degrees 12' 00" E, 113.02 feet; thence S 41 degrees 54' 14" E, 359.60 feet; thence S 85 degrees 37' 42" E, 732.63 feet; thence S 43 degrees 35' 00" E, 211.00 feet to the place of beginning.

Together with all lands lying between said meander line and the bank of the Rubicon River.

PT 36-2102-004-001

**FOR INFORMATIONAL PURPOSES ONLY**
Tax Key No. 36-2102-004-001.

# EXHIBIT C

(a) Taxes, general and special, for the year 2000 and subsequent years, not yet due and payable.

(b) Rights of the public in any portion of the subject premises lying below the ordinary high water mark of Rubicon River and/or Millpond, and rights of the government to regulate the use of the shore and riparian rights.

(c) Right of public or quasi public utilities in the land.

(d) Restrictions, Conditions, Covenants, Easements, Rights and Rights of way, contained in Warranty Deed executed by B.M. Kissel, d/k/a Hartford Industries Company and whose full name is Blanche M. Kissel TO Wadhams Oil Company dated June 29, 1935 and recorded August 17, 1935 in Volume 112 of Deeds, page 249, as Document No. 158985.

(e) Utility Easement granted to Wisconsin Electric Power Company recorded September 22, 1972 in Volume 528 of Records, page 132, as Document No. 336061.

(f) Easement (including rights and conditions therein contained) granted to City of Hartford dated December 17, 1935 and recorded December 21, 1935 at 10:15 A.M., as Document No. 159940.

(g) Award of Damages by State of Wisconsin Department of Transportation Section 84.09(2), 85.09 recorded March 29, 1984 at 8:30 A.M. in Volume 822 of Records, page 312, as Document No. 465242.

(h) Terms, Conditions and Reservations contained in Warranty Deed executed by US Marine Corporation, a Wisconsin Corporation to City of Hartford, a municipal corporation dated February 12, 1988 and recorded February 18, 1988 at 10:07 A.M. in Volume 974 of Records, page 537, as Document No. 523851.

(i) Reservations, rights, restrictions and easements contained in Quit Claim Deed executed by CMC Real Estate Corporation, a Wisconsin Corporation dated December 15, 1988 and recorded January 5, 1989 at 2:15 P.M. in Volume 1013 of Records, page 586, as Document No. 538367.

(j) Covenants, conditions, restrictions, limitations and easements contained in Deed, dated August 19, 1996 and recorded September 20, 1996 at 9:00 A.M., in Volume 1632 of Records, page 567, as Document No. 728315.

MAPQUEST.

Send To Printer Back to Map

105 Steelcraft Dr
Hartford WI
53027-1631 US

**Notes:**

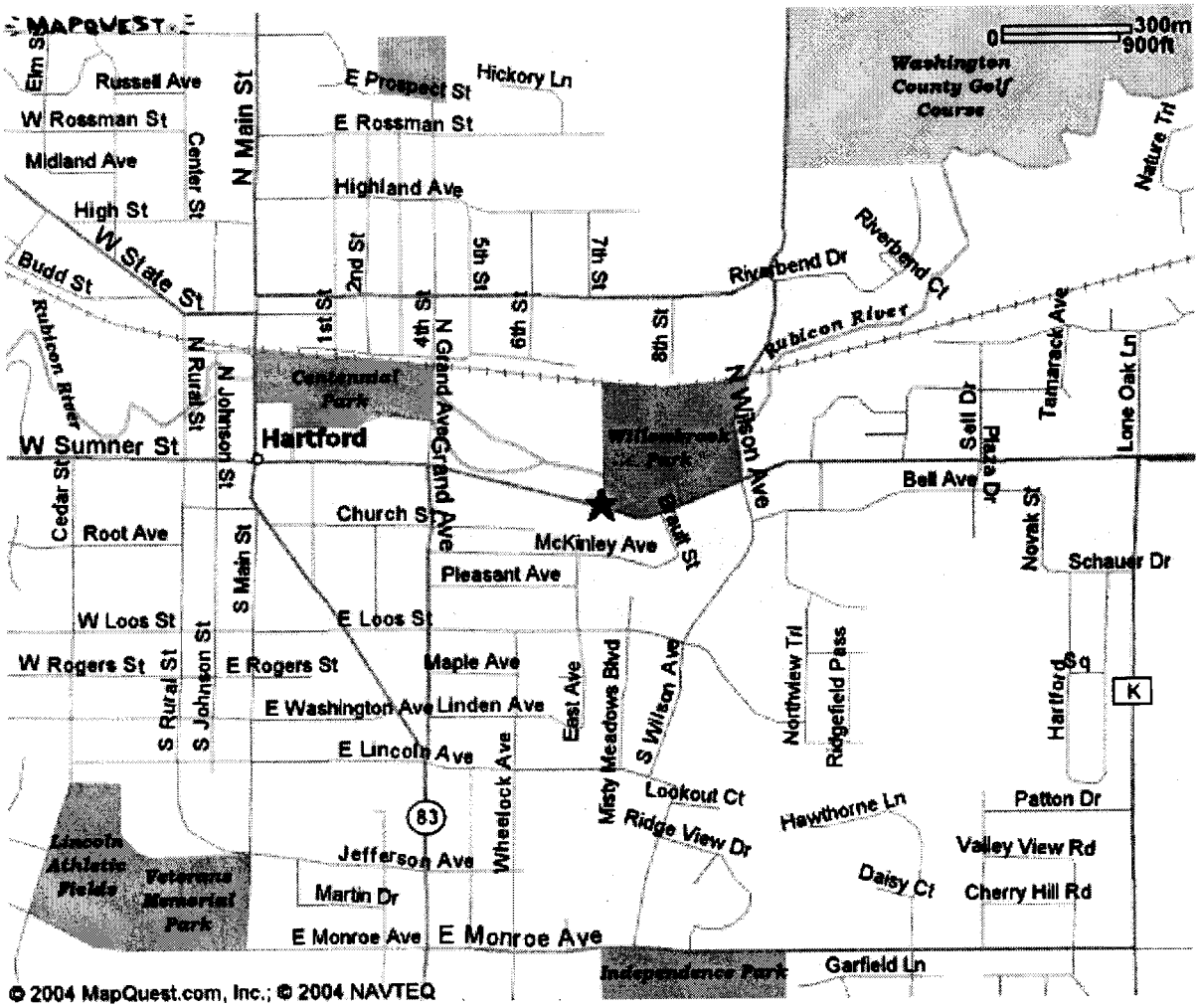
.....

.....

.....

.....





## SOIL QUALITY RESULTS

| SAMPLE ID* AND DEPTH | GP-1 6'-8' | GP-1 8'-10' | GP-2 6'-8' | GP-2 8'-10' | GP-3 2'-4' | GP-3 6'-8' | GP-4 4'-6' | GP-4 8'-10' | GP-5 2'-4' | GP-5 8'-10' | GP-6 2'-4' | GP-6 6'-8' | MSA MW-3 4'-6' | MSA MW-3 10'-12' | MSA MW-4 6'-8' | MSA MW-4 8'-10' | MSA MW-5 6'-8' | MSA MW-5 10'-12' | MSA MW-6 6'-8' | MSA MW-6 8'-10' | STS GP-13 2'-4' | STS GP-16 2'-4' | STS GP-17 2'-4' | STS GP-18 2'-4' | STS GP-23 1.5'-2' | STS GP-24 1.5'-2' | STS GP-25 2'-4' |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| METHYLENE CHLORIDE | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | 13.5 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | --- | --- | <5.8 | <5.8 | <5.8 | <5.8 |
| trans-1,2-DICHLOROETHENE | 12.1 | <5.8 | <5.8 | <5.8 | 25 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | --- | --- | <5.8 | <5.8 | <5.8 | <5.8 |
| VINYL CHLORIDE | 17.1 | <18.8 | <18.8 | <18.8 | <18.8 | <18.8 | <18.8 | <18.8 | <18.8 | <18.8 | <18.8 | <18.8 | <18.8 | <18.8 | <18.8 | <18.8 | <18.8 | <18.8 | <18.8 | <18.8 | <18.8 | --- | --- | <18.8 | <18.8 | <18.8 | <18.8 |
| cis-1,2,-DICHLOROETHENE | 45.4 | <5.8 | <5.8 | <5.8 | 36.5 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | 58.6 | 5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | 9.2 | <5.8 | <5.8 | --- | --- | <5.8 | <5.8 | <5.8 | <5.8 |
| 1,1,2-TRICHLOROETHYLENE | 23.9 | <5.8 | <5.8 | <5.8 | 27.4 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | 27.7 | 8.6* | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | --- | --- | <5.8 | <5.8 | <5.8 | <5.8 |
| 1,1,1-TRICHLOROETHYLENE | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | <5.8 | --- | --- | <5.8 | <5.8 | 14.4 | <5.8 |
| DIESEL RANGE ORGANICS | <3.5 | <3.5 | <3.5 | <3.5 | 79.5 | <3.5 | 22900* | <3.5 | 3380* | <3.5 | <3.5 | <3.5 | 336* | <3.5 | 2150* | 121* | 81.6 | <3.5 | <3.5 | <3.5 | 73.7 | 23.5 | 78.4 | 63.8c | 122c* | 282c* | 91.8c |

ALL RESULTS ARE EXPRESSED IN PARTS PER BILLION (ppb), EXCEPT DRO WHICH IS EXPRESSED IN PARTS PER MILLION (ppm)
ALL SAMPLE DETH'S SHOWN ARE FEET BELOW GROUND SURFACE
--- = NOT ANALYZED
c = DRO PEAKS OUTSIDE CHROMATOGRAPH WINDOW
* = NR 720 SOIL STANDARD EXCEEDANCE

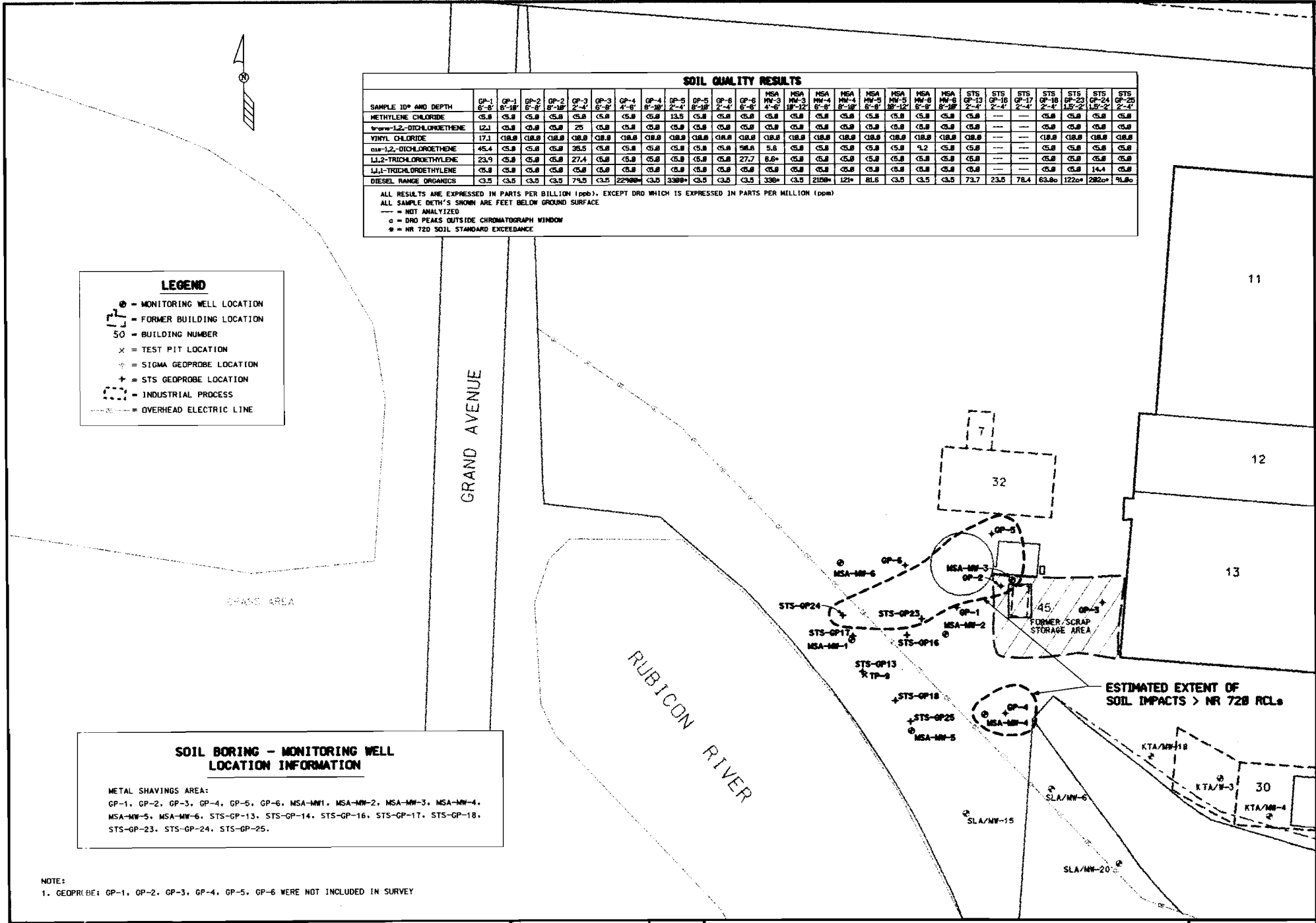
### LEGEND

- ⊕ = MONITORING WELL LOCATION
- = FORMER BUILDING LOCATION
- 50 = BUILDING NUMBER
- × = TEST PIT LOCATION
- ✧ = SIGMA GEOPROBE LOCATION
- + = STS GEOPROBE LOCATION
- = INDUSTRIAL PROCESS
- = OVERHEAD ELECTRIC LINE

### SOIL BORING - MONITORING WELL LOCATION INFORMATION

METAL SHAVINGS AREA:
GP-1, GP-2, GP-3, GP-4, GP-5, GP-6, MSA-MW1, MSA-MW-2, MSA-MW-3, MSA-MW-4, MSA-MW-5, MSA-MW-6, STS-GP-13, STS-GP-14, STS-GP-16, STS-GP-17, STS-GP-18, STS-GP-23, STS-GP-24, STS-GP-25.

NOTE:
1. GEOPROBE: GP-1, GP-2, GP-3, GP-4, GP-5, GP-6 WERE NOT INCLUDED IN SURVEY




SIGMA ENVIRONMENTAL SERVICES, INC.
220 EAST RYAN ROAD
OAK CREEK, WISCONSIN 53154
PHONE : (414) 768 - 7144
1-800-732-4671

GRAPHIC SCALE 0' 20' 40' 60' 80'

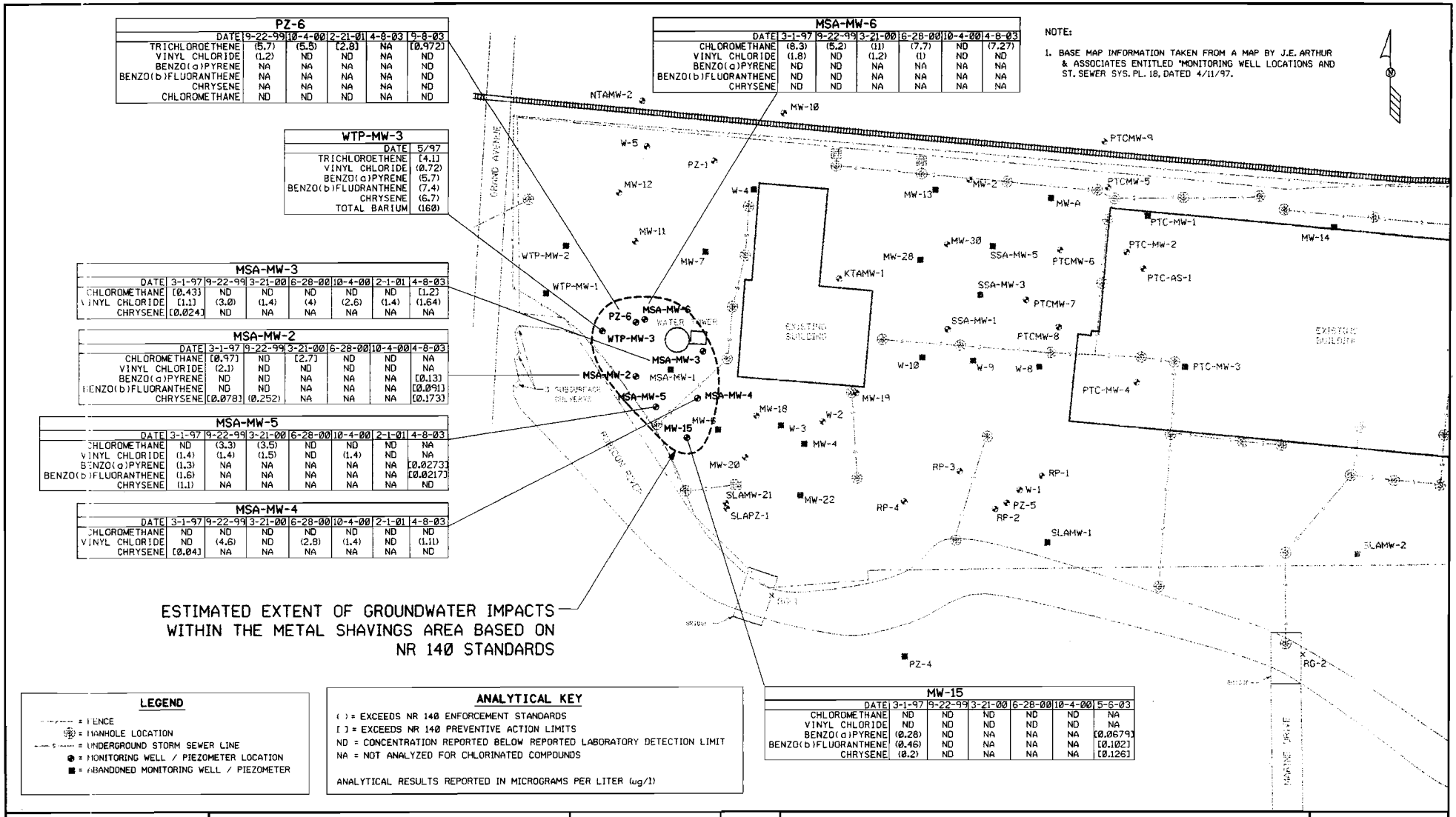
| NO | DATE | REVISIONS | BY | APVD |
|---|---|---|---|---|
| | | | | |

| | NAME: | DATE: |
|---|---|---|
| DRAWN BY: | BEB | 4-22-04 |
| DESIGNED BY: | | |
| CHECKED BY: | | |
| APPROVED BY: | | |

MERCURY MARINE - PLANT 18
105 MARINE DRIVE, HARTFORD, WISCONSIN
MSA - SOIL QUALITY MAP

DRAWING NUMBER 3163-005

FIGURE 8




**PZ-6**

| DATE | 9-22-99 | 10-4-00 | 2-21-01 | 4-8-03 | 9-8-03 |
|---|---|---|---|---|---|
| TRICHLOROETHENE | (5.7) | (5.5) | [2.8] | NA | [0.972] |
| VINYL CHLORIDE | (1.2) | ND | ND | NA | ND |
| BENZO(a)PYRENE | NA | NA | NA | NA | ND |
| BENZO(b)FLUORANTHENE | NA | NA | NA | NA | ND |
| CHRYSENE | NA | NA | NA | NA | ND |
| CHLOROMETHANE | ND | ND | ND | NA | ND |

**MSA-MW-6**

| DATE | 3-1-97 | 9-22-99 | 3-21-00 | 6-28-00 | 10-4-00 | 4-8-03 |
|---|---|---|---|---|---|---|
| CHLOROMETHANE | (8.3) | (5.2) | (11) | (7.7) | ND | (7.27) |
| VINYL CHLORIDE | (1.8) | ND | (1.2) | (1) | ND | ND |
| BENZO(a)PYRENE | ND | ND | NA | NA | NA | NA |
| BENZO(b)FLUORANTHENE | ND | ND | NA | NA | NA | NA |
| CHRYSENE | ND | ND | NA | NA | NA | NA |

**WTP-MW-3**

| DATE | 5/97 |
|---|---|
| TRICHLOROETHENE | [4.1] |
| VINYL CHLORIDE | (0.72) |
| BENZO(a)PYRENE | (5.7) |
| BENZO(b)FLUORANTHENE | (7.4) |
| CHRYSENE | (6.7) |
| TOTAL BARIUM | (160) |

**MSA-MW-3**

| DATE | 3-1-97 | 9-22-99 | 3-21-00 | 6-28-00 | 10-4-00 | 2-1-01 | 4-8-03 |
|---|---|---|---|---|---|---|---|
| CHLOROMETHANE | [0.43] | ND | ND | ND | ND | ND | [1.2] |
| VINYL CHLORIDE | [1.1] | (3.0) | (1.4) | (4) | (2.6) | (1.4) | (1.64) |
| CHRYSENE | [0.024] | ND | NA | NA | NA | NA | NA |

**MSA-MW-2**

| DATE | 3-1-97 | 9-22-99 | 3-21-00 | 6-28-00 | 10-4-00 | 4-8-03 |
|---|---|---|---|---|---|---|
| CHLOROMETHANE | [0.97] | ND | [2.7] | ND | ND | NA |
| VINYL CHLORIDE | (2.1) | ND | ND | ND | ND | NA |
| BENZO(a)PYRENE | ND | ND | NA | NA | NA | [0.13] |
| BENZO(b)FLUORANTHENE | ND | ND | NA | NA | NA | [0.091] |
| CHRYSENE | [0.078] | (0.252) | NA | NA | NA | [0.173] |

**MSA-MW-5**

| DATE | 3-1-97 | 9-22-99 | 3-21-00 | 6-28-00 | 10-4-00 | 2-1-01 | 4-8-03 |
|---|---|---|---|---|---|---|---|
| CHLOROMETHANE | ND | (3.3) | (3.5) | ND | ND | ND | NA |
| VINYL CHLORIDE | (1.4) | (1.4) | (1.5) | ND | (1.4) | ND | NA |
| BENZO(a)PYRENE | (1.3) | NA | NA | NA | NA | NA | [0.0273] |
| BENZO(b)FLUORANTHENE | (1.6) | NA | NA | NA | NA | NA | [0.0217] |
| CHRYSENE | (1.1) | NA | NA | NA | NA | NA | ND |

**MSA-MW-4**

| DATE | 3-1-97 | 9-22-99 | 3-21-00 | 6-28-00 | 10-4-00 | 2-1-01 | 4-8-03 |
|---|---|---|---|---|---|---|---|
| CHLOROMETHANE | ND | ND | ND | ND | ND | ND | ND |
| VINYL CHLORIDE | ND | (4.6) | ND | (2.8) | (1.4) | ND | (1.11) |
| CHRYSENE | [0.04] | NA | NA | NA | NA | NA | ND |

ESTIMATED EXTENT OF GROUNDWATER IMPACTS WITHIN THE METAL SHAVINGS AREA BASED ON NR 140 STANDARDS

**LEGEND**

- = FENCE
- = MANHOLE LOCATION
- = UNDERGROUND STORM SEWER LINE
- = MONITORING WELL / PIEZOMETER LOCATION
- = ABANDONED MONITORING WELL / PIEZOMETER

**ANALYTICAL KEY**

( ) = EXCEEDS NR 140 ENFORCEMENT STANDARDS
[ ] = EXCEEDS NR 140 PREVENTIVE ACTION LIMITS
ND = CONCENTRATION REPORTED BELOW REPORTED LABORATORY DETECTION LIMIT
NA = NOT ANALYZED FOR CHLORINATED COMPOUNDS

ANALYTICAL RESULTS REPORTED IN MICROGRAMS PER LITER (ug/l)

**MW-15**

| DATE | 3-1-97 | 9-22-99 | 3-21-00 | 6-28-00 | 10-4-00 | 5-6-03 |
|---|---|---|---|---|---|---|
| CHLOROMETHANE | ND | ND | ND | ND | ND | NA |
| VINYL CHLORIDE | ND | ND | ND | ND | ND | NA |
| BENZO(a)PYRENE | (0.28) | ND | NA | NA | NA | [0.0679] |
| BENZO(b)FLUORANTHENE | (0.46) | ND | NA | NA | NA | [0.102] |
| CHRYSENE | (0.2) | ND | NA | NA | NA | [0.126] |


SIGMA ENVIRONMENTAL SERVICES INC.
220 EAST RYAN ROAD
OAK CREEK, WISCONSIN 53154
PHONE : (414) 768 - 7144
1-800-732-4671


SCALE – 0' 75' 150'

| NO | DATE | REVISIONS | BY | APVD |
|---|---|---|---|---|
| | | | | |

| | NAME: | DATE: |
|---|---|---|
| DRAWN BY: | BEB | 4-22-04 |
| DESIGNED BY: | | |
| CHECKED BY: | | |
| APPROVED BY: | | |

**MERCURY MARINE PLANT 18**
**105 MARINE DRIVE, HARTFORD, WISCONSIN**
**MSA- GROUNDWATER QUALITY MAP (NR 140 EXCEEDANCES ONLY)**

DRAWING NUMBER 7275-002

FIGURE 3

**Table 2**
**Mercury Marine Plant 18**
Hartford, Wisconsin
Project Number #5018

| Parameter | Units | Detection Limit* | MSA MW-2 | | | | | | | | | | | | | NR 140 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 07/25/1995 | 10/31/1995 | 02/13/1996 | 05/21/1996 | 08/20/1996 | 12/23/1996 | 03/01/1997 | 09/22/1999 | 03/21/2000 | 06/28/2000 | 10/04/2000 | 04/08/2003 | | ESs | PALs |
| **Volatile Organic Compounds** | | | | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | ug/L | 1 | 1 | 1.7 | - | 1.2 | 1.2 | 1.3 | 1 | ND | ND | ND | ND | NA | | 850 | 85 |
| 1,1-Dichloroethylene | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 7 | 0.7 |
| 1,1-Dichloropropene | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | NS | NS |
| 1,1,1-Trichloroethane | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 200 | 40 |
| 1,1,1,2-Tetrachloroethane | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 70 | 7 |
| 1,1,2-Trichloro-1,2,2-fluoroet | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | NS | NS |
| 1,1,2-Trichloroethane | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 5 | 0.5 |
| 1,1,2,2-Tetrachloroethane | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 0.2 | 0.02 |
| 1,2-Dibromo-3-chloropropane | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 0.2 | 0.02 |
| 1,2-Dibromoethane | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 0.05 | 0.005 |
| 1,2-Dichlorobenzene | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 600 | 60 |
| 1,2-Dichloroethane | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 5 | 0.5 |
| 1,2-Dichloropropane | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 5 | 0.5 |
| 1,2,3-Trichlorobenzene | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | NS | NS |
| 1,2,3-Trichloropropane | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 60 | 12 |
| 1,2,4-Trichlorobenzene | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 70 | 14 |
| 1,2,4-Trimethylbenzene | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | NS | NS |
| 1,3,5-Trimethylbenzene | ug/L | 1 | - | - | - | - | - | - | 0.55 | ND | ND | ND | ND | NA | | NS | NS |
| Total Trimethylbenzene | ug/L | X | - | - | - | - | - | - | 0.55 | ND | ND | ND | ND | NA | | 480 | 96 |
| 1,3-Dichlorobenzene | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 1250 | 125 |
| 1,3-Dichloropropane | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | NS | NS |
| 1,4-Dichlorobenzene | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 75 | 15 |
| 2-chloroethylvinyl ether | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | NS | NS |
| 2-Chlorotoluene | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | NS | NS |
| 2-Methyl naphthalene | ug/L | 5 | - | - | NA | - | - | - | - | ND | ND | ND | ND | NA | | NS | NS |
| 2,2-Dichloropropane | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | NS | NS |
| 4-Chlorotoluene | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | NS | NS |
| 4-Isopropyltoluene | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | NS | NS |
| Benzene | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 5 | 0.5 |
| Bromobenzene | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | NS | NS |
| Bromochloromethane | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | NS | NS |
| Bromodichloromethane | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 0.6 | 0.06 |
| Bromoform | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 4.4 | 0.44 |
| Bromomethane | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 10 | 1 |
| Carbon tetrachloride | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 5 | 0.5 |
| Chlorobenzene | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | NS | NS |
| Chloroethane | ug/L | 1 | - | - | - | 1.1 | - | - | - | ND | ND | ND | ND | NA | | 400 | 80 |
| Chloroform | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 6 | 0.6 |
| Chloromethane | ug/L | 1 | - | - | - | - | - | - | 0.97 | ND | 2.7 | ND | ND | NA | | 3 | 0.3 |
| cis-1,2-Dichloroethene | ug/L | 1 | 1.3 | - | 1.1 | - | 1.4 | - | 0.69 | ND | ND | ND | ND | NA | | 70 | 7 |
| cis-1,3-Dichloropropene | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 0.2 | 0.02 |
| Dibromochloromethane | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 60 | 6 |
| Dibromomethane | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | NS | NS |
| Dichlorodifluoromethane | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 1000 | 200 |
| Ethylbenzene | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 700 | 140 |
| Hexachlorobutadiene | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | NS | NS |
| Isopropylbenzene (Cumene) | ug/L | 1 | - | - | - | - | - | - | 1 | ND | ND | ND | ND | NA | | NS | NS |
| Methyl Tertiary Butyl Ether | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 60 | 12 |
| Methylene chloride | ug/L | 5 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | NS | NS |
| n-Butylbenzene | ug/L | 1 | - | - | - | - | - | - | 0.54 | ND | ND | ND | ND | NA | | NS | NS |
| n-Propylbenzene | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | NS | NS |
| Naphthalene | ug/L | 5 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 40 | 8 |
| o-Xylene | ug/L | 1 | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | ND | NA | | NS | NS |
| p & m -Xylene | ug/L | 2 | NA | NA | NA | NA | NA | NA | NA | ND | ND | ND | ND | NA | | NS | NS |
| Total Xylenes | ug/L | X | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 10000 | 1000 |
| sec-Butylbenzene | ug/L | 1 | - | - | - | - | - | - | 1.1 | ND | ND | ND | ND | NA | | NS | NS |
| Styrene | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 100 | 10 |
| tert-Butylbenzene | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | NS | NS |
| Tetrachloroethene | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 5 | 0.5 |
| Toluene | ug/L | 1 | 3.6 | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 1000 | 200 |
| trans-1,2-Dichloroethene | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 100 | 20 |
| trans-1,3-Dichloropropene | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 0.2 | 0.02 |
| Trichloroethene | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | 5 | 0.5 |
| Trichlorofluoromethane | ug/L | 1 | - | - | - | - | - | - | - | ND | ND | ND | ND | NA | | NS | NS |
| Vinyl chloride | ug/L | 1 | 1.5 | 2.1 | - | 3.5 | 3.4 | - | 2.1 | ND | ND | ND | ND | NA | | 0.2 | 0.02 |
| Dilution Factor | | | X | X | X | X | X | X | X | 1 | 1 | 1 | 1 | NA | | X | X |

Notes:
* = Detection limit specific for each monitoring well is multiplied by the respective dilution factor.
- = Concentration reported below unreported laboratory detection limit
**bold** = Exceeds NR 140 Enforcement Standards (ESs)
**bold** = Exceeds NR140 Preventive Action Limits (PALs)
ND = Concentration reported below reported laboratory detection limit
ug/L = Micrograms per liter
NS = No standard established

**Table 2**
**Mercury Marine Plant 18**
Hartford, Wisconsin
Project Number #5018

| Parameter | Units | Detection Limit* | MSA MW-2 | | | | | | | | | | | | NR 140 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 07/25/1995 | 10/31/1995 | 02/13/1996 | 05/21/1996 | 08/20/1996 | 12/23/1996 | 03/01/1997 | 09/22/1999 | 03/21/2000 | 06/28/2000 | 10/04/2000 | 04/08/2003 | ESs | PALs |
| **Polycyclic Aromatic Hydrocarbons** | | | | | | | | | | | | | | | | |
| Acenaphthene | ug/L | 1 | NA | - | - | - | - | - | - | ND | NA | NA | NA | <5.0 | NS | NS |
| Acenaphthylene | ug/L | 1 | NA | - | - | - | - | - | - | ND | NA | NA | NA | <5.0 | NS | NS |
| Anthracene | ug/L | 0.2 | NA | - | - | - | - | - | - | 0.282 | NA | NA | NA | <5.0 | 3000 | 600 |
| Benzo(a)anthracene | ug/L | 0.2 | NA | - | - | - | - | - | - | ND | NA | NA | NA | 0.109 | NS | NS |
| Benzo[a]pyrene | ug/L | 0.2 | NA | - | - | - | - | - | - | ND | NA | NA | NA | **0.13** | 0.2 | 0.02 |
| Benzo[b]fluoranthene | ug/L | 0.2 | NA | - | - | - | - | - | - | ND | NA | NA | NA | **0.091** | 0.2 | 0.02 |
| Benzo[g,h,i]perylene | ug/L | 0.2 | NA | - | - | - | - | - | - | 0.492 | NA | NA | NA | <5.0 | NS | NS |
| Benzo[k]fluoranthene | ug/L | 0.2 | NA | - | - | - | - | - | - | ND | NA | NA | NA | <1.0 | NS | NS |
| Chrysene | ug/L | 0.2 | NA | **0.04** | - | - | - | - | **0.078** | **0.252** | NA | NA | NA | **0.173** | 0.2 | 0.02 |
| Dibenzo[a,h]anthracene | ug/L | 0.2 | NA | - | - | - | - | - | - | ND | NA | NA | NA | <0.1 | NS | NS |
| Fluoranthene | ug/L | 0.2 | NA | - | - | - | - | - | 0.026 | 0.454 | NA | NA | NA | <5.0 | 400 | 80 |
| Fluorene | ug/L | 0.2 | NA | - | - | - | - | - | 0.13 | ND | NA | NA | NA | <5.0 | 400 | 80 |
| Indeno[1,2,3-c,d] pyrene | ug/L | 0.2 | NA | - | - | - | - | - | - | ND | NA | NA | NA | <0.2 | NS | NS |
| Naphthalene | ug/L | 0.5 | NA | - | - | - | - | - | - | ND | NA | NA | NA | <5.0 | 40 | 8 |
| Phenanthrene | ug/L | 0.2 | NA | - | - | - | - | - | - | 0.256 | NA | NA | NA | <5.0 | NS | NS |
| Pyrene | ug/L | 0.2 | NA | - | - | - | - | - | 0.044 | 0.467 | NA | NA | NA | <5.0 | 250 | 50 |
| **Dilution Factor** | | | X | X | X | X | X | X | X | 1 | NA | NA | NA | 1 | X | X |
| **Nutrient Panel** | | | | | | | | | | | | | | | | |
| Alkalinity | mg/L | X | NA | NA | NA | NA | NA | NA | NA | 620 | 500 | 530 | NA | NA | NS | NS |
| Alkalinity, Bicarbonate | mg/L | X | NA | NA | NA | NA | NA | NA | NA | 620 | 500 | 530 | NA | NA | NS | NS |
| Alkalinity, Carbonate | mg/L | X | NA | NA | NA | NA | NA | NA | NA | ND | ND | <10 | NA | NA | NS | NS |
| Alkalinity, Hydroxide | mg/L | X | NA | NA | NA | NA | NA | NA | NA | ND | ND | <10 | NA | NA | NS | NS |
| Chloride | mg/L | X | NA | NA | NA | NA | NA | NA | NA | 56 | 43.4 | 52 | NA | NA | NS | NS |
| Manganese | mg/L | X | NA | NA | NA | NA | NA | NA | NA | 0.45 | 0.35 | 0.34 | NA | NA | NS | NS |
| Nitrate-N | mg/L | X | NA | NA | NA | NA | NA | NA | NA | ND | ND | 0.012 | NA | NA | NS | NS |
| Sulfate | mg/L | X | NA | NA | NA | NA | NA | NA | NA | 30 | 67 | 79 | NA | NA | NS | NS |
| Total Organic Carbon | mg/L | X | NA | NA | NA | NA | NA | NA | NA | 8.5 | 11 | 17 | NA | NA | NS | NS |
| **Metals** | | | | | | | | | | | | | | | | |
| Cadmium (Soluble) | ug/L | X | NA | - | - | - | - | - | - | NA | NA | NA | NA | NA | 5 | 0.5 |
| Chromium (Soluble) | ug/L | X | NA | - | - | - | - | - | - | NA | NA | NA | NA | NA | 100 | 10 |
| Lead (Soluble) | ug/L | X | NA | - | - | - | - | - | - | NA | NA | NA | NA | NA | 15 | 1.5 |
| Silver (Soluble) | ug/L | X | NA | - | - | - | - | - | - | NA | NA | NA | NA | NA | 50 | 10 |
| Arsenic (Soluble) | ug/L | X | NA | - | - | - | 12 | 0.148 | - | NA | NA | NA | NA | NA | 50 | 5 |
| Barium (Soluble) | ug/L | X | NA | 106 | - | - | - | - | - | NA | NA | NA | NA | NA | 2000 | 400 |
| Mercury (Soluble) | ug/L | X | NA | - | - | - | - | - | - | NA | NA | NA | NA | NA | 2 | 0.2 |
| Selenium (Soluble) | ug/L | X | NA | - | - | - | - | - | - | NA | NA | NA | NA | NA | 50 | 10 |
| **Light Hydrocarbons** | | | | | | | | | | | | | | | | |
| Carbon Dioxide | mg/L | X | NA | NA | NA | NA | NA | NA | NA | 25 | 39.94 | 65.31 | 62.38 | NA | NS | NS |
| Methane | mg/L | X | NA | NA | NA | NA | NA | NA | NA | 1.82 | 0.57 | 2.38 | 5.01 | NA | NS | NS |
| Ethylene | ng/L | X | NA | NA | NA | NA | NA | NA | NA | <10,000 | <10,000 | 51 | 71 | NA | NS | NS |
| Ethane | ng/L | X | NA | NA | NA | NA | NA | NA | NA | <10,000 | <10,000 | 714 | 1527 | NA | NS | NS |

**Notes:**

* = Detection limit specific for each monitoring well is multiplied by the respective dilution factor.
- = Concentration reported below unreported laboratory detection limit
**bold** = Exceeds NR 140 Enforcement Standards (ESs)
**bold** = Exceeds NR140 Preventive Action Limits (PALs)
ND = Concentration reported below reported laboratory detection limit
ug/L = Micrograms per liter
NS = No standard established

**Table 2**
**Mercury Marine Plant 18**
Hartford, Wisconsin
Project Number #5018

| Parameter | Units | Detection Limit* | MSA MW-3 | | | | | | | | | | | | NR 140 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 10/31/1995 | 02/13/1996 | 05/21/1996 | 08/20/1996 | 12/23/1996 | 03/01/1997 | 09/22/1999 | 03/22/2000 | 08/28/2000 | 10/04/2000 | 02/01/2001 | 04/08/2003 | ESs | PALs |
| **Volatile Organic Compounds** | | | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 850 | 85 |
| 1,1-Dichloroethylene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 7 | 0.7 |
| 1,1-Dichloropropene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| 1,1,1-Trichloroethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 200 | 40 |
| 1,1,1,2-Tetrachloroethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 70 | 7 |
| 1,1,2-Trichloro-1,2,2-fluoroet | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| 1,1,2-Trichloroethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 5 | 0.5 |
| 1,1,2,2-Tetrachloroethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 0.2 | 0.02 |
| 1,2-Dibromo-3-chloropropane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 0.2 | 0.02 |
| 1,2-Dibromoethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 0.05 | 0.005 |
| 1,2-Dichlorobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 600 | 60 |
| 1,2-Dichloroethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 5 | 0.5 |
| 1,2-Dichloropropane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 5 | 0.5 |
| 1,2,3-Trichlorobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| 1,2,3-Trichloropropane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 60 | 12 |
| 1,2,4-Trichlorobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 70 | 14 |
| 1,2,4-Trimethylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| 1,3,5-Trimethylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| Total Trimethylbenzene | ug/L | X | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 480 | 96 |
| 1,3-Dichlorobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 1250 | 125 |
| 1,3-Dichloropropane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| 1,4-Dichlorobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 75 | 15 |
| 2-chloroethylvinyl ether | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| 2-Chlorotoluene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| 2-Methyl naphthalene | ug/L | 5 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| 2,2-Dichloropropane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| 4-Chlorotoluene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| 4-Isopropyltoluene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| Benzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 5 | 0.5 |
| Bromobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| Bromochloromethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| Bromodichloromethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 0.6 | 0.06 |
| Bromoform | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 4.4 | 0.44 |
| Bromomethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 10 | 1 |
| Carbon tetrachloride | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 5 | 0.5 |
| Chlorobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| Chloroethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 400 | 80 |
| Chloroform | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 6 | 0.6 |
| Chloromethane | ug/L | 1 | - | - | - | - | - | 0.43 | ND | ND | ND | ND | ND | 1.2 | 3 | 0.3 |
| cis-1,2-Dichloroethene | ug/L | 1 | 5.7 | 1.1 | 5.8 | 2.6 | 4.6 | 3.3 | 5.6 | 2.9 | ND | ND | 1.7 | 2.86 | 70 | 7 |
| cis-1,3-Dichloropropene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 0.2 | 0.02 |
| Dibromochloromethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 60 | 6 |
| Dibromomethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| Dichlorodifluoromethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 1000 | 200 |
| Ethylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 700 | 140 |
| Hexachlorobutadiene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| Isopropylbenzene (Cumene) | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| Methyl Tertiary Butyl Ether | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 60 | 12 |
| Methylene chloride | ug/L | 5 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| n-Butylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| n-Propylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| Naphthalene | ug/L | 5 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 40 | 8 |
| o-Xylene | ug/L | 1 | NA | NA | NA | NA | NA | NA | ND | ND | ND | ND | ND | ND | NS | NS |
| p & m -Xylene | ug/L | 2 | NA | NA | NA | NA | NA | NA | ND | ND | ND | ND | ND | ND | NS | NS |
| Total Xylenes | ug/L | X | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 10000 | 1000 |
| sec-Butylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| Styrene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 100 | 10 |
| tert-Butylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| Tetrachloroethene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 5 | 0.5 |
| Toluene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 1000 | 200 |
| trans-1,2-Dichloroethene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 100 | 20 |
| trans-1,3-Dichloropropene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 0.2 | 0.02 |
| Trichloroethene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 5 | 0.5 |
| Trichlorofluoromethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| Vinyl chloride | ug/L | 1 | 4.9 | - | 2.5 | 1.7 | 1.8 | 1.1 | 3.0 | 1.4 | 4 | 2.6 | 1.4 | 1.84 | 0.2 | 0.02 |
| **Dilution Factor** | | | X | X | X | X | X | X | 1 | 1 | 1 | 1 | 1 | 1 | X | X |

**Notes:**

* = Detection limit specific for each monitoring well is multiplied by the respective dilution factor.
- = Concentration reported below unreported laboratory detection limit
**bold** = Exceeds NR 140 Enforcement Standards (ESs)
**bold** = Exceeds NR140 Preventive Action Limits (PALs)
ND = Concentration reported below reported laboratory detection limit
ug/L = Micrograms per liter
NS = No standard established

**Table 2**
**Mercury Marine Plant 18**
Hartford, Wisconsin
Project Number #5018

| Parameter | Units | Detection Limit* | MSA MW-3 | | | | | | | | | | | | NR 140 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 10/31/1995 | 02/13/1996 | 05/21/1996 | 08/20/1996 | 12/23/1996 | 03/01/1997 | 09/22/1999 | 03/22/2000 | 06/28/2000 | 10/04/2000 | 02/01/2001 | 04/08/2003 | ESs | PALs |
| **Polycyclic Aromatic Hydrocarbons** | | | | | | | | | | | | | | | | |
| Acenaphthene | ug/L | 1 | - | - | - | - | - | 0.16 | ND | NA | NA | NA | NA | NA | NS | NS |
| Acenaphthylene | ug/L | 1 | - | - | - | - | - | - | ND | NA | NA | NA | NA | NA | NS | NS |
| Anthracene | ug/L | 0.2 | - | - | - | - | - | 0.052 | 0.250 | NA | NA | NA | NA | NA | 3000 | 600 |
| Benzo(a)anthracene | ug/L | 0.2 | - | - | - | - | - | - | ND | NA | NA | NA | NA | NA | NS | NS |
| Benzo[a]pyrene | ug/L | 0.2 | - | - | - | - | - | - | ND | NA | NA | NA | NA | NA | 0.2 | 0.02 |
| Benzo[b]fluoranthene | ug/L | 0.2 | - | - | - | - | - | - | ND | NA | NA | NA | NA | NA | 0.2 | 0.02 |
| Benzo[g,h,i]perylene | ug/L | 0.2 | - | - | - | - | - | - | ND | NA | NA | NA | NA | NA | NS | NS |
| Benzo[k]fluoranthene | ug/L | 0.2 | - | - | - | - | - | - | ND | NA | NA | NA | NA | NA | NS | NS |
| Chrysene | ug/L | 0.2 | - | - | - | - | - | 0.024 | ND | NA | NA | NA | NA | NA | 0.2 | 0.02 |
| Dibenzo[a,h]anthracene | ug/L | 0.2 | - | - | - | - | - | - | ND | NA | NA | NA | NA | NA | NS | NS |
| Fluoranthene | ug/L | 0.2 | 0.17 | - | - | - | - | 0.12 | 0.465 | NA | NA | NA | NA | NA | 400 | 80 |
| Fluorene | ug/L | 0.2 | - | - | - | - | - | 0.19 | ND | NA | NA | NA | NA | NA | 400 | 80 |
| Indeno[1,2,3-c,d] pyrene | ug/L | 0.2 | - | - | - | - | - | - | ND | NA | NA | NA | NA | NA | NS | NS |
| Naphthalene | ug/L | 0.5 | - | - | - | - | - | - | ND | NA | NA | NA | NA | NA | 40 | 8 |
| Phenanthrene | ug/L | 0.2 | - | - | - | - | - | 0.18 | ND | NA | NA | NA | NA | NA | NS | NS |
| Pyrene | ug/L | 0.2 | 0.18 | - | - | - | - | 0.069 | ND | NA | NA | NA | NA | NA | 250 | 50 |
| **Dilution Factor** | | | X | X | X | X | X | X | 1 | NA | NA | NA | NA | | X | X |
| **Nutrient Panel** | | | | | | | | | | | | | | | | |
| Alkalinity | mg/L | X | NA | NA | NA | NA | NA | NA | 270 | 220 | 300 | NA | NA | NA | NS | NS |
| Alkalinity, Bicarbonate | mg/L | X | NA | NA | NA | NA | NA | NA | 240 | 180 | 280 | NA | NA | NA | NS | NS |
| Alkalinity, Carbonate | mg/L | X | NA | NA | NA | NA | NA | NA | 32 | 40 | 24 | NA | NA | NA | NS | NS |
| Alkalinity, Hydroxide | mg/L | X | NA | NA | NA | NA | NA | NA | ND | ND | <10 | NA | NA | NA | NS | NS |
| Chloride | mg/L | X | NA | NA | NA | NA | NA | NA | 32 | 22.1 | 26 | NA | NA | NA | NS | NS |
| Manganese | mg/L | X | NA | NA | NA | NA | NA | NA | 0.060 | 0.07 | 0.062 | NA | NA | NA | NS | NS |
| Nitrate-N | mg/L | X | NA | NA | NA | NA | NA | NA | ND | ND | 0.013 | NA | NA | NA | NS | NS |
| Sulfate | mg/L | X | NA | NA | NA | NA | NA | NA | 2 | 19 | 4 | NA | NA | NA | NS | NS |
| Total Organic Carbon | mg/L | X | NA | NA | NA | NA | NA | NA | 7.7 | 3.4 | 6 | NA | NA | NA | NS | NS |
| **Metals** | | | | | | | | | | | | | | | | |
| Cadmium (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | NA | 5 | 0.5 |
| Chromium (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | NA | 100 | 10 |
| Lead (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | NA | 15 | 1.5 |
| Silver (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | NA | 50 | 10 |
| Arsenic (Soluble) | ug/L | X | - | - | - | 4.5 | - | - | NA | NA | NA | NA | NA | NA | 50 | 5 |
| Barium (Soluble) | ug/L | X | 94 | - | - | - | 0.63 | - | NA | NA | NA | NA | NA | NA | 2000 | 400 |
| Mercury (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | NA | 2 | 0.2 |
| Selenium (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | NA | 50 | 10 |
| **Light Hydrocarbons** | | | | | | | | | | | | | | | | |
| Carbon Dioxide | mg/L | X | NA | NA | NA | NA | NA | NA | 2 | 1.83 | 3.94 | 5.62 | NA | NA | NS | NS |
| Methane | mg/L | X | NA | NA | NA | NA | NA | NA | 1.7 | 4.5 | 4.98 | 4.15 | NA | NA | NS | NS |
| Ethylene | ng/L | X | NA | NA | NA | NA | NA | NA | <10,000 | <10,000 | 313 | 447 | NA | NA | NS | NS |
| Ethane | ng/L | X | NA | NA | NA | NA | NA | NA | <10,000 | <10,000 | 3665 | 4202 | NA | NA | NS | NS |

**Notes:**

* = Detection limit specific for each monitoring well is multiplied by the respective dilution factor.
- = Concentration reported below unreported laboratory detection limit
**bold** = Exceeds NR 140 Enforcement Standards (ESs)
**bold** = Exceeds NR140 Preventive Action Limits (PALs)
ND = Concentration reported below reported laboratory detection limit
ug/L = Micrograms per liter
NS = No standard established

**Table 2**
**Mercury Marine Plant 18**
Hartford, Wisconsin
Project Number #5018

| Parameter | Units | Detection Limit* | MSA MW-4 | | | | | | | | | | | | NR 140 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 10/31/1995 | 02/13/1996 | 05/21/1996 | 08/22/1996 | 12/23/1996 | 03/01/1997 | 09/22/1999 | 03/21/2000 | 06/26/2000 | 10/04/2000 | 02/01/2001 | 04/08/2003 | ESs | PALs |
| **Volatile Organic Compounds** | | | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 850 | 85 |
| 1,1-Dichloroethylene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 7 | 0.7 |
| 1,1-Dichloropropene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | NS | NS |
| 1,1,1-Trichloroethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 200 | 40 |
| 1,1,1,2-Tetrachloroethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 70 | 7 |
| 1,1,2-Trichloro-1,2,2-fluoroet | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| 1,1,2-Trichloroethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 5 | 0.5 |
| 1,1,2,2-Tetrachloroethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 0.2 | 0.02 |
| 1,2-Dibromo-3-chloropropane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 0.2 | 0.02 |
| 1,2-Dibromoethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 0.05 | 0.005 |
| 1,2-Dichlorobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 600 | 60 |
| 1,2-Dichloroethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 5 | 0.5 |
| 1,2-Dichloropropane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 5 | 0.5 |
| 1,2,3-Trichlorobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| 1,2,3-Trichloropropane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 60 | 12 |
| 1,2,4-Trichlorobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 70 | 14 |
| 1,2,4-Trimethylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 1.66 | NS | NS |
| 1,3,5-Trimethylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 2.14 | NS | NS |
| Total Trimethylbenzene | ug/L | X | - | - | - | - | - | - | ND | ND | ND | ND | ND | 3.8 | 480 | 96 |
| 1,3-Dichlorobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 1250 | 125 |
| 1,3-Dichloropropane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| 1,4-Dichlorobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 75 | 15 |
| 2-chloroethylvinyl ether | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| 2-Chlorotoluene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| 2-Methyl naphthalene | ug/L | 5 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| 2,2-Dichloropropane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| 4-Chlorotoluene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| 4-Isopropyltoluene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| Benzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 5 | 0.5 |
| Bromobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| Bromochloromethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| Bromodichloromethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 0.6 | 0.06 |
| Bromoform | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 4.4 | 0.44 |
| Bromomethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 10 | 1 |
| Carbon tetrachloride | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 5 | 0.5 |
| Chlorobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| Chloroethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 400 | 80 |
| Chloroform | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 6 | 0.6 |
| Chloromethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 3 | 0.3 |
| cis-1,2-Dichloroethene | ug/L | 1 | - | - | - | 2.3 | - | - | ND | ND | 2.1 | ND | ND | ND | 70 | 7 |
| cis-1,3-Dichloropropene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 0.2 | 0.02 |
| Dibromochloromethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 60 | 6 |
| Dibromomethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| Dichlorodifluoromethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 1000 | 200 |
| Ethylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 0.536 | 700 | 140 |
| Hexachlorobutadiene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| Isopropylbenzene (Cumene) | ug/L | 1 | - | - | - | - | - | 0.64 | ND | ND | ND | ND | ND | 3.23 | NS | NS |
| Methyl Tertiary Butyl Ether | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 60 | 12 |
| Methylene chloride | ug/L | 5 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| n-Butylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 1.34 | NS | NS |
| n-Propylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| Naphthalene | ug/L | 5 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 1.06 | 40 | 8 |
| o-Xylene | ug/L | 1 | NA | NA | NA | NA | NA | NA | ND | ND | ND | ND | ND | NA | NS | NS |
| p & m -Xylene | ug/L | 2 | NA | NA | NA | NA | NA | NA | ND | ND | ND | ND | ND | NA | NS | NS |
| Total Xylenes | ug/L | X | - | - | - | - | - | - | ND | ND | ND | ND | ND | 1.69 | 10000 | 1000 |
| sec-Butylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 1.15 | NS | NS |
| Styrene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 100 | 10 |
| tert-Butylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 1.37 | NS | NS |
| Tetrachloroethene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 5 | 0.5 |
| Toluene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 1000 | 200 |
| trans-1,2-Dichloroethene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 100 | 20 |
| trans-1,3-Dichloropropene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 0.2 | 0.02 |
| Trichloroethene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | 5 | 0.5 |
| Trichlorofluoromethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | ND | NS | NS |
| Vinyl chloride | ug/L | 1 | - | - | - | 4.1 | - | - | 4.6 | ND | 2.8 | 1.4 | ND | 1.11 | 0.2 | 0.02 |
| **Dilution Factor** | | | X | X | X | X | X | X | 1 | 1 | 1 | 1 | 1 | 1 | X | X |

Notes:
Groundwater samples for VOC analysis were collected on June 5, 2003
* = Detection limit specific for each monitoring well is multiplied by the respective dilution factor.
- = Concentration reported below unreported laboratory detection limit
**bold** = Exceeds NR 140 Enforcement Standards (ESs)
**bold** = Exceeds NR140 Preventive Action Limits (PALs)
ND = Concentration reported below reported laboratory detection limit
ug/L = Micrograms per liter
NS = No standard established

**Table 2**
**Mercury Marine Plant 18**
Hartford, Wisconsin
Project Number #5018

| Parameter | Units | Detection Limit* | MSA MW-4 | | | | | | | | | | | | NR 140 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 10/31/1995 | 02/13/1996 | 05/21/1996 | 08/22/1996 | 12/23/1996 | 03/01/1997 | 09/22/1999 | 03/21/2000 | 06/28/2000 | 10/04/2000 | 02/01/2001 | 04/08/2003 | ESs | PALs |
| **Polycyclic Aromatic Hydrocarbons** | | | | | | | | | | | | | | | | |
| Acenaphthene | ug/L | 1 | - | - | - | - | - | - | NA | NA | NA | NA | NA | ND | NS | NS |
| Acenaphthylene | ug/L | 1 | - | - | - | - | - | - | NA | NA | NA | NA | NA | ND | NS | NS |
| Anthracene | ug/L | 0.2 | - | - | - | - | - | - | NA | NA | NA | NA | NA | ND | 3000 | 600 |
| Benzo(a)anthracene | ug/L | 0.2 | - | - | - | - | - | - | NA | NA | NA | NA | NA | ND | NS | NS |
| Benzo[a]pyrene | ug/L | 0.2 | - | - | - | - | - | - | NA | NA | NA | NA | NA | ND | 0.2 | 0.02 |
| Benzo[b]fluoranthene | ug/L | 0.2 | - | - | - | - | - | - | NA | NA | NA | NA | NA | ND | 0.2 | 0.02 |
| Benzo[g,h,i]perylene | ug/L | 0.2 | - | - | - | - | - | - | NA | NA | NA | NA | NA | ND | NS | NS |
| Benzo[k]fluoranthene | ug/L | 0.2 | - | - | - | - | - | - | NA | NA | NA | NA | NA | ND | NS | NS |
| Chrysene | ug/L | 0.2 | 0.06 | - | - | - | - | 0.04 | NA | NA | NA | NA | NA | ND | 0.2 | 0.02 |
| Dibenzo[a,h]anthracene | ug/L | 0.2 | - | - | - | - | - | - | NA | NA | NA | NA | NA | ND | NS | NS |
| Fluoranthene | ug/L | 0.2 | 0.5 | - | - | - | - | - | NA | NA | NA | NA | NA | ND | 400 | 80 |
| Fluorene | ug/L | 0.2 | 0.5 | - | - | - | - | - | NA | NA | NA | NA | NA | ND | 400 | 80 |
| Indeno[1,2,3-c,d] pyrene | ug/L | 0.2 | - | - | - | - | - | - | NA | NA | NA | NA | NA | ND | NS | NS |
| Naphthalene | ug/L | 0.5 | - | - | - | - | - | - | NA | NA | NA | NA | NA | ND | 40 | 8 |
| Phenanthrene | ug/L | 0.2 | 0.3 | - | - | - | - | - | NA | NA | NA | NA | NA | ND | NS | NS |
| Pyrene | ug/L | 0.2 | - | - | - | - | - | - | NA | NA | NA | NA | NA | ND | 250 | 50 |
| **Dilution Factor** | | | X | X | X | X | X | X | NA | NA | NA | NA | NA | 1 | X | X |
| **Nutrient Panel** | | | | | | | | | | | | | | | | |
| Alkalinity | mg/L | X | NA | NA | NA | NA | NA | NA | 370 | 340 | 410 | NA | NA | NA | NS | NS |
| Alkalinity, Bicarbonate | mg/L | X | NA | NA | NA | NA | NA | NA | 370 | 340 | 410 | NA | NA | NA | NS | NS |
| Alkalinity, Carbonate | mg/L | X | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | NA | NA | NS | NS |
| Alkalinity, Hydroxide | mg/L | X | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | NA | NA | NS | NS |
| Chloride | mg/L | X | NA | NA | NA | NA | NA | NA | 42 | 11.3 | 28 | NA | NA | NA | NS | NS |
| Manganese | mg/L | X | NA | NA | NA | NA | NA | NA | 0.35 | 0.15 | 0.12 | NA | NA | NA | NS | NS |
| Nitrate-N | mg/L | X | NA | NA | NA | NA | NA | NA | ND | ND | 0.011 | NA | NA | NA | NS | NS |
| Sulfate | mg/L | X | NA | NA | NA | NA | NA | NA | 27 | 38 | 18 | NA | NA | NA | NS | NS |
| Total Organic Carbon | mg/L | X | NA | NA | NA | NA | NA | NA | 5.9 | 7.5 | 13 | NA | NA | NA | NS | NS |
| **Metals** | | | | | | | | | | | | | | | | |
| Cadmium (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | NA | 5 | 0.5 |
| Chromium (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | NA | 100 | 10 |
| Lead (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | NA | 15 | 1.5 |
| Silver (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | NA | 50 | 10 |
| Arsenic (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | NA | 50 | 5 |
| Barium (Soluble) | ug/L | X | 173 | - | - | - | 0.144 | - | NA | NA | NA | NA | NA | NA | 2000 | 400 |
| Mercury (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | NA | 2 | 0.2 |
| Selenium (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | NA | 50 | 10 |
| **Light Hydrocarbons** | | | | | | | | | | | | | | | | |
| Carbon Dioxide | mg/L | X | NA | NA | NA | NA | NA | NA | 22 | 64.72 | 47.4 | 44.88 | NA | NA | NS | NS |
| Methane | mg/L | X | NA | NA | NA | NA | NA | NA | 0.65 | 6.98 | 1.31 | 4.6 | NA | NA | NS | NS |
| Ethylene | mg/L | X | NA | NA | NA | NA | NA | NA | <10,000 | <10,000 | 514 | 358 | NA | NA | NS | NS |
| Ethane | mg/L | X | NA | NA | NA | NA | NA | NA | <10,000 | <10,000 | 3485 | 5775 | NA | NA | NS | NS |

**Notes:**

* = Detection limit specific for each monitoring well is multiplied by the respective dilution factor.
- = Concentration reported below unreported laboratory detection limit
**bold** = Exceeds NR 140 Enforcement Standards (ESs)
**bold** = Exceeds NR140 Preventive Action Limits (PALs)
ND = Concentration reported below reported laboratory detection limit
ug/L = Micrograms per liter
NS = No standard established

**Table 2**
**Mercury Marine Plant 18**
Hartford, Wisconsin
Project Number #5018

| Parameter | Units | Detection Limit* | MSA MW-5 | | | | | | | | | | | | NR 140 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 10/31/1995 | 02/13/1996 | 05/21/1996 | 08/20/1996 | 12/23/1996 | 03/01/1997 | 09/22/1999 | 03/21/2000 | 08/28/2000 | 10/04/2000 | 02/01/2001 | 04/08/2003 | ESs | PALs |
| **Volatile Organic Compounds** | | | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 850 | 85 |
| 1,1-Dichloroethylene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 7 | 0.7 |
| 1,1-Dichloropropene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | NS | NS |
| 1,1,1-Trichloroethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 200 | 40 |
| 1,1,1,2-Tetrachloroethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 70 | 7 |
| 1,1,2-Trichloro-1,2,2-fluoroet | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | NS | NS |
| 1,1,2-Trichloroethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 5 | 0.5 |
| 1,1,2,2-Tetrachloroethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 0.2 | 0.02 |
| 1,2-Dibromo-3-chloropropane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 0.2 | 0.02 |
| 1,2-Dibromoethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 0.05 | 0.005 |
| 1,2-Dichlorobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 600 | 60 |
| 1,2-Dichloroethane | ug/L | 1 | 0.7 | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 5 | 0.5 |
| 1,2-Dichloropropane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 5 | 0.5 |
| 1,2,3-Trichlorobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | NS | NS |
| 1,2,3-Trichloropropane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 60 | 12 |
| 1,2,4-Trichlorobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 70 | 14 |
| 1,2,4-Trimethylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | NS | NS |
| 1,3,5-Trimethylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | NS | NS |
| Total Trimethylbenzene | ug/L | X | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 480 | 96 |
| 1,3-Dichlorobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 1250 | 125 |
| 1,3-Dichloropropane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | NS | NS |
| 1,4-Dichlorobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 75 | 15 |
| 2-chloroethylvinyl ether | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | NS | NS |
| 2-Chlorotoluene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | NS | NS |
| 2-Methyl naphthalene | ug/L | 5 | 0.26 | - | - | - | - | - | ND | ND | ND | ND | ND | NA | NS | NS |
| 2,2-Dichloropropane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | NS | NS |
| 4-Chlorotoluene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | NS | NS |
| 4-Isopropyltoluene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | NS | NS |
| Benzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 5 | 0.5 |
| Bromobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | NS | NS |
| Bromochloromethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | NS | NS |
| Bromodichloromethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 0.6 | 0.06 |
| Bromoform | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 4.4 | 0.44 |
| Bromomethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 10 | 1 |
| Carbon tetrachloride | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 5 | 0.5 |
| Chlorobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | NS | NS |
| Chloroethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 400 | 80 |
| Chloroform | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 6 | 0.6 |
| Chloromethane | ug/L | 1 | - | - | - | - | - | - | 3.3 | 3.5 | ND | ND | ND | NA | 3 | 0.3 |
| cis-1,2-Dichloroethene | ug/L | 1 | - | - | - | - | - | 0.71 | ND | ND | ND | ND | ND | NA | 70 | 7 |
| cis-1,3-Dichloropropene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 0.2 | 0.02 |
| Dibromochloromethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 60 | 6 |
| Dibromomethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | NS | NS |
| Dichlorodifluoromethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 1000 | 200 |
| Ethylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 700 | 140 |
| Hexachlorobutadiene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | NS | NS |
| Isopropylbenzene (Cumene) | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | NS | NS |
| Methyl Tertiary Butyl Ether | ug/L | 1 | - | - | - | - | - | 0.42 | ND | ND | ND | ND | ND | NA | 60 | 12 |
| Methylene chloride | ug/L | 5 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | NS | NS |
| n-Butylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | NS | NS |
| n-Propylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | NS | NS |
| Naphthalene | ug/L | 5 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 40 | 8 |
| o-Xylene | ug/L | 1 | NA | NA | NA | NA | NA | NA | ND | ND | ND | ND | ND | NA | NS | NS |
| p & m -Xylene | ug/L | 2 | NA | NA | NA | NA | NA | NA | ND | ND | ND | ND | ND | NA | NS | NS |
| Total Xylenes | ug/L | X | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 10000 | 1000 |
| sec-Butylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | NS | NS |
| Styrene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 100 | 10 |
| tert-Butylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | NS | NS |
| Tetrachloroethene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 5 | 0.5 |
| Toluene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 1000 | 200 |
| trans-1,2-Dichloroethene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 100 | 20 |
| trans-1,3-Dichloropropene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 0.2 | 0.02 |
| Trichloroethene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | 5 | 0.5 |
| Trichlorofluoromethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NA | NS | NS |
| Vinyl chloride | ug/L | 1 | 2.7 | - | - | - | 1.5 | 1.4 | 1.4 | 1.5 | ND | 1.4 | ND | NA | 0.2 | 0.02 |
| Dilution Factor | | | X | X | X | X | X | X | 1 | 1 | 1 | 1 | 1 | NA | X | X |

Notes:
* = Detection limit specific for each monitoring well is multiplied by the respective dilution factor.
- = Concentration reported below unreported laboratory detection limit
**bold** = Exceeds NR 140 Enforcement Standards (ESs)
**bold** = Exceeds NR140 Preventive Action Limits (PALs)
ND = Concentration reported below reported laboratory detection limit
ug/L = Micrograms per liter
NS = No standard established

**Table 2**
**Mercury Marine Plant 18**
Hartford, Wisconsin
Project Number #5018

| Parameter | Units | Detection Limit* | MSA MW-5 | | | | | | | | | | | | NR 140 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 10/31/1995 | 02/13/1996 | 05/21/1996 | 08/20/1996 | 12/23/1996 | 03/01/1997 | 09/22/1999 | 03/21/2000 | 06/28/2000 | 10/04/2000 | 02/01/2001 | 04/08/2003 | ESs | PALs |
| **Polycyclic Aromatic Hydrocarbons** | | | | | | | | | | | | | | | | |
| Acenaphthene | ug/L | 1 | 0.7 | - | - | - | - | - | NA | NA | NA | NA | NA | ND | NS | NS |
| Acenaphthylene | ug/L | 1 | - | - | - | - | - | - | NA | NA | NA | NA | NA | ND | NS | NS |
| Anthracene | ug/L | 0.2 | - | - | - | - | - | 0.2 | NA | NA | NA | NA | NA | ND | 3000 | 600 |
| Benzo(a)anthracene | ug/L | 0.2 | 0.24 | 0.08 | 0.16 | 0.69 | 0.22 | 1.1 | NA | NA | NA | NA | NA | ND | NS | NS |
| Benzo[a]pyrene | ug/L | 0.2 | 0.3 | - | - | 0.62 | 0.21 | 1.3 | NA | NA | NA | NA | NA | 0.0273 | 0.2 | 0.02 |
| Benzo[b]fluoranthene | ug/L | 0.2 | 0.17 | 0.07 | 0.15 | 0.35 | 0.13 | 1.8 | NA | NA | NA | NA | NA | 0.0217 | 0.2 | 0.02 |
| Benzo[g,h,i]perylene | ug/L | 0.2 | 0.27 | - | - | 0.65 | 0.35 | 1.1 | NA | NA | NA | NA | NA | ND | NS | NS |
| Benzo[k]fluoranthene | ug/L | 0.2 | 0.12 | - | - | - | 0.05 | 0.66 | NA | NA | NA | NA | NA | ND | NS | NS |
| Chrysene | ug/L | 0.2 | 0.2 | - | - | - | 0.15 | 1.1 | NA | NA | NA | NA | NA | ND | 0.2 | 0.02 |
| Dibenzo[a,h]anthracene | ug/L | 0.2 | - | - | - | - | - | 4.8 | NA | NA | NA | NA | NA | 0.0215 | NS | NS |
| Fluoranthene | ug/L | 0.2 | 0.74 | 0.23 | - | 1.4 | 0.65 | 3.4 | NA | NA | NA | NA | NA | ND | 400 | 80 |
| Fluorene | ug/L | 0.2 | 0.12 | - | - | - | - | - | NA | NA | NA | NA | NA | ND | 400 | 80 |
| Indeno[1,2,3-c,d] pyrene | ug/L | 0.2 | 0.15 | - | - | 0.41 | 0.21 | 0.49 | NA | NA | NA | NA | NA | ND | NS | NS |
| Naphthalene | ug/L | 0.5 | 0.06 | - | - | - | - | - | NA | NA | NA | NA | NA | ND | 40 | 8 |
| Phenanthrene | ug/L | 0.2 | 0.56 | - | - | - | - | 1.5 | NA | NA | NA | NA | NA | ND | NS | NS |
| Pyrene | ug/L | 0.2 | 0.35 | 0.26 | - | 0.92 | 0.2 | 2.4 | NA | NA | NA | NA | NA | ND | 250 | 50 |
| **Dilution Factor** | | | X | X | X | X | X | X | NA | NA | NA | NA | NA | 1 | X | X |
| **Nutrient Panel** | | | | | | | | | | | | | | | | |
| Alkalinity | mg/L | X | NA | NA | NA | NA | NA | NA | 390 | 370 | 360 | NA | NA | NA | NS | NS |
| Alkalinity, Bicarbonate | mg/L | X | NA | NA | NA | NA | NA | NA | 390 | 370 | 360 | NA | NA | NA | NS | NS |
| Alkalinity, Carbonate | mg/L | X | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | NA | NA | NS | NS |
| Alkalinity, Hydroxide | mg/L | X | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | NA | NA | NS | NS |
| Chloride | mg/L | X | NA | NA | NA | NA | NA | NA | 61 | 51.8 | 56 | NA | NA | NA | NS | NS |
| Manganese | mg/L | X | NA | NA | NA | NA | NA | NA | 1.3 | 1.3 | 1.4 | NA | NA | NA | NS | NS |
| Nitrate-N | mg/L | X | NA | NA | NA | NA | NA | NA | ND | ND | 0.01 | NA | NA | NA | NS | NS |
| Sulfate | mg/L | X | NA | NA | NA | NA | NA | NA | 24 | 21 | 21 | NA | NA | NA | NS | NS |
| Total Organic Carbon | mg/L | X | NA | NA | NA | NA | NA | NA | 12 | 5.5 | 6.3 | NA | NA | NA | NS | NS |
| **Metals** | | | | | | | | | | | | | | | | |
| Cadmium (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | NA | 5 | 0.5 |
| Chromium (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | NA | 100 | 10 |
| Lead (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | NA | 15 | 1.5 |
| Silver (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | NA | 50 | 10 |
| Arsenic (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | NA | 50 | 5 |
| Barium (Soluble) | ug/L | X | 88 | - | - | - | 0.124 | - | NA | NA | NA | NA | NA | NA | 2000 | 400 |
| Mercury (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | NA | 2 | 0.2 |
| Selenium (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | NA | 50 | 10 |
| **Light Hydrocarbons** | | | | | | | | | | | | | | | | |
| Carbon Dioxide | mg/L | X | NA | NA | NA | NA | NA | NA | 27 | 45.65 | 48.7 | 52.75 | NA | NA | NS | NS |
| Methane | mg/L | X | NA | NA | NA | NA | NA | NA | 0.19 | < 0.01 | 0.37 | 0.006692 | NA | NA | NS | NS |
| Ethylene | ng/L | X | NA | NA | NA | NA | NA | NA | <10,000 | <10,000 | 67 | 61 | NA | NA | NS | NS |
| Ethane | ng/L | X | NA | NA | NA | NA | NA | NA | <10,000 | <10,000 | 1396 | 62 | NA | NA | NS | NS |

**Notes:**

* = Detection limit specific for each monitoring well is multiplied by the respective dilution factor.
- = Concentration reported below unreported laboratory detection limit
**bold** = Exceeds NR 140 Enforcement Standards (ESs)
**bold** = Exceeds NR140 Preventive Action Limits (PALs)
ND = Concentration reported below reported laboratory detection limit
ug/L = Micrograms per liter
NS = No standard established

**Table 2**
**Mercury Marine Plant 18**
Hartford, Wisconsin
Project Number #5018

| Parameter | Units | Detection Limit* | MSA MW-6 | | | | | | | | | | | NR 140 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 10/31/1995 | 02/13/1996 | 05/21/1996 | 08/20/1996 | 12/23/1996 | 03/01/1997 | 09/22/1999 | 03/21/2000 | 06/28/2000 | 10/04/2000 | 04/08/2003 | ES* | PAL* |
| **Volatile Organic Compounds** | | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 850 | 85 |
| 1,1-Dichloroethylene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 7 | 0.7 |
| 1,1-Dichloropropene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NS | NS |
| 1,1,1-Trichloroethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 200 | 40 |
| 1,1,1,2-Tetrachloroethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 70 | 7 |
| 1,1,2-Trichloro-1,2,2-fluoroet | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NS | NS |
| 1,1,2-Trichloroethane | ug/L | 1 | 3.1 | - | - | - | - | - | ND | ND | ND | ND | ND | 5 | 0.5 |
| 1,1,2,2-Tetrachloroethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 0.2 | 0.02 |
| 1,2-Dibromo-3-chloropropane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 0.2 | 0.02 |
| 1,2-Dibromoethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 0.05 | 0.005 |
| 1,2-Dichlorobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 600 | 60 |
| 1,2-Dichloroethane | ug/L | 1 | 0.8 | - | - | - | - | - | ND | ND | ND | ND | ND | 5 | 0.5 |
| 1,2-Dichloropropane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 5 | 0.5 |
| 1,2,3-Trichlorobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NS | NS |
| 1,2,3-Trichloropropane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 60 | 12 |
| 1,2,4-Trichlorobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 70 | 14 |
| 1,2,4-Trimethylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NS | NS |
| 1,3,5-Trimethylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NS | NS |
| Total Trimethylbenzene | ug/L | X | - | - | - | - | - | - | ND | ND | ND | ND | ND | 480 | 96 |
| 1,3-Dichlorobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 1250 | 125 |
| 1,3-Dichloropropane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NS | NS |
| 1,4-Dichlorobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 75 | 15 |
| 2-chloroethylvinyl ether | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NS | NS |
| 2-Chlorotoluene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NS | NS |
| 2-Methyl naphthalene | ug/L | 5 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NS | NS |
| 2,2-Dichloropropane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NS | NS |
| 4-Chlorotoluene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NS | NS |
| 4-isopropyltoluene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NS | NS |
| Benzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 5 | 0.5 |
| Bromobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NS | NS |
| Bromochloromethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NS | NS |
| Bromodichloromethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 0.6 | 0.06 |
| Bromoform | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 4.4 | 0.44 |
| Bromomethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 10 | 1 |
| Carbon tetrachloride | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 5 | 0.5 |
| Chlorobenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NS | NS |
| Chloroethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 400 | 80 |
| Chloroform | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 6 | 0.6 |
| Chloromethane | ug/L | 1 | - | - | - | - | - | 8.3 | 5.2 | 11 | 7.7 | ND | 7.27 | 3 | 0.3 |
| cis-1,2-Dichloroethene | ug/L | 1 | 5.6 | 4.4 | 4 | 5.2 | 3.6 | 4.8 | 2.3 | 2.1 | 1.9 | 2 | 1.91 | 70 | 7 |
| cis-1,3-Dichloropropene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 0.2 | 0.02 |
| Dibromochloromethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 60 | 6 |
| Dibromomethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NS | NS |
| Dichlorodifluoromethane | ug/L | 1 | - | - | - | - | 1.8 | - | ND | ND | ND | ND | ND | 1000 | 200 |
| Ethylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 700 | 140 |
| Hexachlorobutadiene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NS | NS |
| Isopropylbenzene (Cumene) | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NS | NS |
| Methyl Tertiary Butyl Ether | ug/L | 1 | - | - | - | - | - | - | 1.1 | ND | ND | ND | ND | 60 | 12 |
| Methylene chloride | ug/L | 5 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NS | NS |
| n-Butylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NS | NS |
| n-Propylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NS | NS |
| Naphthalene | ug/L | 5 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 40 | 8 |
| o-Xylene | ug/L | 1 | NA | NA | NA | NA | NA | NA | ND | ND | ND | ND | ND | NS | NS |
| p & m -Xylene | ug/L | 2 | NA | NA | NA | NA | NA | NA | ND | ND | ND | ND | ND | NS | NS |
| Total Xylenes | ug/L | X | - | - | - | - | - | - | ND | ND | ND | ND | ND | 10000 | 1000 |
| sec-Butylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NS | NS |
| Styrene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 100 | 10 |
| tert-Butylbenzene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NS | NS |
| Tetrachloroethene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 5 | 0.5 |
| Toluene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 1000 | 200 |
| trans-1,2-Dichloroethene | ug/L | 1 | 2.5 | 1.9 | 1.7 | 2.3 | 1.6 | 1.4 | 1.4 | 1.1 | ND | 1.1 | 0.84 | 100 | 20 |
| trans-1,3-Dichloropropene | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | 0.2 | 0.02 |
| Trichloroethene | ug/L | 1 | - | - | - | 2.2 | 2.1 | 2.4 | 2.4 | 1.9 | 2.2 | 2.2 | ND | 5 | 0.5 |
| Trichlorofluoromethane | ug/L | 1 | - | - | - | - | - | - | ND | ND | ND | ND | ND | NS | NS |
| Vinyl chloride | ug/L | 1 | 3.4 | 1.8 | 1.7 | 3.2 | 1.3 | 1.8 | ND | 1.2 | 1 | ND | ND | 0.2 | 0.02 |
| **Dilution Factor** | | | X | X | X | X | X | X | 1 | 1 | 1 | 1 | 1 | X | X |

**Notes:**

* = Detection limit specific for each monitoring well is multiplied by the respective dilution factor.
- = Concentration reported below unreported laboratory detection limit
**bold** = Exceeds NR 140 Enforcement Standards (ESs)
**bold** #NAME?
ND = Concentration reported below reported laboratory detection limit
ug/L = Micrograms per liter
NS = No standard established

**Table 2**
**Mercury Marine Plant 18**
Hartford, Wisconsin
Project Number #5018

| Parameter | Units | Detection Limit* | MSA MW-6 | | | | | | | | | | | NR 140 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 10/31/1995 | 02/13/1996 | 05/21/1996 | 08/20/1996 | 12/23/1996 | 03/01/1997 | 09/22/1999 | 03/21/2000 | 08/28/2000 | 10/04/2000 | 04/08/2003 | ESs | PALs |
| **Polycyclic Aromatic Hydrocarbons** | | | | | | | | | | | | | | | |
| Acenaphthene | ug/L | 1 | - | - | - | - | - | - | ND | NA | NA | NA | NA | NS | NS |
| Acenaphthylene | ug/L | 1 | - | - | - | - | - | - | ND | NA | NA | NA | NA | NS | NS |
| Anthracene | ug/L | 0.2 | - | - | - | - | - | - | ND | NA | NA | NA | NA | 3000 | 600 |
| Benzo(a)anthracene | ug/L | 0.2 | - | - | - | - | - | - | ND | NA | NA | NA | NA | NS | NS |
| Benzo[a]pyrene | ug/L | 0.2 | - | - | - | - | - | - | ND | NA | NA | NA | NA | 0.2 | 0.02 |
| Benzo[b]fluoranthene | ug/L | 0.2 | - | - | - | - | - | - | ND | NA | NA | NA | NA | 0.2 | 0.02 |
| Benzo[g,h,i]perylene | ug/L | 0.2 | - | - | - | - | - | - | ND | NA | NA | NA | NA | NS | NS |
| Benzo[k]fluoranthene | ug/L | 0.2 | - | - | - | - | - | - | ND | NA | NA | NA | NA | NS | NS |
| Chrysene | ug/L | 0.2 | - | - | - | - | - | - | ND | NA | NA | NA | NA | 0.2 | 0.02 |
| Dibenzo[a,h]anthracene | ug/L | 0.2 | - | - | - | - | - | - | ND | NA | NA | NA | NA | NS | NS |
| Fluoranthene | ug/L | 0.2 | - | - | - | - | - | - | ND | NA | NA | NA | NA | 400 | 80 |
| Fluorene | ug/L | 0.2 | - | - | - | - | - | - | ND | NA | NA | NA | NA | 400 | 80 |
| Indeno[1,2,3-c,d] pyrene | ug/L | 0.2 | - | - | - | - | - | - | ND | NA | NA | NA | NA | NS | NS |
| Naphthalene | ug/L | 0.5 | - | - | - | - | - | - | ND | NA | NA | NA | NA | 40 | 8 |
| Phenanthrene | ug/L | 0.2 | - | - | - | - | - | - | ND | NA | NA | NA | NA | NS | NS |
| Pyrene | ug/L | 0.2 | - | - | - | - | - | - | ND | NA | NA | NA | NA | 250 | 50 |
| **Dilution Factor** | | | X | X | X | X | X | X | 1 | NA | NA | NA | NA | X | X |
| **Nutrient Panel** | | | | | | | | | | | | | | | |
| Alkalinity | mg/L | X | NA | NA | NA | NA | NA | NA | 390 | 390 | 380 | NA | NA | NS | NS |
| Alkalinity, Bicarbonate | mg/L | X | NA | NA | NA | NA | NA | NA | 390 | 390 | 380 | NA | NA | NS | NS |
| Alkalinity, Carbonate | mg/L | X | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | NA | NS | NS |
| Alkalinity, Hydroxide | mg/L | X | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | NA | NS | NS |
| Chloride | mg/L | X | NA | NA | NA | NA | NA | NA | 70 | 74.6 | 97 | NA | NA | NS | NS |
| Manganese | mg/L | X | NA | NA | NA | NA | NA | NA | 0.93 | 0.98 | 0.96 | NA | NA | NS | NS |
| Nitrate-N | mg/L | X | NA | NA | NA | NA | NA | NA | ND | ND | ND | NA | NA | NS | NS |
| Sulfate | mg/L | X | NA | NA | NA | NA | NA | NA | 70 | 120 | 51 | NA | NA | NS | NS |
| Total Organic Carbon | mg/L | X | NA | NA | NA | NA | NA | NA | 5.2 | 3.3 | 6.8 | NA | NA | NS | NS |
| **Metals** | | | | | | | | | | | | | | | |
| Cadmium (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | 5 | 0.5 |
| Chromium (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | 100 | 10 |
| Lead (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | 15 | 1.5 |
| Silver (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | 50 | 10 |
| Arsenic (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | 50 | 5 |
| Barium (Soluble) | ug/L | X | 124 | - | - | - | 0.155 | - | NA | NA | NA | NA | NA | 2000 | 400 |
| Mercury (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | 2 | 0.2 |
| Selenium (Soluble) | ug/L | X | - | - | - | - | - | - | NA | NA | NA | NA | NA | 50 | 10 |
| **Light Hydrocarbons** | | | | | | | | | | | | | | | |
| Carbon Dioxide | mg/L | X | NA | NA | NA | NA | NA | NA | 27 | 41.52 | 46.46 | 48.85 | NA | NS | NS |
| Methane | mg/L | X | NA | NA | NA | NA | NA | NA | 0.06 | < 0.01 | 0.001122 | 0.008546 | NA | NS | NS |
| Ethylene | ng/L | X | NA | NA | NA | NA | NA | NA | <10,000 | <10,000 | <5 | <5 | NA | NS | NS |
| Ethane | ng/L | X | NA | NA | NA | NA | NA | NA | <10,000 | <10,000 | 10 | 45 | NA | NS | NS |

**Notes:**

* = Detection limit specific for each monitoring well is multiplied by the respective dilution factor.
- = Concentration reported below unreported laboratory detection limit
**bold** = Exceeds NR 140 Enforcement Standards (ESs)
**bold** = Exceeds NR140 Preventive Action Limits (PALs)
ND = Concentration reported below reported laboratory detection limit
ug/L = Micrograms per liter
NS = No standard established

TABLE 4

# Geoprobe Soil Analytical Results

## Mercury Marine Plant #18

## Metal Shavings Area (MSA)

| Analyte / Location / Depth | GP-1 6-8' | GP-1 8-10' | GP-2 6-8' | GP-2 8-10' | GP-3 2-4' | GP-3 6-8' | GP-4 4-6' | GP-4 8-10' | NR 720 Soil Cleanup Guidelines |
|---|---|---|---|---|---|---|---|---|---|
| FID/PID (iui) | 1.8 | 0.7 | 62 | 4.6 | 0 | 0 | 117.2 | 1 | *** |
| Benzene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 5.5 |
| Bromoform | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Carbon Tetrachloride | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Chlorobenzene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Chlorodibromomethane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Chloroethane | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | *** |
| Chloroform | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Dichlorobromomethane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Dichlorofluoromethane | NT | NT | NT | NT | NT | NT | NT | NT | *** |
| Dichlorodifluoromethane | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | *** |
| 1,1-Dichloroethane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,2-Dichloroethane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,2-Dichloropropane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Ethylbenzene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 2900 |
| Ethyl Ether** | NT | NT | NT | NT | NT | NT | NT | NT | *** |
| Bromomethane | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | *** |
| 2-Chloroethylvinyl Ether | NT | NT | NT | NT | NT | NT | NT | NT | *** |
| Chloromethane | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | *** |
| Methylene Chloride | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,1,2,2-Tetrachloroethane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Toluene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 1500 |
| Trans-1,2-Dichloroethene | **12.1** | <5.0 | <5.0 | <5.0 | **25.0** | <5.0 | <5.0 | <5.0 | *** |
| 1,1,1-Trichloroethane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,1,2-Trichloroethane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Trichlorofluoromethane | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | *** |
| Vinyl Chloride | **17.1** | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | *** |
| Methylene Chloride | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,3-Dichlorobenzene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,4-Dichlorobenzene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,2-Dichlorobenzene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 2,2-Dichloropropane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Cis-1,2-Dichloroethene | **45.4** | <5.0 | <5.0 | <5.0 | **35.5** | <5.0 | <5.0 | <5.0 | *** |
| Bromochloromethane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,1-Dichloropropene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,1-Dichloroethane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,1-Dichloroethene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Dibromoethane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,3-Dichloropropane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,2-Dichloroethane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 4.9 |
| Chloroform | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Dibromomethane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| P,M-Xylene | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | 4100 |
| O-Xylene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 4100 |
| Styrene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Isopropylbenzene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,2,3-Trichloropropane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Trans-1,3-Dichloropropene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Cis-1,3-Dichloropropene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,1,2-Trichloroethylene | **23.9** | <5.0 | <5.0 | <5.0 | **27.4** | <5.0 | <5.0 | <5.0 | *** |
| Bromoform | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Tetrachloroethene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| N-Propylbenzene | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | *** |
| Bromobenzene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,3,5-Trimethylbenzene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 2-Chlorotoluene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 4-Chlorotoluene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Tert-Butylbenzene | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | *** |
| 1,2,4-Trimethylbenzene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Sec-Butylbenzene | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | *** |
| P-Isopropyltoluene | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | *** |
| N-Butylbenzene | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | *** |
| 1,2-Dibromo-3-Chloropropane | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | *** |
| 1,2,4-Trichlorobenzene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Hexachlorobutadiene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Naphthalene | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | *** |
| 1,2,3-Trichlorobenzene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Gasoline Range Organics | - | - | - | - | - | - | - | - | 100/250[3] |
| Diesel Range Organics | <3.5 | <3.5 | <3.5 | <3.5 | **79.5** | <3.5 | **22,900** | <3.5 | 100/250[3] |

KEY:
All results are listed in ppb. GRO and DRO are listed in ppm.
Depth in feet below ground surface
iui = Instrument Units as Isobutylene (PID) Methane in air (FID)
FID = Flame Ionization Detector
PID = Photo Ionization Detector
NT = Not Tested
NQ = Not Present, Qualitative Only
* = PID Used in Analysis
** = Ethyl Ether may be due to lab contamination
*** = No Standard Established
[1] = GRO sample weight is less than the weight minimum set by WDNR, LUST analytical Guidance SW-141
[2] = DRO peaks outside chromatographic window
[3] = NR 720 Soil Cleanup Guidelines for GRO/DRO are: <100 mg/kg if hydraulic conductivity (k) > 1x10E-6 cm/sec; <250 mg/kg if k < 1x10E-6 cm/sec
- = Not Analyzed due to Sample Quantity
**BOLD** = Shaded area indicates detected compounds
**BOLD** = Shaded area indicates NR 720 exceedance

TABLE 4

## Geoprobe Soil Analytical Results

### Mercury Marine Plant #18

### Metal Shavings Area (MSA)

| Analyte | Location / Depth | GP-5 2-4' | GP-5 8-10' | GP-6 2-4' | GP-6 6-8' | STS/GP-13 2-4' | STS/GP-16 2-4' | STS/GP-17 2-4' | STS/GP-18 2-4' | STS/GP-23 1.5-2' | STS/GP-24 1.5-2' | STS/GP-25 2-4' | NR 720 Soil Cleanup Guidelines |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FID/PID (iui) | | 15.5 | 0 | 0 | 3.1 | <1* | <1* | <1* | <1* | <1* | <1* | <1* | *** |
| Benzene | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | 5.5 |
| Bromoform | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Carbon Tetrachloride | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Chlorobenzene | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Chlorodibromomethane | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Chloroethane | | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | NT | NT | <10.0 | <10.0 | <10.0 | <10.0 | *** |
| Chloroform | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Dichlorobromomethane | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Dichlorofluoromethane | | NT | NT | NT | NT | NQ | NT | NT | NT | NT | NT | NT | *** |
| Dichlorodifluoromethane | | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | NT | NT | <10.0 | <10.0 | <10.0 | <10.0 | *** |
| 1,1-Dichloroethane | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,2-Dichloroethane | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,2-Dichloropropane | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Ethylbenzene | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | 2900 |
| Ethyl Ether** | | NT | NT | NT | NT | **14.0** | NT | NT | NT | NT | NT | NT | *** |
| Bromomethane | | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | NT | NT | <10.0 | <10.0 | <10.0 | <10.0 | *** |
| 2-Chloroethylvinyl Ether | | NT | NT | NT | NT | NT | NT | NT | NQ | NT | NT | NT | *** |
| Chloromethane | | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | NT | NT | <10.0 | <10.0 | <10.0 | <10.0 | *** |
| Methylene Chloride | | 13.5 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,1,2,2-Tetrachloroethane | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Toluene | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | **7.4** | **5.7** | <5.0 | <5.0 | 1500 |
| Trans-1,2-Dichloroethene | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,1,1-Trichloroethane | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | **5.0** | **14.4** | <5.0 | *** |
| 1,1,2-Trichloroethane | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Trichlorofluoromethane | | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | NT | NT | <10.0 | <10.0 | <10.0 | <10.0 | *** |
| Vinyl Chloride | | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | NT | NT | <10.0 | <10.0 | <10.0 | <10.0 | *** |
| Methylene Chloride | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,3-Dichlorobenzene | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,4-Dichlorobenzene | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,2-Dichlorobenzene | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 2,2-Dichloropropane | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Cis-1,2-Dichloroethene | | <5.0 | <5.0 | <5.0 | **50.6** | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Bromochloromethane | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,1-Dichloropropene | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,1-Dichloroethane | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,1-Dichloroethene | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Dibromoethane | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,3-Dichloropropane | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,2-Dichloroethane | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | 4.9 |
| Chloroform | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Dibromomethane | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| P,M-Xylene | | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | NT | NT | <10.0 | <10.0 | <10.0 | <10.0 | 4100 |
| O-Xylene | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | 4100 |
| Styrene | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Isopropylbenzene | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,2,3-Trichloropropane | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Trans-1,3-Dichloropropene | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Cis-1,3-Dichloropropene | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,1,2-Trichloroethylene | | <5.0 | <5.0 | <5.0 | **27.7** | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Bromoform | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Tetrachloroethene | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| N-Propylbenzene | | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | NT | NT | <10.0 | <10.0 | <10.0 | <10.0 | *** |
| Bromobenzene | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 1,3,5-Trimethylbenzene | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 2-Chlorotoluene | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| 4-Chlorotoluene | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Tert-Butylbenzene | | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | NT | NT | <10.0 | <10.0 | <10.0 | <10.0 | *** |
| 1,2,4-Trimethylbenzene | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Sec-Butylbenzene | | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | NT | NT | <10.0 | <10.0 | <10.0 | <10.0 | *** |
| P-Isopropyltoluene | | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | NT | NT | <10.0 | <10.0 | <10.0 | <10.0 | *** |
| N-Butylbenzene | | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | NT | NT | <10.0 | <10.0 | <10.0 | <10.0 | *** |
| 1,2-Dibromo-3-Chloropropane | | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | NT | NT | <10.0 | <10.0 | <10.0 | <10.0 | *** |
| 1,2,4-Trichlorobenzene | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Hexachlorobutadiene | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Naphthalene | | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | NT | NT | <10.0 | <10.0 | <10.0 | <10.0 | *** |
| 1,2,3-Trichlorobenzene | | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | NT | NT | <5.0 | <5.0 | <5.0 | <5.0 | *** |
| Gasoline Range Organics | | - | - | - | - | NT | NT | NT | <3.0[1] | <3.0 | <3.0[1] | <3.0[1] | 100/250[3] |
| Diesel Range Organics | | **3,330** | <3.5 | <3.5 | <3.5 | **73.7[2]** | <3.5 | **78.4[2]** | **63.8[2]** | **122[2]** | **202[2]** | **91.0[2]** | 100/250[3] |

KEY:
All results are listed in ppb. GRO and DRO are listed in ppm.
Depth in feet below ground surface
iui = Instrument Units as Isobutylene (PID), Methane in air (FID)
FID = Flame Ionization Detector
PID = Photo Ionization Detector
NT = Not Tested
NQ = Not Present, Qualitative Only
* = PID Used in Analysis
** = Ethyl Ether may be due to lab contamination
*** = No Standard Established
[1] = GRO sample weight is less than the weight minimum set by WDNR, LUST analytical Guidance SW-141.
[2] = DRO peaks outside chromatographic window.
[3] = NR 720 Soil Cleanup Guidelines for GRO/DRO are: <100 mg/kg if hydraulic conductivity (k) > 1x10E-6 cm/sec; <250 mg/kg if k < 1x10E-6 cm/sec
- = Not Analyzed due to Sample Quantity
**BOLD** = Shaded area indicates detected compounds
**BOLD** = Shaded area indicates NR 720 exceedance

TABLE 5

## Monitoring Well Soil Analytical Results

### Mercury Marine Plant #18

### Metal Shavings Area (MSA)

| | Sample Location/Depth Below Ground Surface (bgs) | | | | | | | | NR 720 |
|---|---|---|---|---|---|---|---|---|---|
| | MSA/MW-3 | | MSA/MW-4 | | MSA/MW-5 | | MSA/MW-6 | | Soil Cleanup |
| Analyte | 4 - 6 | 10 - 12 | 4 - 6 | 8 - 10 | 6 - 8 | 10 - 12 | 6 - 8 | 8 - 10 | Guidelines |
| Benzene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 5.5 |
| Ethylbenzene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 2900 |
| Toluene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 1500 |
| Total Xylenes | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | 4100 |
| Chloroethane | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | * |
| Chloromethane | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | * |
| Bromomethane | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | * |
| Dichlorodifluoromethane | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | * |
| Vinyl Chloride | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | * |
| Methylene Chloride | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| Trichlorofluoromethane | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | * |
| 1,1-Dichloroethene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| 1,1-Dichloroethane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| trans-1,2-Dichloroethene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| Chloroform | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| 1,2-Dichloroethane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 4.9 |
| 1,1,1-Trichloroethane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| Carbon Tetrachloride | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| Bromodichloromethane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| 1,2-Dichloropropane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| trans-1,3-Dichloropropene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| 1,1,2-Trichloroethylene | **6.6** | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| Chlorodibromomethane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| 1,1,2-Trichloroethane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| cis-1,3-Dichloropropene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| Bromoform | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| 1,1,2,2-Tetrachloroethane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| Tetrachloroethene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| Chlorobenzene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| 1,2-Dichlorobenzene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| 1,3-Dichlorobenzene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| 1,4-Dichlorobenzene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| cis-1,2-Dichloroethene | **5.6** | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **9.2** | <5.0 | * |
| 1,3-Dichloropropane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| 1,2,3-Trichloropropane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| 1,2-Dibromoethane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| Isopropylbenzene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| 1,1,1,2-Tetrachloroethane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| 1,1-Dichloropropene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| Dibromomethane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| 2,2-Dichloropropane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| Bromochloromethane | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| Methyl-Tert-Butyl-Ether | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| Styrene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| N-Propylbenzene | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | * |
| Bromobenzene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| 2-Chlorotoluene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| 1,3,5-Trimethylbenzene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| 4-Chlorotoluene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| t-Butylbenzene | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | * |
| 1,2,4-Trimethylbenzene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| Sec-Butylbenzene | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | * |
| p-Isopropyltoluene | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | * |
| n-Butylbenzene | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | * |
| 1,2-Dibromo-3-Chloropropane | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | * |
| 1,2,4-Trichlorobenzene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| Hexachlorobutadiene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| Naphthalene | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | * |
| 1,2,3-Trichlorobenzene | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | * |
| Di-isopropyl Ether | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | <10.0 | * |
| DRO (ppm) | **336** | <3.5 | **2150** | **121** | **81.6** | <3.5 | <3.5 | <3.5 | 100/250[1] |
| GRO (ppm) | <3.0 | <3.0 | **52.3** | **3.6** | <3.0 | <3.0 | <3.0 | <3.0 | 100/250[1] |
| PCB-1016 (ppm) | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | * |
| PCB-1221 (ppm) | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | * |
| PCB-1232 (ppm) | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | * |
| PCB-1242 (ppm) | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | * |
| PCB-1248 (ppm) | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | * |
| PCB-1254 (ppm) | <100 | <100 | <100 | <100 | **4600** | **2160** | <100 | <100 | * |
| PCB-1260 (ppm) | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | * |
| Cadmium (mg/kg) | **16.3** | **3.94** | **39.1** | **5.76** | **4.62** | **17.5** | **7.94** | **4.48** | 8.0/510[2] |
| Chromium (mg/kg) | **16.9** | **7.11** | **32.8** | **11.4** | **13.5** | **14.4** | **14.4** | **15.4** | 14.0/200[2,3] |
| Lead (mg/kg) | **234** | **10.9** | **228** | **19.5** | **22.7** | **26.8** | **23.1** | **11.1** | 50/500[2] |
| Silver (mg/kg) | **0.0832** | <0.0174 | **0.052** | <0.0162 | <0.015 | <0.018 | <0.0131 | <0.0155 | * |
| Arsenic (mg/kg) | **13.1** | **3.94** | **10.8** | **4.04** | **4.73** | **20.2** | **3.51** | **1.79** | 0.039/1.6[2] |
| Barium (mg/kg) | **132** | **27.2** | <0.321 | **38.56** | **68.14** | <0.496 | **138.2** | **45.07** | * |
| Mercury (mg/kg) | **0.044** | <0.019 | **0.038** | <0.02 | **0.161** | **0.018** | **0.038** | <0.02 | * |
| Selenium (mg/kg) | **0.951** | **0.639** | **0.707** | **0.659** | **0.671** | **0.975** | **0.609** | **0.464** | * |

KEY: All concentrations listed in parts per billion (ppb) unless noted
- mg/kg = milligrams per kilogram
- ppm = parts per million
- PCB = Polychlorinated Biphenyl
- GRO = Gasoline Range Organics
- DRO = Diesel Range Organics
- * = No Standard Established
- **BOLD** = Indicates detected compounds
- **BOLD** = Indicates NR 720 exceedance
- (1) = NR 720 Soil Cleanup Guidelines for GRO/DRO are:
  <100 mg/kg if hydraulic conductivity (k) > 1x10E-6 cm/sec
  <250 mg/kg if k < 1x10E-6 cm/sec
- (2) = 50/500 represents NR 720 Soil Cleanup Guidelines for non-industrial/industrial
- (3) = Hexavalent chromium

**Table 1**
**Groundwater Elevations**
**Mercury Marine Plant #18**
Hartford, Wisconsin

| Monitoring Well | Elevation of Ground Surface | Elevation of Top of Casing | Depth to Groundwater from Top of Casing | Depth to Groundwater from Ground Surface | Groundwater Elevation | Date |
|---|---|---|---|---|---|---|
| KTA-MW-1 | 992.50 | 992.30 | 12.76 | 12.96 | 979.54 | 09/20/1999 |
| | | | 12.46 | 12.66 | 979.84 | 03/20/2000 |
| | | | 12.01 | 12.21 | 980.29 | 06/27/2000 |
| | | | 12.21 | 12.41 | 980.09 | 10/03/2000 |
| | | | 12.58 | 12.78 | 979.72 | 02/01/2001 |
| KTA-MW-18 | 981.60 | 981.46 | 4.36 | 4.50 | 977.10 | 09/20/1999 |
| | | | 3.95 | 4.09 | 977.51 | 03/20/2000 |
| | | | 4.10 | 4.24 | 977.36 | 06/27/2000 |
| | | | 4.20 | 4.34 | 977.26 | 10/03/2000 |
| | | | 4.42 | 4.56 | 977.04 | 02/01/2001 |
| ITA-MW-30 | 989.64 | 992.20 | 12.55 | 9.99 | 979.65 | 09/20/1999 |
| | | | 12.21 | 9.65 | 979.99 | 03/20/2000 |
| | | | 11.76 | 9.20 | 980.44 | 06/27/2000 |
| | | | 11.97 | 9.41 | 980.23 | 10/03/2000 |
| | | | 12.10 | 9.54 | 980.10 | 02/01/2001 |
| MSA-MW-2 | 980.56 | 982.74 | 6.23 | 4.05 | 976.51 | 09/20/1999 |
| | | | 5.91 | 3.73 | 976.83 | 03/21/2000 |
| | | | 6.05 | 3.87 | 976.69 | 06/27/2000 |
| | | | 6.13 | 3.95 | 976.61 | 10/03/2000 |
| | | | 6.01 | 3.83 | 976.73 | 02/01/2001 |
| | | | 6.10 | 3.92 | 976.64 | 04/08/2003 |
| MSA-MW-3 | 981.26 | 983.89 | 6.62 | 3.99 | 977.27 | 09/20/1999 |
| | | | 6.26 | 3.63 | 977.63 | 03/22/2000 |
| | | | 6.25 | 3.62 | 977.64 | 06/27/2000 |
| | | | 6.45 | 3.82 | 977.44 | 10/03/2000 |
| | | | 6.35 | 3.72 | 977.54 | 02/01/2001 |
| | | | 6.30 | 3.67 | 977.59 | 04/08/2003 |
| MSA-MW-4 | 980.39 | 983.16 | 6.06 | 3.29 | 977.10 | 09/20/1999 |
| | | | 5.63 | 2.86 | 977.53 | 03/21/2000 |
| | | | 5.73 | 2.96 | 977.43 | 06/27/2000 |
| | | | 5.90 | 3.13 | 977.26 | 10/03/2000 |
| | | | 5.73 | 2.96 | 977.43 | 02/01/2001 |
| | | | 5.70 | 2.93 | 977.46 | 04/08/2003 |
| MSA-MW-5 | 980.75 | 983.31 | 6.42 | 3.86 | 976.89 | 09/20/1999 |
| | | | 6.07 | 3.51 | 977.24 | 03/21/2000 |
| | | | 6.24 | 3.68 | 977.07 | 06/27/2000 |
| | | | 6.31 | 3.75 | 977.00 | 10/03/2000 |
| | | | 6.17 | 3.61 | 977.14 | 02/01/2001 |
| | | | 6.23 | 3.67 | 977.08 | 04/08/2003 |
| MSA-MW-6 | 981.84 | 984.11 | 6.21 | 3.94 | 977.90 | 09/20/1999 |
| | | | 6.15 | 3.88 | 977.96 | 03/21/2000 |
| | | | 6.12 | 3.85 | 977.99 | 06/27/2000 |
| | | | 6.15 | 3.88 | 977.96 | 10/03/2000 |
| | | | 6.21 | 3.94 | 977.90 | 02/01/2001 |
| | | | 6.14 | 3.87 | 977.97 | 04/08/2003 |
| MW-10 | 989.50 | 989.23 | 9.49 | 9.76 | 979.74 | 09/20/1999 |
| | | | 9.16 | 9.43 | 980.07 | 03/23/2000 |
| | | | 8.40 | 8.67 | 980.83 | 06/27/2000 |
| | | | 8.89 | 9.16 | 980.34 | 10/03/2000 |
| | | | 9.24 | 9.51 | 979.99 | 02/01/2001 |
| MW-12 | 986.58 | 988.49 | 9.21 | 7.30 | 979.28 | 09/20/1999 |
| | | | 8.87 | 6.96 | 979.62 | 03/21/2000 |
| | | | 8.38 | 6.47 | 980.11 | 06/27/2000 |
| | | | 8.67 | 6.76 | 979.82 | 10/03/2000 |
| | | | 8.95 | 7.04 | 979.54 | 02/01/2001 |

**Table 1**
**Groundwater Elevations**
**Mercury Marine Plant #18**
Hartford, Wisconsin

| Monitoring Well | Elevation of Ground Surface | Elevation of Top of Casing | Depth to Groundwater from Top of Casing | Depth to Groundwater from Ground Surface | Groundwater Elevation | Date |
|---|---|---|---|---|---|---|
| MW-15 | 980.61 | 980.10 | 3.20 | 3.71 | 976.90 | 09/20/1999 |
| | | | 2.87 | 3.38 | 977.23 | 03/21/2000 |
| | | | 3.01 | 3.52 | 977.09 | 06/27/2000 |
| | | | 3.10 | 3.61 | 977.00 | 10/03/2000 |
| | | | 3.28 | 3.79 | 976.82 | 02/01/2001 |
| | | | 3.05 | 3.56 | 977.05 | 04/08/2003 |
| MW-19 | 983.01 | 986.47 | 7.73 | 4.27 | 978.74 | 09/20/1999 |
| | | | 7.62 | 4.16 | 978.85 | 03/21/2000 |
| | | | 7.50 | 4.04 | 978.97 | 06/27/2000 |
| | | | 7.56 | 4.10 | 978.91 | 10/03/2000 |
| | | | 7.62 | 4.16 | 978.85 | 02/01/2001 |
| MW-2 | 988.43 | 987.64 | 7.71 | 8.50 | 979.93 | 09/20/1999 |
| | | | 7.38 | 8.17 | 980.26 | 03/22/2000 |
| | | | 6.78 | 7.57 | 980.86 | 06/27/2000 |
| | | | 7.05 | 7.84 | 980.59 | 10/03/2000 |
| | | | 7.24 | 8.03 | 980.40 | 02/01/2001 |
| NTA-MW-2 | NS | NS | 8.08 | 8.08 | -8.08 | 09/20/1999 |
| | | | 7.72 | 7.72 | -7.72 | 03/20/2000 |
| | | | 6.98 | 6.98 | -6.98 | 06/27/2000 |
| | | | 7.48 | 7.48 | -7.48 | 10/03/2000 |
| | | | 7.77 | 7.77 | -7.77 | 02/01/2001 |
| NTA-MW-11 | 984.39 | 984.87 | 6.20 | 5.72 | 978.67 | 09/20/1999 |
| | | | 5.87 | 5.39 | 979.00 | 03/20/2000 |
| | | | 5.41 | 4.93 | 979.46 | 06/27/2000 |
| | | | 5.85 | 5.37 | 979.02 | 10/03/2000 |
| | | | 6.32 | 5.84 | 978.55 | 02/01/2001 |
| | | | 6.23 | 5.75 | 978.64 | 04/08/2003 |
| PTC-AS-1 | NS | NS | 12.14 | 12.14 | -12.14 | 09/20/1999 |
| | | | 11.90 | 11.90 | -11.90 | 03/20/2000 |
| | | | 11.65 | 11.65 | -11.65 | 06/27/2000 |
| | | | 11.72 | 11.72 | -11.72 | 10/03/2000 |
| | | | 12.27 | 12.27 | -12.27 | 02/01/2001 |
| | | | 11.92 | 11.92 | -11.92 | 08/23/2001 |
| | | | 11.95 | 11.95 | -11.95 | 02/19/2002 |
| | | | 12.60 | 12.60 | -12.60 | 04/08/2003 |
| | | | 12.88 | 12.88 | -12.88 | 09/08/2003 |
| | | | 12.48 | 12.48 | -12.48 | 12/11/2003 |
| PTC-MW-2 | 992.66 | 992.14 | 12.10 | 12.62 | 980.04 | 09/20/1999 |
| | | | 11.83 | 12.35 | 980.31 | 03/23/2000 |
| | | | 11.30 | 11.82 | 980.84 | 06/27/2000 |
| | | | 11.68 | 12.20 | 980.46 | 10/03/2000 |
| | | | 12.30 | 12.82 | 979.84 | 02/01/2001 |
| | | | 11.88 | 12.40 | 980.26 | 08/23/2001 |
| | | | 11.94 | 12.46 | 980.20 | 02/19/2002 |
| | | | 12.56 | 13.08 | 979.58 | 04/08/2003 |
| | | | 12.87 | 13.39 | 979.27 | 09/08/2003 |
| | | | 12.41 | 12.93 | 979.73 | 12/11/2003 |

**Table 1**
**Groundwater Elevations**
**Mercury Marine Plant #18**
Hartford, Wisconsin

| Monitoring Well | Elevation of Ground Surface | Elevation of Top of Casing | Depth to Groundwater from Top of Casing | Depth to Groundwater from Ground Surface | Groundwater Elevation | Date |
|---|---|---|---|---|---|---|
| PTC-MW-4 | 992.61 | 992.38 | 13.03 | 13.26 | 979.35 | 09/20/1999 |
| | | | 12.75 | 12.98 | 979.63 | 03/20/2000 |
| | | | 12.36 | 12.59 | 980.02 | 06/27/2000 |
| | | | 12.55 | 12.78 | 979.83 | 10/03/2000 |
| | | | | Under Machinery | | 04/08/2003 |
| | | | | Under Machinery | | 09/08/2003 |
| | | | | Under Machinery | | 12/11/2003 |
| PTC-MW-5 | 988.64 | 988.30 | 5.76 | 6.10 | 982.54 | 09/20/1999 |
| | | | 5.56 | 5.90 | 982.74 | 03/20/2000 |
| | | | 5.28 | 5.62 | 983.02 | 06/27/2000 |
| | | | 5.13 | 5.47 | 983.17 | 10/03/2000 |
| | | | 5.13 | 5.47 | 983.17 | 02/01/2001 |
| | | | 5.05 | 5.39 | 983.25 | 08/23/2001 |
| | | | 5.20 | 5.54 | 983.10 | 02/19/2002 |
| | | | 5.17 | 5.51 | 983.13 | 04/08/2003 |
| | | | 5.47 | 5.81 | 982.83 | 09/08/2003 |
| | | | 5.06 | 5.40 | 983.24 | 12/11/2003 |
| PTC-MW-6 | 990.97 | 990.73 | 10.77 | 11.01 | 979.96 | 09/20/1999 |
| | | | 10.38 | 10.62 | 980.35 | 03/20/2000 |
| | | | 9.95 | 10.19 | 980.78 | 06/27/2000 |
| | | | 10.71 | 10.95 | 980.02 | 10/03/2000 |
| | | | 10.89 | 11.13 | 979.84 | 08/23/2001 |
| | | | 10.90 | 11.14 | 979.83 | 02/19/2002 |
| | | | 11.46 | 11.70 | 979.27 | 04/08/2003 |
| | | | 12.02 | 12.26 | 978.71 | 09/08/2003 |
| | | | 11.41 | 11.65 | 979.32 | 12/11/2003 |
| PTC-MW-7 | 990.34 | 989.87 | 10.27 | 10.74 | 979.60 | 09/20/1999 |
| | | | 10.00 | 10.47 | 979.87 | 03/22/2000 |
| | | | 9.55 | 10.02 | 980.32 | 06/27/2000 |
| | | | 9.87 | 10.34 | 980.00 | 10/03/2000 |
| | | | 10.21 | 10.68 | 979.66 | 02/01/2001 |
| | | | 9.95 | 10.42 | 979.92 | 08/23/2001 |
| | | | 9.94 | 10.41 | 979.93 | 02/19/2002 |
| | | | 3.98 | 4.45 | 985.89 | 04/08/2003 |
| | | | 11.14 | 11.61 | 978.73 | 09/08/2003 |
| | | | 10.55 | 11.02 | 979.32 | 12/11/2003 |
| PTC-MW-8 | 993.90 | 993.77 | 14.21 | 14.34 | 979.56 | 09/20/1999 |
| | | | 13.94 | 14.07 | 979.83 | 03/22/2000 |
| | | | 13.51 | 13.64 | 980.26 | 06/27/2000 |
| | | | 10.91 | 11.04 | 982.86 | 10/03/2000 |
| | | | 11.29 | 11.42 | 982.48 | 02/01/2001 |
| | | | 11.04 | 11.17 | 982.73 | 08/23/2001 |
| | | | 11.04 | 11.17 | 982.73 | 02/19/2002 |
| | | | 11.65 | 11.78 | 982.12 | 04/08/2003 |
| | | | 12.17 | 12.30 | 981.60 | 09/08/2003 |
| | | | 11.58 | 11.71 | 982.19 | 12/11/2003 |
| PTC-MW-9 | 993.77 | NS | 10.65 | NA | NA | 09/20/1999 |
| | | | 9.76 | NA | NA | 03/23/2000 |
| | | | 8.92 | NA | NA | 06/27/2000 |
| | | | 9.70 | NA | NA | 10/03/2000 |
| | | | 9.68 | NA | NA | 02/01/2001 |

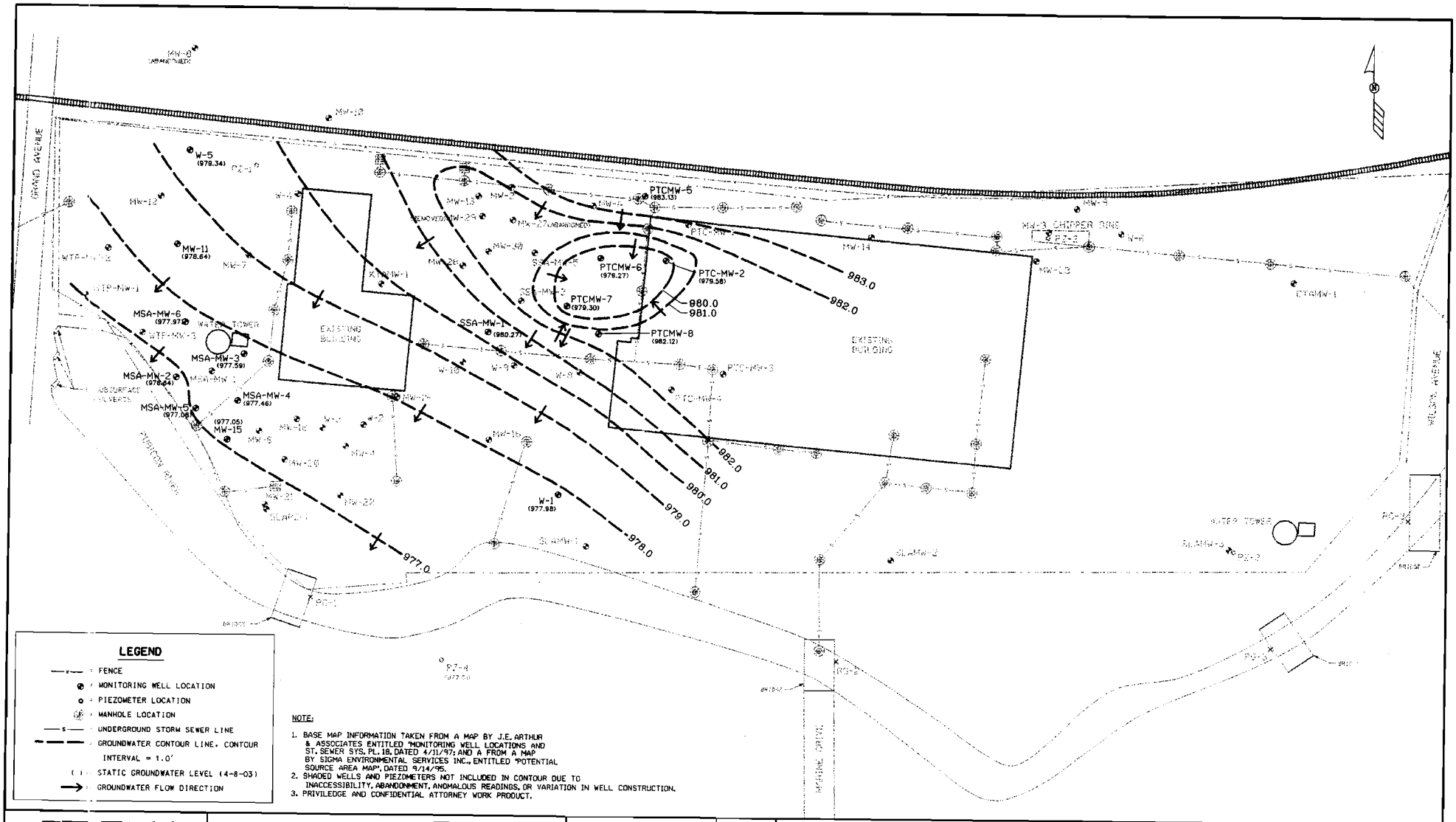
**Table 1**
**Groundwater Elevations**
**Mercury Marine Plant #18**
Hartford, Wisconsin

| Monitoring Well | Elevation of Ground Surface | Elevation of Top of Casing | Depth to Groundwater from Top of Casing | Depth to Groundwater from Ground Surface | Groundwater Elevation | Date |
|---|---|---|---|---|---|---|
| PZ-1 | 988.82 | 988.15 | 8.58 | 9.25 | 979.57 | 09/20/1999 |
| | | | 8.25 | 8.92 | 979.90 | 03/21/2000 |
| | | | 7.71 | 8.38 | 980.44 | 06/27/2000 |
| | | | 8.00 | 8.67 | 980.15 | 10/03/2000 |
| PZ-3 | 985.18 | 984.83 | 4.53 | 4.88 | 980.30 | 09/20/1999 |
| | | | 3.49 | 3.84 | 981.34 | 03/20/2000 |
| | | | 3.28 | 3.63 | 3.98 | 06/27/2000 |
| | | | BURIED | BURIED | BURIED | 10/03/2000 |
| | | | 3.65 | 4.00 | 4.35 | 04/08/2003 |
| PZ-5 | NS | NS | 7.50 | 7.50 | -7.50 | 09/20/1999 |
| | | | 7.60 | 7.60 | -7.60 | 03/20/2000 |
| | | | 7.29 | 7.29 | -7.29 | 06/27/2000 |
| | | | 7.41 | 7.41 | -7.41 | 10/03/2000 |
| | | | 7.75 | 7.75 | -7.75 | 02/01/2001 |
| | | | 7.82 | 7.82 | -7.82 | 04/08/2003 |
| PZ-6 | 982.32 | 983.88 | 4.94 | 3.38 | 978.94 | 09/20/1999 |
| | | | 5.16 | 3.60 | 978.72 | 03/20/2000 |
| | | | 4.85 | 3.29 | 979.03 | 06/27/2000 |
| | | | 5.05 | 3.49 | 978.83 | 10/03/2000 |
| | | | 5.17 | 3.61 | 978.71 | 02/01/2001 |
| | | | 5.62 | 4.06 | 978.26 | 09/08/2003 |
| SLA-MW-20 | 979.95 | 979.59 | 2.55 | 2.91 | 977.04 | 09/20/1999 |
| | | | 1.88 | 2.24 | 977.71 | 03/20/2000 |
| | | | 2.24 | 2.60 | 977.35 | 06/27/2000 |
| | | | BURIED | BURIED | BURIED | 10/03/2000 |
| SLA-MW-21 | 981.21 | 984.73 | 7.32 | 3.80 | 977.41 | 09/20/1999 |
| | | | 6.97 | 3.45 | 977.76 | 03/22/2000 |
| | | | 7.34 | 3.82 | 977.39 | 06/27/2000 |
| | | | 7.32 | 3.80 | 977.41 | 10/03/2000 |
| | | | 7.06 | 3.54 | 977.67 | 02/01/2001 |
| SLA-PZ-1 | 983.73 | 983.57 | 6.31 | 6.47 | 977.26 | 09/20/1999 |
| | | | 5.90 | 6.06 | 977.67 | 03/22/2000 |
| | | | 6.07 | 6.23 | 977.50 | 06/27/2000 |
| | | | 6.13 | 6.29 | 977.44 | 10/03/2000 |
| | | | 5.97 | 6.13 | 977.60 | 02/01/2001 |
| | | | 5.93 | 6.09 | 977.64 | 04/08/2003 |
| SSA-MW-1 | NS | 992.13 | 12.56 | NA | 979.57 | 09/20/1999 |
| | | | 12.25 | NA | 979.88 | 03/23/2000 |
| | | | 11.83 | NA | 980.30 | 06/27/2000 |
| | | | 12.03 | NA | 980.10 | 10/03/2000 |
| | | | 12.37 | NA | 979.76 | 02/01/2001 |
| | | | 11.86 | NA | 980.27 | 04/08/2003 |

**Table 1**
**Groundwater Elevations**
**Mercury Marine Plant #18**
Hartford, Wisconsin

| Monitoring Well | Elevation of Ground Surface | Elevation of Top of Casing | Depth to Groundwater from Top of Casing | Depth to Groundwater from Ground Surface | Groundwater Elevation | Date |
|---|---|---|---|---|---|---|
| W-1 | 983.41 | 983.03 | 5.60 | 5.98 | 977.43 | 09/20/1999 |
| | | | 5.17 | 5.55 | 977.86 | 03/23/2000 |
| | | | 5.26 | 5.64 | 977.77 | 06/27/2000 |
| | | | 5.31 | 5.69 | 977.72 | 10/03/2000 |
| | | | 5.07 | 5.45 | 977.96 | 02/01/2001 |
| | | | 5.28 | 5.66 | 977.75 | 08/23/2001 |
| | | | 4.83 | 5.21 | 978.20 | 02/19/2002 |
| | | | 5.05 | 5.43 | 977.98 | 04/08/2003 |
| W-2 | 982.94 | 985.47 | 5.55 | 3.02 | 979.92 | 09/20/1999 |
| | | | 5.12 | 2.59 | 980.35 | 03/21/2000 |
| | | | 5.28 | 2.75 | 980.19 | 06/27/2000 |
| | | | 5.35 | 2.82 | 980.12 | 10/03/2000 |
| | | | 5.44 | 2.91 | 980.03 | 02/01/2001 |
| W-5 | 988.27 | 991.88 | 12.34 | 8.73 | 979.54 | 09/20/1999 |
| | | | 11.97 | 8.36 | 979.91 | 03/23/2000 |
| | | | 11.33 | 7.72 | 980.55 | 06/27/2000 |
| | | | 11.76 | 8.15 | 980.12 | 10/03/2000 |
| | | | 12.54 | 8.93 | 979.34 | 04/08/2003 |
| WTP-MW-3 | 982.84 | 982.69 | 5.48 | 5.63 | 977.21 | 09/20/1999 |
| | | | 5.17 | 5.32 | 977.52 | 03/20/2000 |
| | | | 5.27 | 5.42 | 977.42 | 06/27/2000 |
| | | | 5.38 | 5.53 | 977.31 | 10/03/2000 |
| | | | 5.28 | 5.43 | 977.41 | 02/01/2001 |
| Culvert A | NS | 981.95 | 4.80 | NA | 977.15 | 09/20/1999 |
| | | | 4.50 | NA | 977.45 | 03/20/2000 |
| | | | 4.72 | NA | 977.23 | 06/27/2000 |
| | | | 4.78 | NA | 977.17 | 10/03/2000 |
| Culvert B | NS | 982.82 | 5.95 | NA | 976.87 | 09/20/1999 |
| | | | 5.64 | NA | 977.18 | 03/20/2000 |
| | | | 5.82 | NA | 977.00 | 06/27/2000 |
| | | | 5.91 | NA | 976.91 | 10/03/2000 |
| Culvert C | NS | 981.71 | 5.05 | NA | 976.66 | 09/20/1999 |
| | | | 4.77 | NA | 976.94 | 03/20/2000 |
| | | | 5.00 | NA | 976.71 | 06/27/2000 |
| | | | 5.03 | NA | 976.68 | 10/03/2000 |

Note: Elevations taken relative to Mean Sea Level




**LEGEND**

- FENCE
- MONITORING WELL LOCATION
- PIEZOMETER LOCATION
- MANHOLE LOCATION
- UNDERGROUND STORM SEWER LINE
- GROUNDWATER CONTOUR LINE. CONTOUR INTERVAL = 1.0'
- ( ) STATIC GROUNDWATER LEVEL (4-8-03)
- GROUNDWATER FLOW DIRECTION

NOTE:

1. BASE MAP INFORMATION TAKEN FROM A MAP BY J.E. ARTHUR & ASSOCIATES ENTITLED "MONITORING WELL LOCATIONS AND ST. SEWER SYS, PL. 18, DATED 4/11/97; AND A FROM A MAP BY SIGMA ENVIRONMENTAL SERVICES INC., ENTITLED "POTENTIAL SOURCE AREA MAP", DATED 9/14/95.
2. SHADED WELLS AND PIEZOMETERS NOT INCLUDED IN CONTOUR DUE TO INACCESSIBILITY, ABANDONMENT, ANOMALOUS READINGS, OR VARIATION IN WELL CONSTRUCTION.
3. PRIVILEDGE AND CONFIDENTIAL ATTORNEY WORK PRODUCT.


SIGMA
ENVIRONMENTAL SERVICES INC.
220 EAST RYAN ROAD
OAK CREEK, WISCONSIN 53154
PHONE : (414) 768 - 7144
1-800-732-4671


SCALE - 1" = 150'- 0" (0' 75' 150')

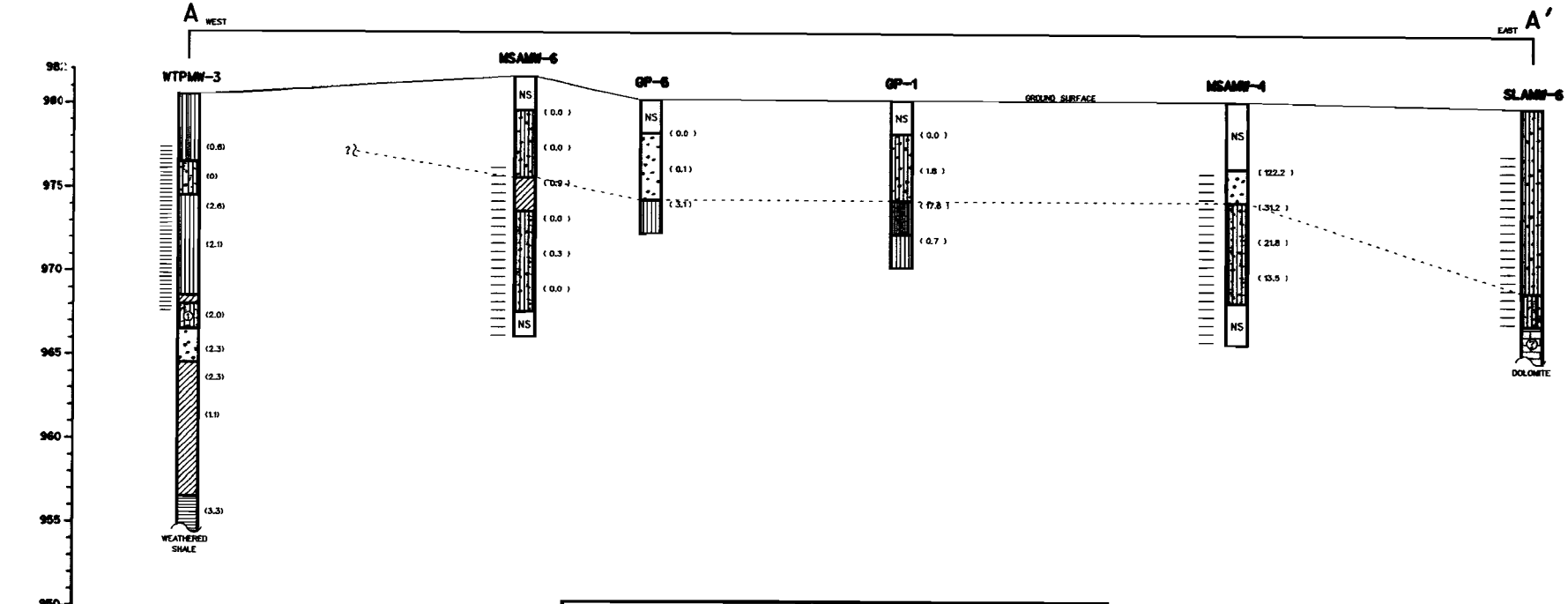
| NO | DATE | REVISIONS | BY | APVD |
|---|---|---|---|---|
| | | | | |

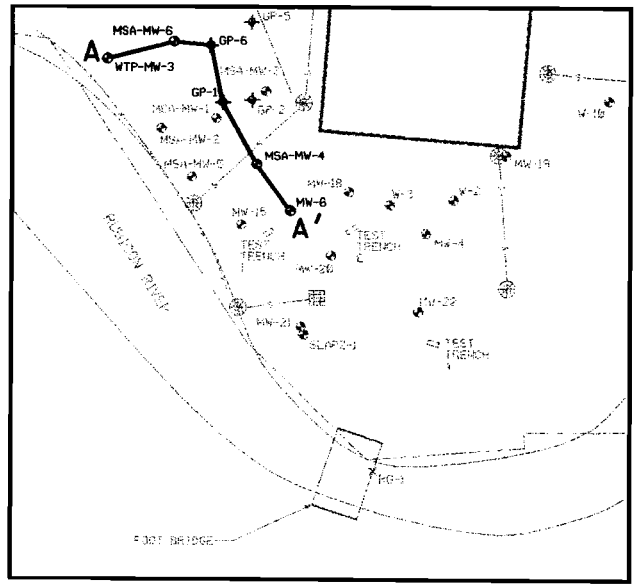
| | NAME: | DATE: |
|---|---|---|
| DRAWN BY: | BEB | 11-21-03 |
| DESIGNED BY: | | |
| CHECKED BY: | | |
| APPROVED BY: | | |

# MERCURY MARINE PLANT 18
## 105 MARINE DRIVE, HARTFORD, WISCONSIN
## GROUNDWATER CONTOUR MAP (4-8-03)

DRAWING NUMBER 7275-001

FIGURE 1




**CROSS SECTION LOCATION**

NOT TO SCALE

GEOPROBE AND TRENCH LOCATIONS WERE NOT INCLUDED IN SURVEY AND ARE FOR REFERENCE ONLY.

**LEGEND**

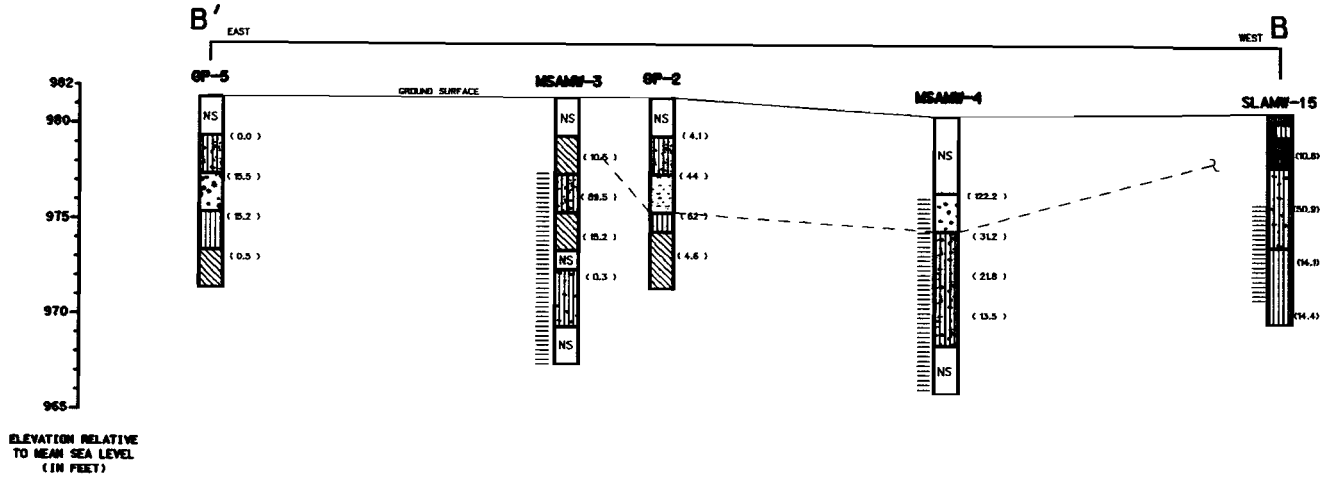
- = WELL SCREEN INTERVAL
- = STATIC WATER LEVEL (5-97)
- = INFERRED CONTACT
- NS = NOT SAMPLED

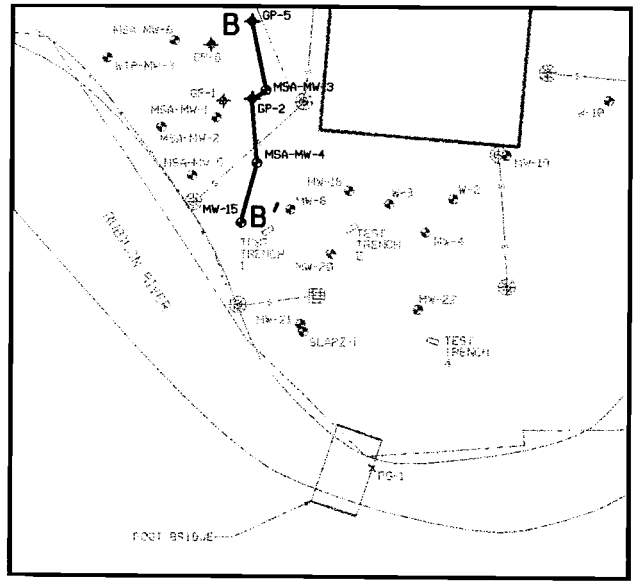
**USCS SYMBOLS**

- GM – SILTY GRAVELS, GRAVEL – SAND– SILT MIXTURES.
- SW – WELL – GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES.
- SM – SILTY – SANDS, SAND – SILT MIXTURES.
- ML – INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY.
- CL – INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SAND CLAYS, SILTY CLAYS, LEAN CLAYS.
- OL – ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY.

NOTES:
HORIZONTAL SCALE 1" = 20'
VERTICAL SCALE 1" = 5'
( ) = FIELD PHOTOIONIZATION DETECTION RESULTS, EXPRESSED AS INSTRUMENT UNITS AS CALIBRATED TO 100 ppm ISOBUTYLENE (iut).

| | | | |
|---|---|---|---|
| MERCURY MARINE – PLANT #18<br>105 MARINE DRIVE, HARTFORD, WISCONSIN | | | SIGMA ENVIRONMENTAL SERVICES INC. |
| DATE: 10-31-97 | DR. BY: TMM | DR.# 3936-004 | SCALE: SEE NOTES |
| GEOLOGIC CROSS SECTION A – A' | | | FIGURE 4-5 |




## CROSS SECTION LOCATION

NOT TO SCALE

GEOPROBE AND TRENCH LOCATIONS WERE NOT INCLUDED IN SURVEY.

**LEGEND**

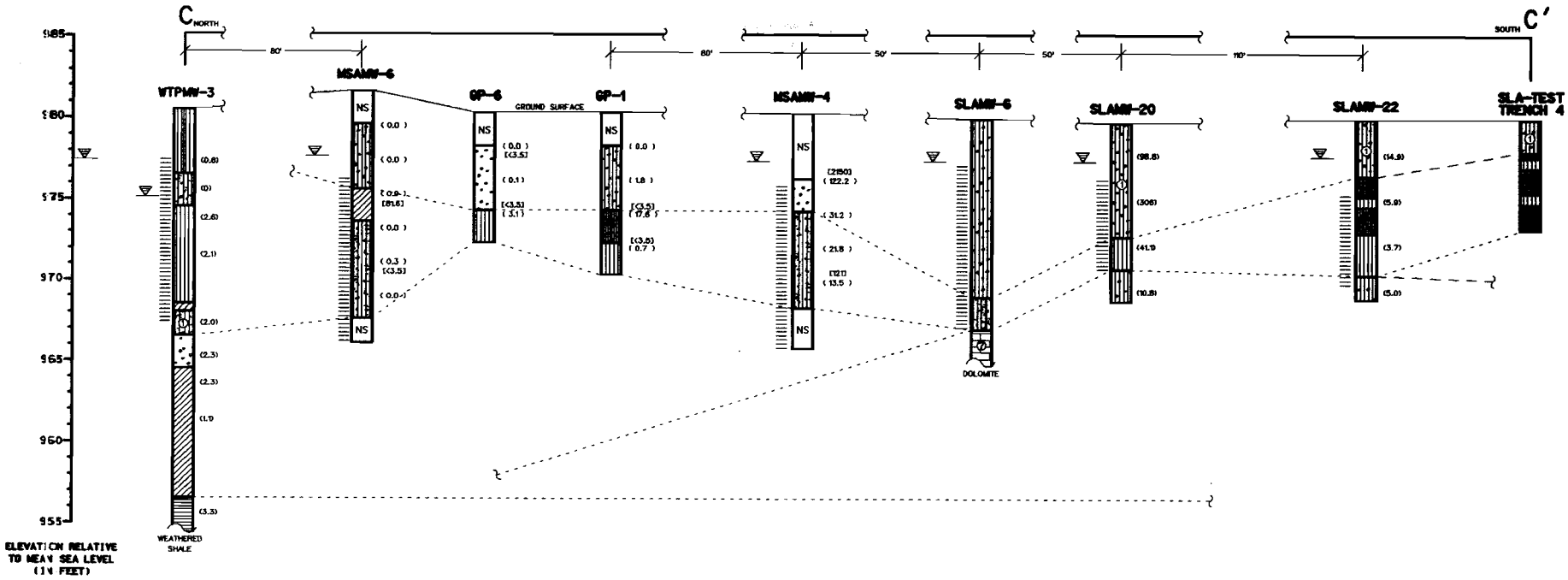
- = WELL SCREEN INTERVAL
- = STATIC WATER LEVEL
- = INFERRED CONTACT (5-97)
- NS = NOT SAMPLED

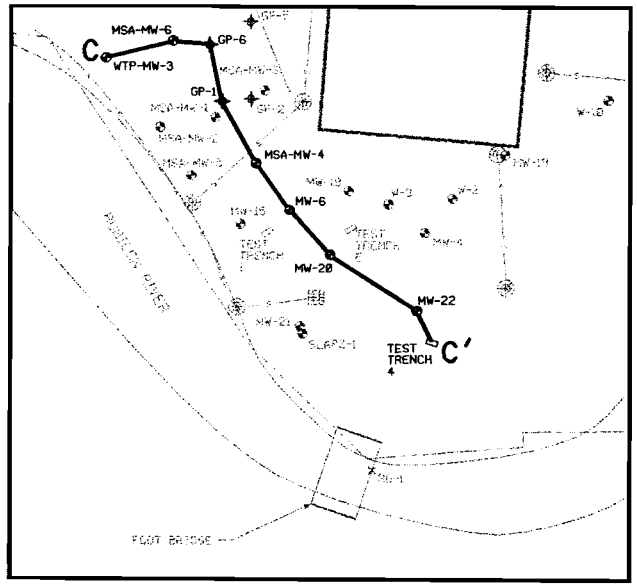
**USCS SYMBOLS**

- GW – WELL – GRADED GRAVELS, GRAVEL – SAND MIXTURES LITTLE OR NO FINES.
- GM – SILTY GRAVELS, GRAVEL – SAND– SILT MIXTURES.
- SW – WELL – GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES.
- SP – POORLY – GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES.
- SM – SILTY – SANDS, SAND – SILT MIXTURES.
- ML – INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY.
- CL – INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SAND CLAYS, SILTY CLAYS, LEAN CLAYS.

NOTES:
HORIZONTAL SCALE 1" = 20'
VERTICAL SCALE 1" = 5'
( ) = FIELD PHOTOIONIZATION DETECTION RESULTS, EXPRESSED AS INSTRUMENT UNITS AS ISOBUTYLENE (ppm).

| | | | |
|---|---|---|---|
| MERCURY MARINE – PLANT 18<br>HARTFORD, WISCONSIN | | | SIGMA ENVIRONMENTAL SERVICES, INC. |
| DATE: 8-7-97 | DR. BY: TMM | DR.# 3936-005 | SCALE: SEE NOTES |
| GEOLOGIC CROSS SECTION B – B' | | | FIGURE |




## CROSS SECTION LOCATION

NOT TO SCALE

GEOPROBE AND TRENCH LOCATIONS WERE NOT INCLUDED IN SURVEY AND ARE FOR REFERENCE ONLY.

**LEGEND**

- = WELL SCREEN INTERVAL
- = STATIC WATER LEVEL (5-97)
- = INFERRED CONTACT
- NS = NOT SAMPLED

**USCS SYMBOLS**

- GM – SILTY GRAVELS, GRAVEL – SAND – SILT MIXTURES.
- GM – SILTY GRAVELS, GRAVEL – SAND – SILT MIXTURES WITH METAL DEBRIS.
- ML – INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY.
- OL – ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY.
- SW – WELL – GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES.
- SM – SILTY – SANDS, SAND – SILT MIXTURES.
- CL – INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SAND CLAYS, SILTY CLAYS, LEAN CLAYS.

NOTES:
HORIZONTAL SCALE 1" = 20'
VERTICAL SCALE 1" = 5'
( ) = FIELD PHOTOIONIZATION DETECTION RESULTS, EXPRESSED AS INSTRUMENT UNITS AS CALIBRATED TO 100ppm ISOBUTYLENE (1ul).

| | | | |
|---|---|---|---|
| MERCURY MARINE – PLANT #18<br>105 MARINE DRIVE, HARTFORD, WISCONSIN | | | SIGMA ENVIRONMENTAL SERVICES INC. |
| DATE: 10-31-97 | DR. BY: TMM | DR.# 3936-006 | SCALE: SEE NOTES |
| GEOLOGIC CROSS SECTION C – C′ | | | FIGURE 4-7 |

Mercury Marine, the responsible party for the former Mercury Marine Plant 18 property located at 105 Steel Craft Drive, Hartford, Wisconsin, states that the legal description provided to the Wisconsin Department of Natural Resources (and attached to this statement) for case file reference 02-67-184670 is complete and accurate to the best of our knowledge.

Craig F. Stark Sr. Environmental Engineer — 8/12/04

Signature and Title of Representative for Responsible Party: Date: