

**Natural  
Resource  
Technology, Inc.**

December 31, 2003  
(1313)

Mr. John Feeney  
Wisconsin Department of Natural Resources  
Richards Street Annex  
4041 N. Richards Street  
P.O. Box 12436  
Milwaukee, Wisconsin 53212

RE: 2003 Annual Operation, Maintenance, and Monitoring Report  
Former Wisconsin Public Service Corporation Manufactured Gas Plant Site,  
Campmarina and Center Avenue Right-of-Way, Sheboygan, WI.  
FID #: 460134950  
DNR Activity #: 02-60-000095

Dear Mr. Feeney:

On behalf of Wisconsin Public Service Corporation (WPSC), enclosed is the Operation, Maintenance, Monitoring and Optimization Report for the period of November 1, 2002 through October 31, 2003 for the former WPSC Campmarina Manufactured Gas Plant (MGP) site in Sheboygan, Wisconsin (Figure 1).

Construction of the remedy is documented in NRT's *Phase I and II Remedy Documentation Report* dated February 28, 2003. The former coal gas facility was located on the Campmarina site along the Sheboygan River and was a designated recreational vehicle parking area and boat launch. MGP contaminated soil and groundwater were identified on both Campmarina and adjacent Center Avenue right-of-way to the south. The remedy was conducted in accordance with the requirements of the approved Record of Decision (ROD) issued by the Wisconsin Department of Natural Resources (WDNR) on November 22, 2000. In the fall of 2000, Phase I remedial activities at the site consisted of the excavation, site grading, material management and off-site thermal treatment and disposal of MGP affected soil and debris. In the Spring of 2001, Phase II activities consisted of installing a vertical sheet pile wall around affected portions of Campmarina and the right-of-way, constructing a low permeability geosynthetic cap, backfilling the site to pre-existing grades and installing a flexible delivery and extraction system for low flow biosparging. Biosparging was performed to enhance natural degradation of contaminants within the containment barrier. In 2001, the City of Sheboygan redeveloped Campmarina into a neighborhood park. The right-of-way property is part of an adjacent development that includes condominiums and a river walk. Construction of the remedy is documented in NRT's *Phase I and II Remedy Documentation Report* dated February 28, 2003.

Institutional controls for the long term care and protection of the remedy construction at Campmarina are required in the ROD, including:

- Containment performance;
- Biosparge system performance; and,
- Inspection of other institutional controls.

In addition, the WDNR Form 4400-194 (Operation, Maintenance, Monitoring and Optimization Reporting of Soil and Groundwater Remediation Systems) is included as Appendix A. Finally, a future monitoring schedule is included herein.

## CONTAINMENT PERFORMANCE

Containment of the plume has been substantially achieved based on groundwater elevation data, the primary measure of containment performance. The engineered components of the containment barrier consist of sheet pile barrier wall surrounding the perimeter of the site and a geosynthetic cap. Containment performance is summarized in Table 1 Groundwater Elevation Data and Vertical Gradients and Figures 2 and 3, showing shallow groundwater elevation contours before and during biosparge operation, respectively. The decreasing groundwater elevations in MW-706 within the containment barrier and increasing groundwater elevations in MW-708 outside the containment barrier demonstrate containment has been achieved. Figures 4 and 5 indicate deeper aquifer potentiometric surface contours. Deeper groundwater appears to continue to flow to the south based on data collected prior to and during biosparge system operation.

The secondary measure of containment performance is contaminant concentration trends in shallow monitoring wells exterior to the containment barrier (MW-705, MW-708 and MW-709) and piezometers below the containment barrier (PZ-701, PZ-702 and PZ-703). Results of the most recent rounds of groundwater monitoring are presented in Appendix B, and summarized in Figure 6, Table 2 and Table 3.

Contaminant concentrations in shallow monitoring wells exterior to the containment barrier including BTEX, PAHs and dissociable cyanide are below their respective NR 140 Preventive Action Limits (PAL). Concentrations in PZ-701 and PZ-702 have remained stable, with only benzene and naphthalene above their respective NR 140 Enforcement Standards (ES). PAH and BTEX concentrations in PZ-703 have increased, however, as evident on Tables 2 and 3. Boring logs and well construction reports for MW-707, MW-707R, BW-09 and PZ-703 previously submitted to WDNR are presented in Appendix C for reference.

An increase in contaminant concentrations at PZ-703 under normal circumstances is not likely to be from MGP impacts immediately above the piezometer. Flexible wall permeability testing of a sample from the lower clay stratum (565 - 567 feet USGS datum) in PZ-703 collected in January



1999 indicated low hydraulic conductivity ( $1.1 \times 10^{-7}$  cm/sec). PZ-703 is screened below that and partially within a clay/silt zone from 555-557 feet, USGS datum. One or more of the following lines of evidence may cause increased concentrations of contaminants in PZ-703 in the recent past:

- Heavy equipment that damaged MW-707 during Phase I remediation activities may have also caused damage to PZ-703. MW-707R replaced MW-707 in February 2001. The concentration of benzene increased by one order of magnitude between groundwater sampling events in January 1999 and June 2002, however, variations in benzene concentration of this magnitude between sampling rounds are not uncommon at PZ-703. A contributing factor may be the effect of purging PZ-703 prior to sampling, potentially causing contaminant dragdown over time.
- Generally downward vertical gradient at PZ-703 may have contributed to contaminant migration, as concentrations of BTEX and PAH contaminants are relatively high at the nested water table well, MW-707/707R. Table 1 indicates a downward vertical gradient averaging  $8.4 \times 10^{-2}$  ft/ft since installation of PZ-703 in 1998.
- Biosparge well BW-09 is located within 20 feet of PZ-703 (radius of influence for each well is assumed to be 30 feet), and is screened at approximately 571 feet, USGS datum. BW-09 screen is at a significantly higher elevation than the piezometer screen for PZ-703. Biosparge pressures at BW-09 typically range from 4.0 to 4.5 psi (Appendix D), which is a lower pressure range than average across the site. It is unlikely, but possible that short-circuiting of pressurized air from the biosparge system is contributing to downward contaminant migration.

Additional evaluation of data may yield further possible lines of evidence. For example, groundwater elevation at PZ-703 may be monitored during purging or other drawdown of MW-707R to observe a response indicating damage-induced hydraulic connectivity between the wells. In addition, to minimize any possible impact to groundwater quality in the deeper aquifer by the biosparge system, BW-09 will be taken offline until its effect on PZ-703 groundwater quality can be ruled out. If appropriate, BW-09 may be used as a second monitoring point near MW-707R in the interim.

## **BIOSPARGE SYSTEM PERFORMANCE**

The low flow biosparge system consists of 18 biosparge wells that inject air at a relatively low pressure and flow rate to enhance aerobic microbial degradation of contaminants within the containment barrier, as shown on Figures 2 through 6. Passive venting is provided in the form of a perimeter drain and venting system within the containment barrier. The perimeter drain is pitched to a sump located below the biosparge treatment building, to collect water that may accumulate within the containment barrier. Water levels are measured regularly within the sump



Mr. John Feeney  
December 31, 2003  
Page 4

as an indicator of containment barrier integrity. Passive venting system outlet is atop the treatment building, and enhanced by a wind powered exhaust turbine. The biosparge treatment building contains a compressor, manifolded conveyance piping and control panel to inject air to six wells at a time, with adjustable manifold cycling intervals. Programmable logic controls will automatically trigger an alarm and cease biosparge compressor operation if pressure in the passive venting stack exceeds 1 psi. Nutrient feed lines are contained within the biosparge conveyance pipes and may provide nutrient injection if necessary to enhance biodegradation.

### Operation and Maintenance

System operation and maintenance included:

- Periodic monitoring for accumulation of vapor phase BTEX in the sump;
- Periodic monitoring for any fluctuations in sump water levels;
- Periodic adjustments to manifold cycling intervals;
- Routine compressor oil changes; and,
- Periodic monitoring of biosparge pressure readings.

Routine system monitoring was performed by WPSC personnel. Alarm conditions and routine system status checks from the PLC control system were periodically reviewed by NRT. No pressure alarm was noted in the stack during system operation. System inspections were performed periodically, as shown on operation and maintenance logs provided in Appendix D. Copies of all equipment specifications and manufacturer's maintenance manuals will be maintained in an O&M manual in the biosparge control room.

The groundwater biosparge system performed mechanically as designed with the exception of compressor motor failure. The cause of motor failure was determined on September 30, 2003, after several attempts to determine the cause of motor malfunction. The system operated approximately 45% of the time intermittently between startup on November 7, 2002 and November 31, 2003. The motor was not operational from June 26, 2003 through November 2003. Details of operation, maintenance and monitoring are provided in the WDNR Form 4400-194 (Appendix A). As containment is the primary remedy, intermittent operation of the biosparge system is acceptable, but will be avoided as much as practicable in 2004.

### Groundwater Monitoring

Monitoring wells were sampled concurrent with the existing monitoring program in accordance with WDNR guidelines as specified in *Groundwater Sampling Desk Reference (WDNR PUBL-DG-037 96)* and *Groundwater Sampling Field Manual (WDNR PUBL-DG-038 96)*. Monitoring wells were purged and sampled with dedicated bailers. Field readings were measured with the





Hydrolab® Groundwater Quality Meter after groundwater sampling was complete. An analytical field duplicate was taken during each sampling round. Laboratory analytical samples were submitted to En Chem, Green Bay, WI. Purge water from wells was stored in 55-gallon drums located within the on-site facility remediation shed. Purge water from this and previous sampling events was discharged to an on-site sanitary floor drain located within the boathouse attached to the biosparge system enclosure. NRT was provided authorization to discharge purge water from the City of Sheboygan WWTP prior to actual discharge.

NRT initiated groundwater monitoring data trend evaluations in substantial compliance with the WDNR *Interim Guidance on Natural Attenuation for Petroleum Releases* (PUB-RR-614, October 1999). Enhanced biodegradation of contaminants in groundwater within the containment barrier was evaluated using the following performance monitoring parameters before and after system startup:

- Analytical Contaminant Parameters: BTEX, PAHs and Cyanides measured during groundwater monitoring (Tables 2 and 3); and,
- Analytical Geochemical Parameters: nitrate, ferrous and total iron, sulfate, and methane (Table 4);and,
- Field Geochemical Parameters: water levels, dissolved oxygen, alkalinity, pH, temperature, specific conductance, oxidation / reduction potential (Table 4).

Parameters were measured prior to system startup on November 7, 2002 and in January, April, June and September 2003 in order to evaluate system performance and to demonstrate appropriate hydrogeologic conditions conducive for natural attenuation (NA). The performance evaluation is based on:

- Contaminant Concentration Trends – decrease in contaminant concentrations over time in groundwater within the containment barrier (**Trend 1**); and,
- Geochemical Trends – evidence of increasing geochemical trends (i.e. methane, ferrous iron) or decreasing geochemical trends (i.e. sulfate, nitrate) associated with increased biological activity, and evaluate dissolved oxygen (DO) trends during operation of the biosparge system (**Trend 2**)

Of the two lines of trend data, the most important is Trend 1, summarized on Figure 7 for this operating period. Intermittent system operation and the presence of coal tar in monitoring wells within the containment barrier, resulted in collection of good baseline Trend 1 data, but limited Trend 2 data, as reflected in the observations below. The presence of both lines of trend data would be considered strong demonstration of system effectiveness.

The aeration environment created by the biosparge system appears to be affecting several geochemical parameters typically utilized to evaluate the potential of an aquifer to provide an environment conducive to NA (alkalinity, ORP, pH, temperature, and specific conductance) and to evaluate geochemical trends indicative of active NA processes (methane, nitrate, sulfate, dissolved manganese, ferrous iron, and DO). With the exception of nitrate and sulfate, the aforementioned geochemical parameters are affected by aeration as outlined in Table C-2 of the WDNR *Interim Guidance on Natural Attenuation for Petroleum Releases* (Appendix C, page 2). Although Table C-2 specifically references the effect of unintentional aeration on geochemical parameters, the table highlights the parameters most useful in the NA evaluation of the biosparge system.

Groundwater quality data from shallow monitoring wells MW-701R, MW-706 and MW-707R are presented in Appendix B and summarized on Figure 6 and Tables 2 through 4. For trend data, the following observations are based on groundwater quality for this monitoring period. Geochemical trend assessment is primarily intended to evaluate the current use of parameters and the potential addition or deletion of specific analyses.

- The presence of Trend 1 in reducing naphthalene concentrations is considered a moderate demonstration of system effectiveness (Figure 7), however, increased benzene concentration over time is incongruent with the naphthalene trend.
- Although BTEX concentrations have increased in monitoring wells MW-701R and MW-706 (within the zone of containment), PAH concentrations have decreased in these wells, as shown on Figure 7. Increased BTEX concentrations may be due to the containment barrier. Dilution by infiltration of surface water and by groundwater flow has been eliminated and is no longer a mechanism for contaminant transport within the containment barrier.
- Currently, geochemical and field parameter results including sulfate, nitrate and reduction/oxidation potential from MW-706 indicates biological activity may be occurring (Table 4). Methane is another indicator of biological activity (anaerobic) that occurred in July 2003 when the biosparge system was not operating. Methane concentrations are considerably higher within the containment barrier (5,800 & 11,000 µg/L) compared to outside the containment barrier (methane ranges from 17-490 µg/L).
- Dissolved oxygen from the shallow monitoring wells within the containment barrier and BW-6 in November 2002 and July 2003 sampling events were not evaluated, due to coal tar present in monitoring wells within the containment barrier during operational periods. As a result, the use of dissolved oxygen as an electron acceptor cannot be interpreted during this monitoring period.

Trend 1 data will continue to be evaluated for future monitoring rounds. Additional monitoring data will be collected to assess Trend 2 data, the use of a field groundwater quality probe may be precluded as the presence of coal tar in monitoring wells within the containment barrier is encountered as was observed during system operation (December 2002 through June 2003).



### **Sump/Vent Monitoring**

In general, the system performed in accordance with anticipated design parameters. Air monitoring of stack emissions was conducted to evaluate the presence of hydrogen sulfide and BTEX in soil vapors emitted. In addition, water levels within the sump were monitored for potential increase in groundwater levels beneath the geosynthetic cover.

No vapor phase volatile organics were detected in the vent during system operation, based on photoionization readings. No accumulation of water was noted in the sump indicating groundwater elevations were below the subgrade drainage/venting system. An air sample (SUMP AS-1) was collected from the sampling port on the sump's ventilation stack on November 7, 2002 following startup. The air BTEX concentration results, as shown in Appendix E, were below detection levels of 0.38 $\mu$ g/L.

### **OTHER INSTITUTIONAL CONTROLS**

In accordance with the WDNR approved ROD, WPSC is responsible for long term performance monitoring of additional remedy components including surface covers for the monitoring wells, cleanouts and biosparge wells, the biosparge building, piping and equipment, and geosynthetic cap and perimeter venting system cleanouts. These features were most recently inspected in December 2003. Overall, the containment system has maintained its integrity. The cover above the geosynthetic cap has remained stable and has not shown any problems due to erosion. Surface covers and cleanouts for the venting system are operational. The only problem noted is biosparge well cover BW-15 could not be located, possibly due to City of Sheboygan park construction activities at the site. A field inspection form completed in December 2003 is included in Appendix D.

### **FUTURE MONTIORING**

Long-term trends in groundwater quality will continue to be evaluated with respect to containment elevations, groundwater quality and geochemical parameters with some changes in 2004, as shown on Table 5. Future cyanide monitoring will include only dissociable cyanide. Geochemical parameters not significantly affected by aeration will continue to be collected, including only sulfate, nitrate and methane. Field geochemical parameters will not be measured due to the presence of tar in monitoring wells within the containment barrier. NRT is currently assessing the possibility of sampling BW-16 or BW-17 instead of BW-15 during future monitoring events, based on well accessibility. The first groundwater monitoring event for Year 2 was collected in November 2003 prior to this evaluation and change in monitoring parameters. An evaluation of ongoing groundwater quality will be provided in the next treatment system monitoring report, to be submitted approximately December 2004.

Mr. John Feeney  
December 31, 2003  
Page 8

Please contact Ms. Connie Lawniczak of WPSC at (920) 433-1140 or the undersigned if you have any questions or if you require additional copies for your files.

Sincerely,

NATURAL RESOURCE TECHNOLOGY, INC.



Heather M. Simon, EIT  
Project Engineer



Spiros L. Fafalios, P.E.  
Senior Engineer

cc: Ms. Connie Lawniczak, WPSC

Attachments:

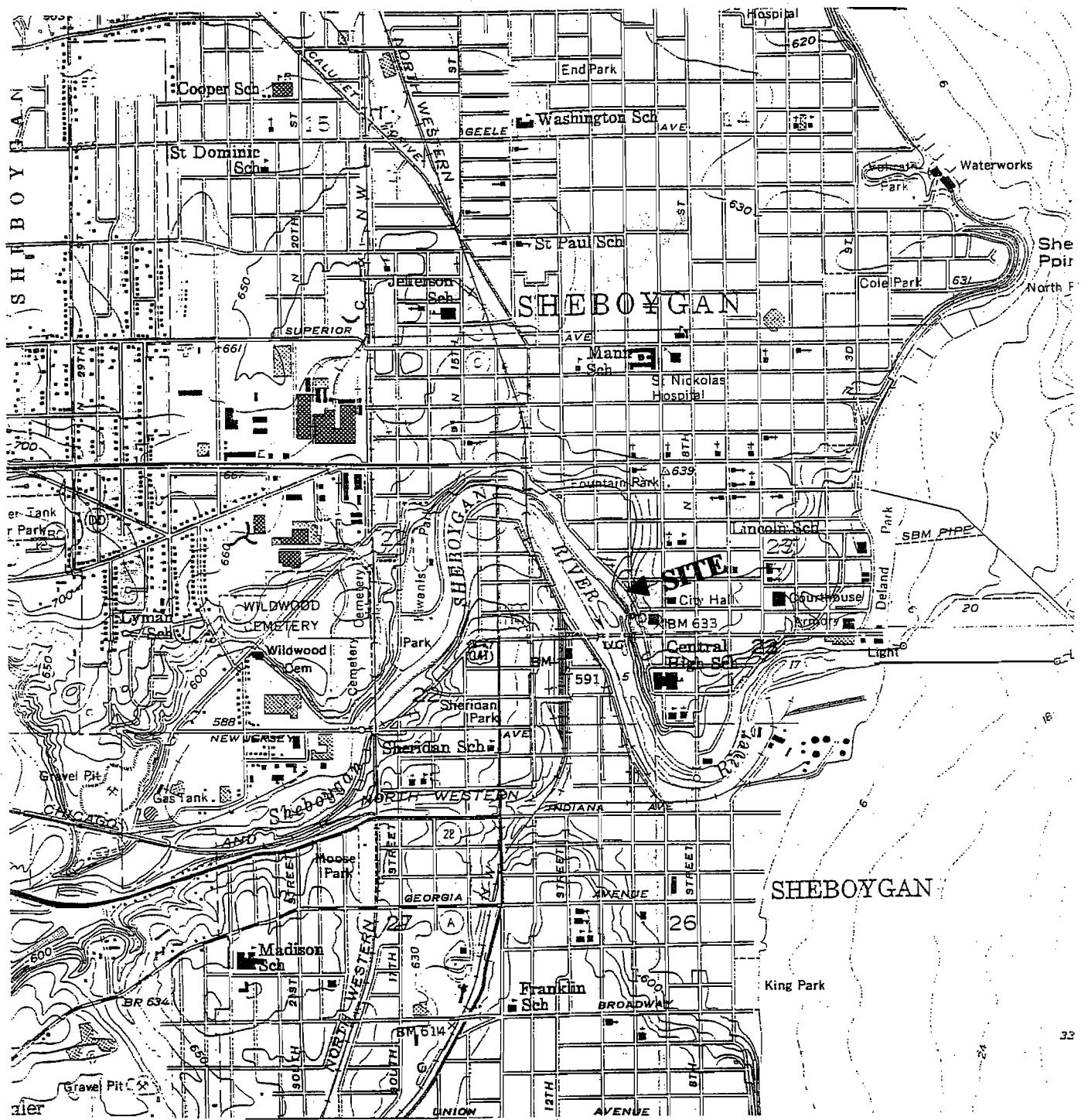
- Figure 1 – Site Location Map
- Figure 2 – Water Table Elevation Contours Before Biosparge System Operation 11/7/02
- Figure 3 – Water Table Elevation Contours During Biosparge System Operation 4/15/03
- Figure 4 – Potentiometric Surface Contours Before Biosparge System Operation 11/7/02
- Figure 5 – Potentiometric Surface Contours Before Biosparge System Operation 4/15/03
- Figure 6 – Groundwater Analytical Summary 2002-2003
- Figure 7 – Contaminant Concentrations versus Time Graphs
- Table 1 – Groundwater Elevation Data and Vertical Gradients
- Table 2 – Groundwater Analytical Results - Cyanide and BTEX
- Table 3 – Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbon
- Table 4 – Groundwater Analytical Results – Field & Laboratory RNA Analytical
- Table 5 – Groundwater and Biosparge System Monitoring Schedule
- Appendix A – Form 4400-194 with Explanations
- Appendix B – Groundwater Analytical Reports
- Appendix C – Soil Boring Logs and Monitoring Well Construction Forms
- Appendix D – Field Forms
- Appendix E – Air Sampling Analytical Report

[1313 WDNR O&M Year 1.ltr.rpt]

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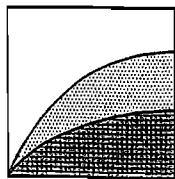
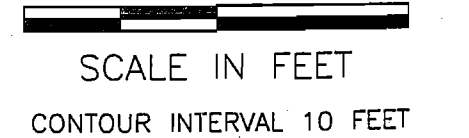
FIGURES



SOURCE: USGS 7.5 MINUTE QUADRANGLE,  
SHEBOYGAN NORTH, DATED 1954.  
PHOTOREVISED 1973.



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SITE LOCATION MAP

CAMPMARINA AND CENTER AVENUE RIGHT-OF-WAY  
WISCONSIN PUBLIC SERVICE CORPORATION  
SHEBOYGAN, WISCONSIN

PROJECT NO.  
1313

DRAWING NO.  
1313-4-A01

FIGURE NO.  
1

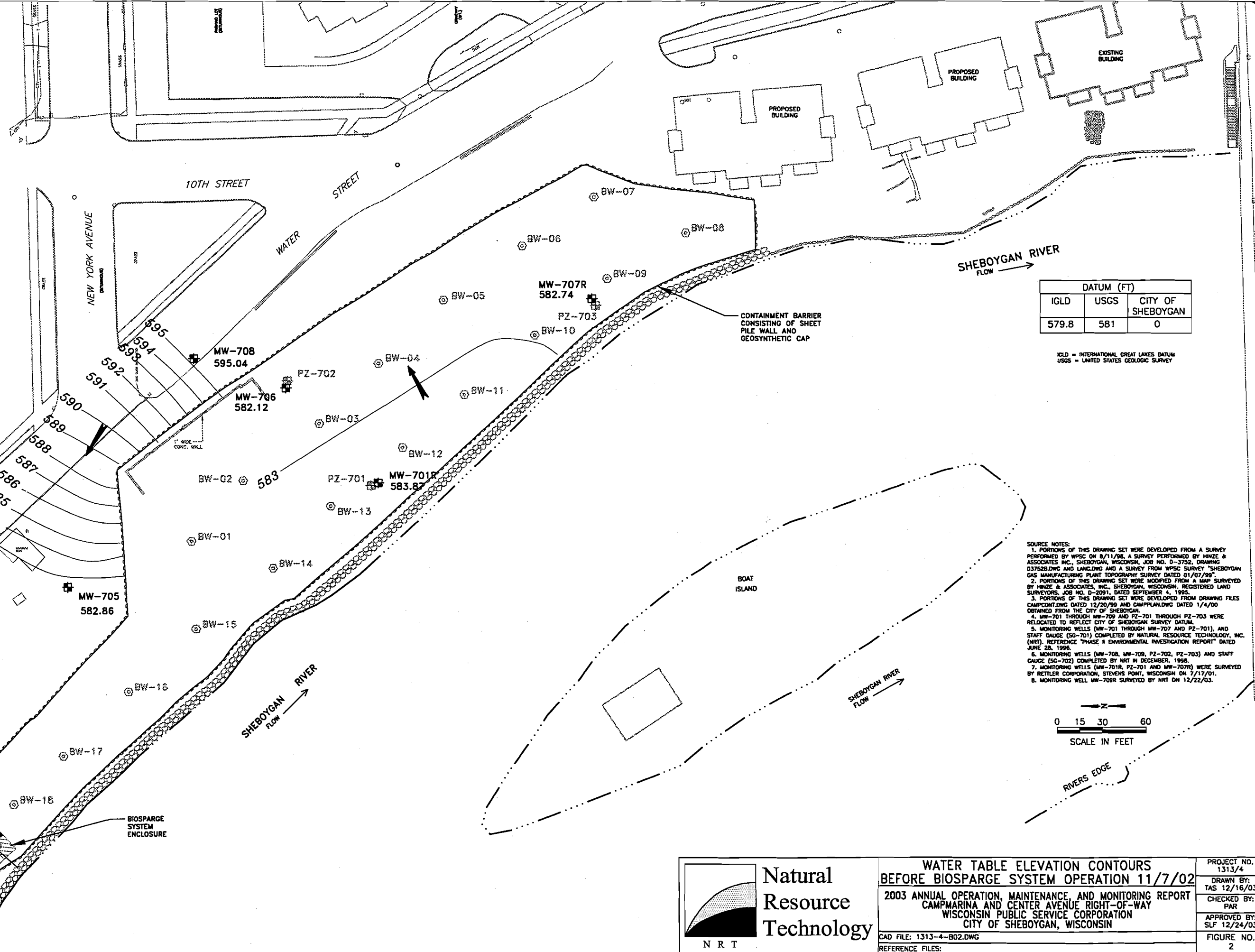
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APPROVED BY: HMS

DATE: 12/22/03

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- GROUNDWATER FLOW DIRECTION
- MW-706 582.12  
MONITORING WELL AND WATER TABLE ELEVATION, FT.
- BW-01  
BIOSPARGE WELL
- PZ-701  
PIEZOMETER
- RIPRAP
- RIVERS EDGE
- PROPERTY BOUNDARY
- CONTAINMENT BARRIER
- SANITARY/STORM MANHOLE



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**WATER TABLE ELEVATION CONTOURS BEFORE BIOSPARGE SYSTEM OPERATION 11/7/02**

2003 ANNUAL OPERATION, MAINTENANCE, AND MONITORING REPORT  
CAMPMARINA AND CENTER AVENUE RIGHT-OF-WAY  
WISCONSIN PUBLIC SERVICE CORPORATION  
CITY OF SHEBOYGAN, WISCONSIN

CAD FILE: 1313-4-802.DWG  
REFERENCE FILES:

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CHECKED BY: PAR
APPROVED BY: SLF 12/24/03
FIGURE NO. 2

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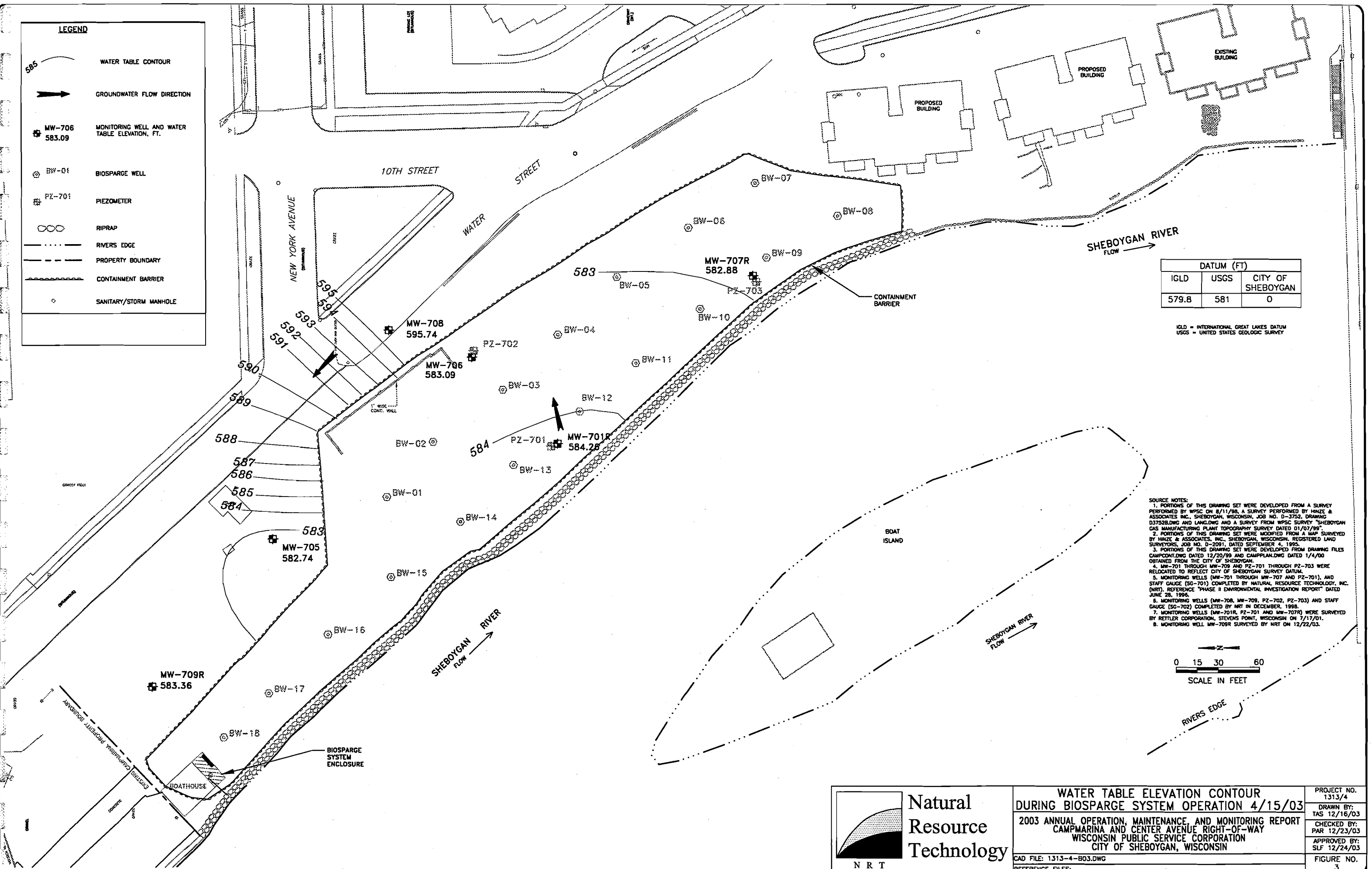
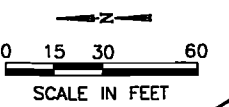
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- GROUNDWATER FLOW DIRECTION
- MW-706 583.09 — MONITORING WELL AND WATER TABLE ELEVATION, FT.
- BW-01 — BIOSPARGE WELL
- PZ-701 — PIEZOMETER
- ○ ○ — RIPRAP
- RIVERS EDGE
- - - - - PROPERTY BOUNDARY
- CONTAINMENT BARRIER
- — SANITARY/STORM MANHOLE

DATUM (FT)		
IGLD	USGS	CITY OF SHEBOYGAN
579.8	581	0

IGLD = INTERNATIONAL GREAT LAKES DATUM  
 USGS = UNITED STATES GEOLOGIC SURVEY

**SOURCE NOTES:**

1. PORTIONS OF THIS DRAWING SET WERE DEVELOPED FROM A SURVEY PERFORMED BY WPSC ON 8/11/98, A SURVEY PERFORMED BY HINZE & ASSOCIATES INC., SHEBOYGAN, WISCONSIN, JOB NO. D-3752, DRAWING D3752B.DWG AND LAND.DWG AND A SURVEY FROM WPSC SURVEY "SHEBOYGAN GAS MANUFACTURING PLANT TOPOGRAPHY SURVEY DATED 01/07/99".
2. PORTIONS OF THIS DRAWING SET WERE MODIFIED FROM A MAP SURVEYED BY HINZE & ASSOCIATES, INC., SHEBOYGAN, WISCONSIN, REGISTERED LAND SURVEYORS, JOB NO. D-2091, DATED SEPTEMBER 4, 1995.
3. PORTIONS OF THIS DRAWING SET WERE DEVELOPED FROM DRAWING FILES CAMPCONT.DWG DATED 12/20/99 AND CAMPPLAN.DWG DATED 1/4/00 OBTAINED FROM THE CITY OF SHEBOYGAN.
4. MW-701 THROUGH MW-709 AND PZ-701 THROUGH PZ-703 WERE RELOCATED TO REFLECT CITY OF SHEBOYGAN SURVEY DATUM.
5. MONITORING WELLS (MW-701 THROUGH MW-707 AND PZ-701), AND STAFF GAUGE (SG-701) COMPLETED BY NATURAL RESOURCE TECHNOLOGY, INC. (NRT), REFERENCE "PHASE II ENVIRONMENTAL INVESTIGATION REPORT" DATED JUNE 28, 1998.
6. MONITORING WELLS (MW-708, MW-709, PZ-702, PZ-703) AND STAFF GAUGE (SG-702) COMPLETED BY NRT IN DECEMBER, 1998.
7. MONITORING WELLS (MW-701R, PZ-701 AND MW-707R) WERE SURVEYED BY RETTLER CORPORATION, STEVENS POINT, WISCONSIN ON 7/17/01.
8. MONITORING WELL MW-709R SURVEYED BY NRT ON 12/22/03.



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**WATER TABLE ELEVATION CONTOUR DURING BIOSPARGE SYSTEM OPERATION 4/15/03**  
 2003 ANNUAL OPERATION, MAINTENANCE, AND MONITORING REPORT  
 CAMPMARINA AND CENTER AVENUE RIGHT-OF-WAY  
 WISCONSIN PUBLIC SERVICE CORPORATION  
 CITY OF SHEBOYGAN, WISCONSIN

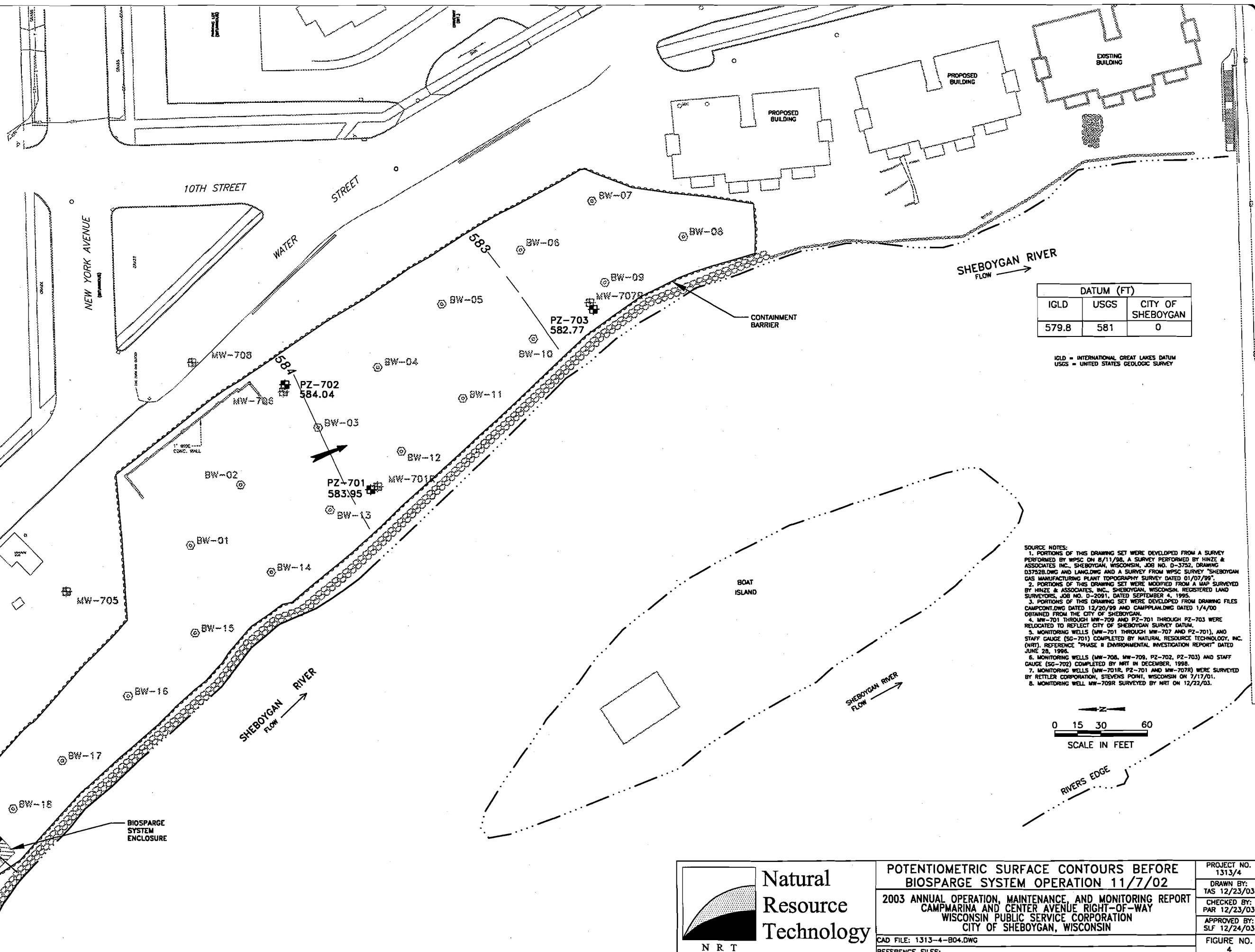
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CAD FILE: 1313-4-803.DWG  
 REFERENCE FILES:



**LEGEND**

- POTENTIOMETRIC SURFACE
- GROUNDWATER FLOW DIRECTION
- PIEZOMETER AND POTENTIOMETRIC ELEVATION, FT
- BIOSPARGE WELL
- MONITORING WELL
- RIPRAP
- RIVERS EDGE
- PROPERTY BOUNDARY
- CONTAINMENT BARRIER
- SANITARY/STORM MANHOLE

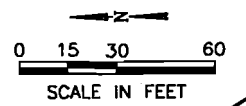


DATUM (FT)		
IGLD	USGS	CITY OF SHEBOYGAN
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8. MONITORING WELL MW-709R SURVEYED BY NRT ON 12/22/03.





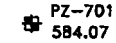

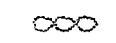


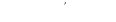


POTENTIOMETRIC SURFACE CONTOURS BEFORE BIOSPARGE SYSTEM OPERATION 11/7/02

2003 ANNUAL OPERATION, MAINTENANCE AND MONITORING REPORT  
CAMPMARINA AND CENTER AVENUE RIGHT-OF-WAY  
WISCONSIN PUBLIC SERVICE CORPORATION  
CITY OF SHEBOYGAN, WISCONSIN

CAD FILE: 1313-4-B04.DWG  
REFERENCE FILES:

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FIGURE NO. 4

**LEGEND**

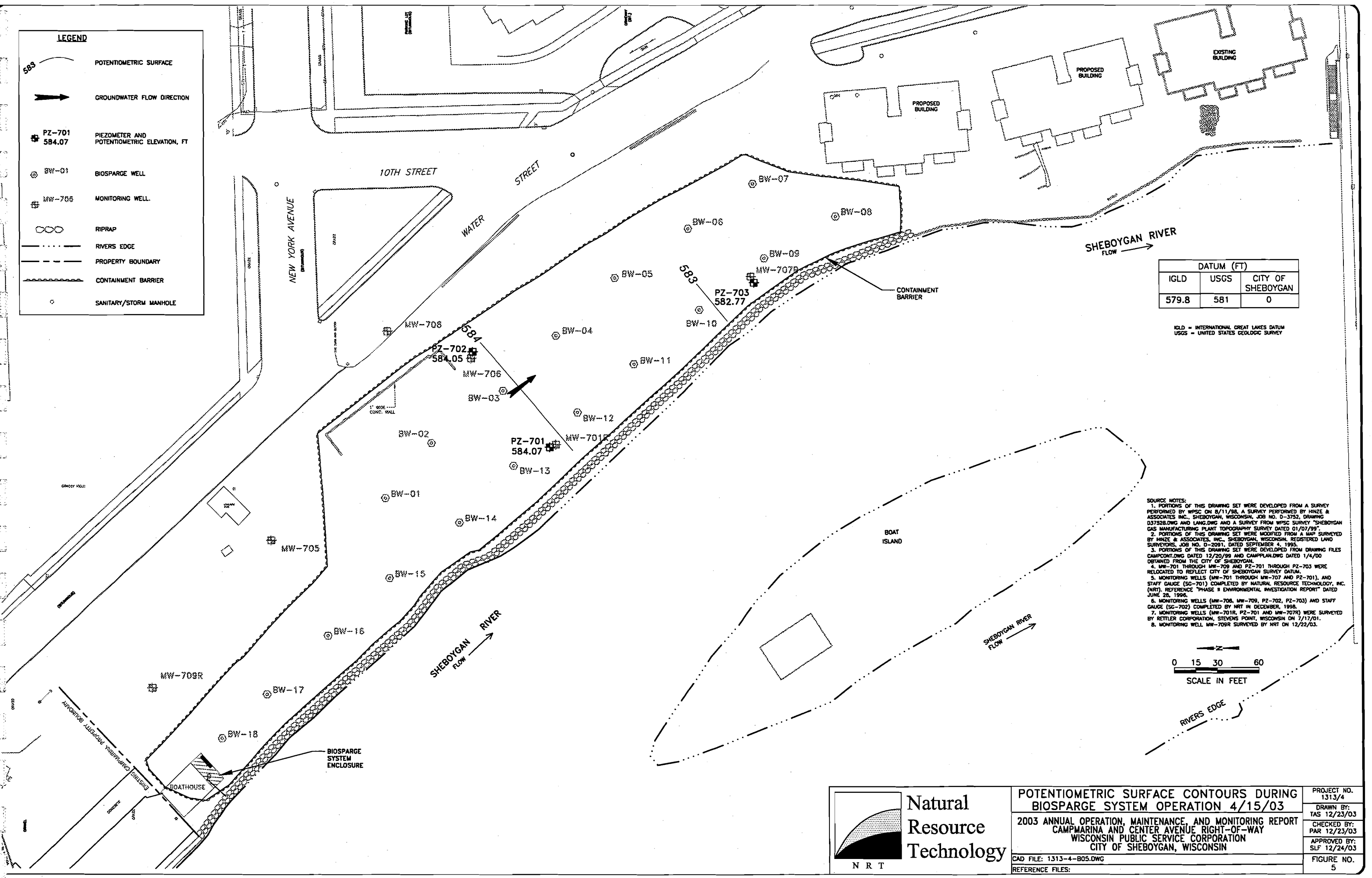
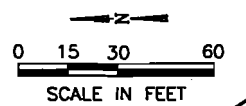
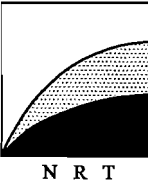
-  POTENTIOMETRIC SURFACE
-  GROUNDWATER FLOW DIRECTION
-  PIEZOMETER AND POTENTIOMETRIC ELEVATION, FT
-  BIOSPARGE WELL
-  MONITORING WELL
-  RIPRAP
-  RIVERS EDGE
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 USGS = UNITED STATES GEOLOGIC SURVEY

**SOURCE NOTES:**

1. PORTIONS OF THIS DRAWING SET WERE DEVELOPED FROM A SURVEY PERFORMED BY WPC ON 8/11/88, A SURVEY PERFORMED BY HINZE & ASSOCIATES INC., SHEBOYGAN, WISCONSIN, JOB NO. D-3752, DRAWING D3752B.DWG AND LANG.DWG AND A SURVEY FROM WPC SURVEY "SHEBOYGAN GAS MANUFACTURING PLANT TOPOGRAPHY SURVEY DATED 01/07/99".
2. PORTIONS OF THIS DRAWING SET WERE MODIFIED FROM A MAP SURVEYED BY HINZE & ASSOCIATES, INC., SHEBOYGAN, WISCONSIN, REGISTERED LAND SURVEYORS, JOB NO. D-2091, DATED SEPTEMBER 4, 1995.
3. PORTIONS OF THIS DRAWING SET WERE DEVELOPED FROM DRAWING FILES CAMPPOINT.DWG DATED 12/20/99 AND CAMPPLAND.DWG DATED 1/4/00 OBTAINED FROM THE CITY OF SHEBOYGAN.
4. MW-701 THROUGH MW-709 AND PZ-701 THROUGH PZ-703 WERE RELOCATED TO REFLECT CITY OF SHEBOYGAN SURVEY DATUM.
5. MONITORING WELLS (MW-701 THROUGH MW-707) AND STAFF GAUGE (SG-701) COMPLETED BY NATURAL RESOURCE TECHNOLOGY, INC. (NRT), REFERENCE "PHASE I ENVIRONMENTAL INVESTIGATION REPORT" DATED JUNE 28, 1996.
6. MONITORING WELLS (MW-708, MW-709, PZ-702, PZ-703) AND STAFF GAUGE (SG-702) COMPLETED BY NRT IN DECEMBER, 1998.
7. MONITORING WELLS (MW-701R, PZ-701 AND MW-707R) WERE SURVEYED BY RETTLER CORPORATION, STEVENS POINT, WISCONSIN ON 7/17/01.
8. MONITORING WELL MW-709R SURVEYED BY NRT ON 12/22/03.

**Natural Resource Technology**  
 N R T

**POTENTIOMETRIC SURFACE CONTOURS DURING BIOSPARGE SYSTEM OPERATION 4/15/03**

2003 ANNUAL OPERATION, MAINTENANCE, AND MONITORING REPORT  
 CAMPMARINA AND CENTER AVENUE RIGHT-OF-WAY  
 WISCONSIN PUBLIC SERVICE CORPORATION  
 CITY OF SHEBOYGAN, WISCONSIN

CAD FILE: 1313-4-B05.DWG  
 REFERENCE FILES:

PROJECT NO. 1313/4  
 DRAWN BY: TAS 12/23/03  
 CHECKED BY: PAR 12/23/03  
 APPROVED BY: SLF 12/24/03  
 FIGURE NO. 5

**LEGEND**

SAMPLE ID	BENZ	BTEX	NAPH	PAHs
DATE SAMPLED	BENZENE µg/L	TOTAL BTEX µg/L	NAPHTHALENE µg/L	POLYNUCLEAR AROMATIC HYDROCARBONS µg/L

- Notes:
- Concentrations that attain/exceed a preventive action limit (PAL) are shown in italics and underlined.
  - Concentrations that attain/exceed an enforcement standard (ES) are underlined and bold.
  - <0.0: Parameter not detected above the Limit of Detection indicated.
- na: Analysis was not performed  
nd: Analyte not detected

- MW-706 MONITORING WELL
- PZ-701 PIEZOMETER
- BW-D1 BIOSPARGE WELL
- RIPRAP
- RIVERS EDGE
- PROPERTY BOUNDARY
- CONTAINMENT BARRIER
- SANITARY/STORM MANHOLE

MW-708	BENZ	BTEX	NAPH	PAHs
6/25/2002	<0.45	nd	<0.027	0.01
11/7/2002	<0.25	nd	<0.024	nd
4/15/2003	<0.41	nd	0.088	0.1
7/1/2003	<0.30	nd	1.5	2.0
9/30/2003	<0.30	nd	0.23	0.2

PZ-702	BENZ	BTEX	NAPH	PAHs
6/25/2002	<0.45	nd	0.42	0.6
11/7/2002	<0.25	nd	0.087	0.4
4/15/2003	<0.41	nd	0.20	0.4
7/1/2003	<0.30	nd	0.045	0.3
9/30/2003	<0.30	nd	0.049	0.1

MW-707R	BENZ	BTEX	NAPH	PAHs
6/25/2002	1,100	4,211	1,600	1,634
7/1/2003	1,300	5,123	1,800	2,170

PZ-703	BENZ	BTEX	NAPH	PAHs
6/25/2002	570	820	190	192
11/7/2002	460	707	41	41
4/15/2003	880	1,308	30	31
7/1/2003	1,800	3,074	410	425
9/30/2003	2,000	3,495	350	371

MW-706	BENZ	BTEX	NAPH	PAHs
6/25/2002	1,900	4,490	7,100	24,000
7/1/2003	6,500	10,930	2,200	4,109

MW-701R	BENZ	BTEX	NAPH	PAHs
6/25/2002	2,700	3,388	9,400	21,713
7/1/2003	3,400	4,021	2,200	3,873

PZ-701	BENZ	BTEX	NAPH	PAHs
6/25/2002	<0.45	nd	0.18	1.5
11/7/2002	0.90	0.90	0.34	3.1
4/15/2003	<0.41	nd	0.067	0.4
7/1/2003	<0.30	nd	na	na
9/30/2003	0.35	0.40	0.22	4.9

MW-705	BENZ	BTEX	NAPH	PAHs
6/25/2002	<0.45	nd	<0.027	nd
11/7/2002	<0.25	nd	<0.024	0.05
4/15/2003	<0.41	nd	0.10	0.1
7/1/2003	<0.30	nd	0.029	0.1
9/30/2003	<0.30	nd	0.059	0.1

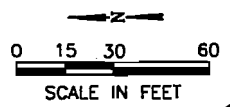
MW-709R	BENZ	BTEX	NAPH	PAHs
6/25/2002	<0.45	nd	1.8	2.2
11/7/2002	<0.25	nd	<0.024	nd
4/15/2003	<0.41	nd	0.12	0.2
7/1/2003	<0.30	nd	0.74	0.9
9/30/2003	<0.30	nd	0.025	0.6

DATUM (FT)		
IGLD	USGS	CITY OF SHEBOYGAN
579.8	581	0

IGLD = INTERNATIONAL GREAT LAKES DATUM  
USGS = UNITED STATES GEOLOGIC SURVEY

NOTE:  
1. DUPLICATE SAMPLES WERE COLLECTED DURING EACH SAMPLING EVENT. CONCENTRATIONS SHOWN REFLECT THE HIGHER CONCENTRATION BETWEEN WELL SAMPLES AND DUPLICATE SAMPLES.

SOURCE NOTES:  
1. PORTIONS OF THIS DRAWING SET WERE DEVELOPED FROM A SURVEY PERFORMED BY WPSG ON 8/11/98, A SURVEY PERFORMED BY HINZE & ASSOCIATES INC., SHEBOYGAN, WISCONSIN, JOB NO. D-3752, DRAWING D3752.BLDG AND LANDING AND A SURVEY FROM WPSG SURVEY "SHEBOYGAN GAS MANUFACTURING PLANT TOPOGRAPHY SURVEY DATED 01/07/99".  
2. PORTIONS OF THIS DRAWING SET WERE MODIFIED FROM A MAP SURVEYED BY HINZE & ASSOCIATES, INC., SHEBOYGAN, WISCONSIN, REGISTERED LAND SURVEYORS, JOB NO. D-2091, DATED SEPTEMBER 4, 1995.  
3. PORTIONS OF THIS DRAWING SET WERE DEVELOPED FROM DRAWING FILES CAMPCONT.DWG DATED 12/20/99 AND CAMPPLAN.DWG DATED 1/4/00 OBTAINED FROM THE CITY OF SHEBOYGAN.  
4. MW-701 THROUGH MW-709 AND PZ-701 THROUGH PZ-703 WERE RELOCATED TO REFLECT CITY OF SHEBOYGAN SURVEY DATUM.  
5. MONITORING WELLS (MW-701 THROUGH MW-707 AND PZ-701), AND STAFF GAUGE (SG-701) COMPLETED BY NATURAL RESOURCE TECHNOLOGY, INC. (NRT). REFERENCE "PHASE II ENVIRONMENTAL INVESTIGATION REPORT" DATED JUNE 28, 1996.  
6. MONITORING WELLS (MW-708, MW-709, PZ-702, PZ-703) AND STAFF GAUGE (SG-702) COMPLETED BY NRT IN DECEMBER, 1998.  
7. MONITORING WELLS (MW-701R, PZ-701 AND MW-707R) WERE SURVEYED BY RETTLER CORPORATION, STEVENS POINT, WISCONSIN ON 7/17/01.  
8. MONITORING WELL MW-709R SURVEYED BY NRT ON 12/22/03.



**GROUNDWATER ANALYTICAL SUMMARY**  
2002-2003

2003 ANNUAL OPERATION, MAINTENANCE, AND MONITORING REPORT  
CAMPMARINA AND CENTER AVENUE RIGHT-OF-WAY  
WISCONSIN PUBLIC SERVICE CORPORATION  
CITY OF SHEBOYGAN, WISCONSIN

CAD FILE: 1313-4-B06.DWG  
REFERENCE FILES:

PROJECT NO.  
1313/4

DRAWN BY:  
TAS 12/23/03

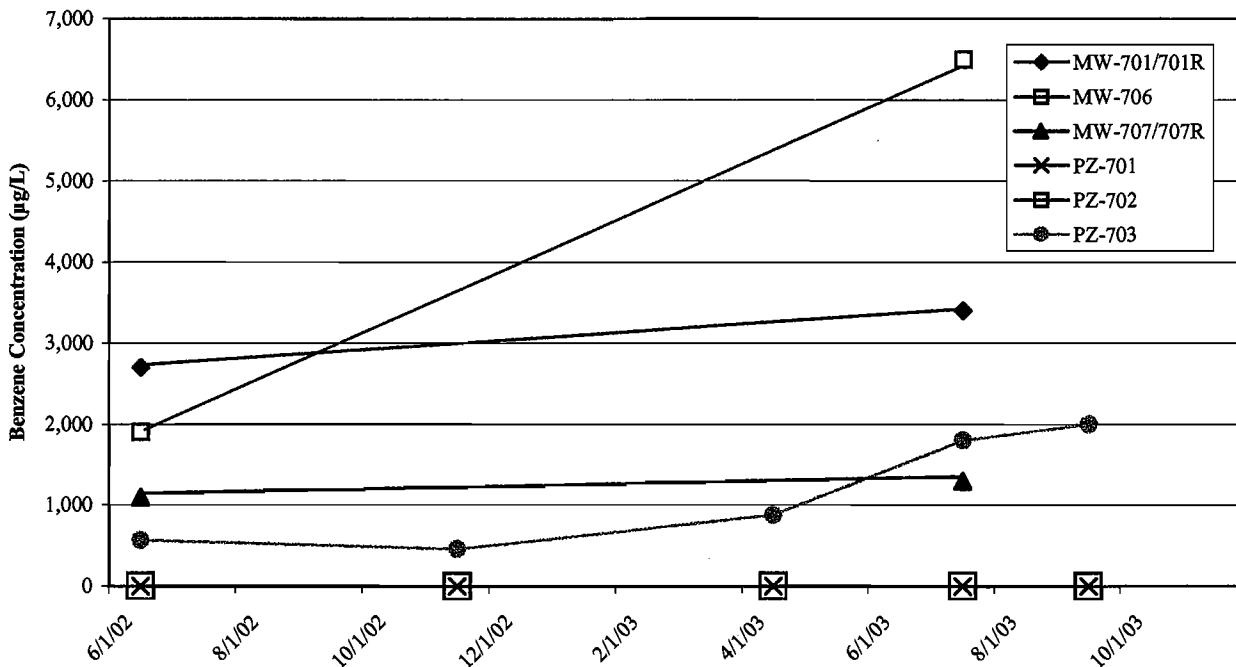
CHECKED BY:  
PAR 12/23/03

APPROVED BY:  
SLF 12/24/03

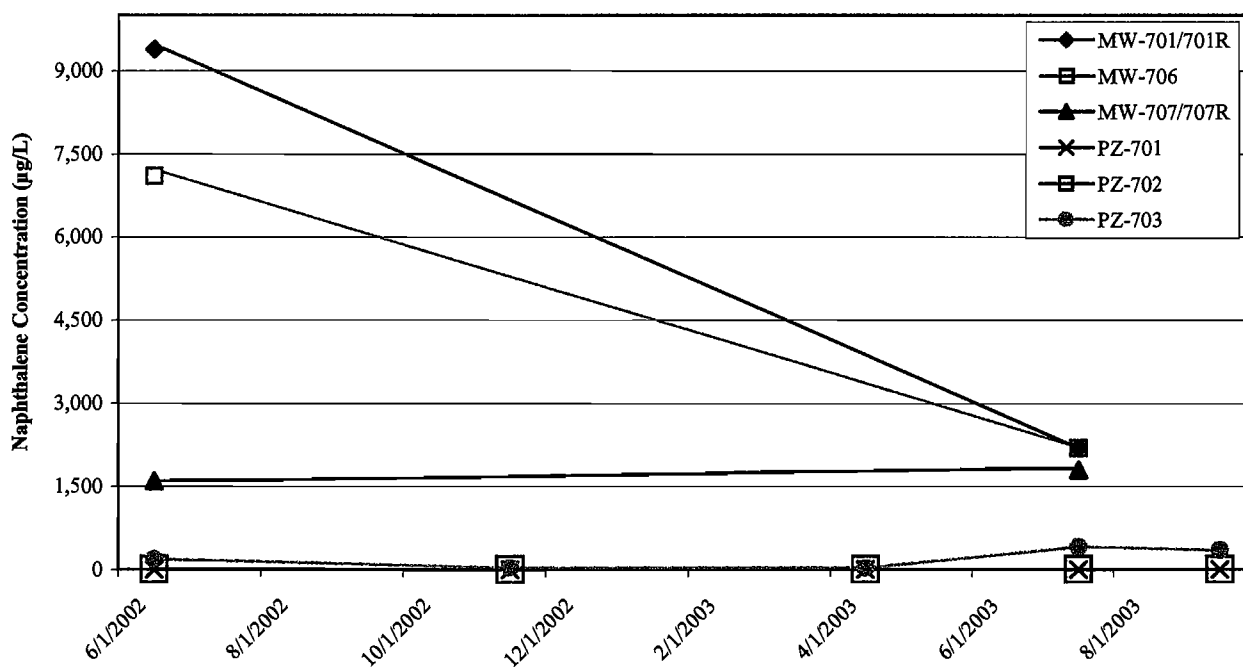
FIGURE NO.  
6

**Figure 7 - Contaminant Concentrations Versus Time Graphs (Trend 1)**  
**Wisconsin Public Service - Campmarina Former MGP Site**  
**Sheboygan, WI**

**Benzene Concentrations Versus Time**



**Naphthalene Concentration Versus Time**



TABLES

**Table 1 - Groundwater Elevations and Vertical Gradients**  
**Wisconsin Public Service Corporation - Campmarina Former MGP Site**  
**Sheboygan, WI**

Monitoring Location	Ground Surface Elevation (feet, MSL)	Top of PVC Elevation (feet, MSL)	Total Well Depth (feet)	Screen Length (feet)	Top of Screen Elevation (feet, MSL)	Middle of Screen Elevation (feet, MSL)	Monitoring Date	Depth to Water (feet)	Groundwater Elevation (feet, MSL)	Change in head (feet)	Change in distance (feet)	Vertical Gradient	Direction
MW-701	588.97	588.51	13.4	10	585.11		8/14/1995	5.51	583.00	7.38	27.63	2.67E-01	downward
							8/20/1995	5.63	582.88	9.14	27.51	3.32E-01	downward
							9/25/1995	5.58	582.93	10.30	27.56	3.74E-01	downward
							12/21/1998	5.72	582.79	0.60	27.42	2.19E-02	downward
							4/18/2000	5.95	582.56	0.42	27.19	1.54E-02	downward
							6/19/2000	5.62	582.89	0.78	27.52	2.83E-02	downward
							Well Replaced	--	--				
MW-701R		590.47	10.80	10	589.67		6/25/2002	6.20	584.27	3.64	28.90	1.26E-01	downward
							11/7/2002	6.60	583.87	-0.08	28.50	-2.81E-03	upward
							1/24/2003	7.06	583.41	-0.06	28.04	-2.14E-03	upward
							4/15/2003	6.21	584.26	0.19	28.89	6.58E-03	downward
							7/1/2003	6.18	584.29	0.21	28.92	7.26E-03	downward
PZ-701	589.28	588.89	36.02	5	557.87	555.37	8/14/1995	13.27	575.62				
							8/20/1995	15.15	573.74				
							9/25/1995	16.26	572.63				
							12/21/1998	6.70	582.19				
							4/18/2000	6.75	582.14				
							6/19/2000	6.78	582.11				
MW-702	590.39	590.09	13.40	10	586.69		8/14/1995	4.86	585.23				
							8/20/1995	4.69	585.40				
							9/25/1995	4.88	585.21				
							12/21/1998	4.83	585.26				
							4/18/2000	4.52	585.57				
							6/19/2000	2.68	587.41				
MW-703	589.16	588.80	13.46	10	585.34		8/14/1995	5.63	583.17				
							8/20/1995	5.69	583.11				
							9/25/1995	5.74	583.06				
							12/21/1998	5.7	583.10				
							4/18/2000	5.99	582.81				
							6/19/2000	5.56	583.24				

**Table 1 - Groundwater Elevations and Vertical Gradients**  
**Wisconsin Public Service Corporation - Campmarina Former MGP Site**  
**Sheboygan, WI**

Monitoring Location	Ground Surface Elevation (feet, MSL)	Top of PVC Elevation (feet, MSL)	Total Well Depth (feet)	Screen Length (feet)	Top of Screen Elevation (feet, MSL)	Middle of Screen Elevation (feet, MSL)	Monitoring Date	Depth to Water (feet)	Groundwater Elevation (feet, MSL)	Change in head (feet)	Change in distance (feet)	Vertical Gradient	Direction
MW-704	589.43	589.05	13.20	10	585.85		8/14/1995	5.93	583.12				
							8/20/1995	5.96	583.09				
							9/25/1995	6.00	583.05				
							12/21/1998	5.63	583.42				
							4/18/2000	5.64	583.41				
							6/19/2000	5.62	583.43				
MW-705	590.22	589.91	16.66	10	583.25		8/14/1995	6.95	582.96				
							8/20/1995	6.07	583.84				
							9/25/1995	6.09	583.82				
							12/21/1998	6.14	583.77				
							4/25/2000	6.11	583.80				
							6/19/2000	5.74	584.17				
							6/25/2002	10.27	579.64				
							11/7/2002	7.05	582.86				
							4/15/2003	7.17	582.74				
							7/1/2003	6.80	583.11				
9/30/2003	7.23	582.68											
MW-706	591.51	591.34	14.10	10	587.94		8/14/1995	3.5 *	587.8 *	-1.15	29.34	-3.92E-02	upward
							8/20/1995	3.4 *	587.9 *				
							9/25/1995	3.5 *	587.8 *				
							12/21/1998	3.34	588.00				
							4/18/2000	2.98	588.36				
							6/19/2000	3.65	587.69				
							6/25/2002	8.40	582.94				
							11/7/2002	9.22	582.12				
							1/24/2003	--	--				
							4/15/2003	8.25	583.09				
7/1/2003	8.77	582.57											
PZ-702	591.62	591.16	38.62	5	561.2	558.7	12/21/1998	2.01	589.15				
							4/18/2000	2.60	588.56				
							6/19/2000	3.32	587.84				
							6/25/2002	10.47	580.69				
							11/7/2002	7.12	584.04				
							1/24/2003	7.58	583.58				
							4/15/2003	7.11	584.05				
							7/1/2003	7.10	584.06				
							9/30/2003	7.18	583.98				

**Table 1 - Groundwater Elevations and Vertical Gradients**  
**Wisconsin Public Service Corporation - Campmarina Former MGP Site**  
**Sheboygan, WI**

Monitoring Location	Ground Surface Elevation (feet, MSL)	Top of PVC Elevation (feet, MSL)	Total Well Depth (feet)	Screen Length (feet)	Top of Screen Elevation (feet, MSL)	Middle of Screen Elevation (feet, MSL)	Monitoring Date	Depth to Water (feet)	Groundwater Elevation (feet, MSL)	Change in head (feet)	Change in distance (feet)	Vertical Gradient	Direction
MW-707	590.29	590.08	13.35	10	586.73		8/14/1995	7.48	582.60	2.84	26.71	1.06E-01	downward
							8/20/1995	7.71	582.37				
							9/25/1995	7.67	582.41				
							12/21/1998	6.65	583.43				
							4/18/2000	--	--				
							6/19/2000	6.05	584.03				
						Well Replaced	--	--					
MW-707R		587.78	11.97	10	585.81		6/25/2002	4.57	583.21	3.79	26.49	1.43E-01	downward
							11/7/2002	5.04	582.74	-0.03	26.02	-1.15E-03	upward
							1/24/2003	--	--				
							4/15/2003	4.9	582.88	0.11	26.16	4.20E-03	downward
							7/1/2003	4.99	582.79	4.40	26.07	1.69E-01	downward
PZ-703	589.85	589.22	33.94	5	559.2	556.7	12/21/1998	8.63	580.59				
							1/19/1999	8.96	580.26				
							4/18/2000	9.49	579.73				
							6/19/2000	9.13	580.09				
							6/25/2002	9.80	579.42				
							11/7/2002	6.45	582.77				
							1/24/2003	--	--				
							4/15/2003	6.45	582.77				
							7/1/2003	10.83	578.39				
							9/30/2003	9.40	579.82				
MW-708	606.45	606.09	18.86	15	602.23		12/10/1998	16.39	589.70				
							12/21/1998	16.78	589.31				
							4/18/2000	15.21	590.88				
							6/19/2000	14.98	591.11				
							6/25/2002	14.22	591.87				
							11/7/2002	11.05	595.04				
							1/24/2003	11.58	594.51				
							4/15/2003	10.35	595.74				
							7/1/2003	10.66	595.43				
							9/30/2003	11.07	595.02				



**Table 1 - Groundwater Elevations and Vertical Gradients**  
**Wisconsin Public Service Corporation - Campmarina Former MGP Site**  
**Sheboygan, WI**

Monitoring Location	Ground Surface Elevation (feet, MSL)	Top of PVC Elevation (feet, MSL)	Total Well Depth (feet)	Screen Length (feet)	Top of Screen Elevation (feet, MSL)	Middle of Screen Elevation (feet, MSL)	Monitoring Date	Depth to Water (feet)	Groundwater Elevation (feet, MSL)	Change in head (feet)	Change in distance (feet)	Vertical Gradient	Direction
MW-709	588.51	587.95	12.50	10	585.45		12/21/1998	7.27	580.68				
							4/18/2000	7.62	580.33				
							6/19/2000	7.23	580.72				
							Well Replaced	--	--				
MW-709R	589.15	588.81	16.54	10	582.27		6/25/2002	9.23	579.58				
							11/7/2002	6.40	582.41				
							4/15/2003	5.45	583.36				
							7/1/2003	5.30	583.51				
							9/30/2003	6.33	582.48				
SG-701	na	582.02	na	na	na		8/14/1995	2.00	580.02				
							8/20/1995	2.33	579.69				
							9/25/1995	2.49	579.53				
SG-702	na	581.37	an	na	na		2.33	579.04					

(U-PAR/JTB 11/03)

Notes:

1. PZ-701, MW-701R and MW-707R were surveyed on 7/17/01 by Rettler Corporation from Stevens Point, Wisconsin.  
PZ-101 was extended from pre-remedial ground surface elevation to existing ground surface elevation.
2. Elevations are referenced to United States Geologic Survey Geodetic Sea Level Datum.
3. \* Estimated value.
4. MW-709 was surveyed on 12/22/03 by NRT using MW-701R TOC as a bench mark and a laser level.
5. -- Not Measured

**Horizontal Gradient Calculation:**

Change in head between 584 ft contour and 583 ft contour = 1 ft  
Change in distance between 584 ft contour and 583 ft contour = 145 ft  
Horizontal Gradient =  $1/145 = 7E-3$  to the southeast

**Table 2 - Groundwater Analytical Results - Cyanide and BTEX**  
**Wisconsin Public Service Corporation - Campmarina Former MGP Site**  
**Sheboygan, WI**

Sampling Location	Sampling Date	Cyanide, dissolved (mg/L)			BTEX (µg/L)				
		Cyanide (amenable)	Cyanide (dissociable)	Cyanide (total)	Benzene	Toluene	Ethylbenzene	Xylene, total	Total BTEX
<b>Wisconsin Groundwater Quality Standards (NR140)</b>									
<b>Preventive Action Limit</b>		ns	<u>0.04</u>	ns	<u>0.5</u>	<u>200</u>	<u>140</u>	<u>1,000</u>	ns
<b>Enforcement Standard</b>		ns	<b>0.2</b>	ns	<b>5</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	ns
<b>MW-701</b>	8/15/1995	<0.0050	0.025	0.11	<b>10,000</b>	96	<b>880</b>	820	11,796
	9/25/1995	<0.0050	0.020	0.088	<b>12,000</b>	53	<b>780</b>	680	13,513
	12/21/1998	0.05	<u>0.11</u>	0.17	<b>10,200</b>	77 *	<b>818</b>	717	11,812
<b>MW-701R</b>	6/25/2002	0.15	0.012	0.16	<b>2,700</b>	28	<u>330</u>	330	3,388
	11/7/2002	--	--	--	--	--	--	--	--
	7/1/2003	--	--	0.13	<b>3,400</b>	21 *	<u>340</u>	260	4,021
<b>PZ-701</b>	8/17/1995	0.02	<0.0050	0.02	<b>5</b>	6.3	3.6	11	25.9
	9/25/1995	0.014	<0.0050	0.014	<u>2.2</u>	6.6	1.7	6.8	17.3
	12/21/1998	--	--	--	<u>0.96</u> *	1.8 *	1.1 *	4.2 *	8.1
	6/25/2002	0.74	<u>0.19</u>	0.83	<0.45	<0.68	<0.82	<1.7	nd
	11/7/2002	0.042	<u>0.049</u>	0.18	<u>0.90</u>	<0.84	<0.53	<1.1	0.9
	4/15/2003	0.47	0.028	0.47	<0.41	<0.67	<0.54	<1.8	nd
	7/1/2003	--	--	0.34	<0.30	<0.58	<0.60	<1.2	nd
9/30/2003	--	--	0.26	0.35 *	<0.58	<0.60	<1.2	0.4	
<b>MW-702</b>	8/15/1995	<0.0050	<u>0.043</u>	0.20	<b>5,900</b>	<b>2,300</b>	<b>1,500</b>	<u>1,600</u>	11,300
	9/25/1995	<0.0050	0.032	0.072	<b>6,100</b>	<b>2,100</b>	<b>1,400</b>	<u>1,400</u>	11,000
<b>MW-703</b>	8/15/1995	<0.0050	0.039	0.12	<b>1,300</b>	29	<b>980</b>	430	2,739
	9/25/1995	<0.0050	0.028	0.14	<b>1,300</b>	23	<b>1,100</b>	450	2,873
	12/21/1998	0.05	<u>0.074</u>	0.20	<b>1,190</b>	9.2 *	<b>973</b>	408	2,580
<b>MW-704</b>	8/15/1995	<0.0050	<u>0.056</u>	0.31	<b>340</b>	<u>200</u>	<u>280</u>	430	1,250
	dup(MW-799) 8/15/1995	0.190	0.022	0.29	<b>310</b>	190	<u>280</u>	440	1,220
	9/25/1995	<0.0050	<u>0.062</u>	0.28	<b>1,100</b>	<u>380</u>	<u>670</u>	970	3,120
	dup(MW-799) 9/25/1995	0.02	<u>0.041</u>	0.36	<b>1,100</b>	<u>360</u>	<u>610</u>	900	2,970
	12/21/1998	0.22	0.017	0.31	<b>29</b>	1.6 *	13	11.3	55
	dup(MW-B) 12/21/1998	0.29	0.023	0.29	<b>22</b>	1.2 *	9.5	8.7 *	41
<b>MW-705</b>	8/15/1995	<0.0050	<0.0050	<0.0050	<1.0	<1.0	<1.0	<3.0	nd
	9/25/1995	<0.0050	<0.0050	<0.0050	<0.50	<1.0	<1.0	<3.0	nd
	12/21/1998	<0.001	<0.001	<0.001	<0.50	<0.60	<0.60	<2.2	nd
	dup(MW-A) 12/21/1998	<0.001	0.004	<0.001	<0.50	<0.60	<0.60	<2.2	nd
	6/25/2002	0.076	0.013	0.080	<0.45	<0.68	<0.82	<1.7	nd
	dup(QA QC-1) 6/25/2002	0.088	0.008	0.10	<0.45	<0.68	<0.82	<1.7	nd
	11/7/2002	0.110	<0.0027	0.060	<0.25	<0.84	<0.53	<1.1	nd
	4/15/2003	0.10	0.0064	0.10	<0.41	<0.67	<0.54	<1.8	nd
	7/1/2003	--	--	0.14	<0.30	<0.58	<0.60	<1.2	nd
	9/30/2003	--	--	0.15	<0.30	<0.58	<0.60	<1.2	nd

**Table 2 - Groundwater Analytical Results - Cyanide and BTEX**  
**Wisconsin Public Service Corporation - Campmarina Former MGP Site**  
**Sheboygan, WI**

Sampling Location	Sampling Date	Cyanide, dissolved (mg/L)			BTEX (µg/L)				Total BTEX
		Cyanide (amenable)	Cyanide (dissociable)	Cyanide (total)	Benzene	Toluene	Ethylbenzene	Xylene, total	
<b>Wisconsin Groundwater Quality Standards (NR140)</b>									
<b>Preventive Action Limit</b>		ns	<u>0.04</u>	ns	<u>0.5</u>	<u>200</u>	<u>140</u>	<u>1,000</u>	ns
<b>Enforcement Standard</b>		ns	<b>0.2</b>	ns	<b>5</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	ns
MW-706	8/15/1995	<0.0050	<0.0050	<0.0050	<b>34,000</b>	<b>13,000</b>	<u>560</u>	<u>7,900</u>	55,460
	9/25/1995	<0.0050	<0.0050	<0.0050	<b>31,000</b>	<b>12,000</b>	<2,500	<u>7,700</u>	50,700
	6/25/2002	0.078	0.0099	0.081	<b>1,900</b>	<b>1,300</b>	<u>270</u>	<u>1,020</u>	4,490
	11/7/2002	--	--	--	--	--	--	--	--
	7/1/2003	--	--	0.099	<b>6,500</b>	<b>2,200</b>	<u>360</u>	<u>1,870</u>	10,930
PZ-702  <i>dup(QA/QC-1)</i>	12/21/1998	<0.002	<0.002	<0.002	<0.50	1.5 *	<0.60	<2.2	1.5
	6/25/2002	<0.0023	<0.00084	<0.0023	<0.45	<0.68	<0.82	<1.7	nd
	11/7/2002	<0.0027	<0.0027	<0.0027	<0.25	<0.84	<0.53	<1.1	nd
	4/15/2003	<0.0015	<0.0019	<0.0015	<0.41	<0.67	<0.54	<1.8	nd
	4/15/2003	<0.0015	<0.0095 C	<0.0015	<0.41	<0.67	<0.54	<1.8	nd
	7/1/2003	--	--	<0.0015	<0.30	<0.58	<0.60	<1.2	nd
	9/30/2003	--	--	0.0033 *,B	<0.30	<0.58	<0.60	<1.2	nd
MW-707	8/15/1995	0.210	<u>0.042</u>	0.38	<b>1,500</b>	190	<b>3,600</b>	<u>1,400</u>	6,690
	9/25/1995	<0.0050	<u>0.058</u>	0.44	<b>1,200</b>	130	<b>3,500</b>	<u>1,200</u>	6,030
	12/21/1998	0.13	0.033	0.64	<b>830</b>	82 *	<b>3,110</b>	990 *	5,012
MW-707R	6/25/2002	0.76	0.010	0.78	<b>1,100</b>	51	<b>2,300</b>	760	4,211
	11/7/2002	--	--	--	--	--	--	--	--
	7/1/2003	--	--	0.26	<b>1,300</b>	73	<b>2,800</b>	950	5,123
PZ-703	12/21/98**	0.002 *	0.002 *	0.002 *	<b>960 **</b>	26 **	<u>429 **</u>	301 **	1,716
	12/21/98***	--	--	--	<b>1,170 ***</b>	26 ***	<u>527 ***</u>	299 ***	2,022
	1/19/1999	--	--	--	<b>71</b>	9.6	12	15.2	108
	6/25/2002	<0.0023	0.0009 *	<0.0023	<b>570</b>	14	<u>150</u>	86	820
	11/7/2002	0.0080 *	<0.0027	0.0070 *	<b>460</b>	16	130	101	707
	4/15/2003	0.0025 *	<0.0019	0.0025 *	<b>880</b>	22	<u>260</u>	146	1,308
	7/1/2003	--	--	0.0019 *	<b>1,800</b>	64	<b>760</b>	450	3,074
	9/30/2003	--	--	0.0039 *,B,A	<b>2,000</b>	65	<b>910</b>	520	3,495
	MW-708  <i>dup(QA/QC-1)</i>	12/21/1998	<0.001	<0.001	<0.001	<0.50	<0.60	<0.60	<2.2
6/25/2002		0.003 *	<0.00084	0.0036 *	<0.45	<0.68	<0.82	<1.7	nd
11/7/2002		<0.0027	<0.0027	0.0060 *	<0.25	<0.84	<0.53	<1.1	nd
11/7/2002		0.0040 *	<0.0027	0.0040 *	<0.25	<0.84	<0.53	<1.1	nd
4/15/2003		<0.0015	0.0022 *	<0.0015	<0.41	<0.67	<0.54	<1.8	nd
7/1/2003		--	--	0.0046 *	<0.30	<0.58	<0.60	<1.2	nd
9/30/2003		--	--	0.0034 *,B	<0.30	<0.58	<0.60	<1.2	nd

**Table 2 - Groundwater Analytical Results - Cyanide and BTEX**  
**Wisconsin Public Service Corporation - Campmarina Former MGP Site**  
**Sheboygan, WI**

Sampling Location	Sampling Date	Cyanide, dissolved (mg/L)			BTEX (µg/L)				Total BTEX
		Cyanide (amenable)	Cyanide (dissociable)	Cyanide (total)	Benzene	Toluene	Ethylbenzene	Xylene, total	
<b>Wisconsin Groundwater Quality Standards (NR140)</b>									
<b>Preventive Action Limit</b>		ns	<u>0.04</u>	ns	<u>0.5</u>	<u>200</u>	<u>140</u>	<u>1,000</u>	ns
<b>Enforcement Standard</b>		ns	<b>0.2</b>	ns	<b>5</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	ns
MW-709	12/21/1998	0.03	0.014	0.030	<0.50	<0.60	<0.60	<2.2	nd
MW-709R	6/25/2002	0.45	0.027	0.480	<0.45	<0.68	<0.82	<1.7	nd
	11/7/2002	0.038	0.0070 *	0.16	<0.25	<0.84	<0.53	<1.1	nd
	4/15/2003	0.28	0.010	0.28	<0.41	<0.67	<0.54	<1.8	nd
dup(M)	7/1/2003	--	--	0.25	<0.30	<0.58	<0.60	<1.2	nd
	7/1/2003	--	--	0.24 N	<0.30	<0.58	<0.60	<1.2	nd
dup(M)	9/30/2003	--	--	0.11	<0.30	<0.58	<0.60	<1.2	nd
	9/30/2003	--	--	0.12	<0.30	<0.58	<0.60	<1.2	nd

[U-PAR/JTB 11/03]

**Notes:**

- 1) Concentrations that attain/exceed a preventive action limit (PAL) are shown in *italics and underlined*.
  - 2) Concentrations that attain/exceed an enforcement standard (ES) are **underlined and bold**.
- \* : Laboratory note - Parameter detected above the limit of detection (LOD) but below the limit of Quantitation (LOQ).
- \*\* : Laboratory note - The original analysis contained concentrations above the calibration curve.
- \*\*\* : Laboratory note - The sample was reanalyzed past hold time, concentrations were within the calibration curve.
- A : Laboratory note-Laboratory Control Spike recovery not within control limits.
- B : Laboratory note-Analyte present in method blank.
- C : Laboratory note- Elevated detection limit.
- N : Laboratory note-Spiked sample recovery not within control limits.
- M : Field duplicate identity was erroneously identified (field duplicate or field blank)
- <0.0050 : Parameter not detected above the Limit of Detection indicated.
- : Analysis was not performed
- nd : Analyte not detected
- ns : NR 140 standard not established
- dup(QA/QC-1): Field duplicate sample (field identity shown in parentheses).

**Table 3 - Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons**  
**Wisconsin Public Service Corporation - Campmarina Former MGP Site**  
**Sheboygan, WI**

Sampling Location	Sampling Date	POLYNUCLEAR AROMATIC HYDROCARBONS - PAHs (µg/L)																	Total PAHs		
		Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(ghi) perylene	Benzo(k) fluoranthene	Chrysene	Dibenz(a,h) anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd) pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Phenanthrene		Pyrene	
		<b>Wisconsin Groundwater Quality Standards (NR 140)</b>																			
<b>Preventive Action Limit</b>		ns	ns	<u>600</u>	ns	<u>0.02</u>	<u>0.02</u>	ns	ns	<u>0.02</u>	ns	<u>80</u>	<u>80</u>	ns	ns	ns	<u>8</u>	ns	<u>50</u>	ns	
<b>Enforcement Standard</b>		ns	ns	<u>3,000</u>	ns	<u>0.2</u>	<u>0.2</u>	ns	ns	<u>0.2</u>	ns	<u>400</u>	<u>400</u>	ns	ns	ns	<u>40</u>	ns	<u>250</u>	ns	
<b>MW-701</b>	8/15/1995	800	<2.0	23	3.4	<u>1.8</u>	<u>0.6</u>	1.2	0.54	<u>1.7</u>	0.25	49	<u>130</u>	0.76	--	--	<u>220</u>	100	20	1,352	
	9/25/1995	680	1,100	17	2	<u>1</u>	<u>0.24</u>	0.67	0.3	<u>1.0</u>	0.4	29	<u>100</u>	0.36	--	--	<u>3,800</u>	81	11	5,824	
	12/21/1998	420	<1.3	32	15	<u>7.7</u>	<u>5.4</u>	4.5	2.5	<u>7.6</u>	6.7	56	<u>92</u>	4.3	367	188	<u>3,740</u>	129	<u>98</u>	5,176	
<b>MW-701R</b>	6/25/2002	2,500 D	<770 D	<u>1,300 D,*</u>	<630	<u>420 D,*</u>	<470 D	<500 D	<430 D	<u>640 D,*</u>	63	<u>1,300 D,*</u>	<u>790 D,*</u>	<470 D	--	--	<u>9,400 D</u>	3,500 D	<u>1,800 D,*</u>	21,713	
	11/7/2002	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	7/1/2003	310 D,*,&	17 &	<200 D	45	<u>35</u>	<u>16</u>	15	19	<u>42</u>	3.5 *	<130 D	<170 D	10	420 D,A,*,&	480 D,*,&	<u>2,200 D,&amp;</u>	260 D,*	<170 D	3,873	
<b>PZ-701</b>	8/17/1995	<1.0	<2.0	1.5	0.89	<u>0.43</u>	<u>0.21</u>	0.24	0.18	<u>0.61</u>	<0.10	3.3	1.0	<0.10	--	--	<1.0	6.6	2.1	17	
	9/26/1995	<1.0	<2.0	0.25	0.13	<0.20	<0.050	<0.10	<0.050	<u>0.13</u>	<0.10	0.70	<0.40	<0.10	--	--	<1.0	0.8	0.77	2.8	
	12/21/1998	<1.4	<1.3	0.23 *	0.25 *	<0.21	<0.12	<0.23	<0.23	<0.092	<0.25	0.60 *	0.42	<0.11	<0.94	<0.92	7.3	0.80	1.1 *	11	
	6/25/2002	0.040 *	0.059 *	0.073	0.13	<u>0.100</u>	<u>0.084</u>	0.059	0.065	<u>0.092</u>	0.018 *	0.23	<0.021	0.058	--	--	0.18	0.10	0.19	1.5	
	11/7/2002	0.11 *	0.087 *	0.15 *	0.19 *	<u>0.16</u>	<u>0.17</u>	0.16	0.14 *	<u>0.16</u>	<0.048	0.44 *	0.053	0.13 *	0.076 *	<0.051	0.34	0.38	0.38	3.1	
	4/15/2003	<0.018	<0.019	0.023 *	0.019 *	0.017 *	0.017 *	0.017 *	<0.019	0.015 *	<0.016	0.029 *	<0.017	<0.021	0.045 *	0.045 *	0.067 *	0.032 *	0.034 *	0.4	
	9/30/2003	0.043 *	0.13	0.23	0.42	<u>0.24</u>	<u>0.19</u>	0.15	0.17 &	<u>0.27</u>	0.067	0.82 D	0.056 *	0.14	0.046 *	0.042 *	0.22	0.89 D	0.82 D	4.9	
<b>MW-702</b>	8/15/1995	390	<2.0	19	2.9	<u>1.4</u>	<u>0.32</u>	0.93	0.48	<u>1.5</u>	0.23	41	<u>150</u>	0.55	--	--	<u>7,300</u>	96	35	8,039	
	9/25/1995	400	1,400	17	3.7	<u>1.8</u>	<u>0.66</u>	1.6	0.73	<u>1.9</u>	0.28	32	<u>140</u>	0.76	--	--	<u>6,400</u>	90	13	8,503	
<b>MW-703</b>	8/15/1995	180	<2.0	17	1.4	<u>0.46</u>	<u>0.1</u>	0.24	0.16	<u>0.55</u>	0.17	28	70	0.16	--	--	<u>2,400</u>	74	9.2	2,781	
	9/25/1995	220	430	14	1.2	<u>0.37</u>	<u>0.05</u>	0.34	0.12	<u>0.51</u>	0.23	19	54	0.19	--	--	<u>2,700</u>	58	5.9	3,504	
	12/21/1998	262	<1.3	5.9	8.7	<u>2.4</u>	<u>1.7</u>	1.6	0.91	<0.092	<0.25	10	45	1.4	408	<0.92	<u>3,080</u>	24	16	3,868	
<b>MW-704</b>	8/15/1995	770	<2.0	44	26	<u>22</u>	<u>8.9</u>	17	7.9	<u>19</u>	<0.10	<u>150</u>	<u>180</u>	10	--	--	<u>5,200</u>	220	<u>56</u>	6,731	
	dup(MW-799)	8/15/1995	660	<2.0	44	25	<u>21</u>	<u>8.7</u>	16	7.3	<u>19</u>	<0.10	<u>140</u>	<u>190</u>	9.2	--	--	<u>3,600</u>	220	<u>55</u>	5,015
	9/25/1995	440	1,400	20	5.0	<u>3.1</u>	<u>2.7</u>	<0.10	2.3	<u>3.5</u>	<0.10	36	<u>120</u>	<0.10	--	--	<u>4,200</u>	120	13	6,366	
	dup(MW-799)	9/25/1995	420	1,100	64	46	<u>38</u>	<u>14</u>	31	15	<u>31</u>	3.2	<u>210</u>	<u>170</u>	20	--	--	<u>3,100</u>	310	<u>83</u>	5,655
	12/21/1998	1.6 *	5.9	6.0	8.9	<u>9.5</u>	<u>8.1</u>	7.0	3.5	<u>4.4</u>	<0.25	21	10	7.7	14	3.6	<u>22</u>	19	26	178	
	dup(MW-B)	12/21/1998	1.6 *	<1.3	4.9	6.6	<u>7.6</u>	<u>6.0</u>	5.3	2.4	<u>3.0</u>	<0.25	16	6.8	5.8	9.5	<0.92	<u>17</u>	16	20	129
<b>MW-705</b>	8/15/1995	<1.0	<2.0	<0.20	<0.050	<0.20	<0.050	<0.10	<0.050	<0.10	<0.10	<0.20	<0.40	<0.10	--	--	<1.0	<0.40	<0.20	nd	
	9/25/1995	<1.0	<2.0	<0.20	<0.050	<0.20	<0.050	<0.10	<0.050	<0.10	<0.10	<0.20	<0.40	<0.10	--	--	<1.0	<0.40	<0.20	nd	
	12/21/1998	<1.4	<1.3	<0.10	<0.10	<0.21	<0.12	<0.23	<0.23	<0.092	<0.25	<0.23	<0.056	<0.11	<0.94	<0.92	<0.73	<0.11	<0.39	nd	
	dup(MW-A)	12/21/1998	<1.4	<1.3	<0.10	<0.10	<0.21	<0.12	<0.23	<0.23	<0.092	<0.25	<0.23	<0.056	<0.11	<0.94	<0.92	<0.73	<0.11	<0.39	nd
	6/25/2002	<0.018	<0.023	<0.020	<0.019	<0.012	<0.014	<0.015	<0.013	<0.018	<0.017	<0.028	<0.021	<0.014	--	--	<0.027	<0.019	<0.020	nd	
	dup(QA/QC-1)	6/25/2002	<0.018	<0.023	<0.020	<0.019	<0.012	<0.014	<0.015	<0.013	<0.018	<0.017	<0.028	<0.021	<0.014	--	--	<0.027	<0.019	<0.020	nd
	11/7/2002	<0.018	<0.019	<0.020	<0.012	0.017 *	0.013 *	<0.016	<0.019	<0.014	<0.016	0.016 *	<0.017	<0.021	<0.017	<0.017	<0.024	<0.016	<0.017	0.05	
	4/15/2003	<0.018	<0.019	<0.020	<0.012	<0.014	<0.013	<0.016	<0.019	<0.014	<0.016	<0.013	<0.017	<0.021	<0.018	0.031 *	0.10	<0.016	<0.017	0.1	
	7/1/2003	<0.018 &	<0.019 &	<0.020	<0.012	<0.014	<0.013	<0.016	<0.019	<0.014	<0.016	0.015 *	<0.017	<0.021	<0.018 A,&	<0.017 &	0.029 *,&B	<0.016	0.018 *	0.1	
	9/30/2003	<0.018	<0.019	<0.020	0.016 *	0.014 *	<0.013	<0.016	<0.019 &	0.014 *	<0.016	0.014 *	<0.017	<0.021	<0.018	<0.017	0.059 *	<0.016	0.020 *	0.1	

**Table 3 - Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons**  
**Wisconsin Public Service Corporation - Campmarina Former MGP Site**  
**Sheboygan, WI**

		POLYNUCLEAR AROMATIC HYDROCARBONS - PAHs (µg/L)																			
Sampling Location	Sampling Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene	Total PAHs	
		Wisconsin Groundwater Quality Standards (NR 140)																			
Preventive Action Limit		ns	ns	600	ns	0.02	0.02	ns	ns	0.02	ns	80	80	ns	ns	ns	8	ns	50	ns	
Enforcement Standard		ns	ns	3,000	ns	0.2	0.2	ns	ns	0.2	ns	400	400	ns	ns	ns	40	ns	250	ns	
MW-706	8/15/1995	197,000	1,480,000	177,000	129,000	83,000	31,000	62,000	29,000	82,000	13,000	266,000	640,000	32,000	--	--	1,900,000	730,000	142,000	5,993,000	
	9/25/1995	9,400	82,000	15,000	11,000	6,700	2,400	4,900	980	5,400	<10	8,400	57,000	2,700	--	--	166,000	56,000	9,700	437,580	
	6/25/2002	<290 D	2,700 D	1,400 D	1,000 D	830 D	270 D,*	270 D,*	460 D,*	920 D	<270 D	2,200 D	1,200	320 D,*	--	--	7,100 D	3,200 D	2,200	24,070	
	11/7/2002	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/1/2003	34 &	370 D,*,&	<200 D	<120 D	<140 D	29	21	31	<140 D	6.4	<130 D	<170 D	18	510 D,A,*,&	640 D,&	2,200 D,&	250 D,*	<170 D	4,109	
PZ-702	12/21/1998	<1.4	<1.3	0.44	0.90	<0.21	0.20*	<0.23	<0.23	0.27*	<0.25	1.5	0.50	<0.11	<0.94	<0.92	1.2*	1.5	2.3	8.8	
	6/25/2002	<0.018	0.059*	<0.020	<0.019	<0.012	<0.014	<0.015	<0.013	<0.018	<0.017	<0.028	0.030*	<0.014	--	--	0.42	0.063	0.021*	0.6	
	11/7/2002	<0.018	0.023*	<0.020	0.015*	<0.014	<0.013	0.016*	<0.019	0.023*	<0.016	0.039*	0.020*	<0.021	0.031*	0.032*	0.087	0.084	0.046*	0.4	
	4/15/2003	<0.018	<0.019	<0.020	0.013*	<0.014	<0.013	<0.016	<0.019	<0.014	<0.016	0.013	0.017	<0.021	0.054*	0.045*	0.12	0.042*	0.018*	0.3	
	dup(QA/QC-1) 4/15/2003	<0.018	<0.019	<0.020	0.012*	<0.014	<0.013	<0.016	<0.019	<0.014	<0.016	<0.013	<0.017	<0.021	0.042*	0.072	0.20	0.026*	<0.017	0.4	
	7/1/2003	<0.018 &	0.037*,&,B	<0.020	<0.012	<0.014	<0.013	<0.016	<0.019	0.014*	<0.016	0.022*	<0.017	<0.021	0.029*,&,A,B	0.022*,&,B	0.045*,&,B	0.058 B	0.033*	0.3	
9/30/2003	<0.018	<0.019	<0.020	<0.012	<0.014	<0.013	<0.016	<0.019 &	<0.014	<0.016	<0.013	<0.017	<0.021	<0.018	<0.017	0.049*	0.019*	<0.017	0.1		
MW-707	8/15/1995	430	<2.0	12	2.2	1.6	0.38	1.3	0.52	1.3	0.25	27	93	0.74	--	--	3,100	60	12	3,742	
	9/25/1995	240	1,400	10	0.4	0.66	0.23	0.83	0.19	0.64	0.40	21	81	0.35	--	--	3,400	60	5	5,221	
	12/21/1998	221	<1.3	15	<0.10	2.1	<0.12	1.7	0.76	2.2	<0.25	28	64	1.3	454	<0.92	3,470	69	58	4,387	
MW-707R	6/25/2002	<120 D	6.4	6.2	1.8	1.2	0.73*	0.61*	0.51*	1.2	<0.34	7.5	<130 D	0.48*	--	--	1,600 D	<120 D	7.3	1,634	
	11/7/2002	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	7/1/2003	<180 D,&	6.8 &	9	1.8*	1.5*	<1.3	<1.6	<1.9	1.8*	<1.6	9.6	39	<2.1	270 D,A,*,&	18 &	1,800 D,&	<160 D	12	2,170	
PZ-703	12/21/1998	<1.4	<1.3	0.20*	0.22*	<0.21	<0.12	<0.23	<0.23	<0.092	<0.25	0.25*	0.44	<0.11	2.8*	<0.92	86	0.53	0.64*	91	
	6/25/2002	1.2	<0.46	0.45*	<0.38	<0.24	<0.28	<0.30	<0.26	<0.36	<0.34	<0.56	<0.42	<0.28	--	--	190	0.38*	<0.40	192	
	11/7/2002	<1.8	<1.9	<2.0	<1.2	<1.4	<1.3	<1.6	<1.9	<1.4	<1.6	<1.3	<1.7	<2.1	<1.7	<1.7	41	<1.6	<1.7	41	
	4/15/2003	<1.4	<1.5	<1.6	<0.96	<1.1	<1.0	<1.3	<1.5	<1.1	<1.3	<1.0	<1.4	<1.7	<1.4	<1.4	30	1.4*	<1.4	31	
	7/1/2003	2.8 &,*	<1.9 &	<2.0	<1.2	<1.4	<1.3	<1.6	<1.9	<1.4	<1.6	<1.3	<1.7	<2.1	7.0 &,A	5.0 &,*	410 D,&	<1.6	<1.7	425	
	9/30/2003	3.9	0.47*	<0.40	<0.24	<0.28	<0.26	<0.32	<0.38 &	<0.28	<0.32	<0.26	0.41*	<0.42	8.4	7.2	350 D	0.41*	<0.34	371	
MW-708	12/21/1998	<1.4	<1.3	<0.10	<0.10	<0.21	<0.12	<0.23	<0.23	<0.092	<0.25	<0.23	<0.056	<0.11	<0.94	<0.92	<0.73	<0.11	<0.39	nd	
	6/25/2002	<0.018	<0.023	<0.020	<0.019	0.014*	<0.014	<0.015	<0.013	<0.018	<0.017	<0.028	<0.021	<0.014	--	--	<0.027	<0.019	<0.020	0.01	
	11/7/2002	<0.018	<0.019	<0.020	<0.012	<0.014	<0.013	<0.016	<0.019	<0.014	<0.016	<0.013	<0.017	<0.021	<0.017	<0.017	<0.024	<0.016	<0.017	nd	
	dup(QA/QC-1) 11/7/2002	<0.018	<0.019	<0.020	<0.012	<0.014	<0.013	<0.016	<0.019	<0.014	<0.016	<0.013	<0.017	<0.021	<0.017	<0.017	<0.024	<0.016	<0.017	nd	
	4/15/2003	<0.018	<0.019	<0.020	<0.012	<0.014	<0.013	<0.016	<0.019	<0.014	<0.016	<0.013	<0.017	<0.021	0.019*	0.026*	0.088	<0.016	<0.017	0.1	
	7/1/2003	0.056*,&,B	0.032*,&,B	<0.020	<0.012	<0.014	<0.013	<0.016	<0.019	<0.014	<0.016	<0.013	0.020*,&,B	<0.021	0.20 A,&,B	0.20 B,&	1.5 B,D,&	0.024*,&,B	<0.017	2.0	
9/30/2003	<0.018	<0.019	<0.020	<0.012	<0.014	<0.013	<0.016	<0.019 &	<0.014	<0.016	<0.013	<0.017	<0.021	<0.018	<0.017	0.23	<0.016	<0.017	0.2		

**Table 3 - Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons**  
**Wisconsin Public Service Corporation - Campmarina Former MGP Site**  
**Sheboygan, WI**

Sampling Location	Sampling Date	POLYNUCLEAR AROMATIC HYDROCARBONS - PAHs (µg/L)																		
		Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (ghi) perylene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene	Total PAHs
		<b>Wisconsin Groundwater Quality Standards (NR 140)</b>																		
<b>Preventive Action Limit</b>		ns	ns	<u>600</u>	ns	<u>0.02</u>	<u>0.02</u>	ns	ns	<u>0.02</u>	ns	<u>80</u>	<u>80</u>	ns	ns	ns	<u>8</u>	ns	<u>50</u>	ns
<b>Enforcement Standard</b>		ns	ns	<b>3,000</b>	ns	<b>0.2</b>	<b>0.2</b>	ns	ns	<b>0.2</b>	ns	<b>400</b>	<b>400</b>	ns	ns	ns	<b>40</b>	ns	<b>250</b>	ns
<b>MW-709</b>	12/21/1998	3.4 *	<1.3	2.9	1.3	<u>0.30</u> *	<u>0.51</u>	<0.23	<0.23	<u>0.66</u>	<0.25	6.6	3.3	<0.11	<0.94	<0.92	4.6	8.4	10	42
<b>MW-709R</b>	6/25/2002	0.13	<0.023	0.032*	<0.019	<u>0.10</u>	<0.014	<0.015	<0.013	<0.018	<0.017	<0.028	0.041 *	<0.014	--	--	1.8 D	0.084	0.027*	2.2
	11/7/2002	<0.018	<0.019	<0.020	<0.012	<0.014	<0.013	<0.016	<0.019	<0.014	<0.016	<0.013	<0.017	<0.021	<0.017	<0.017	<0.024	<0.016	<0.017	nd
dup(M)	4/15/2003	<0.018	<0.019	<0.020	<0.012	<0.014	<0.013	<0.016	<0.019	<0.014	<0.016	<0.013	<0.017	<0.021	0.020 *	0.034 *	0.12	<0.016	<0.017	0.2
	7/1/2003	<0.018	<0.019	<0.020	<0.012	<0.014	<0.013	<0.016	<0.019	<0.014	<0.016	<0.013	<0.017	<0.021	0.020 *	0.019 *	0.040 *	<0.016	<0.017	0.1
	7/1/2003	0.023 *,&,B	0.019 *	<0.020	<0.012	<0.014	<0.013	<0.016	<0.019	<0.014	<0.016	<0.013	<0.017	<0.021	0.084 A,&,B	0.044 *,&,B	0.74 B,D,&	<0.016	<0.017	0.9
dup(M)	9/30/2003	<0.018	<0.019	<0.020	<0.012	<0.014	<0.013	<0.016	<0.019 &	<0.014	<0.016	<0.013	<0.017	<0.021	<0.018	<0.017	<0.024	<0.016	<0.017	nd
dup(M)	9/30/2003	<0.018	<0.019	<0.020	0.065	<u>0.059</u>	<u>0.066</u>	0.098	0.056 *,&	<u>0.057</u>	0.093	<0.013	<0.017	0.094	<0.018	<0.017	0.025*	<0.016	<0.017	0.6

[U-PAR/JTB 11/03]

**Notes:**

- 1) Concentrations that attain/exceed a preventive action limit (PAL) are shown in *italics and underlined*.
- 2) Concentrations that attain/exceed an enforcement standard (ES) are **underlined and bold**.
- \*: Laboratory note - Parameter detected above the limit of detection (LOD) but below the limit of Quantitation (LOQ).
- A: Laboratory note-Laboratory Control Spike recovery not within control limits.
- B: Laboratory note-Analyte present in method blank.
- D: Laboratory note- Analyte value from diluted analysis.
- &: Laboratory note-Precision not within control limits.
- M: Field duplicate identity was erroneously identified (field duplicate or field blank)
- <2.0: Parameter not detected above the Limit of Detection indicated.
- : Analysis was not performed
- nd: Analyte not detected
- ns: NR 140 standard not established
- dup(OA/QC-1): Field duplicate sample (field identity shown in parentheses).

**Table 4 - Groundwater Analytical Results -Field & Laboratory RNA Analytical  
Wisconsin Public Service Corporation - Campmarina Former MGP Site  
Sheboygan, WI**

Well	Date	Laboratory Analytical						Pre Purge Field Measurements				
		Alkalinity (mg/L)	Nitrite+Nitrate (mg/L)	Sulfate (mg/L)	Total Iron (µg/L)	Methane (µg/L)	Dissolved Iron (µg/L)	Conductivity (mmhos/cm)	pH (s.u.)	Temperature (C)	Dissolved Oxygen (mg/L)	Redox Potential (Eh/ORP) (mV)
<b>Wisconsin Groundwater Quality Standards (NR140)</b>												
<b>Preventive Action Limit</b>		ns	2	125	ns	ns	150	ns	ns	ns	ns	ns
<b>Enforcement Standard</b>		ns	10	250	ns	ns	300	ns	ns	ns	ns	ns
MW-701R	6/25/2002	1,200	<0.23	3.8 B	52,000	--	20,000			Coal Tar		
	11/7/2002	--	--	--	--	--	--	1.267	7.18	13.39	1.08	541
	1/24/2003	--	--	--	--	--	--			Coal Tar		
	7/1/2003	--	<0.047	2.3	--	11,000	18,000	1.243	9.32	12.84	4.29	214
	9/30/2003	--	--	--	--	--	--	--	--	--	--	--
PZ-701	6/25/2002	150	0.12	320	7,300	--	440	0.871	8.25	12.52	5.92	392
	11/7/2002	--	<0.075	200	--	250	300	0.562	7.74	14.02	1.92	511
	1/24/2003	--	--	--	--	--	--			hydrolab wouldn't fit in well		
	4/15/2003	--	--	--	--	--	--	0.159	8.84	9.79	7.49	264
	7/1/2003	--	0.057 *	98	--	490	170			hydrolab wouldn't fit in well		
9/30/2003	--	--	--	--	--	--	0.595	7.56	10.5	--	--	
MW-705 dup(QA/QC-1)	6/25/2002	460	<0.023	190	1,200	--	410	1.232	8.7	10.85	4.75	403
	6/25/2002	300	<0.023	91	3,200	--	240	1.232	8.7	10.85	4.75	403
	11/7/2002	--	<0.075	<1.1	--	--	<61	1.407	7.76	11.02	6.42	539
	4/15/2003	--	--	--	--	--	--	1.404	8.41	7.45	6.28	262
	7/1/2003	--	<0.047	380	--	93	670	1.500	9.25	12.40	4.26	262
9/30/2003	--	--	--	--	--	--	2.630	6.98	13.9	--	--	
MW-706	6/25/2002	140	23	1,200	3,800	--	620			Coal Tar		
	11/7/2002	--	--	--	--	--	--	0.011	7.69	9.44	1.88	541
	1/24/2003	--	--	--	--	--	--			Coal Tar		
	7/1/2003	--	0.67	880	--	25	140	1.358	9.35	10.71	2.51	270
PZ-702	6/25/2002	50	<0.023	3.7 *, B	15,000	--	25	0.154	8.5	11.32	3.42	362
	11/7/2002	--	--	--	--	22	--	0.220	8.04	13.76	1.51	515
	1/24/2003	--	--	--	--	--	--	0.200	8.02	10.02	2.33	247
	4/15/2003	--	--	--	--	--	--	0.216	9.01	7.63	2.48	260
	7/1/2003	--	0.053 *	3.6	--	39	48 *	0.103	9.71	10.76	4.52	277
9/30/2003	--	--	--	--	--	--	0.217	8.22	10.6	--	--	
MW-707R	6/25/2002	460	<0.023	40	25,000	--	730			Coal Tar		
	11/7/2002	--	--	--	--	--	--	1.099	7.39	12.86	1.39	523
	1/24/2003	--	--	--	--	--	--			Coal Tar		
	7/1/2003	--	0.049 *	30	--	5,800	510	0.870	9.58	13.81	1.93	198
PZ-703	6/25/2002	73	<0.023	4.7 B	27,000	--	370	0.283	8.95	11.7	0.64	377
	11/7/2002	--	<0.075	4.2	--	71	<61	0.028	8.33	13.01	1.49	492
	1/24/2003	--	--	--	--	--	--			hydrolab wouldn't fit in well due to ice		
	4/15/2003	--	--	--	--	--	--	0.687	9.08	7.28	2.25	249
	7/1/2003	--	<0.047	4.3	--	230	100	0.204	9.99	9.91	2.51	130
9/30/2003	--	--	--	--	--	--	0.320	8.61	10.6	--	--	



**Table 4 - Groundwater Analytical Results -Field & Laboratory RNA Analytical  
Wisconsin Public Service Corporation - Campmarina Former MGP Site  
Sheboygan, WI**

Well	Date	Laboratory Analytical						Pre Purge Field Measurements				
		Alkalinity (mg/L)	Nitrite+Nitrate (mg/L)	Sulfate (mg/L)	Total Iron (µg/L)	Methane (µg/L)	Dissolved Iron (µg/L)	Conductivity (mmhos/cm)	pH (s.u.)	Temperature (C)	Dissolved Oxygen (mg/L)	Redox Potential (Eh/ORP) (mV)
<b>Wisconsin Groundwater Quality Standards (NR140)</b>												
<i>Preventive Action Limit</i>		ns	<u>2</u>	<u>125</u>	ns	ns	<u>150</u>	ns	ns	ns	ns	ns
<b>Enforcement Standard</b>		ns	<b>10</b>	<b>250</b>	ns	ns	<b>300</b>	ns	ns	ns	ns	ns
<b>MW-708</b>  <i>dup(QA/QC-1)</i>	6/25/2002	520	0.18	63	35,000	--	<u>2,500</u>	2.301	7.35	13.49	4.56	406
	11/7/2002	--	0.13 *	66	--	<10	<61	2.407	7.82	14.37	2.72	516
	11/7/2002	--	0.18 *	67	--	<10	<61	--	--	--	--	--
	1/24/2003	--	--	--	--	--	--	4.941	7.83	10.49	1.93	248
	4/15/2003	--	--	--	--	--	--	2.875	8.67	9.19	2.52	258
	7/1/2003	--	0.14 *	70	--	<10	51 *	2.771	9.43	12.36	2.32	250
	9/30/2003	--	--	--	--	--	--	5.130	7.09	13.6	--	--
<b>MW-709R</b>  <i>dup(M)</i>	6/25/2002	900	<u>2.7</u>	<b>440</b>	4,000	--	<u>490</u>	1.32	7.97	14.74	4.44	415
	11/7/2002	--	--	--	--	--	--	1.534	7.57	13.99	1.82	549
	4/15/2003	--	--	--	--	--	--	1.480	8.65	6.92	10.14	246
	7/1/2003	--	0.093 *	<u>500</u>	--	<10	<u>820</u>	0.462	9.72	16.03	4.34	253
	7/1/2003	--	0.13 *	<u>510</u>	--	17	<u>830</u>	--	--	--	--	--
	9/30/2003	--	--	--	--	--	--	3.350	6.92	16.2	--	--
<b>Biosparge Well</b> <b>BW-6</b>	11/7/2002	--	0.13	35	--	<10	<61	0.004	8.36	10.72	3.4	391

(0-17B)GRL73/002(U-PAR)JB 11/03

Notes:

- 1) Concentrations that attain/exceed a preventive action limit (PAL) are shown in italics and underlined.
  - 2) Concentrations that attain/exceed an enforcement standard (ES) are **underlined and bold**.
  - 3) The field monitor for dissolved oxygen and ORP was not functioning on 09/30/2003.
- C° : Degrees celcius  
mg/L : milligrams per liter  
µg/L : micrograms per liter  
mV : millivolts
- B : Laboratory note-Analyte present in method blank.  
M : Field duplicate identity was erroneously identified (field duplicate or field blank)  
-- : Analysis was not performed  
\* : Laboratory note - Parameter detected above the limit of detection (LOD) but below the limit of Quantitation (LOQ).
- dup(QA/QC-1)* : Field duplicate sample (field identity shown in parentheses).  
Coal Tar : Free phased product present in well.  
ns : NR 140 standard not established

**Table 5 - Groundwater and Biosparge System Monitoring Schedule  
Wisconsin Public Service - Campmarina Former MGP Site  
Sheboygan, WI**

	Year 1					Year 2			
	7-Nov-02	24-Jan-03	15-Apr-03	1-Jul-03	23-Sep-03	11-Nov-03	Feb-04	May-04	Aug-04
<b>Biosparge System Monitoring</b>									
<b>Vent Monitoring</b>									
BETX (8260)	X						X		X
PID	X			X			X	X	X
<b>Sump Monitoring</b>									
Hydrogen Sulfide (4 gas meter)		X					X		
Water Level	X	X	X			X	X	X	X
<b>Groundwater Monitoring</b>									
<b>Monitoring Wells</b>									
BW-6	X							X	
BW-15								X	
MW-701R				X		X		X	
PZ-701	X		X	X	X	X		X	
MW-706				X		X		X	
PZ-702	X		X	X	X	X		X	
MW-707R				X		X		X	
PZ-703	X		X	X	X	X		X	
MW-705	X		X	X	X	X		X	
MW-708	X		X	X	X	X		X	
MW-709R	X		X	X	X	X		X	
<b>Field Parameters</b>									
Water Quality Probe	X	X	X	X	X	X	X	X	X
Water Levels	X	X	X	X	X	X	X	X	X
<b>Analytical Parameters</b>									
Dissolved, Fe	X			X		X			
Nitrogen, Nitrate, Nitrite	X			X		X		X	
Methane	X			X		X		X	
Sulfate	X			X		X		X	
BETX (USEPA 8260)	X		X	X	X	X		X	
PAHs (USEPA 8310)	X		X	X	X	X		X	
Cyanide (USEPA 335.4)	X		X	X	X	X		X	

**Notes:**

1. X - Indicates site visit, activity or sample collected during that visit.
2. X - Field Parameters were measured in PZ-701,702, 703; MW-708. Field Parameters were also measured in MW-701R, 706, and 707.
3. Monitoring wells and piezometers sampled for BTEX (USEPA 8260B), PAHs (USEPA 8310), and Cyanides (total, amenable, and dissociable)(USEPA 335.4).
4. X - Indicates planned site visit, scheduled activity or sample collected during that visit. Future cyanide monitoring will include only dissociable cyanide.
5. Water quality probe parameters will only be collected from monitoringwells that do not contain coal tar as observed during that monitoring event.
6. Water quality probe parameters include dissolved oxygen, pH, temperature, specific conductance and oxidation / reduction potential.

FORM 4700-194 WITH EXPLANATIONS

APPENDIX A

OPERATION, MAINTENANCE, MONITORING  
AND OPTIMIZATION REPORTING OF  
SOIL AND GROUNDWATER REMEDIATION SYSTEMS

**PURPOSE AND APPLICABILITY OF THIS FORM:** Completion of this form is required under s. NR 724.13(e), Wis. Adm. Code. Use of this form is mandatory. Failure to submit this form as required is a violation of s. NR 724.13, Wis. Adm. Code, and is subject to the penalties in s. 144.99, Wis. Stats. This form must be submitted every six months for active soil and groundwater remediation projects and every twelve months for passive (natural attenuation) remediation projects that are regulated under the NR 700 series of Wis. Adm. Code. Specifically, for sites meeting any of the following criteria:

- Soil or groundwater remediation projects that report progress in accordance with s. NR 700.11(1), Wis. Adm. Code.
- Soil or groundwater remediation projects that report progress in accordance with s. NR 724.13(3), Wis. Adm. Code. (Note: s. NR 724.13(3) requires progress reports for operation and maintenance of active systems to be submitted every three months however the Department considers submittal of this form every six months to satisfy the requirements of the rules, unless otherwise directed by the Department on a site specific basis.)
- Soil or groundwater remediation projects that report progress in accordance with s. NR 724.17(3), Wis. Adm. Code. (Note: s. NR 724.17(3) requires progress reports every time that samples are collected however the Department considers submittal of this form every twelve months to satisfy the requirements of the rules for monitoring natural attenuation, unless otherwise directed by the Department on a site specific basis.)

Submittal of this form is not a substitute for reporting required by Department programs such as Wastewater or Air Management. Personally identifiable information on this form is not intended to be used for any other purpose than tracking progress of the remediation by the Bureau for Remediation and Redevelopment.

Please refer to the instructions that are attached to the back of these forms starting on page INS-1. In all cases, when asked to "explain," those explanations are to be included on separate sheets of paper. Explanations must include a title that refers to the page and item number, for example: Page GI-2, C.1.a.

**A. GENERAL INFORMATION:**

1. Site name: CAMP MARINA MANUFACTURED GAS PLANT
2. Reporting period from: 11/1/2002 To: 10/31/2003 Days in period: 365
3. Regulatory agency (enter DNR, DCOM, DATCP and/or other): DNR
4. DNR issued site number: 02-60-000095
5. State reimbursement fund claim number and fund name (if not applicable, enter NA): NA
6. Site location:
  - a. DNR region and county: SOUTHEAST REGION, SHEBOYGAN COUNTY
  - b. Street address and municipality: 732 N. WATER ST., SHEBOYGAN, WI
  - c. Township, range, section and quarter quarter section: NW 1/4, SW 1/4, SECTION 23, T15N, R23E
7. Responsible party:
  - a. Name: WISCONSIN PUBLIC SERVICE CORPORATION
  - b. Mailing address: 700 NORTH ADAMS ST. P.O. BOX 19002  
GREEN BAY, WI 54307-9002
  - c. Phone number: (920) 433-1140
8. Consultant:
  - a. Company name: NATURAL RESOURCE TECHNOLOGY, INC.
  - b. Mailing address: 23713 W. PAUL RD, UNIT D  
PEWAUKEE, WI 53072
  - c. Phone number: 262-522-1235
9. Contaminants: BETX, PAHs, CYANIDE
10. Soil types (USCS or USDA): HETEROGENEOUS FILL-SM/SC-CL/ML
11. Hydraulic conductivity (cm/sec):  $1.27 \times 10^{-5}$  TO  $1.27 \times 10^{-4}$
12. Average linear velocity of groundwater (ft/yr): 63

OPERATION, MAINTENANCE, MONITORING  
AND OPTIMIZATION REPORTING OF  
SOIL AND GROUNDWATER REMEDIATION SYSTEMS

GENERAL SITE INFORMATION, CONTINUED

SITE NAME AND REPORTING PERIOD:

Site name: CAMP MARINA MANUFACTURED GAS PLANT  
Reporting period from: 11/1/2002 To: 10/31/2003 Days in period: 365

A. GENERAL INFORMATION (CONTINUED):

18. If soil is treated ex situ, is the treatment location off site? (Y/N) If yes, give location:

- a. DNR region and county: SOUTHEAST REGION, SHEBOYGAN COUNTY  
b. Township, range, section and quarter quarter section: NW 1/4, SW 1/4, SECTION 23, T15N, R23E

B. REMEDIATION METHOD: Only submit pages that apply to an individual site. Check all that apply:

- Groundwater extraction (submit a completed page GW-1).  
 Free product recovery (submit a completed page GW-1).  
 In situ air sparging (submit a completed page GW-2).  
 Groundwater natural attenuation (submit a completed page GW-3).  
 Other groundwater remediation method (submit a completed page GW-4).  
 Soil venting (including soil vapor extraction and bioventing, submit a completed page IS-1).  
 Soil natural attenuation (submit a completed page IS-2).  
 Other in situ soil remediation method (submit a completed page IS-3).  
 Biopiles (submit a completed page ES-1).  
 Landspreading/thinspreading of petroleum contaminated soil (submit a completed page ES-2).  
 Other ex situ soil remediation method (submit a completed page ES-3).

C. GENERAL EFFECTIVENESS EVALUATION FOR ALL ACTIVE SYSTEMS: If the remediation is active (not natural attenuation), complete this subsection.

1. Is the system operating at design rates and specifications? (Y/N): N, SEE ATTACHED  
If the answer is no, explain whether or not modifications are necessary to achieve the goal that was previously established in design.  
2. Are modifications to the system warranted to improve effectiveness? (Y/N) If yes, explain: N  
3. Is natural attenuation an effective low cost option at this time? (Y/N): N  
4. Is closure sampling warranted at this time? (Y/N): N  
5. Are there any modifications that can be made to the remediation to improve cost effectiveness? (Y/N) If yes, explain: N

D. ECONOMIC AND COST DATA TO DATE:

1. Total investigation costs (\$): \$600,000  
2. Implementation costs (design, capital and installation costs, excluding investigation costs) (\$): \$2.6 MILLION  
3. Total costs during the previous reporting period (\$): N/A  
4. Total costs during this reporting period (\$): \$26K  
5. Total anticipated costs for the next reporting period (\$): \$21K  
6. Are any unusual or one-time costs listed in the reporting periods covered by D.3., D.4. or D.5. above? (Y/N) If yes explain: N  
7. If close out is anticipated within 12 months, estimated costs for project closeout (\$): N/A

OPERATION, MAINTENANCE, MONITORING  
AND OPTIMIZATION REPORTING OF  
SOIL AND GROUNDWATER REMEDIATION SYSTEMS

GENERAL SITE INFORMATION, CONTINUED

SITE NAME AND REPORTING PERIOD:

Site name: CAMP MARINA MANUFACTURED GAS PLANT

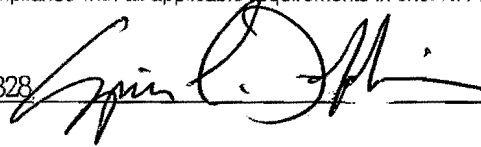
Reporting period from: 11/1/2002 To: 10/31/2003 Days in period: 365

E. NAME(S), SIGNATURE(S) AND DATE OF PERSON(S) SUBMITTING FORM: Legibly print name, date and sign. Only persons qualified to submit reports under ch. NR 712 Wis. Adm. Code are to sign this form.

Registered Professional Engineers:

I (print name) SPIROS L. FAFALIOS, hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Signature, title, P.E. number and date: PROJECT MANAGER, PE #33328



12/31/03

Hydrogeologists:

I (print name) \_\_\_\_\_, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03(1), Wis. Adm. Code, and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

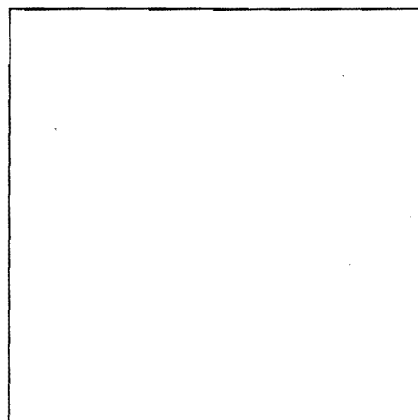
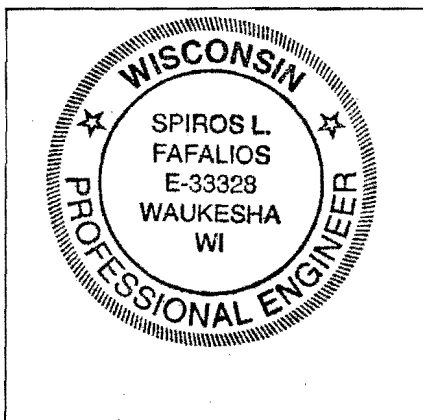
Signature, title and date: \_\_\_\_\_

Scientists:

I (print name) \_\_\_\_\_, hereby certify that I am a scientist as that term is defined in s. NR 712.03(3), Wis. Adm. Code, and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Signature, title and date: \_\_\_\_\_

Professional Seal(s), if applicable:



OPERATION, MAINTENANCE, MONITORING  
AND OPTIMIZATION REPORTING OF  
SOIL AND GROUNDWATER REMEDIATION SYSTEMS

OTHER GROUNDWATER REMEDIATION METHODS

SITE NAME AND REPORTING PERIOD:

Site name: CAMP MARINA MANUFACTURED GAS PLANT

Reporting period from: 11/1/2002 To: 10/31/2003 Days in period: 365

Date that the system was first started up: 11/7/2002

A. EFFECTIVENESS EVALUATION:

1. If free product is not present, determine the single contaminant that requires the greatest percent reduction to achieve ch. NR 140 ES and PAL. Perform this calculation for all contaminants that were present at the site that have ch. NR 140 standards. Use the highest contaminant concentration measured in any sampling points during reporting period. If free product is present, write "FREE PRODUCT" in A.1.a.

a. Contaminant: FREE PRODUCT, CONTAINED BY ENGINEERED BARRIER SYSTEM

b. Percent reduction necessary: NA

c. Maximum contaminant concentration level in any monitoring well ( $\mu\text{g/L}$ ): BENZENE 6,500 ~~MB~~/L

2. Is the size of the plume increasing, stabilized, or decreasing: PLUME ONLY WITHIN CONTAINMENT BARRIER

3. Describe the method used to remediate groundwater at the site. SEE ATTACHED

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. List any additional information required by the DNR for this method for this site:

SEE ATTACHED

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

B. ADDITIONAL ATTACHMENTS: Attach the following to this form:

- Groundwater contour map.
- Groundwater contaminant distribution map (may be combined with contour map).
- When contaminants are aerobically biodegradable, attach a dissolved oxygen in groundwater map (dissolved oxygen may be combined with the contaminant data on a single map).
- Graph of contaminant concentrations versus time for the contaminant listed in A.1.a. (above) for the monitoring point with the greatest level of contamination.
- Groundwater contaminant chemistry table.
- Groundwater elevations table.
- Any other attachments required by the DNR for this remediation method.

**ADDITIONAL INFORMATION FOR PERIOD OF 11/1/02 THROUGH 10/31/03:  
OPERATION, MAINTENANCE, MONITORING AND OPTIMIZATION REPORTING OF  
SOIL AND GROUNDWATER REMEDIATION SYSTEMS (WDNR Form 4400-194)**

Page GI-2, C.2.

The system began operating on November 7, 2002. In late March 2003, the biosparge compressor began experiencing failures due to motor overload. The failures continued into early April and the biosparge system was shut down on April 16, 2003 until a thorough assessment could be performed to determine the cause of the motor overload failures. On June 26, 2003 the initial cause of the motor overload failures was suspected to be a result of a clogged inlet air filter. However, when the filter was replaced and started up again, the motor overload failures continued. The system remained not operational until September 30, 2003 when NRT and WPSC determined that the motor for the compressor was drawing too much current and causing the failures. The motor was removed from service and replaced in November 2003. The biosparge system was re-started during the first week of December 2003 and has operated as designed to date.

Page GW-4, A.3.

Groundwater at the site is contained by an engineered containment system that consists of a Waterloo® sheet pile barrier surrounding the perimeter of the site and a geosynthetic cap to limit infiltration to groundwater. Aerobic degradation of groundwater contaminants within the engineered containment system is stimulated by a low flow biosparge system that is designed to provide an increased source of oxygen to the groundwater via low flow injection of ambient air.

Page GW-4, A.4.

The engineered containment system has drains along the entire interior perimeter of the containment system to provide relief for groundwater fluctuation and pressure during biosparge operations. The interior perimeter drain is connected to a sump in the building that houses the biosparge system. During operation and maintenance of the biosparge system, the sump is inspected for collected water and vapors in the form of volatile organic compounds (VOCs) and hydrogen sulfide (H<sub>2</sub>S, an indicator of anaerobic biodegradation in the subsurface).

Assessment of Water Collected in the Sump:

Throughout the operation of the system no water has accumulated in the sump.

Assessment of Vapors in the Sump:

Prior to start up of the system and during system operation, PID readings were collected from the sump as follows:

Date	Zone of Operation	PID Reading (ppm)
11/7/02	Prior to Startup	0.2
11/7/02	Zone 1	1.0
11/7/02	Zone 2	1.0
11/7/02	Zone 3	1.0
6/26/03	Zone 3	0.0



**ADDITIONAL INFORMATION FOR PERIOD OF 11/1/02 THROUGH 10/31/03:  
OPERATION, MAINTENANCE, MONITORING AND OPTIMIZATION REPORTING OF  
SOIL AND GROUNDWATER REMEDIATION SYSTEMS (WDNR Form 4400-194)**

Page GW-4, A.4. (continued)

An air sample (SUMP AS-1) was collected from the sampling port on the sump's ventilation stack on November 7, 2002 using an impinger and analyzed for benzene, ethylbenzene, toluene and xylenes (BETX). The result of the air sample did not detect any compounds above the stated levels of detection ( $<0.38 \mu\text{g/L}$ ).

In addition, the sump was evaluated in January 2003 for the presence of  $\text{H}_2\text{S}$  using a four gas meter. The meter did not detect the presence of  $\text{H}_2\text{S}$  in the sump ( $<0.0 \text{ ppm}$ ).

GROUNDWATER ANALYTICAL REPORTS

APPENDIX B

Corporate Office & Laboratory  
1241 Bellevue Street  
Green Bay, WI 54302  
920-469-2436 • Fax: 920-469-8827  
800-7-ENCHEM



Madison Office & Laboratory  
525 Science Drive  
Madison, WI 53711  
608-232-3300 • Fax: 608-233-0502  
888-5-ENCHEM

- Analytical Report -

Project Name : CAMP MARINA

Project Number : 1313

Client: NATURAL RESOURCE TECH

WI DNR LAB ID : 405132750

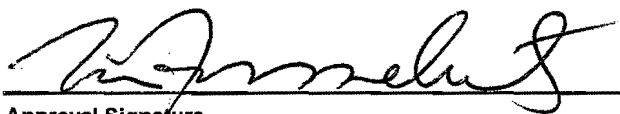
Sample No.	Field ID	Collection Date	Sample No.	Field ID	Collection Date
823638-001	PZ-701	6/25/02			
823638-002	MW701R	6/25/02			
823638-003	MW706	6/25/02			
823638-004	PZ-702	6/25/02			
823638-005	PZ-703	6/25/02			
823638-006	MW-707R	6/25/02			
823638-007	MW709R	6/25/02			
823638-008	MW708	6/25/02			
823638-009	MW705	6/25/02			
823638-010	QA/QC 1	6/25/02			
823638-011	TRIP	6/25/02			


Please visit our Internet homepage at: [www.enchem.com](http://www.enchem.com)

The "Q" flag is present when a parameter has been detected below the LOQ. This indicates the results are qualified due to the uncertainty of the parameter concentration between the LOD and the LOQ.

Soil VOC detects are corrected for the total solids, unless otherwise noted.

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample comments. Release of this final report is authorized by Laboratory management, as is verified by the following signature. Reported results shall not be reproduced, except in full, without the written approval of the lab. The sample results relate only to the analytes of interest tested.

  
Approval Signature

  
Date

# En Chem Inc.

1241 Bellevue Street  
Green Bay, WI 54302  
920-469-2436  
800-7-ENCHEM  
Fax: 920-469-8827

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Lab#:	TestGroupID:	Comment:
823638-002 MW701R	W-SO4-W	A - Analyte present in blank at 0.54 mg/l.

Organic Data Qualifiers

- B Analyte is present in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
- C Elevated detection limit.
- D Analyte value from diluted analysis, or surrogate result not applicable due to sample dilution.
- E Analyte concentration exceeds calibration range.
- F Surrogate results outside control criteria.
- H Extraction or analysis performed past holding time.
- J Qualitative evidence of analyte present: concentration detected is greater than the method detection limit but less than the reporting limit.
- K Detection limit may be elevated due to the presence of an unrequested analyte.
- N Spiked sample recovery not within control limits.
- P The relative percent difference between the two columns for detected concentrations was greater than 40%.
- Q The analyte has been detected between the limit of detection (LOD) and limit of quantitation (LOQ). The results are qualified due to the uncertainty of analyte concentrations within this range.
- S The relative percent difference between quantitation and confirmation columns exceeds internal quality control criteria. Because the result is unconfirmed, it has been reported as a non-detect with an elevated detection limit.
- U The analyte was not detected above the reporting limit.
- W Sample received with headspace.
- X See Sample Narrative.
- & Laboratory Control Spike recovery not within control limits.
- \* Duplicate analyses not within control limits.
- SUB1 Assay was subcontracted to an approved lab.
- SUB2 Assay was subcontracted to En Chem Green Bay WI Cert. #405132750.

**- Analytical Report -**

Project Name : CAMP MARINA  
Project Number : 1313  
Field ID : PZ-701  
Lab Sample Number : 823638-001  
WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH  
Report Date : 7/15/02  
Collection Date : 6/25/02  
Matrix Type : WATER

**Inorganic Results**

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Iron	7300	84	270		ug/L		7/12/02	SW846 3020	SW846 6020	CCR
Iron - Dissolved	440	8.4	27		ug/L		7/12/02	SW846 6020	SW846 6020	dms
Alkalinity as CaCO3	150	9.6	31		mg/L		6/27/02	EPA 310.2	EPA 310.2	*MD
Cyanide, amenable	0.74	0.0023	0.0073		mg/L		7/9/02	EPA 335.1	EPA 335.4	*MD
Cyanide, total	0.83	0.046	0.15		mg/L		7/1/02	EPA 335.4	EPA 335.4	*MD
Cyanide, weak and dissociable	0.19	0.00084	0.0027		mg/L		7/3/02	SM 4500	SM 4500	*MD
Nitrogen, NO3 + NO2	0.12	0.023	0.073		mg/L		7/1/02	EPA 353.2	EPA 353.2	*MD
Sulfate	320	12	38		mg/L		7/2/02	EPA 300.0	EPA 300.0	*MD

**Organic Results****BTEX - WATER**

Prep Method: SW846 5030B Prep Date: 7/1/02 Analyst: SMT

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
a,a,a-Trifluorotoluene	102				%Recov		7/1/02	SW846 M8021B
Benzene	< 0.45	0.45	1.4		ug/l		7/1/02	SW846 M8021B
Ethylbenzene	< 0.82	0.82	2.6		ug/l		7/1/02	SW846 M8021B
Toluene	< 0.68	0.68	2.2		ug/l		7/1/02	SW846 M8021B
Xylenes, -m, -p	< 1.7	1.7	5.4		ug/l		7/1/02	SW846 M8021B
Xylene, -o	< 0.77	0.77	2.5		ug/l		7/1/02	SW846 M8021B

**Organic Results****PAH/PNA - SEMIVOLATILES**

Prep Method: SW846 3510 Prep Date: 6/27/02 Analyst: RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
2-Fluorobiphenyl	50				%Recov		6/28/02	SW846 8270C
Nitrobenzene-d5	69				%Recov		6/28/02	SW846 8270C
Terphenyl-d14	96				%Recov		6/28/02	SW846 8270C
Acenaphthene	0.040	0.018	0.057		ug/L	Q	6/28/02	SW846 8270C
Acenaphthylene	0.059	0.023	0.073		ug/L	Q	6/28/02	SW846 8270C
Anthracene	0.073	0.020	0.064		ug/L		6/28/02	SW846 8270C
Benzo(a)anthracene	0.13	0.019	0.061		ug/L		6/28/02	SW846 8270C
Benzo(a)pyrene	0.100	0.012	0.038		ug/L		6/28/02	SW846 8270C
Benzo(b)fluoranthene	0.084	0.014	0.045		ug/L		6/28/02	SW846 8270C

- Analytical Report -

Project Name : CAMP MARINA

Project Number : 1313

Field ID : PZ-701

Lab Sample Number : 823638-001

WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH

Report Date : 7/15/02

Collection Date : 6/25/02

Matrix Type : WATER

Benzo(g,h,i)perylene	0.059	0.015	0.048	ug/L		6/28/02	SW846 8270C
Benzo(k)fluoranthene	0.065	0.013	0.041	ug/L		6/28/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	0.058	0.014	0.045	ug/L		6/28/02	SW846 8270C
Chrysene	0.092	0.018	0.057	ug/L		6/28/02	SW846 8270C
Dibenzo(a,h)anthracene	0.018	0.017	0.054	ug/L	Q	6/28/02	SW846 8270C
Fluoranthene	0.23	0.028	0.089	ug/L		6/28/02	SW846 8270C
Fluorene	< 0.021	0.021	0.067	ug/L		6/28/02	SW846 8270C
Naphthalene	0.18	0.027	0.086	ug/L		6/28/02	SW846 8270C
Phenanthrene	0.10	0.019	0.061	ug/L		6/28/02	SW846 8270C
Pyrene	0.19	0.020	0.064	ug/L		6/28/02	SW846 8270C

- Analytical Report -

Project Name : CAMP MARINA  
Project Number : 1313  
Field ID : MW701R  
Lab Sample Number : 823638-002  
WI DNR LAB ID : 405132750  
Client : NATURAL RESOURCE TECH  
Report Date : 7/15/02  
Collection Date : 6/25/02  
Matrix Type : WATER

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Iron	52000	84	270		ug/L		7/12/02	SW846 3020	SW846 6020	CCR
Iron - Dissolved	20000	8.4	27		ug/L		7/11/02	SW846 6020	SW846 6020	ccr
Alkalinity as CaCO3	1200	48	150		mg/L		6/27/02	EPA 310.2	EPA 310.2	*MD
Cyanide, amenable	0.15	0.0023	0.0073		mg/L		7/9/02	EPA 335.1	EPA 335.4	*MD
Cyanide, total	0.16	0.0023	0.0073		mg/L		7/1/02	EPA 335.4	EPA 335.4	*MD
Cyanide, weak and dissociable	0.012	0.00084	0.0027		mg/L		7/3/02	SM 4500	SM 4500	*MD
Nitrogen, NO3 + NO2	< 0.23	0.23	0.73		mg/L		7/1/02	EPA 353.2	EPA 353.2	*MD
Sulfate	3.8	1.2	3.8		mg/L	A	7/1/02	EPA 300.0	EPA 300.0	*MD

Organic Results

BTEX - WATER

Prep Method: SW846 5030B Prep Date: 7/1/02 Analyst: SMT

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
a,a,a-Trifluorotoluene	103				%Recov		7/1/02	SW846 M8021B
Benzene	2700	11	35		ug/l		7/1/02	SW846 M8021B
Ethylbenzene	330	20	64		ug/l		7/1/02	SW846 M8021B
Toluene	28	17	54		ug/l	Q	7/1/02	SW846 M8021B
Xylenes, -m, -p	180	42	130		ug/l		7/1/02	SW846 M8021B
Xylene, -o	150	19	61		ug/l		7/1/02	SW846 M8021B

Organic Results

PAH/PNA - SEMIVOLATILES

Prep Method: SW846 3510 Prep Date: 6/27/02 Analyst: RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
2-Fluorobiphenyl	< 1.0				%Recov	D	7/2/02	SW846 8270C
Nitrobenzene-d5	< 1.0				%Recov	D	7/2/02	SW846 8270C
Terphenyl-d14	< 1.0				%Recov	D	7/2/02	SW846 8270C
Acenaphthene	2500	600	1900		ug/L	D	7/3/02	SW846 8270C
Acenaphthylene	< 770	770	2500		ug/L	D	7/3/02	SW846 8270C
Anthracene	1300	670	2100		ug/L	QD	7/3/02	SW846 8270C
Benzo(a)anthracene	< 630	630	2000		ug/L	D	7/3/02	SW846 8270C
Benzo(a)pyrene	420	400	1300		ug/L	QD	7/3/02	SW846 8270C
Benzo(b)fluoranthene	< 470	470	1500		ug/L	D	7/3/02	SW846 8270C



- Analytical Report -

Project Name : CAMP MARINA

Project Number : 1313

Field ID : MW701R

Lab Sample Number : 823638-002

WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH

Report Date : 7/15/02

Collection Date : 6/25/02

Matrix Type : WATER

Benzo(g,h,i)perylene	< 500	500	1600	ug/L	D	7/3/02	SW846 8270C
Benzo(k)fluoranthene	< 430	430	1400	ug/L	D	7/3/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 470	470	1500	ug/L	D	7/3/02	SW846 8270C
Chrysene	640	600	1900	ug/L	QD	7/3/02	SW846 8270C
Dibenzo(a,h)anthracene	63	3.5	11	ug/L		6/29/02	SW846 8270C
Fluoranthene	1300	930	3000	ug/L	QD	7/3/02	SW846 8270C
Fluorene	790	700	2200	ug/L	QD	7/3/02	SW846 8270C
Naphthalene	9400	900	2900	ug/L	D	7/3/02	SW846 8270C
Phenanthrene	3500	630	2000	ug/L	D	7/3/02	SW846 8270C
Pyrene	1800	670	2100	ug/L	QD	7/3/02	SW846 8270C

- Analytical Report -

Project Name : CAMP MARINA  
Project Number : 1313  
Field ID : MW706  
Lab Sample Number : 823638-003  
WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH  
Report Date : 7/15/02  
Collection Date : 6/25/02  
Matrix Type : WATER

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Iron	3800	84	270		ug/L		7/12/02	SW846 3020	SW846 6020	CCR
Iron - Dissolved	620	8.4	27		ug/L		7/12/02	SW846 6020	SW846 6020	dms
Alkalinity as CaCO3	140	9.6	31		mg/L		6/27/02	EPA 310.2	EPA 310.2	*MD
Cyanide, amenable	0.078	0.0023	0.0073		mg/L		7/9/02	EPA 335.1	EPA 335.4	*MD
Cyanide, total	0.081	0.0023	0.0073		mg/L		7/1/02	EPA 335.4	EPA 335.4	*MD
Cyanide, weak and dissociable	0.0099	0.00084	0.0027		mg/L		7/3/02	SM 4500	SM 4500	*MD
Nitrogen, NO3 + NO2	23	0.23	0.73		mg/L		7/1/02	EPA 353.2	EPA 353.2	*MD
Sulfate	1200	12	38		mg/L		7/2/02	EPA 300.0	EPA 300.0	*MD

Organic Results

BTEX - WATER

Prep Method: SW846 5030B Prep Date: 7/1/02 Analyst: SMT

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
a,a,a-Trifluorotoluene	101				%Recov		7/1/02	SW846 M8021B
Benzene	1900	18	57		ug/l		7/1/02	SW846 M8021B
Ethylbenzene	270	33	110		ug/l		7/1/02	SW846 M8021B
Toluene	1300	27	86		ug/l		7/1/02	SW846 M8021B
Xylenes, -m, -p	390	68	220		ug/l		7/1/02	SW846 M8021B
Xylene, -o	630	31	99		ug/l		7/1/02	SW846 M8021B

Organic Results

PAH/PNA - SEMIVOLATILES

Prep Method: SW846 3510 Prep Date: 6/27/02 Analyst: RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
2-Fluorobiphenyl	< 1.0				%Recov	D	7/2/02	SW846 8270C
Nitrobenzene-d5	< 1.0				%Recov	D	7/2/02	SW846 8270C
Terphenyl-d14	< 1.0				%Recov	D	7/2/02	SW846 8270C
Acenaphthene	< 290	290	920		ug/L	D	7/2/02	SW846 8270C
Acenaphthylene	2700	370	1200		ug/L	D	7/2/02	SW846 8270C
Anthracene	1400	320	1000		ug/L	D	7/2/02	SW846 8270C
Benzo(a)anthracene	1000	300	960		ug/L	D	7/2/02	SW846 8270C
Benzo(a)pyrene	830	190	610		ug/L	D	7/2/02	SW846 8270C
Benzo(b)fluoranthene	270	220	700		ug/L	QD	7/2/02	SW846 8270C

- Analytical Report -

Project Name : CAMP MARINA

Project Number : 1313

Field ID : MW706

Lab Sample Number : 823638-003

WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH

Report Date : 7/15/02

Collection Date : 6/25/02

Matrix Type : WATER

Benzo(g,h,i)perylene	270	240	760	ug/L	QD	7/2/02	SW846 8270C
Benzo(k)fluoranthene	460	210	670	ug/L	QD	7/2/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	320	220	700	ug/L	QD	7/2/02	SW846 8270C
Chrysene	920	290	920	ug/L	D	7/2/02	SW846 8270C
Dibenzo(a,h)anthracene	< 270	270	860	ug/L	D	7/2/02	SW846 8270C
Fluoranthene	2200	450	1400	ug/L	D	7/2/02	SW846 8270C
Fluorene	1200	340	1100	ug/L	D	7/2/02	SW846 8270C
Naphthalene	7100	430	1400	ug/L	D	7/2/02	SW846 8270C
Phenanthrene	3200	300	960	ug/L	D	7/2/02	SW846 8270C
Pyrene	2200	320	1000	ug/L	D	7/2/02	SW846 8270C

- Analytical Report -

Project Name : CAMP MARINA  
Project Number : 1313  
Field ID : PZ-702  
Lab Sample Number : 823638-004  
WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH  
Report Date : 7/15/02  
Collection Date : 6/25/02  
Matrix Type : WATER

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Iron	15000	84	270		ug/L		7/12/02	SW846 3020	SW846 6020	CCR
Iron - Dissolved	25	8.4	27		ug/L	Q	7/12/02	SW846 6020	SW846 6020	DMS
Alkalinity as CaCO3	50	9.6	31		mg/L		6/27/02	EPA 310.2	EPA 310.2	*MD
Cyanide, amenable	< 0.0023	0.0023	0.0073		mg/L		7/1/02	EPA 335.1	EPA 335.4	*MD
Cyanide, total	< 0.0023	0.0023	0.0073		mg/L		7/1/02	EPA 335.4	EPA 335.4	*MD
Cyanide, weak and dissociable	< 0.00084	0.00084	0.0027		mg/L		7/3/02	SM 4500	SM 4500	*MD
Nitrogen, NO3 + NO2	< 0.023	0.023	0.073		mg/L		7/1/02	EPA 353.2	EPA 353.2	*MD
Sulfate	3.7	1.2	3.8		mg/L	QA	7/1/02	EPA 300.0	EPA 300.0	*MD

Organic Results

BTEX - WATER

Prep Method: SW846 5030B Prep Date: 7/1/02 Analyst: SMT

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
a,a,a-Trifluorotoluene	101				%Recov		7/1/02	SW846 M8021B
Benzene	< 0.45	0.45	1.4		ug/l		7/1/02	SW846 M8021B
Ethylbenzene	< 0.82	0.82	2.6		ug/l		7/1/02	SW846 M8021B
Toluene	< 0.68	0.68	2.2		ug/l		7/1/02	SW846 M8021B
Xylenes, -m, -p	< 1.7	1.7	5.4		ug/l		7/1/02	SW846 M8021B
Xylene, -o	< 0.77	0.77	2.5		ug/l		7/1/02	SW846 M8021B

Organic Results

PAH/PNA - SEMIVOLATILES

Prep Method: SW846 3510 Prep Date: 6/27/02 Analyst: RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
2-Fluorobiphenyl	90				%Recov		6/28/02	SW846 8270C
Nitrobenzene-d5	102				%Recov		6/28/02	SW846 8270C
Terphenyl-d14	87				%Recov		6/28/02	SW846 8270C
Acenaphthene	< 0.018	0.018	0.057		ug/L		6/28/02	SW846 8270C
Acenaphthylene	0.059	0.023	0.073		ug/L	Q	6/28/02	SW846 8270C
Anthracene	< 0.020	0.020	0.064		ug/L		6/28/02	SW846 8270C
Benzo(a)anthracene	< 0.019	0.019	0.061		ug/L		6/28/02	SW846 8270C
Benzo(a)pyrene	< 0.012	0.012	0.038		ug/L		6/28/02	SW846 8270C
Benzo(b)fluoranthene	< 0.014	0.014	0.045		ug/L		6/28/02	SW846 8270C

- Analytical Report -

Project Name : CAMP MARINA

Project Number : 1313

Field ID : PZ-702

Lab Sample Number : 823638-004

WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH

Report Date : 7/15/02

Collection Date : 6/25/02

Matrix Type : WATER

Benzo(g,h,i)perylene	< 0.015	0.015	0.048	ug/L		6/28/02	SW846 8270C
Benzo(k)fluoranthene	< 0.013	0.013	0.041	ug/L		6/28/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 0.014	0.014	0.045	ug/L		6/28/02	SW846 8270C
Chrysene	< 0.018	0.018	0.057	ug/L		6/28/02	SW846 8270C
Dibenzo(a,h)anthracene	< 0.017	0.017	0.054	ug/L		6/28/02	SW846 8270C
Fluoranthene	< 0.028	0.028	0.089	ug/L		6/28/02	SW846 8270C
Fluorene	0.030	0.021	0.067	ug/L	Q	6/28/02	SW846 8270C
Naphthalene	0.42	0.027	0.086	ug/L		6/28/02	SW846 8270C
Phenanthrene	0.063	0.019	0.061	ug/L		6/28/02	SW846 8270C
Pyrene	0.021	0.020	0.064	ug/L	Q	6/28/02	SW846 8270C

- Analytical Report -

Project Name : CAMP MARINA  
Project Number : 1313  
Field ID : PZ-703  
Lab Sample Number : 823638-005  
WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH  
Report Date : 7/15/02  
Collection Date : 6/25/02  
Matrix Type : WATER

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Iron	27000	84	270		ug/L		7/12/02	SW846 3020	SW846 6020	CCR
Iron - Dissolved	370	8.4	27		ug/L		7/11/02	SW846 6020	SW846 6020	ccr
Alkalinity as CaCO3	73	9.6	31		mg/L		6/27/02	EPA 310.2	EPA 310.2	*MD
Cyanide, amenable	< 0.0023	0.0023	0.0073		mg/L		7/1/02	EPA 335.1	EPA 335.4	*MD
Cyanide, total	< 0.0023	0.0023	0.0073		mg/L		7/1/02	EPA 335.4	EPA 335.4	*MD
Cyanide, weak and dissociable	0.00090	0.00084	0.0027		mg/L	Q	7/3/02	SM 4500	SM 4500	*MD
Nitrogen, NO3 + NO2	< 0.023	0.023	0.073		mg/L		7/1/02	EPA 353.2	EPA 353.2	*MD
Sulfate	4.7	1.2	3.8		mg/L	A	7/1/02	EPA 300.0	EPA 300.0	*MD

Organic Results

BTEX - WATER

Prep Method: SW846 5030B Prep Date: 7/1/02 Analyst: SMT

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
a,a,a-Trifluorotoluene	100				%Recov		7/1/02	SW846 M8021B
Benzene	570	1.8	5.7		ug/l		7/1/02	SW846 M8021B
Ethylbenzene	150	3.3	11		ug/l		7/1/02	SW846 M8021B
Toluene	14	2.7	8.6		ug/l		7/1/02	SW846 M8021B
Xylenes, -m, -p	40	6.8	22		ug/l		7/1/02	SW846 M8021B
Xylene, -o	46	3.1	9.9		ug/l		7/1/02	SW846 M8021B

Organic Results

PAH/PNA - SEMIVOLATILES

Prep Method: SW846 3510 Prep Date: 6/27/02 Analyst: RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
2-Fluorobiphenyl	102				%Recov		6/28/02	SW846 8270C
Nitrobenzene-d5	82				%Recov		6/28/02	SW846 8270C
Terphenyl-d14	97				%Recov		6/28/02	SW846 8270C
Acenaphthene	1.2	0.36	1.1		ug/L		6/28/02	SW846 8270C
Acenaphthylene	< 0.46	0.46	1.5		ug/L		6/28/02	SW846 8270C
Anthracene	0.45	0.40	1.3		ug/L	Q	6/28/02	SW846 8270C
Benzo(a)anthracene	< 0.38	0.38	1.2		ug/L		6/28/02	SW846 8270C
Benzo(a)pyrene	< 0.24	0.24	0.76		ug/L		6/28/02	SW846 8270C
Benzo(b)fluoranthene	< 0.28	0.28	0.89		ug/L		6/28/02	SW846 8270C

- Analytical Report -

Project Name : CAMP MARINA

Project Number : 1313

Field ID : PZ-703

Lab Sample Number : 823638-005

WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH

Report Date : 7/15/02

Collection Date : 6/25/02

Matrix Type : WATER

Benzo(g,h,i)perylene	< 0.30	0.30	0.96	ug/L		6/28/02	SW846 8270C
Benzo(k)fluoranthene	< 0.26	0.26	0.83	ug/L		6/28/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 0.28	0.28	0.89	ug/L		6/28/02	SW846 8270C
Chrysene	< 0.36	0.36	1.1	ug/L		6/28/02	SW846 8270C
Dibenzo(a,h)anthracene	< 0.34	0.34	1.1	ug/L		6/28/02	SW846 8270C
Fluoranthene	< 0.56	0.56	1.8	ug/L		6/28/02	SW846 8270C
Fluorene	< 0.42	0.42	1.3	ug/L		6/28/02	SW846 8270C
Naphthalene	190	14	45	ug/L	D	7/2/02	SW846 8270C
Phenanthrene	0.38	0.38	1.2	ug/L	Q	6/28/02	SW846 8270C
Pyrene	< 0.40	0.40	1.3	ug/L		6/28/02	SW846 8270C

**- Analytical Report -**

Project Name : CAMP MARINA

Project Number : 1313

Client : NATURAL RESOURCE TECH

Field ID : MW-707R

Report Date : 7/15/02

Lab Sample Number : 823638-006

Collection Date : 6/25/02

WI DNR LAB ID : 405132750

Matrix Type : WATER

**Inorganic Results**

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Iron	25000	84	270		ug/L		7/12/02	SW846 3020	SW846 6020	CCR
Iron - Dissolved	730	8.4	27		ug/L		7/12/02	SW846 6020	SW846 6020	dms
Alkalinity as CaCO3	460	9.6	31		mg/L		6/27/02	EPA 310.2	EPA 310.2	*MD
Cyanide, amenable	0.76	0.0023	0.0073		mg/L		7/9/02	EPA 335.1	EPA 335.4	*MD
Cyanide, total	0.78	0.011	0.035		mg/L		7/1/02	EPA 335.4	EPA 335.4	*MD
Cyanide, weak and dissociable	0.010	0.00084	0.0027		mg/L		7/3/02	SM 4500	SM 4500	*MD
Nitrogen, NO3 + NO2	< 0.023	0.023	0.073		mg/L		7/1/02	EPA 353.2	EPA 353.2	*MD
Sulfate	40	1.2	3.8		mg/L		7/1/02	EPA 300.0	EPA 300.0	*MD

**Organic Results****BTEX - WATER**

Prep Method: SW846 5030B

Prep Date: 7/1/02

Analyst: SMT

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
a,a,a-Trifluorotoluene	101				%Recov		7/1/02	SW846 M8021B
Benzene	1100	9.0	29		ug/l		7/1/02	SW846 M8021B
Ethylbenzene	2300	16	51		ug/l		7/1/02	SW846 M8021B
Toluene	51	14	45		ug/l		7/1/02	SW846 M8021B
Xylenes, -m, -p	160	34	110		ug/l		7/1/02	SW846 M8021B
Xylene, -o	600	15	48		ug/l		7/1/02	SW846 M8021B

**Organic Results****PAH/PNA - SEMIVOLATILES**

Prep Method: SW846 3510

Prep Date: 6/27/02

Analyst: RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
2-Fluorobiphenyl	116				%Recov		6/28/02	SW846 8270C
Nitrobenzene-d5	91				%Recov		6/28/02	SW846 8270C
Terphenyl-d14	88				%Recov		6/28/02	SW846 8270C
Acenaphthene	< 120	120	380		ug/L	D	7/3/02	SW846 8270C
Acenaphthylene	6.4	0.46	1.5		ug/L		6/28/02	SW846 8270C
Anthracene	6.2	0.40	1.3		ug/L		6/28/02	SW846 8270C
Benzo(a)anthracene	1.8	0.38	1.2		ug/L		6/28/02	SW846 8270C
Benzo(a)pyrene	1.2	0.24	0.76		ug/L		6/28/02	SW846 8270C
Benzo(b)fluoranthene	0.73	0.28	0.89		ug/L	Q	6/28/02	SW846 8270C



- Analytical Report -

Project Name : CAMP MARINA

Project Number : 1313

Field ID : MW-707R

Lab Sample Number : 823638-006

WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH

Report Date : 7/15/02

Collection Date : 6/25/02

Matrix Type : WATER

Benzo(g,h,i)perylene	0.61	0.30	0.96	ug/L	Q	6/28/02	SW846 8270C
Benzo(k)fluoranthene	0.51	0.26	0.83	ug/L	Q	6/28/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	0.48	0.28	0.89	ug/L	Q	6/28/02	SW846 8270C
Chrysene	1.2	0.36	1.1	ug/L		6/28/02	SW846 8270C
Dibenzo(a,h)anthracene	< 0.34	0.34	1.1	ug/L		6/28/02	SW846 8270C
Fluoranthene	7.5	0.56	1.8	ug/L		6/28/02	SW846 8270C
Fluorene	< 130	130	410	ug/L	D	7/3/02	SW846 8270C
Naphthalene	1600	170	540	ug/L	D	7/3/02	SW846 8270C
Phenanthrene	< 120	120	380	ug/L	D	7/3/02	SW846 8270C
Pyrene	7.3	0.40	1.3	ug/L		6/28/02	SW846 8270C

**- Analytical Report -**

Project Name : CAMP MARINA  
Project Number : 1313  
Field ID : MW709R  
Lab Sample Number : 823638-007  
WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH  
Report Date : 7/15/02  
Collection Date : 6/25/02  
Matrix Type : WATER

**Inorganic Results**

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Iron	4000	84	270		ug/L		7/12/02	SW846 3020	SW846 6020	CCR
Iron - Dissolved	490	8.4	27		ug/L		7/11/02	SW846 6020	SW846 6020	ccr
Alkalinity as CaCO3	900	48	150		mg/L		6/27/02	EPA 310.2	EPA 310.2	*MD
Cyanide, amenable	0.45	0.0023	0.0073		mg/L		7/9/02	EPA 335.1	EPA 335.4	*MD
Cyanide, total	0.48	0.011	0.035		mg/L		7/1/02	EPA 335.4	EPA 335.4	*MD
Cyanide, weak and dissociable	0.027	0.00084	0.0027		mg/L		7/3/02	SM 4500	SM 4500	*MD
Nitrogen, NO3 + NO2	2.7	0.023	0.073		mg/L		7/1/02	EPA 353.2	EPA 353.2	*MD
Sulfate	440	12	38		mg/L		7/2/02	EPA 300.0	EPA 300.0	*MD

**Organic Results**

**BTEX - WATER**

Prep Method: SW846 5030B Prep Date: 7/1/02 Analyst: SMT

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
a,a,a-Trifluorotoluene	101				%Recov		7/1/02	SW846 M8021B
Benzene	< 0.45	0.45	1.4		ug/l		7/1/02	SW846 M8021B
Ethylbenzene	< 0.82	0.82	2.6		ug/l		7/1/02	SW846 M8021B
Toluene	< 0.68	0.68	2.2		ug/l		7/1/02	SW846 M8021B
Xylenes, -m, -p	< 1.7	1.7	5.4		ug/l		7/1/02	SW846 M8021B
Xylene, -o	< 0.77	0.77	2.5		ug/l		7/1/02	SW846 M8021B

**Organic Results**

**PAH/PNA - SEMIVOLATILES**

Prep Method: SW846 3510 Prep Date: 6/27/02 Analyst: RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
2-Fluorobiphenyl	75				%Recov		6/28/02	SW846 8270C
Nitrobenzene-d5	93				%Recov		6/28/02	SW846 8270C
Terphenyl-d14	84				%Recov		6/28/02	SW846 8270C
Acenaphthene	0.13	0.018	0.057		ug/L		6/28/02	SW846 8270C
Acenaphthylene	< 0.023	0.023	0.073		ug/L		6/28/02	SW846 8270C
Anthracene	0.032	0.020	0.064		ug/L	Q	6/28/02	SW846 8270C
Benzo(a)anthracene	< 0.019	0.019	0.061		ug/L		6/28/02	SW846 8270C
Benzo(a)pyrene	0.10	0.012	0.038		ug/L		6/28/02	SW846 8270C
Benzo(b)fluoranthene	< 0.014	0.014	0.045		ug/L		6/28/02	SW846 8270C

- Analytical Report -

Project Name : CAMP MARINA

Project Number : 1313

Client : NATURAL RESOURCE TECH

Field ID : MW709R

Report Date : 7/15/02

Lab Sample Number : 823638-007

Collection Date : 6/25/02

WI DNR LAB ID : 405132750

Matrix Type : WATER

Benzo(g,h,i)perylene	< 0.015	0.015	0.048	ug/L		6/28/02	SW846 8270C
Benzo(k)fluoranthene	< 0.013	0.013	0.041	ug/L		6/28/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 0.014	0.014	0.045	ug/L		6/28/02	SW846 8270C
Chrysene	< 0.018	0.018	0.057	ug/L		6/28/02	SW846 8270C
Dibenzo(a,h)anthracene	< 0.017	0.017	0.054	ug/L		6/28/02	SW846 8270C
Fluoranthene	< 0.028	0.028	0.089	ug/L		6/28/02	SW846 8270C
Fluorene	0.041	0.021	0.067	ug/L	Q	6/28/02	SW846 8270C
Naphthalene	1.8	0.14	0.45	ug/L	D	7/2/02	SW846 8270C
Phenanthrene	0.084	0.019	0.061	ug/L		6/28/02	SW846 8270C
Pyrene	0.027	0.020	0.064	ug/L	Q	6/28/02	SW846 8270C

**- Analytical Report -**

<b>Project Name :</b> CAMP MARINA	<b>Client :</b> NATURAL RESOURCE TECH
<b>Project Number :</b> 1313	<b>Report Date :</b> 7/15/02
<b>Field ID :</b> MW708	<b>Collection Date :</b> 6/25/02
<b>Lab Sample Number :</b> 823638-008	<b>Matrix Type :</b> WATER
<b>WI DNR LAB ID :</b> 405132750	

**Inorganic Results**

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Iron	35000	84	270		ug/L		7/12/02	SW846 3020	SW846 6020	CCR
Iron - Dissolved	2500	8.4	27		ug/L		7/12/02	SW846 6020	SW846 6020	dms
Alkalinity as CaCO3	520	9.6	31		mg/L		6/27/02	EPA 310.2	EPA 310.2	*MD
Cyanide, amenable	0.0030	0.0023	0.0073		mg/L	Q	7/9/02	EPA 335.1	EPA 335.4	*MD
Cyanide, total	0.0036	0.0023	0.0073		mg/L	Q	7/1/02	EPA 335.4	EPA 335.4	*MD
Cyanide, weak and dissociable	< 0.00084	0.00084	0.0027		mg/L		7/3/02	SM 4500	SM 4500	*MD
Nitrogen, NO3 + NO2	0.18	0.023	0.073		mg/L		7/1/02	EPA 353.2	EPA 353.2	*MD
Sulfate	63	1.2	3.8		mg/L		7/1/02	EPA 300.0	EPA 300.0	*MD

**Organic Results**

**BTEX - WATER**

Prep Method: SW846 5030B    Prep Date: 7/1/02    Analyst: SMT

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
a,a,a-Trifluorotoluene	101				%Recov		7/1/02	SW846 M8021B
Benzene	< 0.45	0.45	1.4		ug/l		7/1/02	SW846 M8021B
Ethylbenzene	< 0.82	0.82	2.6		ug/l		7/1/02	SW846 M8021B
Toluene	< 0.68	0.68	2.2		ug/l		7/1/02	SW846 M8021B
Xylenes, -m, -p	< 1.7	1.7	5.4		ug/l		7/1/02	SW846 M8021B
Xylene, -o	< 0.77	0.77	2.5		ug/l		7/1/02	SW846 M8021B

**Organic Results**

**PAH/PNA - SEMIVOLATILES**

Prep Method: SW846 3510    Prep Date: 6/28/02    Analyst: RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
2-Fluorobiphenyl	90				%Recov		7/1/02	SW846 8270C
Nitrobenzene-d5	115				%Recov		7/1/02	SW846 8270C
Terphenyl-d14	101				%Recov		7/1/02	SW846 8270C
Acenaphthene	< 0.018	0.018	0.057		ug/L		7/1/02	SW846 8270C
Acenaphthylene	< 0.023	0.023	0.073		ug/L		7/1/02	SW846 8270C
Anthracene	< 0.020	0.020	0.064		ug/L		7/1/02	SW846 8270C
Benzo(a)anthracene	< 0.019	0.019	0.061		ug/L		7/1/02	SW846 8270C
Benzo(a)pyrene	0.014	0.012	0.038		ug/L	Q	7/1/02	SW846 8270C
Benzo(b)fluoranthene	< 0.014	0.014	0.045		ug/L		7/1/02	SW846 8270C

- Analytical Report -

Project Name : CAMP MARINA

Project Number : 1313

Field ID : MW708

Lab Sample Number : 823638-008

WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH

Report Date : 7/15/02

Collection Date : 6/25/02

Matrix Type : WATER

Benzo(g,h,i)perylene	< 0.015	0.015	0.048	ug/L	7/1/02	SW846 8270C
Benzo(k)fluoranthene	< 0.013	0.013	0.041	ug/L	7/1/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 0.014	0.014	0.045	ug/L	7/1/02	SW846 8270C
Chrysene	< 0.018	0.018	0.057	ug/L	7/1/02	SW846 8270C
Dibenzo(a,h)anthracene	< 0.017	0.017	0.054	ug/L	7/1/02	SW846 8270C
Fluoranthene	< 0.028	0.028	0.089	ug/L	7/1/02	SW846 8270C
Fluorene	< 0.021	0.021	0.067	ug/L	7/1/02	SW846 8270C
Naphthalene	< 0.027	0.027	0.086	ug/L	7/1/02	SW846 8270C
Phenanthrene	< 0.019	0.019	0.061	ug/L	7/1/02	SW846 8270C
Pyrene	< 0.020	0.020	0.064	ug/L	7/1/02	SW846 8270C

- Analytical Report -

Project Name : CAMP MARINA  
Project Number : 1313  
Field ID : MW705  
Lab Sample Number : 823638-009  
WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH  
Report Date : 7/15/02  
Collection Date : 6/25/02  
Matrix Type : WATER

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Iron	1200	8.4	27		ug/L		7/11/02	SW846 6020	SW846 6020	ccr
Iron - Dissolved	410	8.4	27		ug/L		7/11/02	SW846 6020	SW846 6020	ccr
Alkalinity as CaCO3	460	9.6	31		mg/L		6/27/02	EPA 310.2	EPA 310.2	*MD
Cyanide, amenable	0.076	0.0023	0.0073		mg/L		7/9/02	EPA 335.1	EPA 335.4	*MD
Cyanide, total	0.080	0.0023	0.0073		mg/L		7/1/02	EPA 335.4	EPA 335.4	*MD
Cyanide, weak and dissociable	0.013	0.00084	0.0027		mg/L		7/3/02	SM 4500	SM 4500	*MD
Nitrogen, NO3 + NO2	< 0.023	0.023	0.073		mg/L		7/1/02	EPA 353.2	EPA 353.2	*MD
Sulfate	190	1.2	3.8		mg/L		7/1/02	EPA 300.0	EPA 300.0	*MD

Organic Results

BTEX - WATER

Prep Method: SW846 5030B Prep Date: 7/1/02 Analyst: MSB

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
a,a,a-Trifluorotoluene	112				%Recov		7/1/02	SW846 M8021B
Benzene	< 0.45	0.45	1.4		ug/l		7/1/02	SW846 M8021B
Ethylbenzene	< 0.82	0.82	2.6		ug/l		7/1/02	SW846 M8021B
Toluene	< 0.68	0.68	2.2		ug/l		7/1/02	SW846 M8021B
Xylenes, -m, -p	< 1.7	1.7	5.4		ug/l		7/1/02	SW846 M8021B
Xylene, -o	< 0.77	0.77	2.5		ug/l		7/1/02	SW846 M8021B

Organic Results

PAH/PNA - SEMIVOLATILES

Prep Method: SW846 3510 Prep Date: 6/28/02 Analyst: RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
2-Fluorobiphenyl	50				%Recov		7/1/02	SW846 8270C
Nitrobenzene-d5	66				%Recov		7/1/02	SW846 8270C
Terphenyl-d14	90				%Recov		7/1/02	SW846 8270C
Acenaphthene	< 0.018	0.018	0.057		ug/L		7/1/02	SW846 8270C
Acenaphthylene	< 0.023	0.023	0.073		ug/L		7/1/02	SW846 8270C
Anthracene	< 0.020	0.020	0.064		ug/L		7/1/02	SW846 8270C
Benzo(a)anthracene	< 0.019	0.019	0.061		ug/L		7/1/02	SW846 8270C
Benzo(a)pyrene	< 0.012	0.012	0.038		ug/L		7/1/02	SW846 8270C
Benzo(b)fluoranthene	< 0.014	0.014	0.045		ug/L		7/1/02	SW846 8270C

- Analytical Report -

Project Name : CAMP MARINA

Project Number : 1313

Field ID : MW705

Lab Sample Number : 823638-009

WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH

Report Date : 7/15/02

Collection Date : 6/25/02

Matrix Type : WATER

---

Benzo(g,h,i)perylene	< 0.015	0.015	0.048	ug/L	7/1/02	SW846 8270C
Benzo(k)fluoranthene	< 0.013	0.013	0.041	ug/L	7/1/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 0.014	0.014	0.045	ug/L	7/1/02	SW846 8270C
Chrysene	< 0.018	0.018	0.057	ug/L	7/1/02	SW846 8270C
Dibenzo(a,h)anthracene	< 0.017	0.017	0.054	ug/L	7/1/02	SW846 8270C
Fluoranthene	< 0.028	0.028	0.089	ug/L	7/1/02	SW846 8270C
Fluorene	< 0.021	0.021	0.067	ug/L	7/1/02	SW846 8270C
Naphthalene	< 0.027	0.027	0.086	ug/L	7/1/02	SW846 8270C
Phenanthrene	< 0.019	0.019	0.061	ug/L	7/1/02	SW846 8270C
Pyrene	< 0.020	0.020	0.064	ug/L	7/1/02	SW846 8270C

- Analytical Report -

Project Name : CAMP MARINA  
Project Number : 1313  
Field ID : QA/QC 1  
Lab Sample Number : 823638-010  
WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH  
Report Date : 7/15/02  
Collection Date : 6/25/02  
Matrix Type : WATER

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Iron	3200	84	270		ug/L		7/12/02	SW846 3020	SW846 6020	CCR
Iron - Dissolved	240	8.4	27		ug/L		7/12/02	SW846 6020	SW846 6020	dms
Alkalinity as CaCO3	300	9.6	31		mg/L		6/27/02	EPA 310.2	EPA 310.2	*MD
Cyanide, amenable	0.088	0.0023	0.0073		mg/L		7/9/02	EPA 335.1	EPA 335.4	*MD
Cyanide, total	0.10	0.0023	0.0073		mg/L		7/1/02	EPA 335.4	EPA 335.4	*MD
Cyanide, weak and dissociable	0.0084	0.00084	0.0027		mg/L		7/3/02	SM 4500	SM 4500	*MD
Nitrogen, NO3 + NO2	< 0.023	0.023	0.073		mg/L		7/1/02	EPA 353.2	EPA 353.2	*MD
Sulfate	91	1.2	3.8		mg/L		7/1/02	EPA 300.0	EPA 300.0	*MD

Organic Results

BTEX - WATER

Prep Method: SW846 5030B Prep Date: 7/1/02 Analyst: MSB

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
a,a,a-Trifluorotoluene	112				%Recov		7/1/02	SW846 M8021B
Benzene	< 0.45	0.45	1.4		ug/l		7/1/02	SW846 M8021B
Ethylbenzene	< 0.82	0.82	2.6		ug/l		7/1/02	SW846 M8021B
Toluene	< 0.68	0.68	2.2		ug/l		7/1/02	SW846 M8021B
Xylenes, -m, -p	< 1.7	1.7	5.4		ug/l		7/1/02	SW846 M8021B
Xylene, -o	< 0.77	0.77	2.5		ug/l		7/1/02	SW846 M8021B

Organic Results

PAH/PNA - SEMIVOLATILES

Prep Method: SW846 3510 Prep Date: 6/28/02 Analyst: RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
2-Fluorobiphenyl	50				%Recov		7/1/02	SW846 8270C
Nitrobenzene-d5	65				%Recov		7/1/02	SW846 8270C
Terphenyl-d14	96				%Recov		7/1/02	SW846 8270C
Acenaphthene	< 0.018	0.018	0.057		ug/L		7/1/02	SW846 8270C
Acenaphthylene	< 0.023	0.023	0.073		ug/L		7/1/02	SW846 8270C
Anthracene	< 0.020	0.020	0.064		ug/L		7/1/02	SW846 8270C
Benzo(a)anthracene	< 0.019	0.019	0.061		ug/L		7/1/02	SW846 8270C
Benzo(a)pyrene	< 0.012	0.012	0.038		ug/L		7/1/02	SW846 8270C
Benzo(b)fluoranthene	< 0.014	0.014	0.045		ug/L		7/1/02	SW846 8270C



- Analytical Report -

Project Name : CAMP MARINA  
Project Number : 1313  
Field ID : QA/QC 1  
Lab Sample Number : 823638-010  
WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH  
Report Date : 7/15/02  
Collection Date : 6/25/02  
Matrix Type : WATER

Benzo(g,h,i)perylene	< 0.015	0.015	0.048	ug/L	7/1/02	SW846 8270C
Benzo(k)fluoranthene	< 0.013	0.013	0.041	ug/L	7/1/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 0.014	0.014	0.045	ug/L	7/1/02	SW846 8270C
Chrysene	< 0.018	0.018	0.057	ug/L	7/1/02	SW846 8270C
Dibenzo(a,h)anthracene	< 0.017	0.017	0.054	ug/L	7/1/02	SW846 8270C
Fluoranthene	< 0.028	0.028	0.089	ug/L	7/1/02	SW846 8270C
Fluorene	< 0.021	0.021	0.067	ug/L	7/1/02	SW846 8270C
Naphthalene	< 0.027	0.027	0.086	ug/L	7/1/02	SW846 8270C
Phenanthrene	< 0.019	0.019	0.061	ug/L	7/1/02	SW846 8270C
Pyrene	< 0.020	0.020	0.064	ug/L	7/1/02	SW846 8270C

- Analytical Report -

Project Name : CAMP MARINA  
 Project Number : 1313  
 Field ID : TRIP  
 Lab Sample Number : 823638-011  
 WI DNR LAB ID : 405132750  
 Client : NATURAL RESOURCE TECH  
 Report Date : 7/15/02  
 Collection Date : 6/25/02  
 Matrix Type : WATER

Organic Results

BTEX - WATER

Prep Method: SW846 5030B Prep Date: 7/1/02 Analyst: MSB

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
a,a,a-Trifluorotoluene	112				%Recov		7/2/02	SW846 M8021B
Benzene	< 0.45	0.45	1.4		ug/l		7/2/02	SW846 M8021B
Ethylbenzene	< 0.82	0.82	2.6		ug/l		7/2/02	SW846 M8021B
Toluene	< 0.68	0.68	2.2		ug/l		7/2/02	SW846 M8021B
Xylenes, -m, -p	< 1.7	1.7	5.4		ug/l		7/2/02	SW846 M8021B
Xylene, -o	< 0.77	0.77	2.5		ug/l		7/2/02	SW846 M8021B



## Documentation of Subcontracted Analysis

Listed below are the labs used for subcontracted analysis and associated FID number.

Code	Laboratory	Wisconsin FID Number
*MD	En Chem Madison	113172950
*GB	En Chem Green Bay	405132750
*BD	Badger Laboratories, Inc.	445023150
*NL	Northern Lakes Service	721026460
*SF	Sommer - Frey	241249360
*CT	Commonwealth Tech.	157066030
*QO	STL - North Canton, OH	999518190
*QP	STL - Pittsburgh, PA	998027800
*SUB	Indicates analysis that requires no certification	

# En Chem, Inc. Cooler Receipt Log

Batch No. 823638

Project Name or ID 1313 No. of Coolers: 1 Temps: ROI

A. Receipt Phase: Date cooler was opened: 6/26/02 By: GD

- 1: Were samples received on ice? (Must be  $\leq 6$  C).....  YES NO<sup>2</sup>
- 2: Was there a Temperature Blank?..... YES  NO
- 3: Were custody seals present and intact? (Record on COC)..... YES  NO
- 4: Are COC documents present?.....  YES NO<sup>2</sup>
- 5: Does this Project require quick turn around analysis?..... YES  NO
- 6: Is there any sub-work?.....  YES NO
- 7: Are there any short hold time tests?.....  YES NO
- 8: Are any samples nearing expiration of hold-time? (Within 2 days)..... YES<sup>1</sup>  NO Contacted by/Who \_\_\_\_\_
- 9: Do any samples need to be Filtered or Preserved in the lab?..... YES<sup>1</sup>  NO Contacted by/Who \_\_\_\_\_

B. Check-in Phase: Date samples were Checked-in: 6/26/02 By: GD

- 1: Were all sample containers listed on the COC received and intact?.....  YES NO<sup>2</sup> NA
- 2: Sign the COC as received by En Chem. Completed.....  YES NO
- 3: Do sample labels match the COC? .....  YES NO<sup>2</sup> GD
- 4: Check sample pH of preserved samples. (Not VOCs) Completed.....  YES NO NA
- 5: Do samples have correct chemical preservation?.....  YES NO<sup>2</sup> NA
- 6: Are dissolved parameters field filtered?.....  YES NO<sup>2</sup> NA
- 7: Are sample volumes adequate for tests requested? .....  YES NO<sup>2</sup>
- 8: Are VOC samples free of bubbles >6mm .....  YES NO<sup>2</sup> NA
- 9: Enter samples into logbook. Completed.....  YES NO
- 10: Place laboratory sample number on all containers and COC. Completed.....  YES NO
- 11: Complete Laboratory Tracking Sheet (LTS). Completed.....  YES NO  NA
- 12: Start Nonconformance form. ....  YES NO NA
- 13: Initiate Subcontracting procedure. Completed..... YES NO NA
- 14: Check laboratory sample number on all containers and COC. .... 6/26/02  YES NO NA

**Short Hold-time tests:**

48 Hours or less Coliform (6 hrs) Hexavalent Chromium (24 Hrs) BOD Nitrite or Nitrate Low Level Mercury Ortho Phosphorus Turbidity Surfactants Sulfite En Core Preservation Color	7 days Flashpoint TSS Total Solids TDS Sulfide Free Liquids Total Volatile Solids Aqueous Extractable Organics- ALL Unpreserved VOC's Ash	Footnotes 1 Notify proper lab group immediately. 2 Complete nonconformance memo.
--	---	--

Rev. 9/5/2001, Attachment to 1-REC-5.  
 Subject to QA Audit.

Reviewed by/date WJH/7/2

(Please Print Legibly)

Company Name: ART  
 Branch or Location: Pewaukee WI  
 Project Contact: CAR  
 Telephone: 262-522-1210  
 Project Number: 1313  
 Project Name: Cammarina  
 Project State: WI  
 Sampled By (Print): Scrck/mowndt



1241 Bellevue St., Suite 9  
 Green Bay, WI 54302  
 920-469-2436  
 FAX 920-469-8827

525 Science Drive  
 Madison, WI 53711  
 608-232-3300  
 FAX: 608-233-0502

### CHAIN OF CUSTODY

Wpsc  
 FILTERED? (YES/NO)  
 PRESERVATION (CODE)\*

\*Preservation Codes  
 A=None B=HCL C=H2SO4 D=HNO3 E=EnCore F=Methanol G=NaOH  
 H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

Page 1 of 1

P.O. # \_\_\_\_\_ Quote # \_\_\_\_\_

Mail Report To: CAR

Company: ART

Address: 23713 W Paul Rd  
 Pewaukee WI

Invoice To: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

Mail Invoice To: \_\_\_\_\_

Data Package Options - (please circle if requested)

- Sample Results Only (no QC)
- EPA Level II (Subject to Surcharge)
- EPA Level III (Subject to Surcharge)
- EPA Level IV (Subject to Surcharge)

Regulatory Program  
 UST  
 RCRA  
 SDWA  
 NPDES  
 CERCLA

Matrix Codes  
 W=Water  
 S=Soil  
 A=Air  
 C=Charcoal  
 B=Biota  
 SI=Sludge

ANALYSES REQUESTED  
 CHLORIDE  
 NITRATE  
 NITRITE  
 AMMONIA  
 TOTAL AMMONIA  
 TOTAL DIS  
 TOTAL # OF BOTTLES SENT

LABORATORY ID (Lab Use Only)	FIELD ID	COLLECTION		MATRIX	ANALYSES REQUESTED										CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	
		DATE	TIME		W	S	A	C	B	SI	W	S	A	C			B
	PZ-701	6/5	10:30	W	X	X	X	X	X	X	X	X	X	X	X	CHLORIDES & D	
	MW 701 R															ONE FIELD	
	MW 706															Filtered	
	PZ-702																
	PZ-703																
	MW-707K																
	MW 709 R																
	MW 708																
	MW 705																
	QA/QC 1																
	TRIP																

Rush Turnaround Time Requested (TAT) - Prelim  
 (Rush TAT subject to approval/surcharge)  
 Date Needed: \_\_\_\_\_  
 Transmit Prelim Rush Results by (circle):  
 Phone Fax E-Mail  
 Phone #: \_\_\_\_\_  
 Fax #: \_\_\_\_\_  
 E-Mail Address: \_\_\_\_\_

Relinquished By: Scrck/mowndt Date/Time: \_\_\_\_\_  
 Relinquished By: Scrck/mowndt Date/Time: 6-26-02 1530  
 Relinquished By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Relinquished By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Relinquished By: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Received By: Shane Date/Time: 6-26-02 1330  
 Received By: Doris Dattar Date/Time: 6/26/02 1530  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_

En Chem Project No: \_\_\_\_\_  
 Sample Receipt Temp: \_\_\_\_\_  
 Sample Receipt Date/Time: \_\_\_\_\_  
 Inlet / No Inlet: \_\_\_\_\_

Samples on HOLD are subject to special pricing and release of liability





**Corporate Office & Laboratory**  
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920-469-2436 • FAX: 920-469-8827 • 800-7-ENCHEM  
[www.enchem.com](http://www.enchem.com)

**- Analytical Report -**

**Project Name : WPSC CAMP MARINA**

**Project Number : 1313**

**Client: NATURAL RESOURCE TECH**

**WI DNR LAB ID : 405132750**

Sample No.	Field ID	Collection Date	Sample No.	Field ID	Collection Date
828291-001	PZ-701	11/7/02			1
828291-002	PZ-702	11/7/02			
828291-003	PZ-703	11/7/02			
828291-004	MW-705	11/7/02			
828291-005	MW-708	11/7/02			
828291-006	MW-709	11/7/02			
828291-007	BW-6	11/7/02			
828291-008	QA/QC-1	11/7/02			
828291-009	TRIP	11/7/02			

Please visit our Internet homepage at: [www.enchem.com](http://www.enchem.com)

The "Q" flag is present when a parameter has been detected below the LOQ. This indicates the results are qualified due to the uncertainty of the parameter concentration between the LOD and the LOQ.

Soil VOC detects are corrected for the total solids, unless otherwise noted.

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample comments. Release of this final report is authorized by Laboratory management, as is verified by the following signature. Reported results shall not be reproduced, except in full, without the written approval of the lab. The sample results relate only to the analytes of interest tested.

Approval Signature

Date

11/22/02

# En Chem, Inc. Cooler Receipt Log

Batch No. 828291

Project Name or ID 1315

No. of Coolers: 2

Temps: ROI

A. Receipt Phase: Date cooler was opened: 11/8/02 By: KJP

- 1: Were samples received on ice? (Must be  $\leq 6$  C).....YES NO<sup>2</sup>
- 2: Was there a Temperature Blank?.....YES NO
- 3: Were custody seals present and intact? (Record on COC).....YES NO
- 4: Are COC documents present?.....YES NO<sup>2</sup>
- 5: Does this Project require quick turn around analysis?.....YES NO
- 6: Is there any sub-work?.....YES NO
- 7: Are there any short hold time tests?.....YES NO
- 8: Are any samples nearing expiration of hold-time? (Within 2 days).....YES<sup>1</sup> NO Contacted by/Who \_\_\_\_\_
- 9: Do any samples need to be Filtered or Preserved in the lab?.....YES<sup>1</sup> NO Contacted by/Who \_\_\_\_\_

B. Check-in Phase: Date samples were Checked-in: 11/8/02 By: KJP

- 1: Were all sample containers listed on the COC received and intact?.....YES NO<sup>2</sup> NA
- 2: Sign the COC as received by En Chem. Completed.....YES NO
- 3: Do sample labels match the COC? .....YES NO<sup>2</sup>
- 4: Check sample pH of preserved samples. (Not VOCs) Completed.....YES NO NA
- 5: Do samples have correct chemical preservation?.....YES NO<sup>2</sup> NA
- 6: Are dissolved parameters field filtered?.....YES NO<sup>2</sup> NA
- 7: Are sample volumes adequate for tests requested? .....YES NO<sup>2</sup>
- 8: Are VOC samples free of bubbles >6mm .....YES NO<sup>2</sup> NA
- 9: Enter samples into logbook. Completed.....YES NO
- 10: Place laboratory sample number on all containers and COC. Completed.....YES NO
- 11: Complete Laboratory Tracking Sheet (LTS). Completed.....YES NO NA
- 12: Start Nonconformance form. ....YES NO NA
- 13: Initiate Subcontracting procedure. Completed.....YES NO NA
- 14: Check laboratory sample number on all containers and COC. ....PAH YES NO NA

**Short Hold-time tests:**

48 Hours or less	7 days	Footnotes
Coliform (6 hrs)	Flashpoint	1 Notify proper lab group immediately.
Hexavalent Chromium (24 Hrs)	TSS	2 Complete nonconformance memo.
BOD	Total Solids	
Nitrite or Nitrate	TDS	
Low Level Mercury	Sulfide	
Ortho Phosphorus	Free Liquids	
Turbidity	Total Volatile Solids	
Surfactants	<u>Aqueous Extractable Organics- ALL</u>	
Sulfite	Unpreserved VOC's	
En Core Preservation	Ash	
Color		

Rev. 9/5/2001, Attachment to 1-REC-5.  
Subject to QA Audit.

Reviewed by/date EB 11/14/02



Lab#:  
828291-

TestGroupID:

Comment:

The LOD for NO2 + NO3 is considered a reporting limit.



## Documentation of Subcontracted Analysis

Listed below are labs used for subcontracted analysis and their associated State Certification numbers.

Analyst Code	Sub-Laboratory	Wisconsin Cert #	Minnesota Cert #	Phone
*BD	Badger Labs	445023150	NA	920-729-1100
*BR	Braun Intertec Corp	999462640	027-053-117	800-279-6100
*CT	CT Laboratories	157066030	07-053-117	608-356-2760
*ECS	ECCS	113289110		608-221-8700
*EHL	Environmental Health Labs	999766900	018-999-338	574-233-4777
*ERA	ERA Labs	999446800	027-137-152	218-727-6380
*NL	Northern Lake Service	721026460	NA	715-478-2777
*NSA	North Shore Analytical	399017190	027-137-389	218-729-4658
*PAC	PACE	999407970	027-053-137	612-607-1700
*SF	S-F Analytical	241249360	NA	414-475-6700
*SLH	State Lab of Hygiene	113133790	NA	800-442-4618
*STC	STL - Chicago	999580010	017-999-101	708-534-5200
*STS	STL - Savannah	999819810	NA	912-354-7858
*TA	Test America	128053530	055-999-366	800-833-7036
*USF	US Filter/Enviroscan	737053130	055-999-302	715-359-7226

- Analytical Report -

Project Name : WPSC CAMP MARINA  
Project Number : 1313  
Field ID : PZ-701  
Lab Sample Number : 828291-001  
WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH  
Report Date : 11/21/02  
Collection Date : 11/7/02  
Matrix Type : WATER

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Iron - Dissolved	300	61	190		ug/L		11/20/02	SW846 6010B	SW846 6010B	dib
Cyanide, amenable	0.042	0.011	0.035		mg/L		11/18/02	SM 4500-CN-	SM 4500-CN-	*NL
Cyanide, total	0.18	0.011	0.035		mg/L		11/18/02	EPA 335.4	EPA 335.4	*NL
Cyanide, weak and dissociable	0.049	0.0027	0.0086		mg/L		11/18/02	SM4500-CN-I	SM4500-CN-I	*NL
Nitrogen, NO3 + NO2	< 0.075	0.075	0.24		mg/L		11/13/02	EPA 353.2	EPA 353.2	*NL
Sulfate	200	1.1	3.5		mg/L		11/14/02	EPA 300.0	EPA 300.0	JI

Organic Results

BTEX - WATER

Prep Method: SW846 5030B

Prep Date: 11/12/02

Analyst: JJB

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Dibromofluoromethane	77				%Recov		11/12/02	SW846 8260B
Toluene-d8	85				%Recov		11/12/02	SW846 8260B
4-Bromofluorobenzene	74				%Recov		11/12/02	SW846 8260B
Benzene	0.90	0.25	0.80		ug/L		11/12/02	SW846 8260B
Ethylbenzene	< 0.53	0.53	1.7		ug/L		11/12/02	SW846 8260B
Toluene	< 0.84	0.84	2.7		ug/L		11/12/02	SW846 8260B
Xylenes, -m, -p	< 1.1	1.1	3.5		ug/L		11/12/02	SW846 8260B
Xylene, -o	< 0.73	0.73	2.3		ug/L		11/12/02	SW846 8260B

Organic Results

METHANE

Prep Method: SW846 M8015B

Prep Date: 11/20/02

Analyst: ses

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Methane	250			100	ug/l		11/20/02	SW846 M8015B

Organic Results

PAH/PNA - SEMIVOLATILES

Prep Method: SW846 3510

Prep Date: 11/12/02

Analyst: RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
2-Fluorobiphenyl	38				%Recov		11/14/02	SW846 8270C
Nitrobenzene-d5	44				%Recov		11/14/02	SW846 8270C
Terphenyl-d14	75				%Recov		11/14/02	SW846 8270C
Acenaphthene	0.11	0.054	0.17		ug/L	Q	11/14/02	SW846 8270C
Acenaphthylene	0.087	0.057	0.18		ug/L	Q	11/14/02	SW846 8270C

**- Analytical Report -**

**Project Name : WPSC CAMP MARINA**  
**Project Number : 1313**  
**Field ID : PZ-701**  
**Lab Sample Number : 828291-001**  
**WI DNR LAB ID : 405132750**

**Client : NATURAL RESOURCE TECH**  
**Report Date : 11/21/02**  
**Collection Date : 11/7/02**  
**Matrix Type : WATER**

Anthracene	0.15	0.060	0.19	ug/L	Q	11/14/02	SW846 8270C
Benzo(a)anthracene	0.19	0.036	0.11	ug/L		11/14/02	SW846 8270C
Benzo(a)pyrene	0.16	0.042	0.13	ug/L		11/14/02	SW846 8270C
Benzo(b)fluoranthene	0.17	0.039	0.12	ug/L		11/14/02	SW846 8270C
Benzo(g,h,i)perylene	0.16	0.048	0.15	ug/L		11/14/02	SW846 8270C
Benzo(k)fluoranthene	0.14	0.057	0.18	ug/L	Q	11/14/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	0.13	0.063	0.20	ug/L	Q	11/14/02	SW846 8270C
Chrysene	0.16	0.042	0.13	ug/L		11/14/02	SW846 8270C
Dibenzo(a,h)anthracene	< 0.048	0.048	0.15	ug/L		11/14/02	SW846 8270C
Fluoranthene	0.44	0.039	0.12	ug/L		11/14/02	SW846 8270C
Fluorene	0.053	0.051	0.16	ug/L	Q	11/14/02	SW846 8270C
2-Methylnaphthalene	< 0.051	0.051	0.16	ug/L		11/14/02	SW846 8270C
1-Methylnaphthalene	0.076	0.051	0.16	ug/L	Q	11/14/02	SW846 8270C
Naphthalene	0.34	0.072	0.23	ug/L		11/14/02	SW846 8270C
Phenanthrene	0.38	0.048	0.15	ug/L		11/14/02	SW846 8270C
Pyrene	0.38	0.051	0.16	ug/L		11/14/02	SW846 8270C

- Analytical Report -

Project Name : WPSC CAMP MARINA  
Project Number : 1313  
Field ID : PZ-702  
Lab Sample Number : 828291-002  
WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH  
Report Date : 11/21/02  
Collection Date : 11/7/02  
Matrix Type : WATER

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Iron - Dissolved	< 61	61	190		ug/L		11/20/02	SW846 6010B	SW846 6010B	dlb
Cyanide, amenable	< 0.0027	0.0027	0.0086		mg/L		11/18/02	SM 4500-CN-	SM 4500-CN-	*NL
Cyanide, total	< 0.0027	0.0027	0.0086		mg/L		11/18/02	EPA 335.4	EPA 335.4	*NL
Cyanide, weak and dissociable	< 0.0027	0.0027	0.0086		mg/L		11/18/02	SM4500-CN-I	SM4500-CN-I	*NL
Nitrogen, NO3 + NO2	< 0.075	0.075	0.24		mg/L		11/13/02	EPA 353.2	EPA 353.2	*NL
Sulfate	< 1.1	1.1	3.5		mg/L		11/14/02	EPA 300.0	EPA 300.0	Jf

Organic Results

BTEX - WATER

Prep Method: SW846 5030B

Prep Date: 11/12/02

Analyst: JJB

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Dibromofluoromethane	82				%Recov		11/12/02	SW846 8260B
Toluene-d8	85				%Recov		11/12/02	SW846 8260B
4-Bromofluorobenzene	74				%Recov		11/12/02	SW846 8260B
Benzene	< 0.25	0.25	0.80		ug/L		11/12/02	SW846 8260B
Ethylbenzene	< 0.53	0.53	1.7		ug/L		11/12/02	SW846 8260B
Toluene	< 0.84	0.84	2.7		ug/L		11/12/02	SW846 8260B
Xylenes, -m, -p	< 1.1	1.1	3.5		ug/L		11/12/02	SW846 8260B
Xylene, -o	< 0.73	0.73	2.3		ug/L		11/12/02	SW846 8260B

Organic Results

METHANE

Prep Method: SW846 M8015B

Prep Date: 11/20/02

Analyst: ses

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Methane	22			10	ug/l		11/20/02	SW846 M8015B

Organic Results

PAH/PNA - SEMIVOLATILES

Prep Method: SW846 3510

Prep Date: 11/12/02

Analyst: RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
2-Fluorobiphenyl	75				%Recov		11/12/02	SW846 8270C
Nitrobenzene-d5	78				%Recov		11/12/02	SW846 8270C
Terphenyl-d14	80				%Recov		11/12/02	SW846 8270C
Acenaphthene	< 0.018	0.018	0.057		ug/L		11/12/02	SW846 8270C
Acenaphthylene	0.023	0.019	0.061		ug/L	Q	11/12/02	SW846 8270C

**- Analytical Report -**

Project Name : WPSC CAMP MARINA

Project Number : 1313

Field ID : PZ-702

Lab Sample Number : 828291-002

WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH

Report Date : 11/21/02

Collection Date : 11/7/02

Matrix Type : WATER

Anthracene	< 0.020	0.020	0.064	ug/L		11/12/02	SW846 8270C
Benzo(a)anthracene	0.015	0.012	0.038	ug/L	Q	11/12/02	SW846 8270C
Benzo(a)pyrene	< 0.014	0.014	0.045	ug/L		11/12/02	SW846 8270C
Benzo(b)fluoranthene	< 0.013	0.013	0.041	ug/L		11/12/02	SW846 8270C
Benzo(g,h,i)perylene	0.016	0.016	0.051	ug/L	Q	11/12/02	SW846 8270C
Benzo(k)fluoranthene	< 0.019	0.019	0.061	ug/L		11/12/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 0.021	0.021	0.067	ug/L		11/12/02	SW846 8270C
Chrysene	0.023	0.014	0.045	ug/L	Q	11/12/02	SW846 8270C
Dibenzo(a,h)anthracene	< 0.016	0.016	0.051	ug/L		11/12/02	SW846 8270C
Fluoranthene	0.039	0.013	0.041	ug/L	Q	11/12/02	SW846 8270C
Fluorene	0.020	0.017	0.054	ug/L	Q	11/12/02	SW846 8270C
2-Methylnaphthalene	0.032	0.017	0.054	ug/L	Q	11/12/02	SW846 8270C
1-Methylnaphthalene	0.031	0.017	0.054	ug/L	Q	11/12/02	SW846 8270C
Naphthalene	0.087	0.024	0.076	ug/L		11/12/02	SW846 8270C
Phenanthrene	0.084	0.016	0.051	ug/L		11/12/02	SW846 8270C
Pyrene	0.046	0.017	0.054	ug/L	Q	11/12/02	SW846 8270C

- Analytical Report -

Project Name : WPSC CAMP MARINA  
Project Number : 1313  
Field ID : PZ-703  
Lab Sample Number : 828291-003  
WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH  
Report Date : 11/21/02  
Collection Date : 11/7/02  
Matrix Type : WATER

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Iron - Dissolved	< 61	61	190		ug/L		11/20/02	SW846 6010B	SW846 6010B	dlb
Cyanide, amenable	0.0080	0.0027	0.0086		mg/L	Q	11/18/02	SM 4500-CN-	SM 4500-CN-	*NL
Cyanide, total	0.0070	0.0027	0.0086		mg/L	Q	11/18/02	EPA 335.4	EPA 335.4	*NL
Cyanide, weak and dissociable	< 0.0027	0.0027	0.0086		mg/L		11/18/02	SM4500-CN-I	SM4500-CN-I	*NL
Nitrogen, NO3 + NO2	< 0.075	0.075	0.24		mg/L		11/13/02	EPA 353.2	EPA 353.2	*NL
Sulfate	4.2	1.1	3.5		mg/L		11/14/02	EPA 300.0	EPA 300.0	JI

Organic Results

BTEX - WATER

Prep Method: SW846 5030B

Prep Date: 11/13/02

Analyst: JJB

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Dibromofluoromethane	79				%Recov		11/13/02	SW846 8260B
Toluene-d8	84				%Recov		11/13/02	SW846 8260B
4-Bromofluorobenzene	80				%Recov		11/13/02	SW846 8260B
Benzene	460	1.2	3.8		ug/L		11/13/02	SW846 8260B
Ethylbenzene	130	2.6	8.3		ug/L		11/13/02	SW846 8260B
Toluene	16	4.2	13		ug/L		11/13/02	SW846 8260B
Xylenes, -m, -p	50	5.5	18		ug/L		11/13/02	SW846 8260B
Xylene, -o	51	3.6	11		ug/L		11/13/02	SW846 8260B

Organic Results

METHANE

Prep Method: SW846 M8015B

Prep Date: 11/20/02

Analyst: ses

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Methane	71			10	ug/l		11/20/02	SW846 M8015B

Organic Results

PAH/PNA - SEMIVOLATILES

Prep Method: SW846 3510

Prep Date: 11/12/02

Analyst: RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
2-Fluorobiphenyl	93				%Recov		11/13/02	SW846 8270C
Nitrobenzene-d5	104				%Recov		11/13/02	SW846 8270C
Terphenyl-d14	126				%Recov		11/13/02	SW846 8270C
Acenaphthene	< 1.8	1.8	5.7		ug/L		11/13/02	SW846 8270C
Acenaphthylene	< 1.9	1.9	6.1		ug/L		11/13/02	SW846 8270C

**- Analytical Report -**

Project Name : WPSC CAMP MARINA

Project Number : 1313

Field ID : PZ-703

Lab Sample Number : 828291-003

WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH

Report Date : 11/21/02

Collection Date : 11/7/02

Matrix Type : WATER

Anthracene	< 2.0	2.0	6.4	ug/L	11/13/02	SW846 8270C
Benzo(a)anthracene	< 1.2	1.2	3.8	ug/L	11/13/02	SW846 8270C
Benzo(a)pyrene	< 1.4	1.4	4.5	ug/L	11/13/02	SW846 8270C
Benzo(b)fluoranthene	< 1.3	1.3	4.1	ug/L	11/13/02	SW846 8270C
Benzo(g,h,i)perylene	< 1.6	1.6	5.1	ug/L	11/13/02	SW846 8270C
Benzo(k)fluoranthene	< 1.9	1.9	6.1	ug/L	11/13/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 2.1	2.1	6.7	ug/L	11/13/02	SW846 8270C
Chrysene	< 1.4	1.4	4.5	ug/L	11/13/02	SW846 8270C
Dibenzo(a,h)anthracene	< 1.6	1.6	5.1	ug/L	11/13/02	SW846 8270C
Fluoranthene	< 1.3	1.3	4.1	ug/L	11/13/02	SW846 8270C
Fluorene	< 1.7	1.7	5.4	ug/L	11/13/02	SW846 8270C
2-Methylnaphthalene	< 1.7	1.7	5.4	ug/L	11/13/02	SW846 8270C
1-Methylnaphthalene	< 1.7	1.7	5.4	ug/L	11/13/02	SW846 8270C
Naphthalene	41	2.4	7.6	ug/L	11/13/02	SW846 8270C
Phenanthrene	< 1.6	1.6	5.1	ug/L	11/13/02	SW846 8270C
Pyrene	< 1.7	1.7	5.4	ug/L	11/13/02	SW846 8270C



- Analytical Report -

Project Name : WPSC CAMP MARINA  
Project Number : 1313  
Field ID : MW-705  
Lab Sample Number : 828291-004  
WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH  
Report Date : 11/21/02  
Collection Date : 11/7/02  
Matrix Type : WATER

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Cyanide, amenable	0.011	0.0027	0.0086		mg/L		11/18/02	SM 4500-CN-	SM 4500-CN-	*NL
Cyanide, total	0.060	0.0027	0.0086		mg/L		11/18/02	EPA 335.4	EPA 335.4	*NL
Cyanide, weak and dissociable	< 0.0027	0.0027	0.0086		mg/L		11/18/02	SM4500-CN-I	SM4500-CN-I	*NL

Organic Results

BTEX - WATER

Prep Method: SW846 5030B

Prep Date: 11/12/02

Analyst: JJB

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Dibromofluoromethane	80				%Recov		11/12/02	SW846 8260B
Toluene-d8	84				%Recov		11/12/02	SW846 8260B
4-Bromofluorobenzene	75				%Recov		11/12/02	SW846 8260B
Benzene	< 0.25	0.25	0.80		ug/L		11/12/02	SW846 8260B
Ethylbenzene	< 0.53	0.53	1.7		ug/L		11/12/02	SW846 8260B
Toluene	< 0.84	0.84	2.7		ug/L		11/12/02	SW846 8260B
Xylenes, -m, -p	< 1.1	1.1	3.5		ug/L		11/12/02	SW846 8260B
Xylene, -o	< 0.73	0.73	2.3		ug/L		11/12/02	SW846 8260B

Organic Results

PAH/PNA - SEMIVOLATILES

Prep Method: SW846 3510

Prep Date: 11/12/02

Analyst: RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
2-Fluorobiphenyl	72				%Recov		11/12/02	SW846 8270C
Nitrobenzene-d5	74				%Recov		11/12/02	SW846 8270C
Terphenyl-d14	78				%Recov		11/12/02	SW846 8270C
Acenaphthene	< 0.018	0.018	0.057		ug/L		11/12/02	SW846 8270C
Acenaphthylene	< 0.019	0.019	0.061		ug/L		11/12/02	SW846 8270C
Anthracene	< 0.020	0.020	0.064		ug/L		11/12/02	SW846 8270C
Benzo(a)anthracene	< 0.012	0.012	0.038		ug/L		11/12/02	SW846 8270C
Benzo(a)pyrene	0.017	0.014	0.045		ug/L	Q	11/12/02	SW846 8270C
Benzo(b)fluoranthene	0.013	0.013	0.041		ug/L	Q	11/12/02	SW846 8270C
Benzo(g,h,i)perylene	< 0.016	0.016	0.051		ug/L		11/12/02	SW846 8270C
Benzo(k)fluoranthene	< 0.019	0.019	0.061		ug/L		11/12/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 0.021	0.021	0.067		ug/L		11/12/02	SW846 8270C
Chrysene	< 0.014	0.014	0.045		ug/L		11/12/02	SW846 8270C
Dibenzo(a,h)anthracene	< 0.016	0.016	0.051		ug/L		11/12/02	SW846 8270C
Fluoranthene	0.016	0.013	0.041		ug/L	Q	11/12/02	SW846 8270C

- Analytical Report -

Project Name : WPSC CAMP MARINA  
Project Number : 1313  
Field ID : MW-705  
Lab Sample Number : 828291-004  
WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH  
Report Date : 11/21/02  
Collection Date : 11/7/02  
Matrix Type : WATER

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Fluorene	< 0.017	0.017	0.054	ug/L	11/12/02	SW846 8270C
2-Methylnaphthalene	< 0.017	0.017	0.054	ug/L	11/12/02	SW846 8270C
1-Methylnaphthalene	< 0.017	0.017	0.054	ug/L	11/12/02	SW846 8270C
Naphthalene	< 0.024	0.024	0.076	ug/L	11/12/02	SW846 8270C
Phenanthrene	< 0.016	0.016	0.051	ug/L	11/12/02	SW846 8270C
Pyrene	< 0.017	0.017	0.054	ug/L	11/12/02	SW846 8270C

- Analytical Report -

Project Name : WPSC CAMP MARINA  
Project Number : 1313  
Field ID : MW-708  
Lab Sample Number : 828291-005  
WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH  
Report Date : 11/21/02  
Collection Date : 11/7/02  
Matrix Type : WATER

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Iron - Dissolved	< 61	61	190		ug/L		11/20/02	SW846 6010B	SW846 6010B	dlb
Cyanide, amenable	< 0.0027	0.0027	0.0086		mg/L		11/18/02	SM 4500-CN-	SM 4500-CN-	*NL
Cyanide, total	0.0060	0.0027	0.0086		mg/L	Q	11/18/02	EPA 335.4	EPA 335.4	*NL
Cyanide, weak and dissociable	< 0.0027	0.0027	0.0086		mg/L		11/18/02	SM4500-CN-I	SM4500-CN-I	*NL
Nitrogen, NO3 + NO2	0.13	0.075	0.24		mg/L	Q	11/13/02	EPA 353.2	EPA 353.2	*NL
Sulfate	66	1.1	3.5		mg/L		11/14/02	EPA 300.0	EPA 300.0	JI

Organic Results

BTEX - WATER

Prep Method: SW846 5030B

Prep Date: 11/12/02

Analyst: JJB

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Dibromofluoromethane	77				%Recov		11/12/02	SW846 8260B
Toluene-d8	85				%Recov		11/12/02	SW846 8260B
4-Bromofluorobenzene	74				%Recov		11/12/02	SW846 8260B
Benzene	< 0.25	0.25	0.80		ug/L		11/12/02	SW846 8260B
Ethylbenzene	< 0.53	0.53	1.7		ug/L		11/12/02	SW846 8260B
Toluene	< 0.84	0.84	2.7		ug/L		11/12/02	SW846 8260B
Xylenes, -m, -p	< 1.1	1.1	3.5		ug/L		11/12/02	SW846 8260B
Xylene, -o	< 0.73	0.73	2.3		ug/L		11/12/02	SW846 8260B

Organic Results

METHANE

Prep Method: SW846 M8015B

Prep Date: 11/20/02

Analyst: ses

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Methane	< 10			10	ug/l		11/20/02	SW846 M8015B

Organic Results

PAH/PNA - SEMIVOLATILES

Prep Method: SW846 3510

Prep Date: 11/12/02

Analyst: RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
2-Fluorobiphenyl	72				%Recov		11/12/02	SW846 8270C
Nitrobenzene-d5	76				%Recov		11/12/02	SW846 8270C
Terphenyl-d14	82				%Recov		11/12/02	SW846 8270C
Acenaphthene	< 0.018	0.018	0.057		ug/L		11/12/02	SW846 8270C
Acenaphthylene	< 0.019	0.019	0.061		ug/L		11/12/02	SW846 8270C

**- Analytical Report -**

Project Name : WPSC CAMP MARINA

Project Number : 1313

Field ID : MW-708

Lab Sample Number : 828291-005

WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH

Report Date : 11/21/02

Collection Date : 11/7/02

Matrix Type : WATER

Anthracene	< 0.020	0.020	0.064	ug/L	11/12/02	SW846 8270C
Benzo(a)anthracene	< 0.012	0.012	0.038	ug/L	11/12/02	SW846 8270C
Benzo(a)pyrene	< 0.014	0.014	0.045	ug/L	11/12/02	SW846 8270C
Benzo(b)fluoranthene	< 0.013	0.013	0.041	ug/L	11/12/02	SW846 8270C
Benzo(g,h,i)perylene	< 0.016	0.016	0.051	ug/L	11/12/02	SW846 8270C
Benzo(k)fluoranthene	< 0.019	0.019	0.061	ug/L	11/12/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 0.021	0.021	0.067	ug/L	11/12/02	SW846 8270C
Chrysene	< 0.014	0.014	0.045	ug/L	11/12/02	SW846 8270C
Dibenzo(a,h)anthracene	< 0.016	0.016	0.051	ug/L	11/12/02	SW846 8270C
Fluoranthene	< 0.013	0.013	0.041	ug/L	11/12/02	SW846 8270C
Fluorene	< 0.017	0.017	0.054	ug/L	11/12/02	SW846 8270C
2-Methylnaphthalene	< 0.017	0.017	0.054	ug/L	11/12/02	SW846 8270C
1-Methylnaphthalene	< 0.017	0.017	0.054	ug/L	11/12/02	SW846 8270C
Naphthalene	< 0.024	0.024	0.076	ug/L	11/12/02	SW846 8270C
Phenanthrene	< 0.016	0.016	0.051	ug/L	11/12/02	SW846 8270C
Pyrene	< 0.017	0.017	0.054	ug/L	11/12/02	SW846 8270C

- Analytical Report -

Project Name : WPSC CAMP MARINA  
Project Number : 1313  
Field ID : MW-709  
Lab Sample Number : 828291-006  
WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH  
Report Date : 11/21/02  
Collection Date : 11/7/02  
Matrix Type : WATER

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Cyanide, amenable	0.038	0.0027	0.0086		mg/L		11/18/02	SM 4500-CN-	SM 4500-CN-	*NL
Cyanide, total	0.16	0.0027	0.0086		mg/L		11/18/02	EPA 335.4	EPA 335.4	*NL
Cyanide, weak and dissociable	0.0070	0.0027	0.0086		mg/L	Q	11/18/02	SM4500-CN-I	SM4500-CN-I	*NL

Organic Results

BTEX - WATER

Prep Method: SW846 5030B

Prep Date: 11/12/02

Analyst: JJB

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Dibromofluoromethane	76				%Recov		11/12/02	SW846 8260B
Toluene-d8	86				%Recov		11/12/02	SW846 8260B
4-Bromofluorobenzene	75				%Recov		11/12/02	SW846 8260B
Benzene	< 0.25	0.25	0.80		ug/L		11/12/02	SW846 8260B
Ethylbenzene	< 0.53	0.53	1.7		ug/L		11/12/02	SW846 8260B
Toluene	< 0.84	0.84	2.7		ug/L		11/12/02	SW846 8260B
Xylenes, -m, -p	< 1.1	1.1	3.5		ug/L		11/12/02	SW846 8260B
Xylene, -o	< 0.73	0.73	2.3		ug/L		11/12/02	SW846 8260B

Organic Results

PAH/PNA - SEMIVOLATILES

Prep Method: SW846 3510

Prep Date: 11/12/02

Analyst: RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
2-Fluorobiphenyl	72				%Recov		11/12/02	SW846 8270C
Nitrobenzene-d5	76				%Recov		11/12/02	SW846 8270C
Terphenyl-d14	79				%Recov		11/12/02	SW846 8270C
Acenaphthene	< 0.018	0.018	0.057		ug/L		11/12/02	SW846 8270C
Acenaphthylene	< 0.019	0.019	0.061		ug/L		11/12/02	SW846 8270C
Anthracene	< 0.020	0.020	0.064		ug/L		11/12/02	SW846 8270C
Benzo(a)anthracene	< 0.012	0.012	0.038		ug/L		11/12/02	SW846 8270C
Benzo(a)pyrene	< 0.014	0.014	0.045		ug/L		11/12/02	SW846 8270C
Benzo(b)fluoranthene	< 0.013	0.013	0.041		ug/L		11/12/02	SW846 8270C
Benzo(g,h,i)perylene	< 0.016	0.016	0.051		ug/L		11/12/02	SW846 8270C
Benzo(k)fluoranthene	< 0.019	0.019	0.061		ug/L		11/12/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 0.021	0.021	0.067		ug/L		11/12/02	SW846 8270C
Chrysene	< 0.014	0.014	0.045		ug/L		11/12/02	SW846 8270C
Dibenzo(a,h)anthracene	< 0.016	0.016	0.051		ug/L		11/12/02	SW846 8270C
Fluoranthene	< 0.013	0.013	0.041		ug/L		11/12/02	SW846 8270C

- Analytical Report -

Project Name : WPSC CAMP MARINA

Project Number : 1313

Field ID : MW-709

Lab Sample Number : 828291-006

WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH

Report Date : 11/21/02

Collection Date : 11/7/02

Matrix Type : WATER

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Fluorene	< 0.017	0.017	0.054	ug/L	11/12/02	SW846 8270C
2-Methylnaphthalene	< 0.017	0.017	0.054	ug/L	11/12/02	SW846 8270C
1-Methylnaphthalene	< 0.017	0.017	0.054	ug/L	11/12/02	SW846 8270C
Naphthalene	< 0.024	0.024	0.076	ug/L	11/12/02	SW846 8270C
Phenanthrene	< 0.016	0.016	0.051	ug/L	11/12/02	SW846 8270C
Pyrene	< 0.017	0.017	0.054	ug/L	11/12/02	SW846 8270C

**- Analytical Report -**

Project Name : WPSC CAMP MARINA  
 Project Number : 1313  
 Field ID : BW-6  
 Lab Sample Number : 828291-007  
 WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH  
 Report Date : 11/21/02  
 Collection Date : 11/7/02  
 Matrix Type : WATER

**Inorganic Results**

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Iron - Dissolved	< 61	61	190		ug/L		11/20/02	SW846 6010B	SW846 6010B	dib
Nitrogen, NO3 + NO2	0.13	0.075	0.24		mg/L	Q	11/13/02	EPA 353.2	EPA 353.2	*NL
Sulfate	35	1.1	3.5		mg/L		11/14/02	EPA 300.0	EPA 300.0	Ji

**Organic Results**

**METHANE**

Prep Method: SW846 M8015B      Prep Date: 11/20/02      Analyst: ses

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Methane	< 10			10	ug/l		11/20/02	SW846 M8015B

- Analytical Report -

Project Name : WPSC CAMP MARINA  
Project Number : 1313  
Field ID : QA/QC-1  
Lab Sample Number : 828291-008  
WI DNR LAB ID : 405132750  
Client : NATURAL RESOURCE TECH  
Report Date : 11/21/02  
Collection Date : 11/7/02  
Matrix Type : WATER

Inorganic Results

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Iron - Dissolved	< 61	61	190		ug/L		11/20/02	SW846 6010B	SW846 6010B	dlb
Cyanide, amenable	0.0040	0.0027	0.0086		mg/L	Q	11/18/02	SM 4500-CN-	SM 4500-CN-	*NL
Cyanide, total	0.0040	0.0027	0.0086		mg/L	Q	11/18/02	EPA 335.4	EPA 335.4	*NL
Cyanide, weak and dissociable	< 0.0027	0.0027	0.0086		mg/L		11/18/02	SM4500-CN-I	SM4500-CN-I	*NL
Nitrogen, NO3 + NO2	0.18	0.075	0.24		mg/L	Q	11/13/02	EPA 353.2	EPA 353.2	*NL
Sulfate	67	1.1	3.5		mg/L		11/14/02	EPA 300.0	EPA 300.0	JJ

Organic Results

BTEX - WATER

Prep Method: SW846 5030B Prep Date: 11/12/02 Analyst: HW

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Dibromofluoromethane	130				%Recov		11/13/02	SW846 8260B
Toluene-d8	127				%Recov		11/13/02	SW846 8260B
4-Bromofluorobenzene	102				%Recov		11/13/02	SW846 8260B
Benzene	< 0.25	0.25	0.80		ug/L		11/13/02	SW846 8260B
Ethylbenzene	< 0.53	0.53	1.7		ug/L		11/13/02	SW846 8260B
Toluene	< 0.84	0.84	2.7		ug/L		11/13/02	SW846 8260B
Xylenes, -m, -p	< 1.1	1.1	3.5		ug/L		11/13/02	SW846 8260B
Xylene, -o	< 0.73	0.73	2.3		ug/L		11/13/02	SW846 8260B

Organic Results

METHANE

Prep Method: SW846 M8015B Prep Date: 11/20/02 Analyst: ses

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Methane	< 10			10	ug/l		11/20/02	SW846 M8015B

Organic Results

PAH/PNA - SEMIVOLATILES

Prep Method: SW846 3510 Prep Date: 11/12/02 Analyst: RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
2-Fluorobiphenyl	72				%Recov		11/12/02	SW846 8270C
Nitrobenzene-d5	75				%Recov		11/12/02	SW846 8270C
Terphenyl-d14	78				%Recov		11/12/02	SW846 8270C
Acenaphthene	< 0.018	0.018	0.057		ug/L		11/12/02	SW846 8270C
Acenaphthylene	< 0.019	0.019	0.061		ug/L		11/12/02	SW846 8270C



**- Analytical Report -**

Project Name : WPSC CAMP MARINA  
Project Number : 1313  
Field ID : QA/QC-1  
Lab Sample Number : 828291-008  
WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH  
Report Date : 11/21/02  
Collection Date : 11/7/02  
Matrix Type : WATER

Anthracene	< 0.020	0.020	0.064	ug/L	11/12/02	SW846 8270C
Benzo(a)anthracene	< 0.012	0.012	0.038	ug/L	11/12/02	SW846 8270C
Benzo(a)pyrene	< 0.014	0.014	0.045	ug/L	11/12/02	SW846 8270C
Benzo(b)fluoranthene	< 0.013	0.013	0.041	ug/L	11/12/02	SW846 8270C
Benzo(g,h,i)perylene	< 0.016	0.016	0.051	ug/L	11/12/02	SW846 8270C
Benzo(k)fluoranthene	< 0.019	0.019	0.061	ug/L	11/12/02	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 0.021	0.021	0.067	ug/L	11/12/02	SW846 8270C
Chrysene	< 0.014	0.014	0.045	ug/L	11/12/02	SW846 8270C
Dibenzo(a,h)anthracene	< 0.016	0.016	0.051	ug/L	11/12/02	SW846 8270C
Fluoranthene	< 0.013	0.013	0.041	ug/L	11/12/02	SW846 8270C
Fluorene	< 0.017	0.017	0.054	ug/L	11/12/02	SW846 8270C
2-Methylnaphthalene	< 0.017	0.017	0.054	ug/L	11/12/02	SW846 8270C
1-Methylnaphthalene	< 0.017	0.017	0.054	ug/L	11/12/02	SW846 8270C
Naphthalene	< 0.024	0.024	0.076	ug/L	11/12/02	SW846 8270C
Phenanthrene	< 0.016	0.016	0.051	ug/L	11/12/02	SW846 8270C
Pyrene	< 0.017	0.017	0.054	ug/L	11/12/02	SW846 8270C

- Analytical Report -

Project Name : WPSC CAMP MARINA  
 Project Number : 1313  
 Field ID : TRIP  
 Lab Sample Number : 828291-009  
 WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH  
 Report Date : 11/21/02  
 Collection Date : 11/7/02  
 Matrix Type : WATER

Organic Results

BTEX - WATER

Prep Method: SW846 5030B

Prep Date: 11/12/02

Analyst: HW

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Toluene-d8	126				%Recov		11/13/02	SW846 8260B
Dibromofluoromethane	125				%Recov		11/13/02	SW846 8260B
4-Bromofluorobenzene	101				%Recov		11/13/02	SW846 8260B
Benzene	< 0.25	0.25	0.80		ug/L		11/13/02	SW846 8260B
Ethylbenzene	< 0.53	0.53	1.7		ug/L		11/13/02	SW846 8260B
Toluene	1.1	0.84	2.7		ug/L	Q	11/13/02	SW846 8260B
Xylenes, -m, -p	< 1.1	1.1	3.5		ug/L		11/13/02	SW846 8260B
Xylene, -o	< 0.73	0.73	2.3		ug/L		11/13/02	SW846 8260B



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### Analytical Report Number: 833341

Client : NATURAL RESOURCE TECH

Project Name : CAMP MARINA

Project Number : 1313

Lab Sample Number	Field ID	Matrix	Collection Date
833341-001	MW-705	WATER	04/15/03
833341-002	PZ-701R	WATER	04/15/03
833341-003	MW-708	WATER	04/15/03
833341-004	PZ-702	WATER	04/15/03
833341-005	MW-709	WATER	04/15/03
833341-006	PZ-703	WATER	04/15/03
833341-007	QA/QC 1	WATER	04/15/03
833341-008	TRIP BLANK	WATER	04/15/03

The "Q" flag is present when a parameter has been detected below the LOQ. This indicates the results are qualified due to the uncertainty of the parameter concentration between the LOD and the LOQ.

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample comments. Release of this final report is authorized by Laboratory management, as is verified by the following signature. Reported results shall not be reproduced, except in full, without the written approval of the lab. The sample results relate only to the analytes of interest tested.

  
Approval Signature

5/7/03  
Date

Company: N  
 Branch or Location: Pewaukee WI  
 Project Contact: Chris Robb  
 Telephone: 262-522-1216  
 Project Number: 1313  
 Project Name: Camp Marina  
 Project Location: SHEBOYGAN WI  
 Sampled By (Print): SARAH CONSWINDT



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Mail Report To: CHRIS Robb  
 Company: Natural Resource Technology  
 Address: 23713 W. Paul ROAD  
 Pewaukee WI 53072  
 Invoice To: CHRIS Robb  
 Company: Natural Resource Tech  
 Address: 23713 W Paul RD  
 Pewaukee WI 53072  
 P.O. No.:  
 Quote No.:

### CHAIN OF CUSTODY

NR720 Confirmation Analysis Required?  
 (En Chem will confirm unless otherwise instructed.)

Field ID	Sample Description	Collection		Field Screen	Matrix	Filt'd Y/N	Preserv*	Analysis Requested	SHADED AREA FOR LABORATORY USE ONLY			
		Date	Time						Good Cond.	Total Bottles	Comments	Laboratory Number
001	MW-705	4/15/03		NA	GW	YES	B.G. A	BTEX 8260 PAH CYANIDES (total, Amenable & Dissociable) METHOD 335.4			7-40mlB, 1-250mlE, 1-1L Amber A	
002	PZ-701 R											
003	MW-708											
004	PZ-702											
005	MW-709											
006	PZ-703											
007	QA/QC 1											
008	*H <sub>2</sub> O Trip Blank										1-40mlB	
											* Added to COC by Lab 4-16-03 Kra	

\*Preservation Code  
 A=None B=HCL C=H2SO4  
 D=HN03 E=EnCore F=Methanol\*\*  
 G=NaOH O=Other (Indicate)

\*\*If not using En Chem's methanol, indicate volume of methanol added and mark the appropriate samples.

Relinquished By: Sarah Conswindt	Date/Time: 4/16/03	Received By: [Signature]	En Chem Project No. 833341
Relinquished By: [Signature]	Date/Time: 4/16/03	Received By: Hoque 4-16-03 1330	Sample Receipt Temp. (Must be rec'd at 4°C)
Relinquished By: Hoque	Date/Time: 4-16-03 1630	Received By (En Chem): [Signature]	R&B

**Analytical Report Number: 833341**

Client : NATURAL RESOURCE TECH  
 Project Name : CAMP MARINA  
 Project Number : 1313  
 Field ID : MW-705

Matrix Type : WATER  
 Collection Date : 04/15/03  
 Report Date : 05/07/03  
 Lab Sample Number : 833341-001

**INORGANICS**

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Cyanide, Amenable - Dissolved	0.10	0.0015	0.0048		mg/L		05/01/03	EPA 335.1	EPA 335.4	DAW
Cyanide, Total - Dissolved	0.10	0.0015	0.0048		mg/L		04/24/03	EPA 335.4	EPA 335.4	daw
Cyanide, Weak & Dissociable - D	0.0064	0.0019	0.0061		mg/L		04/23/03	SM4500-CN	SM4500-CN	DAW

**BTEX**

Prep Method: SW846 5030B

Prep Date: 04/18/03

Analyst: JSF

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	< 0.41	0.41	1.3		ug/L		04/18/03	SW846 8260B
Ethylbenzene	< 0.54	0.54	1.7		ug/L		04/18/03	SW846 8260B
Toluene	< 0.67	0.67	2.1		ug/L		04/18/03	SW846 8260B
Xylene, o	< 0.83	0.83	2.6		ug/L		04/18/03	SW846 8260B
Xylenes, m + p	< 1.8	1.8	5.7		ug/L		04/18/03	SW846 8260B
4-Bromofluorobenzene	94				%Recov		04/18/03	SW846 8260B
Toluene-d8	108				%Recov		04/18/03	SW846 8260B
Dibromofluoromethane	105				%Recov		04/18/03	SW846 8260B

**PAH/ PNA**

Prep Method: SW846 3510

Prep Date: 04/18/03

Analyst: RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
1-Methylnaphthalene	< 0.018	0.018	0.057		ug/L		04/18/03	SW846 8270C
2-Methylnaphthalene	0.031	0.017	0.054		ug/L	Q	04/18/03	SW846 8270C
Acenaphthene	< 0.018	0.018	0.057		ug/L		04/18/03	SW846 8270C
Acenaphthylene	< 0.019	0.019	0.061		ug/L		04/18/03	SW846 8270C
Anthracene	< 0.020	0.020	0.064		ug/L		04/18/03	SW846 8270C
Benzo(a)anthracene	< 0.012	0.012	0.038		ug/L		04/18/03	SW846 8270C
Benzo(a)pyrene	< 0.014	0.014	0.045		ug/L		04/18/03	SW846 8270C
Benzo(b)fluoranthene	< 0.013	0.013	0.041		ug/L		04/18/03	SW846 8270C
Benzo(ghi)perylene	< 0.016	0.016	0.051		ug/L		04/18/03	SW846 8270C
Benzo(k)fluoranthene	< 0.019	0.019	0.061		ug/L		04/18/03	SW846 8270C
Chrysene	< 0.014	0.014	0.045		ug/L		04/18/03	SW846 8270C
Dibenzo(a,h)anthracene	< 0.016	0.016	0.051		ug/L		04/18/03	SW846 8270C
Fluoranthene	< 0.013	0.013	0.041		ug/L		04/18/03	SW846 8270C
Fluorene	< 0.017	0.017	0.054		ug/L		04/18/03	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 0.021	0.021	0.067		ug/L		04/18/03	SW846 8270C
Naphthalene	0.10	0.024	0.076		ug/L		04/18/03	SW846 8270C
Phenanthrene	< 0.016	0.016	0.051		ug/L		04/18/03	SW846 8270C
Pyrene	< 0.017	0.017	0.054		ug/L		04/18/03	SW846 8270C
Nitrobenzene-d5	59				%Recov		04/18/03	SW846 8270C
2-Fluorobiphenyl	83				%Recov		04/18/03	SW846 8270C
Terphenyl-d14	83				%Recov		04/18/03	SW846 8270C

**Analytical Report Number: 833341**

Client : NATURAL RESOURCE TECH  
Project Name : CAMP MARINA  
Project Number : 1313  
Field ID : PZ-701R

Matrix Type : WATER  
Collection Date : 04/15/03  
Report Date : 05/07/03  
Lab Sample Number : 833341-002

**INORGANICS**

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Cyanide, Amenable - Dissolved	0.47	0.0015	0.0048		mg/L		05/01/03	EPA 335.1	EPA 335.4	DAW
Cyanide, Total - Dissolved	0.47	0.0015	0.0048		mg/L		04/24/03	EPA 335.4	EPA 335.4	daw
Cyanide, Weak & Dissociable - D	0.028	0.0019	0.0061		mg/L		04/23/03	SM4500-CN	SM4500-CN	DAW

**BTEX**

Prep Method: SW846 5030B      Prep Date: 04/18/03      Analyst: JSF

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	< 0.41	0.41	1.3		ug/L		04/18/03	SW846 8260B
Ethylbenzene	< 0.54	0.54	1.7		ug/L		04/18/03	SW846 8260B
Toluene	< 0.67	0.67	2.1		ug/L		04/18/03	SW846 8260B
Xylene, o	< 0.83	0.83	2.6		ug/L		04/18/03	SW846 8260B
Xylenes, m + p	< 1.8	1.8	5.7		ug/L		04/18/03	SW846 8260B
4-Bromofluorobenzene	94				%Recov		04/18/03	SW846 8260B
Toluene-d8	105				%Recov		04/18/03	SW846 8260B
Dibromofluoromethane	110				%Recov		04/18/03	SW846 8260B

**PAH/ PNA**

Prep Method: SW846 3510      Prep Date: 04/18/03      Analyst: RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
1-Methylnaphthalene	0.045	0.018	0.057		ug/L	Q	04/22/03	SW846 8270C
2-Methylnaphthalene	0.045	0.017	0.054		ug/L	Q	04/22/03	SW846 8270C
Acenaphthene	< 0.018	0.018	0.057		ug/L		04/22/03	SW846 8270C
Acenaphthylene	< 0.019	0.019	0.061		ug/L		04/22/03	SW846 8270C
Anthracene	0.023	0.020	0.064		ug/L	Q	04/22/03	SW846 8270C
Benzo(a)anthracene	0.019	0.012	0.038		ug/L	Q	04/22/03	SW846 8270C
Benzo(a)pyrene	0.017	0.014	0.045		ug/L	Q	04/22/03	SW846 8270C
Benzo(b)fluoranthene	0.017	0.013	0.041		ug/L	Q	04/22/03	SW846 8270C
Benzo(ghi)perylene	0.017	0.016	0.051		ug/L	Q	04/22/03	SW846 8270C
Benzo(k)fluoranthene	< 0.019	0.019	0.061		ug/L		04/22/03	SW846 8270C
Chrysene	0.015	0.014	0.045		ug/L	Q	04/22/03	SW846 8270C
Dibenzo(a,h)anthracene	< 0.016	0.016	0.051		ug/L		04/22/03	SW846 8270C
Fluoranthene	0.029	0.013	0.041		ug/L	Q	04/22/03	SW846 8270C
Fluorene	< 0.017	0.017	0.054		ug/L		04/22/03	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 0.021	0.021	0.067		ug/L		04/22/03	SW846 8270C
Naphthalene	0.067	0.024	0.076		ug/L	Q	04/22/03	SW846 8270C
Phenanthrene	0.032	0.016	0.051		ug/L	Q	04/22/03	SW846 8270C
Pyrene	0.034	0.017	0.054		ug/L	Q	04/22/03	SW846 8270C
Nitrobenzene-d5	65				%Recov		04/22/03	SW846 8270C
2-Fluorobiphenyl	68				%Recov		04/22/03	SW846 8270C
Terphenyl-d14	98				%Recov		04/22/03	SW846 8270C

**Analytical Report Number: 833341**

Client : NATURAL RESOURCE TECH  
Project Name : CAMP MARINA  
Project Number : 1313  
Field ID : MW-708

Matrix Type : WATER  
Collection Date : 04/15/03  
Report Date : 05/07/03  
Lab Sample Number : 833341-003

**INORGANICS**

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Cyanide, Amenable - Dissolved	< 0.0015	0.0015	0.0048		mg/L		04/24/03	EPA 335.4	EPA 335.4	daw
Cyanide, Total - Dissolved	< 0.0015	0.0015	0.0048		mg/L		04/24/03	EPA 335.4	EPA 335.4	daw
Cyanide, Weak & Dissociable - D	0.0022	0.0019	0.0061		mg/L	Q	04/23/03	SM4500-CN	SM4500-CN	DAW

**BTEX**

Prep Method: SW846 5030B      Prep Date: 04/18/03      Analyst: JSF

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	< 0.41	0.41	1.3		ug/L		04/18/03	SW846 8260B
Ethylbenzene	< 0.54	0.54	1.7		ug/L		04/18/03	SW846 8260B
Toluene	< 0.67	0.67	2.1		ug/L		04/18/03	SW846 8260B
Xylene, o	< 0.83	0.83	2.6		ug/L		04/18/03	SW846 8260B
Xylenes, m + p	< 1.8	1.8	5.7		ug/L		04/18/03	SW846 8260B
4-Bromofluorobenzene	95				%Recov		04/18/03	SW846 8260B
Toluene-d8	105				%Recov		04/18/03	SW846 8260B
Dibromofluoromethane	102				%Recov		04/18/03	SW846 8260B

**PAH/ PNA**

Prep Method: SW846 3510      Prep Date: 04/18/03      Analyst: RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
1-Methylnaphthalene	0.019	0.018	0.057		ug/L	Q	04/22/03	SW846 8270C
2-Methylnaphthalene	0.026	0.017	0.054		ug/L	Q	04/22/03	SW846 8270C
Acenaphthene	< 0.018	0.018	0.057		ug/L		04/22/03	SW846 8270C
Acenaphthylene	< 0.019	0.019	0.061		ug/L		04/22/03	SW846 8270C
Anthracene	< 0.020	0.020	0.064		ug/L		04/22/03	SW846 8270C
Benzo(a)anthracene	< 0.012	0.012	0.038		ug/L		04/22/03	SW846 8270C
Benzo(a)pyrene	< 0.014	0.014	0.045		ug/L		04/22/03	SW846 8270C
Benzo(b)fluoranthene	< 0.013	0.013	0.041		ug/L		04/22/03	SW846 8270C
Benzo(ghi)perylene	< 0.016	0.016	0.051		ug/L		04/22/03	SW846 8270C
Benzo(k)fluoranthene	< 0.019	0.019	0.061		ug/L		04/22/03	SW846 8270C
Chrysene	< 0.014	0.014	0.045		ug/L		04/22/03	SW846 8270C
Dibenzo(a,h)anthracene	< 0.016	0.016	0.051		ug/L		04/22/03	SW846 8270C
Fluoranthene	< 0.013	0.013	0.041		ug/L		04/22/03	SW846 8270C
Fluorene	< 0.017	0.017	0.054		ug/L		04/22/03	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 0.021	0.021	0.067		ug/L		04/22/03	SW846 8270C
Naphthalene	0.088	0.024	0.076		ug/L		04/22/03	SW846 8270C
Phenanthrene	< 0.016	0.016	0.051		ug/L		04/22/03	SW846 8270C
Pyrene	< 0.017	0.017	0.054		ug/L		04/22/03	SW846 8270C
Nitrobenzene-d5	91				%Recov		04/22/03	SW846 8270C
2-Fluorobiphenyl	75				%Recov		04/22/03	SW846 8270C
Terphenyl-d14	90				%Recov		04/22/03	SW846 8270C

**Analytical Report Number: 833341**

Client : NATURAL RESOURCE TECH  
Project Name : CAMP MARINA  
Project Number : 1313  
Field ID : PZ-702

Matrix Type : WATER  
Collection Date : 04/15/03  
Report Date : 05/07/03  
Lab Sample Number : 833341-004

**INORGANICS**

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Cyanide, Amenable - Dissolved	< 0.0015	0.0015	0.0048		mg/L		04/24/03	EPA 335.4	EPA 335.4	daw
Cyanide, Total - Dissolved	< 0.0015	0.0015	0.0048		mg/L		04/24/03	EPA 335.4	EPA 335.4	daw
Cyanide, Weak & Dissociable - D	< 0.0019	0.0019	0.0061		mg/L		04/23/03	SM4500-CN	SM4500-CN	DAW

**BTEX**

Prep Method: SW846 5030B      Prep Date: 04/18/03      Analyst: JSF

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	< 0.41	0.41	1.3		ug/L		04/18/03	SW846 8260B
Ethylbenzene	< 0.54	0.54	1.7		ug/L		04/18/03	SW846 8260B
Toluene	< 0.67	0.67	2.1		ug/L		04/18/03	SW846 8260B
Xylene, o	< 0.83	0.83	2.6		ug/L		04/18/03	SW846 8260B
Xylenes, m + p	< 1.8	1.8	5.7		ug/L		04/18/03	SW846 8260B
4-Bromofluorobenzene	89				%Recov		04/18/03	SW846 8260B
Toluene-d8	106				%Recov		04/18/03	SW846 8260B
Dibromofluoromethane	106				%Recov		04/18/03	SW846 8260B

**PAH/ PNA**

Prep Method: SW846 3510      Prep Date: 04/18/03      Analyst: RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
1-Methylnaphthalene	0.054	0.018	0.057		ug/L	Q	04/22/03	SW846 8270C
2-Methylnaphthalene	0.045	0.017	0.054		ug/L	Q	04/22/03	SW846 8270C
Acenaphthene	< 0.018	0.018	0.057		ug/L		04/22/03	SW846 8270C
Acenaphthylene	< 0.019	0.019	0.061		ug/L		04/22/03	SW846 8270C
Anthracene	< 0.020	0.020	0.064		ug/L		04/22/03	SW846 8270C
Benzo(a)anthracene	0.013	0.012	0.038		ug/L	Q	04/22/03	SW846 8270C
Benzo(a)pyrene	< 0.014	0.014	0.045		ug/L		04/22/03	SW846 8270C
Benzo(b)fluoranthene	< 0.013	0.013	0.041		ug/L		04/22/03	SW846 8270C
Benzo(ghi)perylene	< 0.016	0.016	0.051		ug/L		04/22/03	SW846 8270C
Benzo(k)fluoranthene	< 0.019	0.019	0.061		ug/L		04/22/03	SW846 8270C
Chrysene	< 0.014	0.014	0.045		ug/L		04/22/03	SW846 8270C
Dibenzo(a,h)anthracene	< 0.016	0.016	0.051		ug/L		04/22/03	SW846 8270C
Fluoranthene	0.013	0.013	0.041		ug/L		04/22/03	SW846 8270C
Fluorene	0.017	0.017	0.054		ug/L		04/22/03	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 0.021	0.021	0.067		ug/L		04/22/03	SW846 8270C
Naphthalene	0.12	0.024	0.076		ug/L		04/22/03	SW846 8270C
Phenanthrene	0.042	0.016	0.051		ug/L	Q	04/22/03	SW846 8270C
Pyrene	0.018	0.017	0.054		ug/L	Q	04/22/03	SW846 8270C
Nitrobenzene-d5	88				%Recov		04/22/03	SW846 8270C
2-Fluorobiphenyl	91				%Recov		04/22/03	SW846 8270C
Terphenyl-d14	98				%Recov		04/22/03	SW846 8270C



**Analytical Report Number: 833341**

Client : NATURAL RESOURCE TECH  
Project Name : CAMP MARINA  
Project Number : 1313  
Field ID : MW-709

Matrix Type : WATER  
Collection Date : 04/15/03  
Report Date : 05/07/03  
Lab Sample Number : 833341-005

**INORGANICS**

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Cyanide, Amenable - Dissolved	0.28	0.0015	0.0048		mg/L		05/01/03	EPA 335.1	EPA 335.4	DAW
Cyanide, Total - Dissolved	0.28	0.0015	0.0048		mg/L		04/24/03	EPA 335.4	EPA 335.4	daw
Cyanide, Weak & Dissociable - D	0.010	0.0019	0.0061		mg/L		04/23/03	SM4500-CN	SM4500-CN	DAW

**BTEX**

Prep Method: SW846 5030B      Prep Date: 04/18/03      Analyst: JSF

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	< 0.41	0.41	1.3		ug/L		04/18/03	SW846 8260B
Ethylbenzene	< 0.54	0.54	1.7		ug/L		04/18/03	SW846 8260B
Toluene	< 0.67	0.67	2.1		ug/L		04/18/03	SW846 8260B
Xylene, o	< 0.83	0.83	2.6		ug/L		04/18/03	SW846 8260B
Xylenes, m + p	< 1.8	1.8	5.7		ug/L		04/18/03	SW846 8260B
4-Bromofluorobenzene	94				%Recov		04/18/03	SW846 8260B
Toluene-d8	107				%Recov		04/18/03	SW846 8260B
Dibromofluoromethane	108				%Recov		04/18/03	SW846 8260B

**PAH/ PNA**

Prep Method: SW846 3510      Prep Date: 04/17/03      Analyst: RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
1-Methylnaphthalene	0.020	0.018	0.057		ug/L	Q	04/18/03	SW846 8270C
2-Methylnaphthalene	0.034	0.017	0.054		ug/L	Q	04/18/03	SW846 8270C
Acenaphthene	< 0.018	0.018	0.057		ug/L		04/18/03	SW846 8270C
Acenaphthylene	< 0.019	0.019	0.061		ug/L		04/18/03	SW846 8270C
Anthracene	< 0.020	0.020	0.064		ug/L		04/18/03	SW846 8270C
Benzo(a)anthracene	< 0.012	0.012	0.038		ug/L		04/18/03	SW846 8270C
Benzo(a)pyrene	< 0.014	0.014	0.045		ug/L		04/18/03	SW846 8270C
Benzo(b)fluoranthene	< 0.013	0.013	0.041		ug/L		04/18/03	SW846 8270C
Benzo(ghi)perylene	< 0.016	0.016	0.051		ug/L		04/18/03	SW846 8270C
Benzo(k)fluoranthene	< 0.019	0.019	0.061		ug/L		04/18/03	SW846 8270C
Chrysene	< 0.014	0.014	0.045		ug/L		04/18/03	SW846 8270C
Dibenzo(a,h)anthracene	< 0.016	0.016	0.051		ug/L		04/18/03	SW846 8270C
Fluoranthene	< 0.013	0.013	0.041		ug/L		04/18/03	SW846 8270C
Fluorene	< 0.017	0.017	0.054		ug/L		04/18/03	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 0.021	0.021	0.067		ug/L		04/18/03	SW846 8270C
Naphthalene	0.12	0.024	0.076		ug/L		04/18/03	SW846 8270C
Phenanthrene	< 0.016	0.016	0.051		ug/L		04/18/03	SW846 8270C
Pyrene	< 0.017	0.017	0.054		ug/L		04/18/03	SW846 8270C
Nitrobenzene-d5	63				%Recov		04/18/03	SW846 8270C
2-Fluorobiphenyl	88				%Recov		04/18/03	SW846 8270C
Terphenyl-d14	92				%Recov		04/18/03	SW846 8270C

**Analytical Report Number: 833341**

Client : NATURAL RESOURCE TECH  
Project Name : CAMP MARINA  
Project Number : 1313  
Field ID : PZ-703

Matrix Type : WATER  
Collection Date : 04/15/03  
Report Date : 05/07/03  
Lab Sample Number : 833341-006

**INORGANICS**

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Cyanide, Amenable - Dissolved	0.0025	0.0015	0.0048		mg/L	Q	05/01/03	EPA 335.1	EPA 335.4	DAW
Cyanide, Total - Dissolved	0.0025	0.0015	0.0048		mg/L	Q	04/24/03	EPA 335.4	EPA 335.4	daw
Cyanide, Weak & Dissociable - D <	0.0019	0.0019	0.0061		mg/L		04/23/03	SM4500-CN	SM4500-CN	DAW

**BTEX**

Prep Method: SW846 5030B      Prep Date: 04/18/03      Analyst: JSF

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	880	2.0	6.4		ug/L		04/18/03	SW846 8260B
Ethylbenzene	260	2.7	8.6		ug/L		04/18/03	SW846 8260B
Toluene	22	3.4	11		ug/L		04/18/03	SW846 8260B
Xylene, o	81	4.2	13		ug/L		04/18/03	SW846 8260B
Xylenes, m + p	65	9.0	29		ug/L		04/18/03	SW846 8260B
4-Bromofluorobenzene	97				%Recov		04/18/03	SW846 8260B
Toluene-d8	106				%Recov		04/18/03	SW846 8260B
Dibromofluoromethane	106				%Recov		04/18/03	SW846 8260B

**PAH/ PNA**

Prep Method: SW846 3510      Prep Date: 04/17/03      Analyst: RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
1-Methylnaphthalene	< 1.4	1.4	4.5		ug/L		04/21/03	SW846 8270C
2-Methylnaphthalene	< 1.4	1.4	4.5		ug/L		04/21/03	SW846 8270C
Acenaphthene	< 1.4	1.4	4.5		ug/L		04/21/03	SW846 8270C
Acenaphthylene	< 1.5	1.5	4.8		ug/L		04/21/03	SW846 8270C
Anthracene	< 1.6	1.6	5.1		ug/L		04/21/03	SW846 8270C
Benzo(a)anthracene	< 0.96	0.96	3.1		ug/L		04/21/03	SW846 8270C
Benzo(a)pyrene	< 1.1	1.1	3.5		ug/L		04/21/03	SW846 8270C
Benzo(b)fluoranthene	< 1.0	1.0	3.2		ug/L		04/21/03	SW846 8270C
Benzo(ghi)perylene	< 1.3	1.3	4.1		ug/L		04/21/03	SW846 8270C
Benzo(k)fluoranthene	< 1.5	1.5	4.8		ug/L		04/21/03	SW846 8270C
Chrysene	< 1.1	1.1	3.5		ug/L		04/21/03	SW846 8270C
Dibenzo(a,h)anthracene	< 1.3	1.3	4.1		ug/L		04/21/03	SW846 8270C
Fluoranthene	< 1.0	1.0	3.2		ug/L		04/21/03	SW846 8270C
Fluorene	< 1.4	1.4	4.5		ug/L		04/21/03	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 1.7	1.7	5.4		ug/L		04/21/03	SW846 8270C
Naphthalene	30	1.9	6.1		ug/L		04/21/03	SW846 8270C
Phenanthrene	1.4	1.3	4.1		ug/L	Q	04/21/03	SW846 8270C
Pyrene	< 1.4	1.4	4.5		ug/L		04/21/03	SW846 8270C
Nitrobenzene-d5	< NA				%Recov	D	04/21/03	SW846 8270C
2-Fluorobiphenyl	< NA				%Recov	D	04/21/03	SW846 8270C
Terphenyl-d14	< NA				%Recov	D	04/21/03	SW846 8270C

**Analytical Report Number: 833341**

Client : NATURAL RESOURCE TECH  
 Project Name : CAMP MARINA  
 Project Number : 1313  
 Field ID : QA/QC 1

Matrix Type : WATER  
 Collection Date : 04/15/03  
 Report Date : 05/07/03  
 Lab Sample Number : 833341-007

**INORGANICS**

Test	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Prep Method	Analysis Method	Analyst
Cyanide, Amenable - Dissolved	< 0.0015	0.0015	0.0048		mg/L		04/24/03	EPA 335.4	EPA 335.4	daw
Cyanide, Total - Dissolved	< 0.0015	0.0015	0.0048		mg/L		04/24/03	EPA 335.4	EPA 335.4	daw
Cyanide, Weak & Dissociable - D	< 0.0095	0.0095	0.030		mg/L	C	04/23/03	SM4500-CN	SM4500-CN	DAW

**BTEX**

Prep Method: SW846 5030B      Prep Date: 04/18/03      Analyst: JJB

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	< 0.41	0.41	1.3		ug/L		04/18/03	SW846 8260B
Ethylbenzene	< 0.54	0.54	1.7		ug/L		04/18/03	SW846 8260B
Toluene	< 0.67	0.67	2.1		ug/L		04/18/03	SW846 8260B
Xylene, o	< 0.83	0.83	2.6		ug/L		04/18/03	SW846 8260B
Xylenes, m + p	< 1.8	1.8	5.7		ug/L		04/18/03	SW846 8260B
4-Bromofluorobenzene	89				%Recov		04/18/03	SW846 8260B
Toluene-d8	96				%Recov		04/18/03	SW846 8260B
Dibromofluoromethane	92				%Recov		04/18/03	SW846 8260B

**PAH/ PNA**

Prep Method: SW846 3510      Prep Date: 04/18/03      Analyst: RJN

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
1-Methylnaphthalene	0.042	0.018	0.057		ug/L	Q	04/22/03	SW846 8270C
2-Methylnaphthalene	0.072	0.017	0.054		ug/L		04/22/03	SW846 8270C
Acenaphthene	< 0.018	0.018	0.057		ug/L		04/22/03	SW846 8270C
Acenaphthylene	< 0.019	0.019	0.061		ug/L		04/22/03	SW846 8270C
Anthracene	< 0.020	0.020	0.064		ug/L		04/22/03	SW846 8270C
Benzo(a)anthracene	0.012	0.012	0.038		ug/L	Q	04/22/03	SW846 8270C
Benzo(a)pyrene	< 0.014	0.014	0.045		ug/L		04/22/03	SW846 8270C
Benzo(b)fluoranthene	< 0.013	0.013	0.041		ug/L		04/22/03	SW846 8270C
Benzo(ghi)perylene	< 0.016	0.016	0.051		ug/L		04/22/03	SW846 8270C
Benzo(k)fluoranthene	< 0.019	0.019	0.061		ug/L		04/22/03	SW846 8270C
Chrysene	< 0.014	0.014	0.045		ug/L		04/22/03	SW846 8270C
Dibenzo(a,h)anthracene	< 0.016	0.016	0.051		ug/L		04/22/03	SW846 8270C
Fluoranthene	< 0.013	0.013	0.041		ug/L		04/22/03	SW846 8270C
Fluorene	< 0.017	0.017	0.054		ug/L		04/22/03	SW846 8270C
Indeno(1,2,3-cd)pyrene	< 0.021	0.021	0.067		ug/L		04/22/03	SW846 8270C
Naphthalene	0.20	0.024	0.076		ug/L		04/22/03	SW846 8270C
Phenanthrene	0.026	0.016	0.051		ug/L	Q	04/22/03	SW846 8270C
Pyrene	< 0.017	0.017	0.054		ug/L		04/22/03	SW846 8270C
Nitrobenzene-d5	109				%Recov		04/22/03	SW846 8270C
2-Fluorobiphenyl	88				%Recov		04/22/03	SW846 8270C
Terphenyl-d14	94				%Recov		04/22/03	SW846 8270C

**Analytical Report Number: 833341**

Client : NATURAL RESOURCE TECH  
 Project Name : CAMP MARINA  
 Project Number : 1313  
 Field ID : TRIP BLANK

Matrix Type : WATER  
 Collection Date : 04/15/03  
 Report Date : 05/07/03  
 Lab Sample Number : 833341-008

**BTEX**

Prep Method: SW846 5030B

Prep Date: 04/18/03

Analyst: JJB

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Benzene	< 0.41	0.41	1.3		ug/L		04/18/03	SW846 8260B
Ethylbenzene	< 0.54	0.54	1.7		ug/L		04/18/03	SW846 8260B
Toluene	0.98	0.67	2.1		ug/L	Q	04/18/03	SW846 8260B
Xylene, o	< 0.83	0.83	2.6		ug/L		04/18/03	SW846 8260B
Xylenes, m + p	< 1.8	1.8	5.7		ug/L		04/18/03	SW846 8260B
4-Bromofluorobenzene	92				%Recov		04/18/03	SW846 8260B
Toluene-d8	102				%Recov		04/18/03	SW846 8260B
Dibromofluoromethane	94				%Recov		04/18/03	SW846 8260B

# En Chem, Inc. Cooler Receipt Log

Batch No. 833341

Project Name or ID Camp Marina

No. of Coolers: 1 Temps: 20F

A. Receipt Phase: Date cooler was opened: 4-16-03 By: CX

- 1: Were samples received on ice? (Must be ≤ 6 C).....  YES  NO<sup>2</sup>
- 2: Was there a Temperature Blank?..... YES  NO
- 3: Were custody seals present and intact? (Record on COC)..... YES  NO
- 4: Are COC documents present?.....  YES  NO<sup>2</sup>
- 5: Does this Project require quick turn around analysis?..... YES  NO
- 6: Is there any sub-work?..... YES  NO
- 7: Are there any short hold time tests?.....  YES  NO KP 4-16-03
- 8: Are any samples nearing expiration of hold-time? (Within 2 days)..... YES<sup>1</sup>  NO Contacted by/Who \_\_\_\_\_
- 9: Do any samples need to be Filtered or Preserved in the lab?..... YES<sup>1</sup>  NO Contacted by/Who \_\_\_\_\_

B. Check-in Phase: Date samples were Checked-in: 4-16-03 By: CX

- 1: Were all sample containers listed on the COC received and intact?.....  YES  NO<sup>2</sup>  NA
- 2: Sign the COC as received by En Chem. Completed.....  YES  NO
- 3: Do sample labels match the COC? .....  YES  NO<sup>2</sup>
- 4: Completed pH check on preserved samples. ....  YES  NO  NA  
*(This statement does not apply to water: VOC, O&G, TOC, DRO, Total Rec. Phenolics)*
- 5: Do samples have correct chemical preservation?.....  YES  NO<sup>2</sup>  NA  
*(This statement does not apply to water: VOC, O&G, TOC, DRO, Total Rec. Phenolics)*
- 6: Are dissolved parameters field filtered?.....  YES  NO<sup>2</sup>  NA
- 7: Are sample volumes adequate for tests requested? .....  YES  NO<sup>2</sup>
- 8: Are VOC samples free of bubbles >6mm .....  YES  NO<sup>2</sup>  NA
- 9: Enter samples into logbook. Completed.....  YES  NO
- 10: Place laboratory sample number on all containers and COC. Completed.....  YES  NO
- 11: Complete Laboratory Tracking Sheet (LTS). Completed..... YES  NO  NA
- 12: Start Nonconformance form. .... YES  NO  NA
- 13: Initiate Subcontracting procedure. Completed..... YES  NO  NA
- 14: Check laboratory sample number on all containers and COC. .... KP  YES  NO  NA

**Short Hold-time tests:**

48 Hours or less Coliform (6 hrs) Hexavalent Chromium (24 Hrs) BOD Nitrite or Nitrate Low Level Mercury Ortho Phosphorus Turbidity Surfactants Sulfite En Core Preservation Color	7 days Flashpoint TSS Total Solids TDS Sulfide Free Liquids Total Volatile Solids Aqueous Extractable Organics- ALL Unpreserved VOC's Ash	Footnotes 1 Notify proper lab group immediately. 2 Complete nonconformance memo.
--	---	--

Rev. 4/11/03, Attachment to 1-REC-5.  
Subject to QA Audit.

Reviewed by/date SBG/22/03

En Chem Inc.

Analysis Summary by Laboratory

1241 Bellevue Street  
Green Bay, WI 54302  
920-469-2436  
800-7-ENCHEM  
Fax: 920-469-8827

Test Group Name	833341-001	833341-002	833341-003	833341-004	833341-005	833341-006	833341-007	833341-008
BTEX	G	G	G	G	G	G	G	G
CYANIDE, AMENABLE - DISSOLVED	K	K	K	K	K	K	K	K
CYANIDE, TOTAL - DISSOLVED	K	K	K	K	K	K	K	K
CYANIDE, WEAK & DISSOCIABLE -DI	K	K	K	K	K	K	K	K
PAH/ PNA	G	G	G	G	G	G	G	G

WISCONSIN Certification	
G = En Chem Green Bay	405132750
K = En Chem Kimberly	445134030
S = Subcontracted Analysis	



# Green Bay to Kimberly Sample Transfer Record

Client: Natural Resource Tech

QT?  yes  no Due: \_\_\_\_\_

Rec Temp: RST

ANALYSES REQUESTED  
 (VARIABLES (Total Analytes: Dissolvable)  
 (Method 3351-17)

TOTAL # OF BOTTLES SENT

Lab No.	Collection Date	Collection Time	Matrix	ANALYSES REQUESTED										COMMENTS		
833341-001	4/15/03		W	X												1-250ml/6
-002	↓		↓	↓												↓
-003																
-004																
-005																
-006																
-007																

Relinquished By: Ch. Ch Date/Time: 4-16-03  
 Relinquished By: John Heraf Date/Time: 4/17/03

Received By: John Heraf Date/Time: 4/17/03 7:30  
 Received By: John Stevens Date/Time: 4/17/03 8:15

COMMENTS: \_\_\_\_\_

Cooler Custody Seal (If applicable)  
 Intact / Not Intact

Company Name: Natural Resource Technology  
 Branch or Location: Waukegan  
 Project Contact: Sarah Gonswindt  
 Telephone: 847-522-1202  
 Project Number: 1313  
 Project Name: Camp Marina  
 Project State: Wisconsin  
 Sampled By (Print): Sarah Gonswindt, Mike Mason



1241 Bellevue St., Suite 9  
 Green Bay, WI 54302  
 920-469-2436  
 FAX 920-469-8827

525 Science Drive  
 Madison, WI 53711  
 608-232-3300  
 FAX: 608-233-0502

### CHAIN OF CUSTODY

**\*Preservation Codes**  
 A=None B=HCL C=H2SO4 D=HN03 E=EnCore F=Methanol G=NaOH  
 H = Sodium Bisulfate Solution I = Sodium Thiosulfate J = Other  
 FILTERED? (YES/NO)  
 PRESERVATION (CODE)\*

*Method 355.2*  
*Method 355.2*  
**ANALYSES REQUESTED**  
 BTEX (8260)  
 PAHS (8260)  
 CYANIDES (8260)  
 DISSOLVED TOXIC AMMONIA DIS. (8260)  
 DISSOLVED VOA (8260)  
 METHANOL (8260)  
 SULFATE (8260)  
**TOTAL # OF BOTTLES SENT**

Page 1 of 1  
 Rpt Quote # 2002  
 Mail Report To: CAR  
 Company: Natural Resource Tech  
 Address: 23713 W Paul Rd  
Waukegan, WI 53072  
 Invoice To: CAR (Carrie Robb)  
 Company: Natural Resource Tech  
 Address: 23713 W Paul Rd  
Waukegan, WI 53072  
 Mail Invoice To: CAR

Data Package Options - (please circle if requested)  
 Sample Results Only (no QC)  
 EPA Level II (Subject to Surcharge)  
 EPA Level III (Subject to Surcharge)  
 EPA Level IV (Subject to Surcharge)

**Regulatory Program**  
 UST  
 RCRA  
 SDWA  
 NPDES  
 CERCLA

**Matrix Codes**  
 W=Water  
 S=Soil  
 A=Air  
 C=Charcoal  
 B=Biota  
 Sl=Sludge

LABORATORY ID (Lab Use Only)	FIELD ID	COLLECTION		MATRIX	ANALYSES REQUESTED												CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)
		DATE	TIME		BTEX (8260)	PAHS (8260)	CYANIDES (8260)	DISSOLVED TOXIC AMMONIA DIS. (8260)	DISSOLVED VOA (8260)	METHANOL (8260)	SULFATE (8260)	TOTAL # OF BOTTLES SENT						
001	PZ-701	11/7/02	1200	W	X	X	X	X	X	X	X	X	X	X	11			
002	PZ-702		1815		X	X	X	X	X	X	X	X	X	X	11			
003	PZ-703		1230		X	X	X	X	X	X	X	X	X	X	11			
004	MW-705		1310		X	X	X								8			
005	MW-708		1240		X	X	X	X	X	X	X	X	X	X	11			
006	MW-709		1240		X	X	X	NON	NON	NON	NON	NON	NON	NON	8			
007	BW-6		1220					X	X	X	X	X	X	X	9			
008	QA/QC-1			V	X	X	X	X	X	X	X	X	X	X	11			
009	TRUP				X										1			

Rush Turnaround Time Requested (TAT) - Prelim (Rush TAT subject to approval/surcharge)  
 Date Needed: \_\_\_\_\_  
 Transmit Prelim Rush Results by (circle):  
 Phone \_\_\_\_\_ Fax \_\_\_\_\_ E-Mail \_\_\_\_\_  
 Phone #: \_\_\_\_\_  
 Fax #: \_\_\_\_\_  
 E-Mail Address: \_\_\_\_\_

Samples on HOLD are subject to special pricing and release of liability

Relinquished By: <u>Sarah Gonswindt</u> Date/Time: <u>11/8/02 8:00</u>	Received By: <u>Carrie Robb</u> Date/Time: <u>11-8-02 1:30</u>	EN Chem Project No: _____
Relinquished By: <u>Carrie Robb</u> Date/Time: <u>11/8/02 12:00</u>	Received By: <u>Carrie Robb</u> Date/Time: <u>11/8/02 12:10</u>	Sample Receipt Temp: _____
Relinquished By: <u>Carrie Robb</u> Date/Time: <u>11/8/02 16:00</u>	Received By: <u>Carrie Robb</u> Date/Time: <u>11/8/02 16:00</u>	Sample Receipt Intact/Not Intact: _____
Relinquished By: _____ Date/Time: _____	Received By: _____ Date/Time: _____	Cooler Custody Seal: _____
Relinquished By: _____ Date/Time: _____	Received By: _____ Date/Time: _____	Present / Not Present: _____
Relinquished By: _____ Date/Time: _____	Received By: _____ Date/Time: _____	Intact / Not Intact: _____



(Please Print Legibly)

Company Name: 15.5 Vol. 22111  
 Branch or Location: Green Bay  
 Project Contact: Mike Mason  
 Telephone: 433-1397  
 Project Number: 1313  
 Project Name: Sh. boggy - Camp Marina  
 Project State: Wis.  
 Sampled By (Print): Mike Mason  
 PO #:



1241 Bellevue St., Suite 9  
 Green Bay, WI 54302  
 920-469-2436  
 FAX 920-469-8827

### CHAIN OF CUSTODY

106506

Page 1 of 1

\*Preservation Codes  
 A=None B=HCL C=H2SO4 D=HNO3 E=EnCore F=Methanol G=NaOH  
 H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other  
 FILTERED? (YES/NO)  
 PRESERVATION (CODE)\*

ANALYSES REQUESTED	N	N	N	N	N	N	Y	Y
	B	B	A	A	C	D	Y	Y
BTEX								
Methane								
PAH								
Sulfate								
NO2+NO3 Nitrogen								
Fe. & Mn								
Cyanide (USEPA 335.4)								
TOTAL # OF BOTTLES SENT								

Quote #:  
 Mail Report To: Shirley Schantz  
 Company: WPS  
 Address: P.O. Box 19002  
G.R., 54307-0902  
 Invoice To: Accounts Payable  
 Company: WPS  
 Address: Same  
 Mail Invoice To:

Data Package Options - (please circle if requested)  
 Sample Results Only (no QC)  
 EPA Level II (Subject to Surcharge)  
 EPA Level III (Subject to Surcharge)  
 EPA Level IV (Subject to Surcharge)

Regulatory Program  
 UST  
 RCRA  
 SDWA  
 NPDES  
 CERCLA

Matrix Codes  
 W=Water  
 S=Soil  
 A=Air  
 C=Charcoal  
 B=Biota  
 Sl=Sludge

LABORATORY ID (Lab Use Only)	FIELD ID	COLLECTION		MATRIX	ANALYSES REQUESTED									CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	
		DATE	TIME		BTEX	Methane	PAH	Sulfate	NO2+NO3 Nitrogen	Fe. & Mn	Cyanide (USEPA 335.4)	TOTAL # OF BOTTLES SENT				
001	MW-709R	7/1/03		W											11	4-250ml H2O, 6-40ml H2O
002	MW-705														11	
003	MW-706														11	
004	MW-708														11	
005	PZ-702														11	
006	MW-701R														11	
007	PZ-701														10	-No PAH-Not enough sample.
008	MW-707R														11	
009	PZ-703														11	
010	Field Duplicate														11	
011	Trip Blank														2	2-40ml H2O
	① No Methane on trip blank 7/2/03															

Rush Turnaround Time Requested (TAT) - Prelim  
 (Rush TAT subject to approval/surcharge)  
 Date Needed:  
 Transmit Prelim Rush Results by (circle):  
 Phone Fax E-Mail  
 Phone #:  
 Fax #:  
 E-Mail Address:  
 Samples on HOLD are subject to special pricing and release of liability

Relinquished By: <u>Mike Mason 7/2/03</u>	Date/Time: <u>0810</u>	Received By: <u>L. Wacey</u>	Date/Time: <u>7/2/03 8:10</u>
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:

En Chem Project No: 136174  
 Sample Receipt Temp: 101  
 Sample Receipt pH (We/Metal):  
 Cooler Custody Seal Present / Not Present: Present  
 Intact / Not Intact:



**Corporate Office & Laboratory**  
1241 Bellevue Street, Suite 9 • Green Bay, WI 54302  
920-469-2436 • FAX: 920-469-8827 • 800-7-ENCHEM  
[www.enchem.com](http://www.enchem.com)

## Analytical Report Number: 836177

Client : WISCONSIN PUBLIC SERVICE

Project Name : SHEBOYGAN-CAMP MARINA

Project Number : 1313

Lab Sample Number	Field ID	Matrix	Collection Date
836177-001	MW-709R	WATER	07/01/03
836177-002	MW-705	WATER	07/01/03
836177-003	MW-706	WATER	07/01/03
836177-004	MW-708	WATER	07/01/03
836177-005	PZ-702	WATER	07/01/03
836177-006	MW-701R	WATER	07/01/03
836177-007	PZ-701	WATER	07/01/03
836177-008	MW-707R	WATER	07/01/03
836177-009	PZ-703	WATER	07/01/03
836177-010	FIELD DUPLICATE	WATER	07/01/03
836177-011	TRIP BLANK	WATER	07/01/03

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample comments. Release of this final report is authorized by Laboratory management, as is verified by the following signature. Reported results shall not be reproduced, except in full, without the written approval of the lab. The sample results relate only to the analytes of interest tested.

Approval Signature

7/16/03

Date

Analytical Report Number: 836177

Client : WISCONSIN PUBLIC SERVICE

Matrix Type : WATER

Project Name : SHEBOYGAN-CAMP MARINA

Collection Date : 07/01/03

Project Number : 1313

Report Date : 07/16/03

Field ID : MW-709R

Lab Sample Number : 836177-001

INORGANICS

Test	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Iron - Dissolved	820	18	57		1	ug/L		07/08/03	SW846 6010B	SW846 6010B
Cyanide, Total - Dissolved	0.25	0.0015	0.0048		1	mg/L		07/03/03	EPA 335.4	EPA 335.4
Nitrogen, NO3 + NO2	0.093	0.047	0.15		1	mg/L	Q	07/11/03	EPA 353.2	EPA 353.2
Sulfate	500	2.4	7.6		10	mg/L		07/08/03	EPA 300.0	EPA 300.0

BTEX

Prep Date: 07/03/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Benzene	< 0.30	0.30	0.96		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Ethylbenzene	< 0.60	0.60	1.9		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Toluene	< 0.58	0.58	1.8		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Xylene, o	< 0.64	0.64	2.0		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Xylenes, m + p	< 1.2	1.2	3.8		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
a,a,a-Trifluorotoluene	102				1	%Recov		07/03/03	SW846 5030B	SW846 M8021

METHANE

Prep Date: 07/10/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Methane	< 10			10	1	ug/l		07/09/03	SW846 M8015	SW846 M8015

PAH/ PNA

Prep Date: 07/03/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
1-Methylnaphthalene	0.020	0.018	0.057		1	ug/L	Q	07/04/03	SW846 3510C	8270C-SIM
2-Methylnaphthalene	0.019	0.017	0.054		1	ug/L	Q	07/04/03	SW846 3510C	8270C-SIM
Acenaphthene	< 0.018	0.018	0.057		1	ug/L		07/04/03	SW846 3510C	8270C-SIM
Acenaphthylene	< 0.019	0.019	0.061		1	ug/L		07/04/03	SW846 3510C	8270C-SIM
Anthracene	< 0.020	0.020	0.064		1	ug/L		07/04/03	SW846 3510C	8270C-SIM
Benzo(a)anthracene	< 0.012	0.012	0.038		1	ug/L		07/04/03	SW846 3510C	8270C-SIM
Benzo(a)pyrene	< 0.014	0.014	0.045		1	ug/L		07/04/03	SW846 3510C	8270C-SIM
Benzo(b)fluoranthene	< 0.013	0.013	0.041		1	ug/L		07/04/03	SW846 3510C	8270C-SIM
Benzo(ghi)perylene	< 0.016	0.016	0.051		1	ug/L		07/04/03	SW846 3510C	8270C-SIM
Benzo(k)fluoranthene	< 0.019	0.019	0.061		1	ug/L		07/04/03	SW846 3510C	8270C-SIM
Chrysene	< 0.014	0.014	0.045		1	ug/L		07/04/03	SW846 3510C	8270C-SIM
Dibenzo(a,h)anthracene	< 0.016	0.016	0.051		1	ug/L		07/04/03	SW846 3510C	8270C-SIM
Fluoranthene	< 0.013	0.013	0.041		1	ug/L		07/04/03	SW846 3510C	8270C-SIM
Fluorene	< 0.017	0.017	0.054		1	ug/L		07/04/03	SW846 3510C	8270C-SIM
Indeno(1,2,3-cd)pyrene	< 0.021	0.021	0.067		1	ug/L		07/04/03	SW846 3510C	8270C-SIM
Naphthalene	0.040	0.024	0.076		1	ug/L	Q	07/04/03	SW846 3510C	8270C-SIM
Phenanthrene	< 0.016	0.016	0.051		1	ug/L		07/04/03	SW846 3510C	8270C-SIM
Pyrene	< 0.017	0.017	0.054		1	ug/L		07/04/03	SW846 3510C	8270C-SIM
Nitrobenzene-d5	67				1	%Recov		07/04/03	SW846 3510C	8270C-SIM

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**Analytical Report Number: 836177**

Client : WISCONSIN PUBLIC SERVICE  
Project Name : SHEBOYGAN-CAMP MARINA  
Project Number : 1313  
Field ID : MW-709R

Matrix Type : WATER  
Collection Date : 07/01/03  
Report Date : 07/16/03  
Lab Sample Number : 836177-001

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PAH/ PNA

Prep Date: 07/03/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
2-Fluorobiphenyl	56				1	%Recov		07/04/03	SW846 3510C	8270C-SIM
Terphenyl-d14	85				1	%Recov		07/04/03	SW846 3510C	8270C-SIM

**Analytical Report Number: 836177**

Client : WISCONSIN PUBLIC SERVICE

Matrix Type : WATER

Project Name : SHEBOYGAN-CAMP MARINA

Collection Date : 07/01/03

Project Number : 1313

Report Date : 07/16/03

Field ID : MW-705

Lab Sample Number : 836177-002

**INORGANICS**

Test	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Iron - Dissolved	670	18	57		1	ug/L		07/08/03	SW846 6010B	SW846 6010B
Cyanide, Total - Dissolved	0.14	0.0015	0.0048		1	mg/L		07/03/03	EPA 335.4	EPA 335.4
Nitrogen, NO3 + NO2	< 0.047	0.047	0.15		1	mg/L		07/11/03	EPA 353.2	EPA 353.2
Sulfate	380	2.4	7.6		10	mg/L		07/08/03	EPA 300.0	EPA 300.0

**BTEX**

Prep Date: 07/03/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Benzene	< 0.30	0.30	0.96		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Ethylbenzene	< 0.60	0.60	1.9		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Toluene	< 0.58	0.58	1.8		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Xylene, o	< 0.64	0.64	2.0		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Xylenes, m + p	< 1.2	1.2	3.8		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
a,a,a-Trifluorotoluene	102				1	%Recov		07/03/03	SW846 5030B	SW846 M8021

**METHANE**

Prep Date: 07/10/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Methane	93			10	1	ug/l		07/09/03	SW846 M8015	SW846 M8015

**PAH/ PNA**

Prep Date: 07/07/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
1-Methylnaphthalene	< 0.018	0.018	0.057		1	ug/L	*&	07/07/03	SW846 3510C	8270C-SIM
2-Methylnaphthalene	< 0.017	0.017	0.054		1	ug/L	*	07/07/03	SW846 3510C	8270C-SIM
Acenaphthene	< 0.018	0.018	0.057		1	ug/L	*	07/07/03	SW846 3510C	8270C-SIM
Acenaphthylene	< 0.019	0.019	0.061		1	ug/L	*	07/07/03	SW846 3510C	8270C-SIM
Anthracene	< 0.020	0.020	0.064		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Benzo(a)anthracene	< 0.012	0.012	0.038		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Benzo(a)pyrene	< 0.014	0.014	0.045		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Benzo(b)fluoranthene	< 0.013	0.013	0.041		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Benzo(ghi)perylene	< 0.016	0.016	0.051		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Benzo(k)fluoranthene	< 0.019	0.019	0.061		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Chrysene	< 0.014	0.014	0.045		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Dibenzo(a,h)anthracene	< 0.016	0.016	0.051		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Fluoranthene	0.015	0.013	0.041		1	ug/L	Q	07/07/03	SW846 3510C	8270C-SIM
Fluorene	< 0.017	0.017	0.054		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Indeno(1,2,3-cd)pyrene	< 0.021	0.021	0.067		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Naphthalene	0.029	0.024	0.076		1	ug/L	Q*B	07/07/03	SW846 3510C	8270C-SIM
Phenanthrene	< 0.016	0.016	0.051		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Pyrene	0.018	0.017	0.054		1	ug/L	Q	07/07/03	SW846 3510C	8270C-SIM
Nitrobenzene-d5	78				1	%Recov		07/07/03	SW846 3510C	8270C-SIM

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**Analytical Report Number: 836177**

Client : WISCONSIN PUBLIC SERVICE  
Project Name : SHEBOYGAN-CAMP MARINA  
Project Number : 1313  
Field ID : MW-705

Matrix Type : WATER  
Collection Date : 07/01/03  
Report Date : 07/16/03  
Lab Sample Number : 836177-002

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PAH/ PNA

Prep Date: 07/07/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
2-Fluorobiphenyl	69				1	%Recov		07/07/03	SW846 3510C	8270C-SIM
Terphenyl-d14	79				1	%Recov		07/07/03	SW846 3510C	8270C-SIM

**Analytical Report Number: 836177**

Client : WISCONSIN PUBLIC SERVICE

Matrix Type : WATER

Project Name : SHEBOYGAN-CAMP MARINA

Collection Date : 07/01/03

Project Number : 1313

Report Date : 07/16/03

Field ID : MW-706

Lab Sample Number : 836177-003

**INORGANICS**

Test	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Iron - Dissolved	140	19	61		1	ug/L		07/09/03	SW846 3010A	SW846 6010B
Cyanide, Total - Dissolved	0.099	0.0015	0.0048		1	mg/L		07/03/03	EPA 335.4	EPA 335.4
Nitrogen, NO3 + NO2	0.67	0.047	0.15		1	mg/L		07/11/03	EPA 353.2	EPA 353.2
Sulfate	880	4.8	15		20	mg/L		07/08/03	EPA 300.0	EPA 300.0

**BTEX**

Prep Date: 07/03/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Benzene	6500	12	38		40	ug/l		07/03/03	SW846 5030B	SW846 M8021
Ethylbenzene	360	24	76		40	ug/l		07/03/03	SW846 5030B	SW846 M8021
Toluene	2200	23	74		40	ug/l		07/03/03	SW846 5030B	SW846 M8021
Xylene, o	1200	26	82		40	ug/l		07/03/03	SW846 5030B	SW846 M8021
Xylenes, m + p	670	48	150		40	ug/l		07/03/03	SW846 5030B	SW846 M8021
a,a,a-Trifluorotoluene	99				1	%Recov		07/03/03	SW846 5030B	SW846 M8021

**METHANE**

Prep Date: 07/10/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Methane	25			10	1	ug/l		07/09/03	SW846 M8015	SW846 M8015

**PAH/ PNA**

Prep Date: 07/07/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
1-Methylnaphthalene	510	180	570		10000	ug/L	QD&*	07/08/03	SW846 3510C	8270C-SIM
2-Methylnaphthalene	640	170	540		10000	ug/L	D*	07/08/03	SW846 3510C	8270C-SIM
Acenaphthene	34	1.8	5.7		100	ug/L	*	07/08/03	SW846 3510C	8270C-SIM
Acenaphthylene	370	190	610		10000	ug/L	QD*	07/08/03	SW846 3510C	8270C-SIM
Anthracene	< 200	200	640		10000	ug/L	D	07/08/03	SW846 3510C	8270C-SIM
Benzo(a)anthracene	< 120	120	380		10000	ug/L	D	07/08/03	SW846 3510C	8270C-SIM
Benzo(a)pyrene	< 140	140	450		10000	ug/L	D	07/08/03	SW846 3510C	8270C-SIM
Benzo(b)fluoranthene	29	1.3	4.1		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Benzo(ghi)perylene	21	1.6	5.1		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Benzo(k)fluoranthene	31	1.9	6.1		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Chrysene	< 140	140	450		10000	ug/L	D	07/08/03	SW846 3510C	8270C-SIM
Dibenzo(a,h)anthracene	6.4	1.6	5.1		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Fluoranthene	< 130	130	410		10000	ug/L	D	07/08/03	SW846 3510C	8270C-SIM
Fluorene	< 170	170	540		10000	ug/L	D	07/08/03	SW846 3510C	8270C-SIM
Indeno(1,2,3-cd)pyrene	18	2.1	6.7		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Naphthalene	2200	240	760		10000	ug/L	D*	07/08/03	SW846 3510C	8270C-SIM
Phenanthrene	250	160	510		10000	ug/L	QD	07/08/03	SW846 3510C	8270C-SIM
Pyrene	< 170	170	540		10000	ug/L	D	07/08/03	SW846 3510C	8270C-SIM
Nitrobenzene-d5	< NA				1	%Recov	D	07/08/03	SW846 3510C	8270C-SIM

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**Analytical Report Number: 836177**

Client : WISCONSIN PUBLIC SERVICE  
Project Name : SHEBOYGAN-CAMP MARINA  
Project Number : 1313  
Field ID : MW-706

Matrix Type : WATER  
Collection Date : 07/01/03  
Report Date : 07/16/03  
Lab Sample Number : 836177-003

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PAH/ PNA

Prep Date: 07/07/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
2-Fluorobiphenyl	< NA				1	%Recov	D	07/08/03	SW846 3510C	8270C-SIM
Terphenyl-d14	< NA				1	%Recov	D	07/08/03	SW846 3510C	8270C-SIM



**Analytical Report Number: 836177**

Client : WISCONSIN PUBLIC SERVICE

Matrix Type : WATER

Project Name : SHEBOYGAN-CAMP MARINA

Collection Date : 07/01/03

Project Number : 1313

Report Date : 07/16/03

Field ID : MW-708

Lab Sample Number : 836177-004

**INORGANICS**

Test	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Iron - Dissolved	51	18	57		1	ug/L	Q	07/08/03	SW846 6010B	SW846 6010B
Cyanide, Total - Dissolved	0.0046	0.0015	0.0048		1	mg/L	Q	07/03/03	EPA 335.4	EPA 335.4
Nitrogen, NO3 + NO2	0.14	0.047	0.15		1	mg/L	Q	07/11/03	EPA 353.2	EPA 353.2
Sulfate	70	0.24	0.76		1	mg/L		07/08/03	EPA 300.0	EPA 300.0

**BTEX**

Prep Date: 07/03/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Benzene	< 0.30	0.30	0.96		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Ethylbenzene	< 0.60	0.60	1.9		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Toluene	< 0.58	0.58	1.8		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Xylene, o	< 0.64	0.64	2.0		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Xylenes, m + p	< 1.2	1.2	3.8		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
a,a,a-Trifluorotoluene	102				1	%Recov		07/03/03	SW846 5030B	SW846 M8021

**METHANE**

Prep Date: 07/10/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Methane	< 10			10	1	ug/l		07/09/03	SW846 M8015	SW846 M8015

**PAH/ PNA**

Prep Date: 07/07/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
1-Methylnaphthalene	0.20	0.018	0.057		1	ug/L	&*B	07/07/03	SW846 3510C	8270C-SIM
2-Methylnaphthalene	0.20	0.017	0.054		1	ug/L	*B	07/07/03	SW846 3510C	8270C-SIM
Acenaphthene	0.056	0.018	0.057		1	ug/L	Q*B	07/07/03	SW846 3510C	8270C-SIM
Acenaphthylene	0.032	0.019	0.061		1	ug/L	Q*B	07/07/03	SW846 3510C	8270C-SIM
Anthracene	< 0.020	0.020	0.064		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Benzo(a)anthracene	< 0.012	0.012	0.038		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Benzo(a)pyrene	< 0.014	0.014	0.045		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Benzo(b)fluoranthene	< 0.013	0.013	0.041		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Benzo(ghi)perylene	< 0.016	0.016	0.051		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Benzo(k)fluoranthene	< 0.019	0.019	0.061		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Chrysene	< 0.014	0.014	0.045		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Dibenzo(a,h)anthracene	< 0.016	0.016	0.051		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Fluoranthene	< 0.013	0.013	0.041		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Fluorene	0.020	0.017	0.054		1	ug/L	QB	07/07/03	SW846 3510C	8270C-SIM
Indeno(1,2,3-cd)pyrene	< 0.021	0.021	0.067		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Naphthalene	1.5	0.12	0.38		5	ug/L	D*B	07/08/03	SW846 3510C	8270C-SIM
Phenanthrene	0.024	0.016	0.051		1	ug/L	QB	07/07/03	SW846 3510C	8270C-SIM
Pyrene	< 0.017	0.017	0.054		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Nitrobenzene-d5	73				1	%Recov		07/07/03	SW846 3510C	8270C-SIM

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**Analytical Report Number: 836177**

Client : WISCONSIN PUBLIC SERVICE  
Project Name : SHEBOYGAN-CAMP MARINA  
Project Number : 1313  
Field ID : MW-708

Matrix Type : WATER  
Collection Date : 07/01/03  
Report Date : 07/16/03  
Lab Sample Number : 836177-004

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**PAH/ PNA**

Prep Date: 07/07/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
2-Fluorobiphenyl	64				1	%Recov		07/07/03	SW846 3510C	8270C-SIM
Terphenyl-d14	70				1	%Recov		07/07/03	SW846 3510C	8270C-SIM

Analytical Report Number: 836177

Client : WISCONSIN PUBLIC SERVICE

Matrix Type : WATER

Project Name : SHEBOYGAN-CAMP MARINA

Collection Date : 07/01/03

Project Number : 1313

Report Date : 07/16/03

Field ID : PZ-702

Lab Sample Number : 836177-005

INORGANICS

Test	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Iron - Dissolved	48	18	57		1	ug/L	Q	07/08/03	SW846 6010B	SW846 6010B
Cyanide, Total - Dissolved	< 0.0015	0.0015	0.0048		1	mg/L		07/03/03	EPA 335.4	EPA 335.4
Nitrogen, NO3 + NO2	0.053	0.047	0.15		1	mg/L	Q	07/11/03	EPA 353.2	EPA 353.2
Sulfate	3.6	0.24	0.76		1	mg/L		07/08/03	EPA 300.0	EPA 300.0

BTEX

Prep Date: 07/03/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Benzene	< 0.30	0.30	0.96		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Ethylbenzene	< 0.60	0.60	1.9		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Toluene	< 0.58	0.58	1.8		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Xylene, o	< 0.64	0.64	2.0		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Xylenes, m + p	< 1.2	1.2	3.8		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
a,a,a-Trifluorotoluene	103				1	%Recov		07/03/03	SW846 5030B	SW846 M8021

METHANE

Prep Date: 07/10/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Methane	39			10	1	ug/l		07/09/03	SW846 M8015	SW846 M8015

PAH/ PNA

Prep Date: 07/07/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
1-Methylnaphthalene	0.029	0.018	0.057		1	ug/L	QB&*	07/07/03	SW846 3510C	8270C-SIM
2-Methylnaphthalene	0.022	0.017	0.054		1	ug/L	Q*B	07/07/03	SW846 3510C	8270C-SIM
Acenaphthene	< 0.018	0.018	0.057		1	ug/L	*	07/07/03	SW846 3510C	8270C-SIM
Acenaphthylene	0.037	0.019	0.061		1	ug/L	Q*B	07/07/03	SW846 3510C	8270C-SIM
Anthracene	< 0.020	0.020	0.064		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Benzo(a)anthracene	< 0.012	0.012	0.038		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Benzo(a)pyrene	< 0.014	0.014	0.045		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Benzo(b)fluoranthene	< 0.013	0.013	0.041		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Benzo(ghi)perylene	< 0.016	0.016	0.051		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Benzo(k)fluoranthene	< 0.019	0.019	0.061		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Chrysene	0.014	0.014	0.045		1	ug/L	Q	07/07/03	SW846 3510C	8270C-SIM
Dibenzo(a,h)anthracene	< 0.016	0.016	0.051		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Fluoranthene	0.022	0.013	0.041		1	ug/L	Q	07/07/03	SW846 3510C	8270C-SIM
Fluorene	< 0.017	0.017	0.054		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Indeno(1,2,3-cd)pyrene	< 0.021	0.021	0.067		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Naphthalene	0.045	0.024	0.076		1	ug/L	Q*B	07/07/03	SW846 3510C	8270C-SIM
Phenanthrene	0.058	0.016	0.051		1	ug/L	B	07/07/03	SW846 3510C	8270C-SIM
Pyrene	0.033	0.017	0.054		1	ug/L	Q	07/07/03	SW846 3510C	8270C-SIM
Nitrobenzene-d5	82				1	%Recov		07/07/03	SW846 3510C	8270C-SIM

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**Analytical Report Number: 836177**

Client : WISCONSIN PUBLIC SERVICE  
Project Name : SHEBOYGAN-CAMP MARINA  
Project Number : 1313  
Field ID : PZ-702

Matrix Type : WATER  
Collection Date : 07/01/03  
Report Date : 07/16/03  
Lab Sample Number : 836177-005

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**PAH/ PNA**

Prep Date: 07/07/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
2-Fluorobiphenyl	73				1	%Recov		07/07/03	SW846 3510C	8270C-SIM
Terphenyl-d14	71				1	%Recov		07/07/03	SW846 3510C	8270C-SIM

**Analytical Report Number: 836177**

Client : WISCONSIN PUBLIC SERVICE

Matrix Type : WATER

Project Name : SHEBOYGAN-CAMP MARINA

Collection Date : 07/01/03

Project Number : 1313

Report Date : 07/16/03

Field ID : MW-701R

Lab Sample Number : 836177-006

**INORGANICS**

Test	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Iron - Dissolved	18000	18	57		1	ug/L		07/08/03	SW846 6010B	SW846 6010B
Cyanide, Total - Dissolved	0.13	0.0015	0.0048		1	mg/L		07/03/03	EPA 335.4	EPA 335.4
Nitrogen, NO3 + NO2	< 0.047	0.047	0.15		1	mg/L		07/11/03	EPA 353.2	EPA 353.2
Sulfate	2.3	0.24	0.76		1	mg/L		07/08/03	EPA 300.0	EPA 300.0

**BTEX**

Prep Date: 07/03/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Benzene	3400	6.0	19		20	ug/l		07/03/03	SW846 5030B	SW846 M8021
Ethylbenzene	340	12	38		20	ug/l		07/03/03	SW846 5030B	SW846 M8021
Toluene	21	12	37		20	ug/l	Q	07/03/03	SW846 5030B	SW846 M8021
Xylene, o	150	13	41		20	ug/l		07/03/03	SW846 5030B	SW846 M8021
Xylenes, m + p	110	24	76		20	ug/l		07/03/03	SW846 5030B	SW846 M8021
a,a,a-Trifluorotoluene	98				1	%Recov		07/03/03	SW846 5030B	SW846 M8021

**METHANE**

Prep Date: 07/10/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Methane	11000			1000	100	ug/l		07/09/03	SW846 M8015	SW846 M8015

**PAH/ PNA**

Prep Date: 07/07/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
1-Methylnaphthalene	420	180	580		10000	ug/L	QD&*	07/08/03	SW846 3510C	8270C-SIM
2-Methylnaphthalene	480	170	550		10000	ug/L	QD*	07/08/03	SW846 3510C	8270C-SIM
Acenaphthene	310	180	580		10000	ug/L	QD*	07/08/03	SW846 3510C	8270C-SIM
Acenaphthylene	17	1.9	6.2		100	ug/L	*	07/08/03	SW846 3510C	8270C-SIM
Anthracene	< 200	200	650		10000	ug/L	D	07/08/03	SW846 3510C	8270C-SIM
Benzo(a)anthracene	45	1.2	3.9		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Benzo(a)pyrene	35	1.4	4.5		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Benzo(b)fluoranthene	16	1.3	4.2		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Benzo(ghi)perylene	15	1.6	5.2		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Benzo(k)fluoranthene	19	1.9	6.2		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Chrysene	42	1.4	4.5		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Dibenzo(a,h)anthracene	3.5	1.6	5.2		100	ug/L	Q	07/08/03	SW846 3510C	8270C-SIM
Fluoranthene	< 130	130	420		10000	ug/L	D	07/08/03	SW846 3510C	8270C-SIM
Fluorene	< 170	170	550		10000	ug/L	D	07/08/03	SW846 3510C	8270C-SIM
Indeno(1,2,3-cd)pyrene	10	2.1	6.8		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Naphthalene	2200	240	780		10000	ug/L	D*	07/08/03	SW846 3510C	8270C-SIM
Phenanthrene	260	160	520		10000	ug/L	QD	07/08/03	SW846 3510C	8270C-SIM
Pyrene	< 170	170	550		10000	ug/L	D	07/08/03	SW846 3510C	8270C-SIM
Nitrobenzene-d5	< NA				1	%Recov	D	07/08/03	SW846 3510C	8270C-SIM

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**Analytical Report Number: 836177**

Client : WISCONSIN PUBLIC SERVICE

Matrix Type : WATER

Project Name : SHEBOYGAN-CAMP MARINA

Collection Date : 07/01/03

Project Number : 1313

Report Date : 07/16/03

Field ID : MW-701R

Lab Sample Number : 836177-006

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PAH/ PNA

Prep Date: 07/07/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
2-Fluorobiphenyl	< NA				1	%Recov	D	07/08/03	SW846 3510C	8270C-SIM
Terphenyl-d14	< NA				1	%Recov	D	07/08/03	SW846 3510C	8270C-SIM

**Analytical Report Number: 836177**

Client : WISCONSIN PUBLIC SERVICE  
 Project Name : SHEBOYGAN-CAMP MARINA  
 Project Number : 1313  
 Field ID : PZ-701

Matrix Type : WATER  
 Collection Date : 07/01/03  
 Report Date : 07/16/03  
 Lab Sample Number : 836177-007

**INORGANICS**

Test	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Iron - Dissolved	170	18	57		1	ug/L		07/08/03	SW846 6010B	SW846 6010B
Cyanide, Total - Dissolved	0.34	0.0015	0.0048		1	mg/L		07/03/03	EPA 335.4	EPA 335.4
Nitrogen, NO3 + NO2	0.057	0.047	0.15		1	mg/L	Q	07/11/03	EPA 353.2	EPA 353.2
Sulfate	98	0.48	1.5		2	mg/L		07/08/03	EPA 300.0	EPA 300.0

**BTEX**

Prep Date: 07/03/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Benzene	< 0.30	0.30	0.96		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Ethylbenzene	< 0.60	0.60	1.9		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Toluene	< 0.58	0.58	1.8		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Xylene, o	< 0.64	0.64	2.0		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Xylenes, m + p	< 1.2	1.2	3.8		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
a,a,a-Trifluorotoluene	103				1	%Recov.		07/03/03	SW846 5030B	SW846 M8021

**METHANE**

Prep Date: 07/10/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Methane	490			50	5	ug/l		07/09/03	SW846 M8015	SW846 M8015

**Analytical Report Number: 836177**

Client : WISCONSIN PUBLIC SERVICE

Matrix Type : WATER

Project Name : SHEBOYGAN-CAMP MARINA

Collection Date : 07/01/03

Project Number : 1313

Report Date : 07/16/03

Field ID : MW-707R

Lab Sample Number : 836177-008

**INORGANICS**

Test	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Iron - Dissolved	510	18	57		1	ug/L		07/08/03	SW846 6010B	SW846 6010B
Cyanide, Total - Dissolved	0.26	0.0015	0.0048		1	mg/L		07/03/03	EPA 335.4	EPA 335.4
Nitrogen, NO3 + NO2	0.049	0.047	0.15		1	mg/L	Q	07/11/03	EPA 353.2	EPA 353.2
Sulfate	30	0.24	0.76		1	mg/L		07/08/03	EPA 300.0	EPA 300.0

**BTEX**

Prep Date: 07/03/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Benzene	1300	6.0	19		20	ug/l		07/03/03	SW846 5030B	SW846 M8021
Ethylbenzene	2800	12	38		20	ug/l		07/03/03	SW846 5030B	SW846 M8021
Toluene	73	12	37		20	ug/l		07/03/03	SW846 5030B	SW846 M8021
Xylene, o	710	13	41		20	ug/l		07/03/03	SW846 5030B	SW846 M8021
Xylenes, m + p	240	24	76		20	ug/l		07/03/03	SW846 5030B	SW846 M8021
a,a,a-Trifluorotoluene	101				1	%Recov		07/03/03	SW846 5030B	SW846 M8021

**METHANE**

Prep Date: 07/10/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Methane	5800			500	50	ug/l		07/09/03	SW846 M8015	SW846 M8015

**PAH/ PNA**

Prep Date: 07/07/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
1-Methylnaphthalene	270	180	570		10000	ug/L	QD&*	07/08/03	SW846 3510C	8270C-SIM
2-Methylnaphthalene	18	1.7	5.4		100	ug/L	*	07/08/03	SW846 3510C	8270C-SIM
Acenaphthene	< 180	180	570		10000	ug/L	D*	07/08/03	SW846 3510C	8270C-SIM
Acenaphthylene	6.8	1.9	6.1		100	ug/L	*	07/08/03	SW846 3510C	8270C-SIM
Anthracene	9.0	2.0	6.4		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Benzo(a)anthracene	1.8	1.2	3.8		100	ug/L	Q	07/08/03	SW846 3510C	8270C-SIM
Benzo(a)pyrene	1.5	1.4	4.5		100	ug/L	Q	07/08/03	SW846 3510C	8270C-SIM
Benzo(b)fluoranthene	< 1.3	1.3	4.1		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Benzo(ghi)perylene	< 1.6	1.6	5.1		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Benzo(k)fluoranthene	< 1.9	1.9	6.1		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Chrysene	1.8	1.4	4.5		100	ug/L	Q	07/08/03	SW846 3510C	8270C-SIM
Dibenzo(a,h)anthracene	< 1.6	1.6	5.1		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Fluoranthene	9.6	1.3	4.1		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Fluorene	39	1.7	5.4		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Indeno(1,2,3-cd)pyrene	< 2.1	2.1	6.7		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Naphthalene	1800	240	760		10000	ug/L	D*	07/08/03	SW846 3510C	8270C-SIM
Phenanthrene	< 160	160	510		10000	ug/L	D	07/08/03	SW846 3510C	8270C-SIM
Pyrene	12	1.7	5.4		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Nitrobenzene-d5	< NA				1	%Recov	D	07/08/03	SW846 3510C	8270C-SIM



**Analytical Report Number: 836177**

Client : WISCONSIN PUBLIC SERVICE

Matrix Type : WATER

Project Name : SHEBOYGAN-CAMP MARINA

Collection Date : 07/01/03

Project Number : 1313

Report Date : 07/16/03

Field ID : MW-707R

Lab Sample Number : 836177-008

PAH/ PNA

Prep Date: 07/07/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
2-Fluorobiphenyl	< NA				1	%Recov	D	07/08/03	SW846 3510C	8270C-SIM
Terphenyl-d14	< NA				1	%Recov	D	07/08/03	SW846 3510C	8270C-SIM

**Analytical Report Number: 836177**

Client : WISCONSIN PUBLIC SERVICE

Matrix Type : WATER

Project Name : SHEBOYGAN-CAMP MARINA

Collection Date : 07/01/03

Project Number : 1313

Report Date : 07/16/03

Field ID : PZ-703

Lab Sample Number : 836177-009

**INORGANICS**

Test	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Iron - Dissolved	100	18	57		1	ug/L		07/08/03	SW846 6010B	SW846 6010B
Cyanide, Total - Dissolved	0.0019	0.0015	0.0048		1	mg/L	Q	07/03/03	EPA 335.4	EPA 335.4
Nitrogen, NO3 + NO2	< 0.047	0.047	0.15		1	mg/L		07/11/03	EPA 353.2	EPA 353.2
Sulfate	4.3	0.24	0.76		1	mg/L		07/08/03	EPA 300.0	EPA 300.0

**BTEX**

Prep Date: 07/03/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Benzene	1800	3.0	9.6		10	ug/l		07/03/03	SW846 5030B	SW846 M8021
Ethylbenzene	760	6.0	19		10	ug/l		07/03/03	SW846 5030B	SW846 M8021
Toluene	64	5.8	18		10	ug/l		07/03/03	SW846 5030B	SW846 M8021
Xylene, o	240	6.4	20		10	ug/l		07/03/03	SW846 5030B	SW846 M8021
Xylenes, m + p	210	12	38		10	ug/l		07/03/03	SW846 5030B	SW846 M8021
a,a,a-Trifluorotoluene	98				1	%Recov		07/03/03	SW846 5030B	SW846 M8021

**METHANE**

Prep Date: 07/10/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Methane	230			10	1	ug/l		07/09/03	SW846 M8015	SW846 M8015

**PAH/ PNA**

Prep Date: 07/07/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
1-Methylnaphthalene	7.0	1.8	5.7		100	ug/L	&*	07/08/03	SW846 3510C	8270C-SIM
2-Methylnaphthalene	5.0	1.7	5.4		100	ug/L	Q*	07/08/03	SW846 3510C	8270C-SIM
Acenaphthene	2.8	1.8	5.7		100	ug/L	Q*	07/08/03	SW846 3510C	8270C-SIM
Acenaphthylene	< 1.9	1.9	6.1		100	ug/L	*	07/08/03	SW846 3510C	8270C-SIM
Anthracene	< 2.0	2.0	6.4		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Benzo(a)anthracene	< 1.2	1.2	3.8		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Benzo(a)pyrene	< 1.4	1.4	4.5		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Benzo(b)fluoranthene	< 1.3	1.3	4.1		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Benzo(ghi)perylene	< 1.6	1.6	5.1		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Benzo(k)fluoranthene	< 1.9	1.9	6.1		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Chrysene	< 1.4	1.4	4.5		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Dibenzo(a,h)anthracene	< 1.6	1.6	5.1		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Fluoranthene	< 1.3	1.3	4.1		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Fluorene	< 1.7	1.7	5.4		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Indeno(1,2,3-cd)pyrene	< 2.1	2.1	6.7		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Naphthalene	410	24	76		1000	ug/L	D*	07/08/03	SW846 3510C	8270C-SIM
Phenanthrene	< 1.6	1.6	5.1		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Pyrene	< 1.7	1.7	5.4		100	ug/L		07/08/03	SW846 3510C	8270C-SIM
Nitrobenzene-d5	< NA				1	%Recov	D	07/08/03	SW846 3510C	8270C-SIM

**Analytical Report Number: 836177**

Client : WISCONSIN PUBLIC SERVICE

Matrix Type : WATER

Project Name : SHEBOYGAN-CAMP MARINA

Collection Date : 07/01/03

Project Number : 1313

Report Date : 07/16/03

Field ID : PZ-703

Lab Sample Number : 836177-009

PAH/ PNA

Prep Date: 07/07/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
2-Fluorobiphenyl	< NA				1	%Recov	D	07/08/03	SW846 3510C	8270C-SIM
Terphenyl-d14	< NA				1	%Recov	D	07/08/03	SW846 3510C	8270C-SIM

**Analytical Report Number: 836177**

Client : WISCONSIN PUBLIC SERVICE

Matrix Type : WATER

Project Name : SHEBOYGAN-CAMP MARINA

Collection Date : 07/01/03

Project Number : 1313

Report Date : 07/16/03

Field ID : FIELD DUPLICATE

Lab Sample Number : 836177-010

**INORGANICS**

Test	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Iron - Dissolved	830	18	57		1	ug/L		07/08/03	SW846 6010B	SW846 6010B
Cyanide, Total - Dissolved	0.24	0.0015	0.0048		1	mg/L	N	07/03/03	EPA 335.4	EPA 335.4
Nitrogen, NO3 + NO2	0.13	0.047	0.15		1	mg/L	Q	07/11/03	EPA 353.2	EPA 353.2
Sulfate	510	2.4	7.6		10	mg/L		07/08/03	EPA 300.0	EPA 300.0

**BTEX**

Prep Date: 07/03/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Benzene	< 0.30	0.30	0.96		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Ethylbenzene	< 0.60	0.60	1.9		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Toluene	< 0.58	0.58	1.8		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Xylene, o	< 0.64	0.64	2.0		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Xylenes, m + p	< 1.2	1.2	3.8		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
a, a, a-Trifluorotoluene	102				1	%Recov		07/03/03	SW846 5030B	SW846 M8021

**METHANE**

Prep Date: 07/10/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Methane	17			10	1	ug/l		07/09/03	SW846 M8015	SW846 M8015

**PAH/ PNA**

Prep Date: 07/07/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
1-Methylnaphthalene	0.084	0.018	0.057		1	ug/L	&*B	07/07/03	SW846 3510C	8270C-SIM
2-Methylnaphthalene	0.044	0.017	0.054		1	ug/L	Q*B	07/07/03	SW846 3510C	8270C-SIM
Acenaphthene	0.023	0.018	0.057		1	ug/L	Q*B	07/07/03	SW846 3510C	8270C-SIM
Acenaphthylene	< 0.019	0.019	0.061		1	ug/L	*	07/07/03	SW846 3510C	8270C-SIM
Anthracene	< 0.020	0.020	0.064		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Benzo(a)anthracene	< 0.012	0.012	0.038		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Benzo(a)pyrene	< 0.014	0.014	0.045		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Benzo(b)fluoranthene	< 0.013	0.013	0.041		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Benzo(ghi)perylene	< 0.016	0.016	0.051		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Benzo(k)fluoranthene	< 0.019	0.019	0.061		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Chrysene	< 0.014	0.014	0.045		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Dibenzo(a,h)anthracene	< 0.016	0.016	0.051		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Fluoranthene	< 0.013	0.013	0.041		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Fluorene	< 0.017	0.017	0.054		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Indeno(1,2,3-cd)pyrene	< 0.021	0.021	0.067		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Naphthalene	0.74	0.048	0.15		2	ug/L	D*B	07/08/03	SW846 3510C	8270C-SIM
Phenanthrene	< 0.016	0.016	0.051		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Pyrene	< 0.017	0.017	0.054		1	ug/L		07/07/03	SW846 3510C	8270C-SIM
Nitrobenzene-d5	65				1	%Recov		07/07/03	SW846 3510C	8270C-SIM

**Analytical Report Number: 836177**

Client : WISCONSIN PUBLIC SERVICE  
Project Name : SHEBOYGAN-CAMP MARINA  
Project Number : 1313  
Field ID : FIELD DUPLICATE

Matrix Type : WATER  
Collection Date : 07/01/03  
Report Date : 07/16/03  
Lab Sample Number : 836177-010

**PAH/ PNA**

Prep Date: 07/07/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
2-Fluorobiphenyl	56				1	%Recov		07/07/03	SW846 3510C	8270C-SIM
Terphenyl-d14	77				1	%Recov		07/07/03	SW846 3510C	8270C-SIM

**Analytical Report Number: 836177**

Client : WISCONSIN PUBLIC SERVICE

Matrix Type : WATER

Project Name : SHEBOYGAN-CAMP MARINA

Collection Date : 07/01/03

Project Number : 1313

Report Date : 07/16/03

Field ID : TRIP BLANK

Lab Sample Number : 836177-011

**BTEX**

Prep Date: 07/03/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Benzene	< 0.30	0.30	0.96		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Ethylbenzene	< 0.60	0.60	1.9		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Toluene	< 0.58	0.58	1.8		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Xylene, o	< 0.64	0.64	2.0		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
Xylenes, m + p	< 1.2	1.2	3.8		1	ug/l		07/03/03	SW846 5030B	SW846 M8021
a,a,a-Trifluorotoluene	102				1	%Recov		07/03/03	SW846 5030B	SW846 M8021

Lab Number	TestGroupID	Field ID	Comment
836177-002	PAH+-W	MW-705	B - Naphthalene present in blank at 0.086ug/l.
836177-004	PAH+-W	MW-708	B - Phenanthrene present in blank at 0.018ug/l.
836177-004	PAH+-W	MW-708	
836177-004	PAH+-W	MW-708	B - 1-Methylnaphthalene present in blank at 0.074ug/l.
836177-004	PAH+-W	MW-708	B - 2-Methylnaphthalene present in blank at 0.078ug/l.
836177-004	PAH+-W	MW-708	B - Acenaphthene present in blank at 0.049ug/l.
836177-004	PAH+-W	MW-708	B - Acenaphthylene present in blank at 0.052ug/l.
836177-004	PAH+-W	MW-708	B - Fluorene present in blank at 0.030ug/l.
836177-004	PAH+-W	MW-708	B - Naphthalene present in blank at 0.086ug/l.
836177-005	PAH+-W	PZ-702	B - 2-Methylnaphthalene present in blank at 0.078ug/l.
836177-005	PAH+-W	PZ-702	B - Acenaphthylene present in blank at 0.052ug/l.
836177-005	PAH+-W	PZ-702	B - Naphthalene present in blank at 0.086ug/l.
836177-005	PAH+-W	PZ-702	B - Phenanthrene present in blank at 0.018ug/l.
836177-005	PAH+-W	PZ-702	B - 1-Methylnaphthalene present in blank at 0.074ug/l.
836177-010	PAH+-W	FIELD	B - Naphthalene present in blank at 0.086ug/l.
836177-010	PAH+-W	FIELD	B - 2-Methylnaphthalene present in blank at 0.078ug/l.
836177-010	PAH+-W	FIELD	B - Acenaphthene present in blank at 0.049ug/l.

# Qualifier Codes

Flag	Applies To	Explanation
A	Inorganic	Analyte is detected in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
B	Inorganic	The analyte has been detected between the method detection limit and the reporting limit.
B	Organic	Analyte is present in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
C	All	Elevated detection limit.
D	All	Analyte value from diluted analysis or surrogate result not applicable due to sample dilution.
E	Inorganic	Estimated concentration due to matrix interferences. During the metals analysis using the inductively coupled plasma (ICP), the serial dilution failed to meet the established control limits of 0-10% and the sample concentration is greater than 50 times the IDL (100 times the IDL for analysis done on the ICP-MS). The result was flagged with the E qualifier to indicate that a physical interference was observed.
E	Organic	Analyte concentration exceeds calibration range.
F	Inorganic	Due to potential interferences for this analysis by Inductively Coupled Plasma techniques (SW-846 Method 6010), this analyte has been confirmed by and reported from an alternate method.
F	Organic	Surrogate results outside control criteria.
H	All	Preservation, extraction or analysis performed past holding time.
J	Inorganic	The analyte has been detected between the method detection limit and the reporting limit.
J	Organic	Concentration detected is greater than the method detection limit but less than the reporting limit.
K	Inorganic	Sample received unpreserved. Sample was either preserved at the time of receipt or at the time of sample preparation.
K	Organic	Detection limit may be elevated due to the presence of an unrequested analyte.
L	All	Elevated detection limit due to low sample volume.
N	All	Spiked sample recovery not within control limits.
P	Organic	The relative percent difference between the two columns for detected concentrations was greater than 40%.
Q	All	The analyte has been detected between the limit of detection (LOD) and limit of quantitation (LOQ). The results are qualified due to the uncertainty of analyte concentrations within this range.
S	Organic	The relative percent difference between quantitation and confirmation columns exceeds internal quality control criteria. Because the result is unconfirmed, it has been reported as a non-detect with an elevated detection limit.
U	All	The analyte was not detected at or above the reporting limit.
V	All	Sample received with headspace.
W	All	A second aliquot of sample was analyzed from a container with headspace.
X	All	See Sample Narrative.
&	All	Laboratory Control Spike recovery not within control limits.
*	All	Precision not within control limits.
<	All	The analyte was not detected at or above the reporting limit.
1	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses passed QC based on precision criteria.
2	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses failed QC based on precision criteria.
3	Inorganic	BOD result is estimated due to the BOD blank exceeding the allowable oxygen depletion.
4	Inorganic	BOD duplicate precision not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
5	Inorganic	BOD result is estimated due to insufficient oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
6	Inorganic	BOD laboratory control sample not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
7	Inorganic	BOD result is estimated due to complete oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.



Test Group Name	836177-001	836177-002	836177-003	836177-004	836177-005	836177-006	836177-007	836177-008	836177-009	836177-010	836177-011
BTEX	G	G	G	G	G	G	G	G	G	G	G
CYANIDE, TOTAL - DISSOLVED	K	K	K	K	K	K	K	K	K	K	K
IRON - DISSOLVED	G	G	G	G	G	G	G	G	G	G	G
METHANE	G	G	G	G	G	G	G	G	G	G	G
NITROGEN, NO3 + NO2	K	K	K	K	K	K	K	K	K	K	K
PAH/ PNA	G	G	G	G	G	G		G	G	G	
SULFATE	K	K	K	K	K	K	K	K	K	K	K

Wisconsin Certification	
G = En Chem Green Bay	405132750 / DATCP: 105 000444
K = En Chem Kimberly	445134030
S = Subcontracted Analysis	

# En Chem, Inc. Cooler Receipt Log

Batch No. 836144

Project Name or ID 1313

No. of Coolers: 1 Temps: 105

A. Receipt Phase: Date cooler was opened: 7/2/03 By: J. Mauer

- 1: Were samples received on ice? (Must be ≤ 6 C).....YES<sup>2</sup> NO<sup>2</sup>
- 2: Was there a Temperature Blank?.....YES NO
- 3: Were custody seals present and intact? (Record on COC).....YES NO
- 4: Are COC documents present?.....YES<sup>2</sup> NO<sup>2</sup>
- 5: Does this Project require quick turn around analysis?.....YES NO
- 6: Is there any sub-work?.....YES NO
- 7: Are there any short hold time tests?.....YES NO
- 8: Are any samples nearing expiration of hold-time? (Within 2 days).....YES<sup>1</sup> NO Contacted by/Who \_\_\_\_\_
- 9: Do any samples need to be Filtered or Preserved in the lab?.....YES<sup>1</sup> NO Contacted by/Who \_\_\_\_\_

B. Check-in Phase: Date samples were Checked-in: 7/2/03 By: J. Mauer

- 1: Were all sample containers listed on the COC received and intact?.....YES NO<sup>2</sup> NA
- 2: Sign the COC as received by En Chem. Completed.....YES NO
- 3: Do sample labels match the COC? .....YES NO<sup>2</sup>
- 4: Completed pH check on preserved samples.....YES NO NA  
*(This statement does not apply to water: VOC, O&G, TOC, DRO, Total Rec. Phenolics)*
- 5: Do samples have correct chemical preservation?.....YES NO<sup>2</sup> NA  
*(This statement does not apply to water: VOC, O&G, TOC, DRO, Total Rec. Phenolics)*
- 6: Are dissolved parameters field filtered?.....YES NO<sup>2</sup> NA
- 7: Are sample volumes adequate for tests requested? .....YES<sup>1</sup> NO<sup>2</sup>
- 8: Are VOC samples free of bubbles >6mm .....YES NO<sup>2</sup> NA
- 9: Enter samples into logbook. Completed.....YES NO
- 10: Place laboratory sample number on all containers and COC. Completed.....YES NO
- 11: Complete Laboratory Tracking Sheet (LTS). Completed.....YES NO NA
- 12: Start Nonconformance form. ....YES NO NA
- 13: Initiate Subcontracting procedure. Completed.....YES NO NA
- 14: Check laboratory sample number on all containers and COC. ....GO YES NO NA

**Short Hold-time tests:**

48 Hours or less Coliform (6 hrs) Hexavalent Chromium (24 Hrs) BOD Nitrite or Nitrate Low Level Mercury Ortho Phosphorus Turbidity Surfactants Sulfite En Core Preservation Color	7 days Flashpoint TSS Total Solids TDS Sulfide Free Liquids Total Volatile Solids Aqueous Extractable Organics- ALL Unpreserved VOC's Ash	Footnotes 1 Notify proper lab group immediately. 2 Complete nonconformance memo.
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Rev. 4/11/03, Attachment to 1-REC-5.  
Subject to QA Audit.

Reviewed by/date EB 7/2/03



Corporate Office & Laboratory  
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920-469-2436, 800-7-ENCHEM, Fax: 920-469-8827  
[www.enchem.com](http://www.enchem.com)

**Analytical Report Number: 839355**

Client : WISCONSIN PUBLIC SERVICE

Project Name : SHEBOYGAN-CAMP MARINA

Project Number : 1313

Lab Sample Number	Field ID	Matrix	Collection Date
839355-001	PZ-701	WATER	09/30/03
839355-002	PZ-702	WATER	09/30/03
839355-003	PZ-703	WATER	09/30/03
839355-004	MW-705	WATER	09/30/03
839355-005	MW-708	WATER	09/30/03
839355-006	MW-709R	WATER	09/30/03
839355-007	FIELD BLANK	WATER	09/30/03
839355-008	TRIP BLANK	WATER	09/30/03

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample comments. Release of this final report is authorized by Laboratory management, as is verified by the following signature. Reported results shall not be reproduced, except in full, without the written approval of the lab. The sample results relate only to the analytes of interest tested.

Approval Signature

10/10/03  
Date

Analytical Report Number: 839355

Client : WISCONSIN PUBLIC SERVICE	Matrix Type : WATER
Project Name : SHEBOYGAN-CAMP MARINA	Collection Date : 09/30/03
Project Number : 1313	Report Date : 10/09/03
Field ID : PZ-701	Lab Sample Number : 839355-001

INORGANICS

Test	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Cyanide, Total - Dissolved	0.26	0.0015	0.0050		1	mg/L		10/08/03	EPA 335.4	EPA 335.4

BTEX

Prep Date: 10/02/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Benzene	0.35	0.30	1.0		1	ug/l	Q	10/02/03	SW846 5030B	SW846 M8021
Ethylbenzene	< 0.60	0.60	2.0		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Toluene	< 0.58	0.58	1.9		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Xylene, o	< 0.64	0.64	2.1		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Xylenes, m + p	< 1.2	1.2	4.0		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
a,a,a-Trifluorotoluene	101				1	%Recov		10/02/03	SW846 5030B	SW846 M8021

PAH/ PNA

Prep Date: 10/02/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
1-Methylnaphthalene	0.046	0.018	0.060		1	ug/L	Q	10/03/03	SW846 3510C	8270C-SIM
2-Methylnaphthalene	0.042	0.017	0.057		1	ug/L	Q	10/03/03	SW846 3510C	8270C-SIM
Acenaphthene	0.043	0.018	0.060		1	ug/L	Q	10/03/03	SW846 3510C	8270C-SIM
Acenaphthylene	0.13	0.019	0.063		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Anthracene	0.23	0.020	0.067		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(a)anthracene	0.42	0.012	0.040		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(a)pyrene	0.24	0.014	0.047		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(b)fluoranthene	0.19	0.013	0.043		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(ghi)perylene	0.15	0.016	0.053		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(k)fluoranthene	0.17	0.019	0.063		1	ug/L	*	10/03/03	SW846 3510C	8270C-SIM
Chrysene	0.27	0.014	0.047		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Dibenzo(a,h)anthracene	0.067	0.016	0.053		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Fluoranthene	0.82	0.052	0.17		4	ug/L	D	10/06/03	SW846 3510C	8270C-SIM
Fluorene	0.056	0.017	0.057		1	ug/L	Q	10/03/03	SW846 3510C	8270C-SIM
Indeno(1,2,3-cd)pyrene	0.14	0.021	0.070		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Naphthalene	0.22	0.024	0.080		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Phenanthrene	0.89	0.064	0.21		4	ug/L	D	10/06/03	SW846 3510C	8270C-SIM
Pyrene	0.82	0.068	0.23		4	ug/L	D	10/06/03	SW846 3510C	8270C-SIM
Nitrobenzene-d5	48				1	%Recov		10/03/03	SW846 3510C	8270C-SIM
2-Fluorobiphenyl	42				1	%Recov		10/03/03	SW846 3510C	8270C-SIM
Terphenyl-d14	65				1	%Recov		10/03/03	SW846 3510C	8270C-SIM

Analytical Report Number: 839355

Client : WISCONSIN PUBLIC SERVICE	Matrix Type : WATER
Project Name : SHEBOYGAN-CAMP MARINA	Collection Date : 09/30/03
Project Number : 1313	Report Date : 10/09/03
Field ID : PZ-702	Lab Sample Number : 839355-002

INORGANICS

Test	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Cyanide, Total - Dissolved	0.0033	0.0015	0.0050		1	mg/L	QA	10/08/03	EPA 335.4	EPA 335.4

BTEX

Prep Date: 10/02/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Benzene	< 0.30	0.30	1.0		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Ethylbenzene	< 0.60	0.60	2.0		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Toluene	< 0.58	0.58	1.9		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Xylene, o	< 0.64	0.64	2.1		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Xylenes, m + p	< 1.2	1.2	4.0		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
a,a,a-Trifluorotoluene	103				1	%Recov		10/02/03	SW846 5030B	SW846 M8021

PAH/ PNA

Prep Date: 10/02/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
1-Methylnaphthalene	< 0.018	0.018	0.060		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
2-Methylnaphthalene	< 0.017	0.017	0.057		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Acenaphthene	< 0.018	0.018	0.060		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Acenaphthylene	< 0.019	0.019	0.063		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Anthracene	< 0.020	0.020	0.067		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(a)anthracene	< 0.012	0.012	0.040		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(a)pyrene	< 0.014	0.014	0.047		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(b)fluoranthene	< 0.013	0.013	0.043		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(ghi)perylene	< 0.016	0.016	0.053		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(k)fluoranthene	< 0.019	0.019	0.063		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Chrysene	< 0.014	0.014	0.047		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Dibenzo(a,h)anthracene	< 0.016	0.016	0.053		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Fluoranthene	< 0.013	0.013	0.043		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Fluorene	< 0.017	0.017	0.057		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Indeno(1,2,3-cd)pyrene	< 0.021	0.021	0.070		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Naphthalene	0.049	0.024	0.080		1	ug/L	Q	10/03/03	SW846 3510C	8270C-SIM
Phenanthrene	0.019	0.016	0.053		1	ug/L	Q	10/03/03	SW846 3510C	8270C-SIM
Pyrene	< 0.017	0.017	0.057		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Nitrobenzene-d5	68				1	%Recov		10/03/03	SW846 3510C	8270C-SIM
2-Fluorobiphenyl	70				1	%Recov		10/03/03	SW846 3510C	8270C-SIM
Terphenyl-d14	83				1	%Recov		10/03/03	SW846 3510C	8270C-SIM

Analytical Report Number: 839355

Client : WISCONSIN PUBLIC SERVICE

Matrix Type : WATER

Project Name : SHEBOYGAN-CAMP MARINA

Collection Date : 09/30/03

Project Number : 1313

Report Date : 10/09/03

Field ID : PZ-703

Lab Sample Number : 839355-003

INORGANICS

Test	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Cyanide, Total - Dissolved	0.0039	0.0015	0.0050		1	mg/L	QAN	10/08/03	EPA 335.4	EPA 335.4

BTEX

Prep Date: 10/02/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Benzene	2000	6.0	20		20	ug/l		10/02/03	SW846 5030B	SW846 M8021
Ethylbenzene	910	12	40		20	ug/l		10/02/03	SW846 5030B	SW846 M8021
Toluene	65	12	39		20	ug/l		10/02/03	SW846 5030B	SW846 M8021
Xylene, o	280	13	43		20	ug/l		10/02/03	SW846 5030B	SW846 M8021
Xylenes, m + p	240	24	80		20	ug/l		10/02/03	SW846 5030B	SW846 M8021
a,a,a-Trifluorotoluene	96				1	%Recov		10/02/03	SW846 5030B	SW846 M8021

PAH/ PNA

Prep Date: 10/02/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
1-Methylnaphthalene	8.4	0.36	1.2		20	ug/L		10/03/03	SW846 3510C	8270C-SIM
2-Methylnaphthalene	7.2	0.34	1.1		20	ug/L		10/03/03	SW846 3510C	8270C-SIM
Acenaphthene	3.9	0.36	1.2		20	ug/L		10/03/03	SW846 3510C	8270C-SIM
Acenaphthylene	0.47	0.38	1.3		20	ug/L	Q	10/03/03	SW846 3510C	8270C-SIM
Anthracene	< 0.40	0.40	1.3		20	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(a)anthracene	< 0.24	0.24	0.80		20	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(a)pyrene	< 0.28	0.28	0.93		20	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(b)fluoranthene	< 0.26	0.26	0.87		20	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(ghi)perylene	< 0.32	0.32	1.1		20	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(k)fluoranthene	< 0.38	0.38	1.3		20	ug/L	*	10/03/03	SW846 3510C	8270C-SIM
Chrysene	< 0.28	0.28	0.93		20	ug/L		10/03/03	SW846 3510C	8270C-SIM
Dibenzo(a,h)anthracene	< 0.32	0.32	1.1		20	ug/L		10/03/03	SW846 3510C	8270C-SIM
Fluoranthene	< 0.26	0.26	0.87		20	ug/L		10/03/03	SW846 3510C	8270C-SIM
Fluorene	0.41	0.34	1.1		20	ug/L	Q	10/03/03	SW846 3510C	8270C-SIM
Indeno(1,2,3-cd)pyrene	< 0.42	0.42	1.4		20	ug/L		10/03/03	SW846 3510C	8270C-SIM
Naphthalene	350	48	160		2000	ug/L	D	10/04/03	SW846 3510C	8270C-SIM
Phenanthrene	0.41	0.32	1.1		20	ug/L	Q	10/03/03	SW846 3510C	8270C-SIM
Pyrene	< 0.34	0.34	1.1		20	ug/L		10/03/03	SW846 3510C	8270C-SIM
Nitrobenzene-d5	152				1	%Recov		10/03/03	SW846 3510C	8270C-SIM
2-Fluorobiphenyl	82				1	%Recov		10/03/03	SW846 3510C	8270C-SIM
Terphenyl-d14	58				1	%Recov		10/03/03	SW846 3510C	8270C-SIM

Analytical Report Number: 839355

Client : WISCONSIN PUBLIC SERVICE	Matrix Type : WATER
Project Name : SHEBOYGAN-CAMP MARINA	Collection Date : 09/30/03
Project Number : 1313	Report Date : 10/09/03
Field ID : MW-705	Lab Sample Number : 839355-004

INORGANICS

Test	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Cyanide, Total - Dissolved	0.15	0.0015	0.0050		1	mg/L		10/08/03	EPA 335.4	EPA 335.4

BTEX

Prep Date: 10/02/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Benzene	< 0.30	0.30	1.0		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Ethylbenzene	< 0.60	0.60	2.0		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Toluene	< 0.58	0.58	1.9		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Xylene, o	< 0.64	0.64	2.1		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Xylenes, m + p	< 1.2	1.2	4.0		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
a,a,a-Trifluorotoluene	102				1	%Recov		10/02/03	SW846 5030B	SW846 M8021

PAH/ PNA

Prep Date: 10/02/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
1-Methylnaphthalene	< 0.018	0.018	0.060		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
2-Methylnaphthalene	< 0.017	0.017	0.057		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Acenaphthene	< 0.018	0.018	0.060		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Acenaphthylene	< 0.019	0.019	0.063		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Anthracene	< 0.020	0.020	0.067		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(a)anthracene	0.016	0.012	0.040		1	ug/L	Q	10/03/03	SW846 3510C	8270C-SIM
Benzo(a)pyrene	0.014	0.014	0.047		1	ug/L	Q	10/03/03	SW846 3510C	8270C-SIM
Benzo(b)fluoranthene	< 0.013	0.013	0.043		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(ghi)perylene	< 0.016	0.016	0.053		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(k)fluoranthene	< 0.019	0.019	0.063		1	ug/L	*	10/03/03	SW846 3510C	8270C-SIM
Chrysene	0.014	0.014	0.047		1	ug/L	Q	10/03/03	SW846 3510C	8270C-SIM
Dibenzo(a,h)anthracene	< 0.016	0.016	0.053		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Fluoranthene	0.014	0.013	0.043		1	ug/L	Q	10/03/03	SW846 3510C	8270C-SIM
Fluorene	< 0.017	0.017	0.057		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Indeno(1,2,3-cd)pyrene	< 0.021	0.021	0.070		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Naphthalene	0.059	0.024	0.080		1	ug/L	Q	10/03/03	SW846 3510C	8270C-SIM
Phenanthrene	< 0.016	0.016	0.053		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Pyrene	0.020	0.017	0.057		1	ug/L	Q	10/03/03	SW846 3510C	8270C-SIM
Nitrobenzene-d5	86				1	%Recov		10/03/03	SW846 3510C	8270C-SIM
2-Fluorobiphenyl	84				1	%Recov		10/03/03	SW846 3510C	8270C-SIM
Terphenyl-d14	86				1	%Recov		10/03/03	SW846 3510C	8270C-SIM

## Analytical Report Number: 839355

Client : WISCONSIN PUBLIC SERVICE

Matrix Type : WATER

Project Name : SHEBOYGAN-CAMP MARINA

Collection Date : 09/30/03

Project Number : 1313

Report Date : 10/09/03

Field ID : MW-708

Lab Sample Number : 839355-005

## INORGANICS

Test	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Cyanide, Total - Dissolved	0.0034	0.0015	0.0050		1	mg/L	QA	10/08/03	EPA 335.4	EPA 335.4

## BTEX

Prep Date: 10/02/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Benzene	< 0.30	0.30	1.0		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Ethylbenzene	< 0.60	0.60	2.0		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Toluene	< 0.58	0.58	1.9		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Xylene, o	< 0.64	0.64	2.1		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Xylenes, m + p	< 1.2	1.2	4.0		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
a,a,a-Trifluorotoluene	102				1	%Recov		10/02/03	SW846 5030B	SW846 M8021

## PAH/ PNA

Prep Date: 10/02/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
1-Methylnaphthalene	< 0.018	0.018	0.060		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
2-Methylnaphthalene	< 0.017	0.017	0.057		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Acenaphthene	< 0.018	0.018	0.060		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Acenaphthylene	< 0.019	0.019	0.063		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Anthracene	< 0.020	0.020	0.067		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(a)anthracene	< 0.012	0.012	0.040		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(a)pyrene	< 0.014	0.014	0.047		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(b)fluoranthene	< 0.013	0.013	0.043		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(ghi)perylene	< 0.016	0.016	0.053		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(k)fluoranthene	< 0.019	0.019	0.063		1	ug/L	*	10/03/03	SW846 3510C	8270C-SIM
Chrysene	< 0.014	0.014	0.047		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Dibenzo(a,h)anthracene	< 0.016	0.016	0.053		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Fluoranthene	< 0.013	0.013	0.043		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Fluorene	< 0.017	0.017	0.057		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Indeno(1,2,3-cd)pyrene	< 0.021	0.021	0.070		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Naphthalene	0.23	0.024	0.080		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Phenanthrene	< 0.016	0.016	0.053		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Pyrene	< 0.017	0.017	0.057		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Nitrobenzene-d5	72				1	%Recov		10/03/03	SW846 3510C	8270C-SIM
2-Fluorobiphenyl	71				1	%Recov		10/03/03	SW846 3510C	8270C-SIM
Terphenyl-d14	82				1	%Recov		10/03/03	SW846 3510C	8270C-SIM



Analytical Report Number: 839355

Client : WISCONSIN PUBLIC SERVICE	Matrix Type : WATER
Project Name : SHEBOYGAN-CAMP MARINA	Collection Date : 09/30/03
Project Number : 1313	Report Date : 10/09/03
Field ID : MW-709R	Lab Sample Number : 839355-006

INORGANICS

Test	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Cyanide, Total - Dissolved	0.11	0.0015	0.0050		1	mg/L		10/08/03	EPA 335.4	EPA 335.4

BTEX

Prep Date: 10/02/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Benzene	< 0.30	0.30	1.0		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Ethylbenzene	< 0.60	0.60	2.0		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Toluene	< 0.58	0.58	1.9		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Xylene, o	< 0.64	0.64	2.1		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Xylenes, m + p	< 1.2	1.2	4.0		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
a,a,a-Trifluorotoluene	101				1	%Recov		10/02/03	SW846 5030B	SW846 M8021

PAH/ PNA

Prep Date: 10/02/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
1-Methylnaphthalene	< 0.018	0.018	0.060		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
2-Methylnaphthalene	< 0.017	0.017	0.057		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Acenaphthene	< 0.018	0.018	0.060		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Acenaphthylene	< 0.019	0.019	0.063		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Anthracene	< 0.020	0.020	0.067		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(a)anthracene	< 0.012	0.012	0.040		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(a)pyrene	< 0.014	0.014	0.047		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(b)fluoranthene	< 0.013	0.013	0.043		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(ghi)perylene	< 0.016	0.016	0.053		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(k)fluoranthene	< 0.019	0.019	0.063		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Chrysene	< 0.014	0.014	0.047		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Dibenzo(a,h)anthracene	< 0.016	0.016	0.053		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Fluoranthene	< 0.013	0.013	0.043		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Fluorene	< 0.017	0.017	0.057		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Indeno(1,2,3-cd)pyrene	< 0.021	0.021	0.070		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Naphthalene	< 0.024	0.024	0.080		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Phenanthrene	< 0.016	0.016	0.053		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Pyrene	< 0.017	0.017	0.057		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Nitrobenzene-d5	67				1	%Recov		10/03/03	SW846 3510C	8270C-SIM
2-Fluorobiphenyl	69				1	%Recov		10/03/03	SW846 3510C	8270C-SIM
Terphenyl-d14	91				1	%Recov		10/03/03	SW846 3510C	8270C-SIM

Analytical Report Number: 839355

Client : WISCONSIN PUBLIC SERVICE

Matrix Type : WATER

Project Name : SHEBOYGAN-CAMP MARINA

Collection Date : 09/30/03

Project Number : 1313

Report Date : 10/09/03

Field ID : FIELD BLANK

Lab Sample Number : 839355-007

INORGANICS

Test	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Cyanide, Total	0.12	0.0015	0.0050		1	mg/L		10/08/03	EPA 335.4	EPA 335.4

BTEX

Prep Date: 10/02/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Benzene	< 0.30	0.30	1.0		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Ethylbenzene	< 0.60	0.60	2.0		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Toluene	< 0.58	0.58	1.9		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Xylene, o	< 0.64	0.64	2.1		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Xylenes, m + p	< 1.2	1.2	4.0		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
a,a,a-Trifluorotoluene	101				1	%Recov		10/02/03	SW846 5030B	SW846 M8021

PAH/ PNA

Prep Date: 10/02/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
1-Methylnaphthalene	< 0.018	0.018	0.060		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
2-Methylnaphthalene	< 0.017	0.017	0.057		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Acenaphthene	< 0.018	0.018	0.060		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Acenaphthylene	< 0.019	0.019	0.063		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Anthracene	< 0.020	0.020	0.067		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(a)anthracene	0.065	0.012	0.040		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(a)pyrene	0.059	0.014	0.047		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(b)fluoranthene	0.066	0.013	0.043		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(ghi)perylene	0.098	0.016	0.053		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Benzo(k)fluoranthene	0.056	0.019	0.063		1	ug/L	Q*	10/03/03	SW846 3510C	8270C-SIM
Chrysene	0.057	0.014	0.047		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Dibenzo(a,h)anthracene	0.093	0.016	0.053		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Fluoranthene	< 0.013	0.013	0.043		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Fluorene	< 0.017	0.017	0.057		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Indeno(1,2,3-cd)pyrene	0.094	0.021	0.070		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Naphthalene	0.025	0.024	0.080		1	ug/L	Q	10/03/03	SW846 3510C	8270C-SIM
Phenanthrene	< 0.016	0.016	0.053		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Pyrene	< 0.017	0.017	0.057		1	ug/L		10/03/03	SW846 3510C	8270C-SIM
Nitrobenzene-d5	62				1	%Recov		10/03/03	SW846 3510C	8270C-SIM
2-Fluorobiphenyl	63				1	%Recov		10/03/03	SW846 3510C	8270C-SIM
Terphenyl-d14	92				1	%Recov		10/03/03	SW846 3510C	8270C-SIM

En Chem Inc.

1241 Bellevue Street  
Green Bay, WI 54302  
920-469-2436  
800-7-ENCHEM  
Fax: 920-469-8827

Analytical Report Number: 839355

Client : WISCONSIN PUBLIC SERVICE

Matrix Type : WATER

Project Name : SHEBOYGAN-CAMP MARINA

Collection Date : 09/30/03

Project Number : 1313

Report Date : 10/09/03

Field ID : TRIP BLANK

Lab Sample Number : 839355-008

BTEX

Prep Date: 10/02/03

Analyte	Result	LOD	LOQ	EQL	Dil.	Units	Code	Analysis Date	Prep Method	Analysis Method
Benzene	< 0.30	0.30	1.0		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Ethylbenzene	< 0.60	0.60	2.0		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Toluene	< 0.58	0.58	1.9		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Xylene, o	< 0.64	0.64	2.1		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
Xylenes, m + p	< 1.2	1.2	4.0		1	ug/l		10/02/03	SW846 5030B	SW846 M8021
a,a,a-Trifluorotoluene	101				1	%Recov		10/02/03	SW846 5030B	SW846 M8021

# En Chem Inc.

1241 Bellevue Street  
Green Bay, WI 54302  
920-469-2436  
800-7-ENCHEM  
Fax: 920-469-8827

Lab Number	TestGroupID	Field ID	Comment
839355	W-CN-D	All Samples	A - Analyte is detected in the method blank at a concentration of 0.0043 mg/L for samples 002,003 and 005.

# Qualifier Codes

Flag	Applies To	Explanation
A	Inorganic	Analyte is detected in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
B	Inorganic	The analyte has been detected between the method detection limit and the reporting limit.
B	Organic	Analyte is present in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
C	All	Elevated detection limit.
D	All	Analyte value from diluted analysis or surrogate result not applicable due to sample dilution.
E	Inorganic	Estimated concentration due to matrix interferences. During the metals analysis using the inductively coupled plasma (ICP), the serial dilution failed to meet the established control limits of 0-10% and the sample concentration is greater than 50 times the IDL (100 times the IDL for analysis done on the ICP-MS). The result was flagged with the E qualifier to indicate that a physical interference was observed.
E	Organic	Analyte concentration exceeds calibration range.
F	Inorganic	Due to potential interferences for this analysis by Inductively Coupled Plasma techniques (SW-846 Method 6010), this analyte has been confirmed by and reported from an alternate method.
F	Organic	Surrogate results outside control criteria.
H	All	Preservation, extraction or analysis performed past holding time.
J	Inorganic	The analyte has been detected between the method detection limit and the reporting limit.
J	Organic	Concentration detected is greater than the method detection limit but less than the reporting limit.
K	Inorganic	Sample received unpreserved. Sample was either preserved at the time of receipt or at the time of sample preparation.
K	Organic	Detection limit may be elevated due to the presence of an unrequested analyte.
L	All	Elevated detection limit due to low sample volume.
N	All	Spiked sample recovery not within control limits.
P	Organic	The relative percent difference between the two columns for detected concentrations was greater than 40%.
Q	All	The analyte has been detected between the limit of detection (LOD) and limit of quantitation (LOQ). The results are qualified due to the uncertainty of analyte concentrations within this range.
S	Organic	The relative percent difference between quantitation and confirmation columns exceeds internal quality control criteria. Because the result is unconfirmed, it has been reported as a non-detect with an elevated detection limit.
U	All	The analyte was not detected at or above the reporting limit.
V	All	Sample received with headspace.
W	All	A second aliquot of sample was analyzed from a container with headspace.
X	All	See Sample Narrative.
&	All	Laboratory Control Spike recovery not within control limits.
*	All	Precision not within control limits.
<	All	The analyte was not detected at or above the reporting limit.
1	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses passed QC based on precision criteria.
2	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses failed QC based on precision criteria.
3	Inorganic	BOD result is estimated due to the BOD blank exceeding the allowable oxygen depletion.
4	Inorganic	BOD duplicate precision not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
5	Inorganic	BOD result is estimated due to insufficient oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
6	Inorganic	BOD laboratory control sample not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
7	Inorganic	BOD result is estimated due to complete oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.

Test Group Name	839355-001	839355-002	839355-003	839355-004	839355-005	839355-006	839355-007	839355-008
BTEX	G	G	G	G	G	G	G	G
CYANIDE, TOTAL								K
CYANIDE, TOTAL - DISSOLVED	K	K	K	K	K	K		
PAH/ PNA	G	G	G	G	G	G	G	G

Wisconsin Certification	
G = En Chem Green Bay	405132750 / DATCP: 105 000444
K = En Chem Kimberly	445134030
S = Subcontracted Analysis	

# En Chem, Inc. Cooler Receipt Log

Batch No. 839355

Project Name or ID Shelbygen - Comp. Marking No. of Coolers: 1 Temps: ROF

A. Receipt Phase: Date cooler was opened: 9/30/03 By: CK

- 1: Were samples received on ice? (Must be ≤ 6 C).....YES NO<sup>2</sup>
- 2: Was there a Temperature Blank?.....YES  NO
- 3: Were custody seals present and intact? (Record on COC).....YES  NO
- 4: Are COC documents present?.....YES NO<sup>2</sup>
- 5: Does this Project require quick turn around analysis?.....YES  NO
- 6: Is there any sub-work?.....YES  NO
- 7: Are there any short hold time tests?.....YES NO
- 8: Are any samples nearing expiration of hold-time? (Within 2 days).....YES<sup>1</sup>  NO Contacted by/Who \_\_\_\_\_
- 9: Do any samples need to be Filtered or Preserved in the lab?.....YES<sup>1</sup>  NO Contacted by/Who \_\_\_\_\_

B. Check-in Phase: Date samples were Checked-in: 9/30/03 By: CK

- 1: Were all sample containers listed on the COC received and intact?.....YES NO<sup>2</sup> NA
- 2: Sign the COC as received by En Chem. Completed.....YES NO
- 3: Do sample labels match the COC? .....YES NO<sup>2</sup>
- 4: Completed pH check on preserved samples. ....YES NO NA  
*(This statement does not apply to water: VOC, O&G, TOC, DRO, Total Rec. Phenolics)*
- 5: Do samples have correct chemical preservation?.....YES NO<sup>2</sup> NA  
*(This statement does not apply to water: VOC, O&G, TOC, DRO, Total Rec. Phenolics)*
- 6: Are dissolved parameters field filtered?.....YES NO<sup>2</sup> NA
- 7: Are sample volumes adequate for tests requested? .....YES NO<sup>2</sup>
- 8: Are VOC samples free of bubbles >6mm .....YES NO<sup>2</sup> NA
- 9: Enter samples into logbook. Completed.....YES NO
- 10: Place laboratory sample number on all containers and COC. Completed.....YES NO
- 11: Complete Laboratory Tracking Sheet (LTS). Completed.....YES NO  NA
- 12: Start Nonconformance form. ....YES NO  NA
- 13: Initiate Subcontracting procedure. Completed.....YES NO  NA
- 14: Check laboratory sample number on all containers and COC. .... KB YES NO NA

**Short Hold-time tests:**

48 Hours or less	7 days	Footnotes
Coliform (6 hrs)	Flashpoint	1 Notify proper lab group immediately.
Hexavalent Chromium (24 Hrs)	TSS	2 Complete nonconformance memo.
BOD	Total Solids	
Nitrite or Nitrate	TDS	
Low Level Mercury	Sulfide	
Ortho Phosphorus	Free Liquids	
Turbidity	Total Volatile Solids	
Surfactants	<del>Aqueous Extractable Organics-AL</del>	
Sulfite	Unpreserved VOC's	
En Core Preservation	Ash	
Color		

Rev. 4/11/03, Attachment to 1-REC-5.  
Subject to QA Audit.

Reviewed by/date KB 11/03

(Please Print Legibly)

Company Name: Wis. Public Service

Branch or Location: Green Bay

Project Contact: Mike Mason

Telephone: 433-1397

Project Number: 1313

Project Name: Sheboygan - Camp Marina

Project State: WI.

Sampled By (Print): Mike Mason



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Green Bay, WI 54302  
920-469-2436  
FAX 920-469-8827

525 Science Drive  
Madison, WI 53711  
608-232-3300  
FAX: 608-233-0502

### CHAIN OF CUSTODY

89076

Page 1 of 1

\*Preservation Codes  
 A=None B=HCL C=H2SO4 D=HN03 E=EnCore F=Methanol G=NaOH  
 H = Sodium Bisulfate Solution I = Sodium Thiosulfate J = Other

Filtered? (YES/NO) N N Y  
 PRESERVATION (CODE)\* B A G

P.O. # \_\_\_\_\_ Quote # \_\_\_\_\_  
Mail Report To: Mike Mason

Company: WPS  
Address: P.O. Box 19002  
G.B. 54307-9002  
Invoice To: Accounts Payable

Company: Same  
Address: \_\_\_\_\_  
Mail Invoice To: P.O. # 902440

Data Package Options - (please circle if requested)

Sample Results Only (no QC)  
 EPA Level II (Subject to Surcharge)  
 EPA Level III (Subject to Surcharge)  
 EPA Level IV (Subject to Surcharge)

Regulatory Program  
 UST  
 RCRA  
 SDWA  
 NPDES  
 CERCLA

Matrix Codes  
 W=Water  
 S=Soil  
 A=Air  
 C=Charcoal  
 B=Biota  
 Sl=Sludge

ANALYSES REQUESTED  
BETX (8021B)  
PAH (8310) (8230)  
Cyanide (335-4)

TOTAL # OF BOTTLES SENT

LABORATORY ID (Lab Use Only)	FIELD ID	COLLECTION		MATRIX	ANALYSES REQUESTED	PRESERVATION CODE	TOTAL # OF BOTTLES SENT	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)
		DATE	TIME						
001	PZ-701	9/30/03		W				08270 de fur	3-yombo, 1-250 ml, 1.0 A-hin
002	PZ-702							Wintony (810/110)	
003	PZ-703								
004	MW-705								
005	MW-708								
006	MW-709R								
007	Field Duplicate							Field Dup.	
008	Trip blank							Cyanide is not Filtered. Run it as a total.	2-40 ml, 1.0 A-hin added to loc by lab

Rush Turnaround Time Requested (TAT) - Prelim  
 (Rush TAT subject to approval/surcharge)

Date Needed: \_\_\_\_\_

Transmit Prelim Rush Results by (circle):  
 Phone Fax E-Mail

Phone #: \_\_\_\_\_  
 Fax #: \_\_\_\_\_  
 E-Mail Address: \_\_\_\_\_

Relinquished By: <u>Mike Mason</u>	Date/Time: <u>9/30/03 15:00</u>	Received By: <u>L. Walker</u>	Date/Time: <u>9/30/03 15:00</u>
Relinquished By: _____	Date/Time: _____	Received By: _____	Date/Time: _____
Relinquished By: _____	Date/Time: _____	Received By: _____	Date/Time: _____
Relinquished By: _____	Date/Time: _____	Received By: _____	Date/Time: _____

Entchem Project No: 839555

Sample Receipt Temp: POI

Sample Receipt (Initials): OK

Chain of Custody Seal: Present (Not Present)

Samples on HOLD are subject to spec \_\_\_\_\_ ing at \_\_\_\_\_ ase o \_\_\_\_\_ y \_\_\_\_\_



SOIL BORING LOGS AND MONITORING WELL  
CONSTRUCTION FORMS

APPENDIX C

Facility/Project Name <i>NPSC-Sheboygan / Water Street, Campmarina</i>		License/Permit/Monitoring Number		Boring Number <i>PZ-703</i>	
Boring Drilled By (Firm name and name of crew chief) <i>Boart Longyear Environmental Drilling Randy Radke</i>			Date Drilling Started <i>12/08/98</i>	Date Drilling Completed <i>12/09/98</i>	Drilling Method <i>3-1/4" HSA &amp; 6" Mud Rot.</i>
DNR Facility Well No.	WI Unique Well No. <i>JG774</i>	Common Well Name <i>PZ-703</i>	Final Static Water Level <i>Feet MSL</i>	Surface Elevation <i>589.85 Feet MSL</i>	Borehole Diameter <i>6.5 inches</i>
Boring Location State Plane		Feet N  Feet E	Lat Long	Local Grid Location (if applicable) <i>4611.5 feet</i> <input checked="" type="checkbox"/> N <i>5437.1 feet</i> <input checked="" type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
County <i>Sheboygan</i>		DNR County Code <i>60</i>	Civil Town/City/ or Village <i>Sheboygan</i>		

Sample Number and Type	Length Att. & Recovered (ft)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					ROD/ Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
PZ703 (1)	6	2/3 3/6	0-2	0'-6" FILL, cinders, yellow brick fragments, gravel, clayey sand, moist, no odor.				1.3						
PZ703 (3)	8	1/2 2/2	2-4	with grayish brown CLAY WITH SILT and medium subround sand	FILL			38.3						
PZ703 (5)	17	4/3 2/2	4-6	predominantly CLAY WITH SILT, soft to firm, moist, slight odor				71.8						
PZ703 (7)	14	2/1 1/1	6-8	6'-8" SILTY CLAY WITH SAND, brown (7.5YR 4/2), fine to medium sand, predominantly fine, trace fine subround gravel, medium plasticity, soft to firm, very moist, slight odor.	CL			548						
PZ703 (8)	22	2/1	8-10	SANDY CLAY WITH GRAVEL, fine to coarse subround sand, fine subround gravel, soft, no to low plasticity, trace organics, very moist to wet, slight odor.	CL			233						
PZ703 (11)	11	1/1 1/1	10-12		CL			254						
PZ703 (13)	21	1/1 1/2	12-14	10'-36" CLAY WITH SILT, grayish brown (10YR 5/2), trace to 5% very fine sand, trace organics, medium plasticity, soft, very moist to wet, slight odor.	CL			271						
PZ703 (15)	22	2/2 2/1	14-16					1225						
PZ703 (17)	11	1/1 1/1	16-18	SANDY CLAY, grayish brown (10YR 5/2), fine to medium sand, predominantly fine, trace very fine gravel, soft, 5% silt, 1.5" black sand seam (medium, subround) lower 5"	SC			1267						
PZ703 (18)	21	1/1 1/1	18-20	CLAYEY SAND, poorly graded, fine, trace to 5% silt, trace organics, trace tar, sheen, wet, slight odor.	SC SM			804						
PZ703 (21)	20	1/2 2/1	20-22	with silt, no tar, sheen upper 5", odor.				264						
PZ703 (23)	18	2/5 3/1	22-24	CLAY, brown (7.5YR 4/2), 5% silt, trace very fine sand, firm to hard, medium to high plasticity, moist, slight odor.	CL			185						

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature *[Handwritten Signature]*

Firm **Natural Resource Technology**

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than \$10 nor more than \$5,000 for each violation. Fined not less than \$10 or more than \$100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.



Route To:

Watershed/Wastewater   
Remediation/Redevelopment

Waste Management   
Other

Facility/Project Name <b>WASC-Camp Marina Feasibility Study</b>	Local Grid Location of Well 4611.5 ft. <input checked="" type="checkbox"/> N. <input type="checkbox"/> S. 5437.1 ft. <input checked="" type="checkbox"/> E. <input type="checkbox"/> W.	Well Name <b>PZ-703</b>
Facility License, Permit or Monitoring No.	Grid Origin Location (Check if estimated: <input type="checkbox"/> ) Lat. _____ Long. _____ or _____	Wis. Unique Well No./DNR Well No. <b>JQ 774</b>
Facility ID	St. Plane _____ ft. N. _____ ft. E. S/C/N	Date Well Installed <b>12/09/1998</b>
Type of Well Well Code <b>12/pz</b>	Section Location of Waste/Source _____ 1/4 of _____ 1/4 of Sec. _____ T. _____ N. R. _____ <input type="checkbox"/> E <input type="checkbox"/> W	Well Installed By: (Person's Name and Firm) <b>Randy Radke</b>
Distance Well Is From Waste/Source Boundary ft.	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input checked="" type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	<b>Boart Longyear</b>

A. Protective pipe, top elevation 589.85 ft. MSL  
 B. Well casing, top elevation 589.22 ft. MSL  
 C. Land surface elevation 589.85 ft. MSL  
 D. Surface seal, bottom 587.72 ft. MSL or 1.5 ft.

12. USC classification of soil near screen:  
 GP  GM  GC  GW  SW  SP   
 SM  SC  ML  MH  CL  CH   
 Bedrock

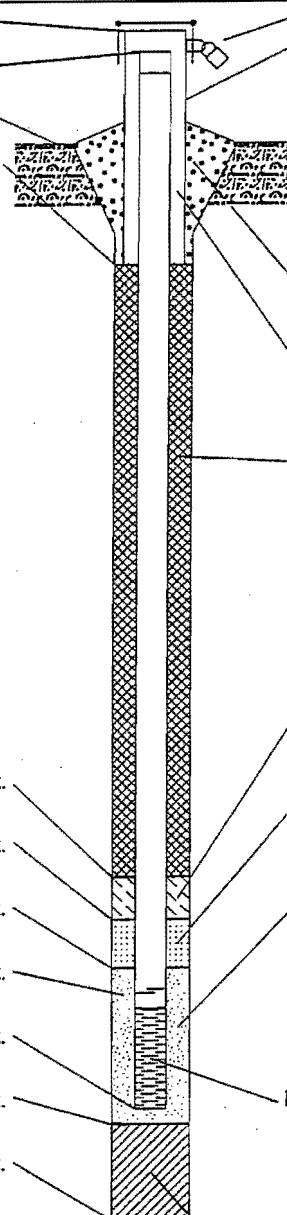
13. Sieve analysis attached?  Yes  No

14. Drilling method used: Rotary  50  
 Hollow Stem Auger  41  
 Other

15. Drilling fluid used: Water  02 Air  01  
 Drilling Mud  03 None  99

16. Drilling additives used?  Yes  No  
 Describe N/A

17. Source of water (attach analysis):  
N/A



- Cap and lock?  Yes  No
- Protective cover pipe:
  - Inside diameter: 9.0 in.
  - Length: 1.0 ft.
  - Material: Steel  04  
Other
  - Additional protection?  Yes  No  
If yes, describe: \_\_\_\_\_
- Surface seal: Bentonite  30  
Concrete  01  
Other
- Material between well casing and protective pipe: Sand Bentonite  30  
Other
- Annular space seal: a. Chipped Granular Bentonite  33  
b. \_\_\_\_\_ Lbs/gal mud weight . Bentonite-sand slurry  35  
c. \_\_\_\_\_ Lbs/gal mud weight . . . Bentonite slurry  31  
d. \_\_\_\_\_ % Bentonite . . . Bentonite-cement grout  50  
e. \_\_\_\_\_ Ft<sup>3</sup> volume added for any of the above  
f. How installed: Tremie  01  
Tremie pumped  02  
Gravity  08
- Bentonite seal: a. Bentonite granules  33  
b.  1/4 in.  3/8 in.  1/2 in. Bentonite pellets  32  
c. \_\_\_\_\_ Other
- Fine sand material: Manufacturer, product name and mesh size  
a. #7 Badger  
b. Volume added \_\_\_\_\_ ft<sup>3</sup>
- Filter pack material: Manufacturer, product name and mesh size  
a. #30 American Material  
b. Volume added \_\_\_\_\_ ft<sup>3</sup>
- Well casing: Flush threaded PVC schedule 40  23  
Flush threaded PVC schedule 80  24  
Other
- Screen material: PVC  
a. Screen Type: Factory cut  11  
Continuous slot  01  
Other   
b. Manufacturer Baort Longyear  
c. Slot size: 0.010 in.  
d. Slotted length: 5.0 ft.
- Backfill material (below filter pack): None  14  
Other

E. Bentonite seal, top \_\_\_\_\_ ft. MSL or \_\_\_\_\_ ft.  
 F. Fine sand, top 563.22 ft. MSL or 26.0 ft.  
 G. Filter pack, top 561.22 ft. MSL or 28.0 ft.  
 H. Screen joint, top 559.22 ft. MSL or 30.0 ft.  
 I. Well bottom 554.22 ft. MSL or 35.0 ft.  
 J. Filter pack, bottom 553.22 ft. MSL or 36.0 ft.  
 K. Borehole, bottom 553.22 ft. MSL or 36.0 ft.  
 L. Borehole, diameter 8.0 in.  
 M. O.D. well casing 2.37 in.  
 N. I.D. well casing 2.06 in.

I hereby certify that the information on this form is true and correct to the best of my knowledge.  
 Signature [Signature] Firm **BOART LONGYEAR COMPANY** Tel: 715-359-7090  
 101 ALDERSON ST., P.O. BOX 109 SCHOFIELD, WI 54476 Fax: 715-355-5715

Please complete both Forms 4400-113A and 4400-113B and return to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

<b>City/Project Name</b> HPSC-Sheboygan II/1060/ Site Investigation		<b>License/Permit/Monitoring Number</b>		<b>Boring Number</b> MW-707	
<b>Boring Drilled By</b> (Firm name and name of crew chief) Boart Longyear Scott/Kurt		<b>Date Drilling Started</b> 07/19/95		<b>Date Drilling Completed</b> 07/19/95	
<b>DNR Facility Well No.</b>		<b>WI Unique Well No.</b>		<b>Common Well Name</b> MW-707	
<b>Final Static Water Level</b> 582.60 Feet MSL		<b>Surface Elevation</b> 590.29 Feet MSL		<b>Borehole Diameter</b> 8.25 inches	
<b>Boring Location</b> State Plane NW1/4, SW1/4, 23, T15N, R23E		<b>Feet N</b>  <b>Feet E</b>		<b>Local Grid Location (If applicable)</b> 4613.4 feet <input checked="" type="checkbox"/> N 5442.7 feet <input checked="" type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
<b>County</b> Sheboygan		<b>DNR County Code</b> 60		<b>Civil Town/City/ or Village</b> Sheboygan	

Sample Number and Type	Length Att. & Recovered (ft)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200		
			1	GRAVEL FILL FOR DRIVE	GP (FILL)										
			2	GRAVEL (BRICKS) w/ SILT (FILL)	BRICKS (FILL)										
07 (3)	17	2	3	2'-4' CLAY, brwn (10YR 5/3), 15% f-med sand, med plast, sft, v. mst, sl. odor	CL (FILL)			8.8							
MW707 (5)	3	2	5	4'-14' WOOD w/ blk silt (difficult, slow drilling)	WOOD (FILL)			285							
MW707 (7)	0	50 (1")	7					NR							
MW707 (9)	0	50 (0)	9					NR							
MW707 (11)	2	2	11	w/ med-crs sand & silt - difficult drilling				78							

I hereby certify that the information on this form is true and correct to the best of my knowledge.  
 Signature: *[Signature]* Firm: **Natural Resource Technology**

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than \$10 nor more than \$5,000 for each violation. Fined not less than \$10 or more than \$100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.



Facility/Project Name <b>WPSC SITE</b>	Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> S. <input type="checkbox"/> E. <input type="checkbox"/> W.	Well Name <b>MW-707</b>
Facility License, Permit or Monitoring Number	Grid Origin Location Lat. 0' " Long. 0' " or	Wis. Unique Well Number: DNR Well Number:
Type of Well Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	St. Plane _____ ft. N, _____ ft. E.	Date Well Installed <b>07/19/95</b>
Distance Well Is From Waste/Source Boundary ft.	Section Location of Waste/Source 1/4 of _____ 1/4 of Sec. _____ T. _____ N, R. _____ E. <input type="checkbox"/> W. <input type="checkbox"/>	Well Installed By: (Person's Name and Firm) <b>Pat Jensen</b> <b>Boart Longyear</b>
Is Well A Point of Enforcement Std. Application? <input type="checkbox"/> Yes <input type="checkbox"/> No	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	

A. Protective pipe, top elevation _____ ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation <u>0.00</u> ft. MSL	2. Protective cover pipe: a. Inside diameter: <u>8.0</u> in. b. Length: <u>1.0</u> ft. c. Material: Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/>
C. Land surface elevation _____ ft. MSL	d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____
D. Surface seal, bottom _____ ft. MSL or <u>1.0</u> ft.	3. Surface seal: Bentonite <input type="checkbox"/> 30 Concrete <input checked="" type="checkbox"/> 01 Other <input type="checkbox"/>
12. USC classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>	4. Material between well casing and protective pipe: Bentonite <input type="checkbox"/> 30 Annular space seal <input type="checkbox"/> Other <input type="checkbox"/>
13. Sieve analysis attached? <input type="checkbox"/> Yes <input type="checkbox"/> No	5. Annular space seal: a. Granular Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight . . . Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite . . . Bentonite-cement grout <input type="checkbox"/> 50 e. _____ Ft <sup>3</sup> volume added for any of the above
14. Drilling method used: Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input checked="" type="checkbox"/> 41 Other <input type="checkbox"/>	f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input checked="" type="checkbox"/> 08
15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99	6. Bentonite seal: a. Bentonite granules <input checked="" type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite pellets <input type="checkbox"/> 32 c. _____ Other <input type="checkbox"/>
16. Drilling additives used? <input type="checkbox"/> Yes <input type="checkbox"/> No	7. Fine sand material: Manufacturer, product name and mesh size a. _____ b. Volume added _____ ft <sup>3</sup>
Describe _____	8. Filter pack material: Manufacturer, product name and mesh size a. <u>#30 American Material</u> b. Volume added _____ ft <sup>3</sup>
17. Source of water (attach analysis): _____	9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/>
E. Bentonite seal, top _____ ft. MSL or <u>1.0</u> ft.	10. Screen material: <u>PVC</u> a. Screen Type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>
F. Fine sand, top _____ ft. MSL or _____ ft.	b. Manufacturer <u>Boart Longyear</u>
G. Filter pack, top _____ ft. MSL or <u>3.0</u> ft.	c. Slot size: <u>0.010</u> in.
H. Screen joint, top _____ ft. MSL or <u>3.5</u> ft.	d. Slotted length: <u>10.0</u> ft.
I. Well bottom _____ ft. MSL or <u>13.5</u> ft.	11. Backfill material (below filter pack): None <input type="checkbox"/> 14 <u>#30 American Material</u> Other <input checked="" type="checkbox"/>
J. Filter pack, bottom _____ ft. MSL or <u>16.0</u> ft.	
K. Borehole, bottom _____ ft. MSL or <u>22.0</u> ft.	
L. Borehole, diameter <u>8.0</u> in.	
M. O.D. well casing <u>2.37</u> in.	
N. I.D. well casing <u>2.06</u> in.	

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature 	Firm <b>Boart Longyear</b> 101 Alderson Street	Tel: (715) 359-7090 Fax: (715) 355-5715
---------------	--	--

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats., and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

- Route To:
- Solid Waste
  - Emergency Response
  - Wastewater
  - Superfund
  - Haz. Waste
  - Underground Tanks
  - Water Resources
  - Other:

Facility/Project Name <i>WPSC-Sheboygan II/1060/ Site Investigation</i>		License/Permit/Monitoring Number		Boring Number <i>MW-707R</i>	
Boring Drilled By (Firm name and name of crew chief) <i>Boart Longyear Todd Schmaldfeldt</i>		Date Drilling Started <i>02/21/01</i>	Date Drilling Completed <i>02/21/01</i>	Drilling Method <i>HSA 4 1/4" (ID)</i>	
DNR Facility Well No.	WI Unique Well No.	Common Well Name <i>MW-707R</i>	Final Static Water Level <i>Feet MSL</i>	Surface Elevation <i>Feet MSL</i>	Borehole Diameter <i>8.25 inches</i>
Boring Location State Plane		Feet N  Feet E	Lat Long	Local Grid Location (if applicable) <i>4374.90 feet</i> <input checked="" type="checkbox"/> N <i>5456.92 feet</i> <input checked="" type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
County <i>Sheboygan</i>		DNR County Code <i>60</i>	Civil Town/City/ or Village <i>Sheboygan</i>		

Sample		Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	
			2 4 6 8 10 12 14 16 18 20 22	0'-8' Drill without sampling, Reference soil boring log for MW-707										
				5'-8' drilled through wood	WOOD									
				EOB @ 11'										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: *Adam Shingledacker* Firm: **Natural Resource Technology**

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeited not less than \$10 nor more than \$5,000 for each violation. Fined not less than \$10 or more than \$100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.



Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name <b>WPSL SHEBOYGAN - CAMP MARINA</b>	Local Grid Location of Well 4374.9 ft. <input checked="" type="checkbox"/> N. <input type="checkbox"/> S. 5456.92 ft. <input checked="" type="checkbox"/> E. <input type="checkbox"/> W.	Well Name <b>MW-707R</b>
Facility License, Permit or Monitoring No.	Grid Origin Location (Check if estimated: <input type="checkbox"/> ) Lat. _____ " Long. _____ " or	Wis. Unique Well No. / DNR Well Number
Facility ID	St. Plane _____ ft. N. _____ ft. E. S/C/N	Date Well Installed <b>02/21/2001</b>
Type of Well Well Code 11/mw	Section Location of Waste/Source 1/4 of _____ 1/4 of Sec. _____ T. _____ N, R. _____ <input type="checkbox"/> E <input type="checkbox"/> W	Well Installed By: (Person's Name and Firm) <b>T. Schmalfeldt</b>
Distance Well Is From Waste/Source Boundary ft.	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	<b>Boart Longyear</b>

A. Protective pipe, top elevation \_\_\_\_\_ ft. MSL  
 B. Well casing, top elevation **587.78** ft. MSL  
 C. Land surface elevation \_\_\_\_\_ ft. MSL  
 D. Surface seal, bottom \_\_\_\_\_ ft. MSL or **\*** ft.

12. USC classification of soil near screen:  
 GP  GM  GC  GW  SW  SP   
 SM  SC  ML  MH  CL  CH   
 Bedrock

13. Sieve analysis attached?  Yes  No

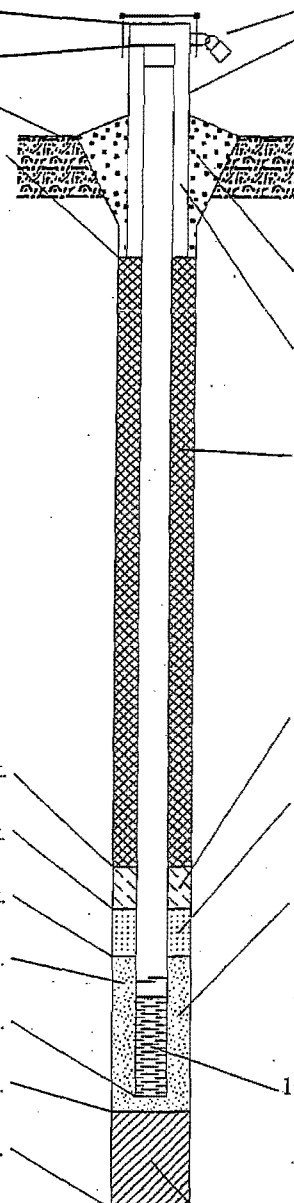
14. Drilling method used: Rotary  5 0  
 Hollow Stem Auger  4 1  
 Other

15. Drilling fluid used: Water  0 2 Air  0 1  
 Drilling Mud  0 3 None  9 9

16. Drilling additives used?  Yes  No

Describe \_\_\_\_\_

17. Source of water (attach analysis): \_\_\_\_\_



1. Cap and lock?  Yes  No

2. Protective cover pipe:  
 a. Inside diameter: \_\_\_\_\_  
 b. Length: \_\_\_\_\_  
 c. Material: Steel  Other  na

3. Surface seal: Bentonite  Concrete  Other

4. Material between well casing and protective pipe: Bentonite  Other  na

5. Annular space seal:  
 a. Granular Bentonite   
 b. \_\_\_\_\_ Lbs/gal mud weight . Bentonite-sand slurry   
 c. \_\_\_\_\_ Lbs/gal mud weight . . . Bentonite slurry   
 d. \_\_\_\_\_ % Bentonite . . . Bentonite-cement grout   
 e. \_\_\_\_\_ Ft<sup>3</sup> volume added for any of the above  
 f. How installed: Tremie  0 1  
 Tremie pumped  0 2  
 Gravity  0 3

6. Bentonite seal: a. Bentonite granules   
 b.  1/4 in.  3/8 in.  1/2 in. Bentonite pellets   
 c. \_\_\_\_\_ Other

7. Fine sand material: Manufacturer, product name and me  
 a. \_\_\_\_\_  
 b. Volume added \_\_\_\_\_ ft<sup>3</sup>

8. Filter pack material: Manufacturer, product name and me  
 a. #30 American Materials  
 b. Volume added \_\_\_\_\_ ft<sup>3</sup>

9. Well casing: Flush threaded PVC schedule 40   
 Flush threaded PVC schedule 80   
 Other

10. Screen material: PVC  
 a. Screen Type: Factory cut   
 Continuous slot  0 1  
 Other

b. Manufacturer **Boart Longyear**  
 c. Slot size: \_\_\_\_\_  
 d. Slotted length: **10.0** ft

11. Backfill material (below filter pack): None   
 Other

E. Bentonite seal, top \_\_\_\_\_ ft. MSL or **\*** ft.  
 F. Fine sand, top \_\_\_\_\_ ft. MSL or **\*** ft.  
 G. Filter pack, top \_\_\_\_\_ ft. MSL or **\*** 0.0 ft.  
 H. Screen joint, top \_\_\_\_\_ ft. MSL or **\*** 0.0 ft.  
 I. Well bottom \_\_\_\_\_ ft. MSL or **10.0** ft.  
 J. Filter pack, bottom \_\_\_\_\_ ft. MSL or **10.5** ft.  
 K. Borehole, bottom \_\_\_\_\_ ft. MSL or **10.5** ft.  
 L. Borehole, diameter **8.0** in.  
 M. O.D. well casing **2.37** in.  
 N. I.D. well casing **2.06** in.

**\* WELL CONSTRUCTED PRIOR TO SITE RESTORATION. FILTER PACK SEAL, ANNULAR SPACE SEAL, AND SURFACE SEAL PLACED ABOVE FILTER PACK AFTER GROUND SURFACE ELEVATION RAISED.**

I hereby certify that the information on this form is true and correct to the best of my knowledge. **FIRM Boart Longyear**  
 Signature **[Signature]** Firm **Boart Longyear** 101 Alderson St. Schofield, WI 54476 Tel: (715)359-7... Fax: (715)355-5...  
 101 Alderson St. Schofield, WI 54476 Tel: (715)359-7... Fax: (715)355-5...

- Route To:
- Solid Waste
  - Emergency Response
  - Wastewater
  - Superfund
  - Haz. Waste
  - Underground Tanks
  - Water Resources
  - Other:

Facility/Project Name <i>WPSC, Campmarina</i>			License/Permit/Monitoring Number		Boring Number <i>BW-09</i>
Boring Drilled By (Firm name and name of crew chief) <i>Boart Longyear Sean Abel</i>			Date Drilling Started <i>02/26/01</i>	Date Drilling Completed <i>02/26/01</i>	Drilling Method <i>HSA 4 1/4" (ID)</i>
DNR Facility Well No.	WI Unique Well No.	Common Well Name <i>BW-09</i>	Final Static Water Level <i>Feet MSL</i>	Surface Elevation <i>Feet MSL</i>	Borehole Diameter <i>8.25 inches</i>
Boring Location State Plane		Feet N  Feet E	Lat Long	Local Grid Location (if applicable) <i>4365.08 feet</i> <input checked="" type="checkbox"/> N <i>5469.70 feet</i> <input checked="" type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
County <i>Sheboygan</i>			DNR County Code <i>80</i>	Civil Town/City/ or Village <i>sheboygan</i>	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RSD/ Comments		
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200			
			0-5	0'-5' Drill without sampling												
BW09 (5-7)	6		5-7	5'-7' FILL sand, gravel, bricks, odor	FILL			118								
			7-10	7'-10' Drill without sampling												
BW09 (10-12)	24		10-12	10'-10'4" CLAYEY SAND, 5% gravel, wet, odor	SC SP			1100								
			12-18	10'4"-10'8" SAND/GRAVEL, black, wet, odor												
			18-20	10'8"-18' LEAN CLAY, light brown, trace organics, few gravel, moist	CL											
BW09 (16-18)	20		16-18	Increased clay				1035								
			18	EOB @ 18'												

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Firm: **Natural Resource Technology**

This form is authorized by Chapters 144.147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than \$10 nor more than \$5,000 for each violation. Fined not less than \$10 or more than \$100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

Route To:

Watershed/Wastewater

Waste Management

Remediation/Redevelopment

Other

MONITORING WELL CONSTRUCTION

Form 4400-113A

Rev. 6-97

Facility/Project Name <b>W PSC SHEBOYGAN - CAMPMARINA</b>	Local Grid Location of Well 4365.08 ft. <input checked="" type="checkbox"/> N. <input type="checkbox"/> S. 5469.7 ft. <input checked="" type="checkbox"/> E. <input type="checkbox"/> W	Well Name <b>BW-9</b>
Facility License, Permit or Monitoring No.	Grid Origin Location (Check if estimated: <input type="checkbox"/> ) Lat. _____ " Long. _____ " or _____ " or _____ "	Wis. Unique Well No. / DNR Well Number
Facility ID	St. Plane _____ ft. N. _____ ft. E. S/C/N	Date Well Installed <b>02/26/2001</b>
Type of Well Well Code 99/ot	Section Location of Waste/Source 1/4 of _____ 1/4 of Sec. _____ T. _____ N. R. _____ <input type="checkbox"/> E <input type="checkbox"/> W	Well Installed By: (Person's Name and Firm) <b>S. Abel Boart Longyear</b>
Distance Well Is From Waste/Source Boundary ft.	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	

- A. Protective pipe, top elevation \_\_\_\_\_ ft. MSL
- B. Well casing, top elevation 586.70 ft. MSL
- C. Land surface elevation \_\_\_\_\_ ft. MSL
- D. Surface seal, bottom \_\_\_\_\_ ft. MSL or \*10 ft.

12. USC classification of soil near screen:

GP  GM  GC  GW  SW  SP   
 SM  SC  ML  MH  CL  CH   
 Bedrock

13. Sieve analysis attached?  Yes  No

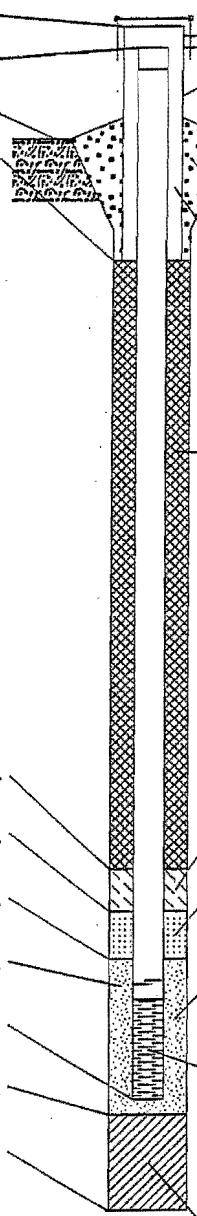
14. Drilling method used: Rotary  50  
 Hollow Stem Auger  41  
 Other

15. Drilling fluid used: Water  02 Air  01  
 Drilling Mud  03 None  99

16. Drilling additives used?  Yes  No

Describe \_\_\_\_\_

17. Source of water (attach analysis): \_\_\_\_\_



- E. Bentonite seal, top \_\_\_\_\_ ft. MSL or 7.5 ft.
- F. Fine sand, top \_\_\_\_\_ ft. MSL or 12.5 ft.
- G. Filter pack, top \_\_\_\_\_ ft. MSL or 13.0 ft.
- H. Screen joint, top \_\_\_\_\_ ft. MSL or 15.0 ft.
- I. Well bottom \_\_\_\_\_ ft. MSL or 17.5 ft.
- J. Filter pack, bottom \_\_\_\_\_ ft. MSL or 18.0 ft.
- K. Borehole, bottom \_\_\_\_\_ ft. MSL or 18.0 ft.
- L. Borehole, diameter 8.0 in.
- M. O.D. well casing 2.37 in.
- N. I.D. well casing 1.94 in.

- 1. Cap and lock?  Yes  No
- 2. Protective cover pipe:
  - a. Inside diameter: \_\_\_\_\_
  - b. Length: \_\_\_\_\_
  - c. Material: Steel  Other
  - d. Additional protection?  Yes  No  
If yes, describe: \_\_\_\_\_
- 3. Surface seal: Bentonite  Concrete  Other
- 4. Material between well casing and protective pipe:
  - na \_\_\_\_\_ Bentonite  Other
- 5. Annular space seal:
  - a. Granular Bentonite  3
  - b. \_\_\_\_\_ Lbs/gal mud weight . Bentonite-sand slurry  5
  - c. X Lbs/gal mud weight . . . Bentonite slurry  31
  - d. \_\_\_\_\_ % Bentonite . . . Bentonite-cement grout  0
  - e. \_\_\_\_\_ Ft<sup>3</sup> volume added for any of the above
  - f. How installed: Tremie  01  
Tremie pumped  02  
Gravity  8
- 6. Bentonite seal:
  - a. Bentonite granules  3
  - b.  1/4 in.  3/8 in.  1/2 in. Bentonite pellets  32
  - c. \_\_\_\_\_ Other
- 7. Fine sand material: Manufacturer, product name and me s  
 a. #45-55 American Materials
- b. Volume added \_\_\_\_\_ ft<sup>3</sup>
- 8. Filter pack material: Manufacturer, product name and m h  
 a. #30 American Materials
- b. Volume added \_\_\_\_\_ ft<sup>3</sup>
- 9. Well casing: Flush threaded PVC schedule 40  3  
 Flush threaded PVC schedule 80  4  
 Other
- 10. Screen material: PVC  
 a. Screen Type: Factory cut  1  
 Continuous slot  01  
 Other
- b. Manufacturer Boart Longyear
- c. Slot size: 0.01 in
- d. Slotted length: 2.5 ft
- 11. Backfill material (below filter pack): None  4  
 Other

**\* CONSTRUCTION AS  
OF 02/26/01 - MAY  
HAVE CHANGED WITH  
FINAL GRADE**

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature [Signature] Firm **Boart Longyear** 101 Alderson St. Schofield, WI 54476 Tel: (715)359-9000 Fax: (715)355-5712

Please complete both Forms 4400-113A and 4400-113B and return to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

FIELD FORMS

APPENDIX D

# OPERATIONS & MAINTENANCE LOG (page 1)

Site Name: Campmarina / Worker's Water Steet Park  
 Project/Task Number: 1313/4.3  
 Site Location: 732 Water Street, Sheboygan, WI

Date of Site Visit: 11-7-02  
 Arrival Time: 8:30 AM  
 Departure Time: \_\_\_\_\_

Operator: CARZ/CRL

Signature: \_\_\_\_\_

Is system operating upon arrival? NO upon departure? \_\_\_\_\_  
 If no, which alarm is signalled? NA

**BIOSPARGE COMPRESSOR**

VLS (Air/water Separator)

Record Compressor Temperature: \_\_\_\_\_ deg. F  
 Record Compressor Pressure: \_\_\_\_\_ psi  
 Air bleed valve status: (Closed / Partially open / Full open)  
 Air Outlet valve status: (Closed / Partially open / Full open)

**Maintenance**

: FILTER SOUNDS  
 : OIL LEVEL (Mobil Oil # on Compressor)

**HDPE SUMP**

Water Level: 5.81 ft from top of lid  
 High Level Float Switch Setting: (Full Depth / Raised) \_\_\_\_\_ feet  
 Slice Gate Valve Setting: (Closed / Partially open / Full open)  
 Noticable Odor: (Yes / No)  
 PID Reading: 0.2 ppm  
 Air Sample Collected: (yes / no)  
 Maintenance  
 Inspect float switch operation: \_\_\_\_\_

**GENERAL MAINTENANCE**

Electric Meter reading: \_\_\_\_\_ Kw-hrs  
 Check Operation of Heaters/Fans: \_\_\_\_\_  
 Noticable Odors Outside Building: \_\_\_\_\_

**VALVE**

Cumulative Run Time  
 1 2.3  
 2 2.0  
 3 1.7  
 Compressor Hours 6.0

**BIOSPARGE WELLS**

Operation Zone	In Building		Pressure (psi)	Flow Vel. (ft/min act.)	Pressure (psi)
	Well #	Valve Status (open, part. closed)			
Zone 1	BW-01	0	6.5		
Zone 2	BW-02	0	6.5		
Zone 3 → 1	BW-03	0	4.0		
Zone 1	BW-04	0	6.0		
Zone 2	BW-05	0	6.5		
Zone 3	BW-06	0	4.5		
Zone 1	BW-07	0	6.5		
Zone 2	BW-08	0	6.5		
Zone 3	BW-09	0	4.5		
Zone 1	BW-10	0			
Zone 2	BW-11	0	6.25		
Zone 3	BW-12	0	5.0		
Zone 1	BW-13	0	6.5		
Zone 2	BW-14	0	6.5		
Zone 3	BW-15	0	5.0		
Zone 1	BW-16	0	7.5		
Zone 2	BW-17	0	6.0		
Zone 3	BW-18	0	5.0		

**NOTES:**

- SYSTEM STARTER @ 10:58A
- ASK ABOUT SCROLL BAR ALARMS
- BW-10 PRESSURE GAUGE SOUNDS
- ASK KEVIN TIBBETT ABOUT SCROLL BAR
- LABEL ON MOTOR CONTROLLER
- DIST WPS ABOVE CAMPMARINA LABEL
- LABEL THERMOSTAT FOR FANS
- COP. STAFF + DATE ON DATA SHEETS

DESTAR @ 12:30

OPERATIONS & MAINTENANCE LOG (page 1)

Site Name: Campmarina / Worker's Water Steet Park  
 Project/Task Number: 1313/4.3  
 Site Location: 732 Water Street, Sheboygan, WI

Date of Site Visit: 11-8-2002  
 Arrival Time: 13:00  
 Departure Time: 13:30

Operator: JEFF WUNSCH

Signature: [Signature]

Is system operating upon arrival? NO upon departure? \_\_\_\_\_  
 If no, which alarm is signalled? NO

**BIOSPARGE WELLS**

Operation Zone	In Building		Pressure (psi)	Flow Vel. (ft/min act.)	In Field	
	Well #	Valve Status (open, part. closed)			Pressure (psi)	Pressure (psi)
Zone 3	BW-01	OPEN	6.5			
Zone 2	BW-02		6.5			
Zone 1	BW-03		6.25	3.75		
Zone 3	BW-04		6.25			
Zone 2	BW-05		6.5			
Zone 1	BW-06		4.25			
Zone 3	BW-07		6.5			
Zone 2	BW-08		6.75			
Zone 1	BW-09		4.5			
Zone 3	BW-10		4.0			
Zone 2	BW-11		6.25			
Zone 1	BW-12		5.0			
Zone 3	BW-13		6.5			
Zone 2	BW-14		6.5			
Zone 1	BW-15		5.0			
Zone 3	BW-16		7.5			
Zone 2	BW-17		6.25			
Zone 1	BW-18		5.0			

**BIOSPARGE COMPRESSOR**

VLS (Air/water Separator)

Record Compressor Temperature: 116 deg. F  
 Record Compressor Pressure: \_\_\_\_\_ psi  
 Air bleed valve status: (~~Closed~~ / Partially open / ~~Full open~~)  
 Air Outlet valve status: (~~Closed~~ / Partially open / Full open)

Maintenance

**HDPE SUMP**

Water Level: 23" from top of lid  
 High Level Float Switch Setting: (Full Depth / Raised \_\_\_\_\_ feet)  
 Slice Gate Valve Setting: (~~Closed~~ / Partially open / Full open)  
 Noticable Odor: (~~Yes~~) (No)  
 PID Reading: \_\_\_\_\_ ppm  
 Air Sample Collected: (~~yes~~/no)  
 Maintenance  
 Inspect float switch operation: \_\_\_\_\_

**GENERAL MAINTENANCE**

Electric Meter reading: 67032 Kw-hrs  
 Check Operation of Heaters/Fans:  
 Noticable Odors Outside Building: NO

**NOTES:**

	COMPRESSOR BLEED	COMPRESSOR OUTLET
ZONE 1		
ZONE 2	3	5.5
ZONE 3	4	6

FAX 262-523-9001

11/08/2002 13:42  
 5209013/1/  
 WPSU SHEBOYGAN DP  
 PAGE 01/01

**OPERATIONS & MAINTENANCE LOG (page 1)**

Site Name: Campmarina / Worker's Water Steet Park  
 Project/Task Number: 1313/4.3  
 Site Location: 732 Water Street, Sheboygan, WI

Date of Site Visit: 11-13-2002  
 Arrival Time: 13:30  
 Departure Time: 13:50

Operator: JEFF WUNSCH

Signature: *Jeff Wunsch*

Is system operating upon arrival? NO upon departure? \_\_\_\_\_  
 If no, which alarm is signalled? NO

**BIOSPARGE COMPRESSOR**

VLS (Air/water Separator)  
 Record Compressor Temperature: 107 deg. F  
 Record Compressor Pressure: NOTES psi  
 Air bleed valve status: (~~Closed~~ / Partially open / ~~Full open~~)  
 Air Outlet valve status: (~~Closed~~ / ~~Partially open~~ / Full open)  
 Maintenance \_\_\_\_\_

**HDPE SUMP**

Water Level: 23" <sup>BOTTOM</sup> from top of lid-  
 High Level Float Switch Setting: (Full Depth / Raised \_\_\_\_\_ feet)  
 Slice Gate Valve Setting: (~~Closed~~ / ~~Partially open~~ / Full open)  
 Noticable Odor: (~~Yes~~ / No)  
 PID Reading: \_\_\_\_\_ ppm  
 Air Sample Collected: (yes/no)  
 Maintenance \_\_\_\_\_  
 Inspect float switch operation: \_\_\_\_\_

**GENERAL MAINTENANCE**

Electric Meter reading: 07163 Kw-hrs  
 Check Operation of Heaters/Fans: OK  
 Noticable Odors Outside Building: NO

**BIOSPARGE WELLS**

Operation Zone	In Building		Pressure (psi)	Flow Vel. (ft/min act.)	In Field Pressure (psi)
	Well #	Valve Status (open, part. closed)			
Zone 3	BW-01	OPEN	6.5		
Zone 2	BW-02	}	6.5		
Zone 1	BW-03		3.75		
Zone 3	BW-04		6.25		
Zone 2	BW-05		6.5		
Zone 1	BW-06		4.25		
Zone 3	BW-07		6.5		
Zone 2	BW-08		7.0		
Zone 1	BW-09		4.5		
Zone 3	BW-10		4.0		
Zone 2	BW-11		6.5		
Zone 1	BW-12		5.0		
Zone 3	BW-13		6.5		
Zone 2	BW-14		6.5		
Zone 1	BW-15		5.0		
Zone 3	BW-16		7.75		
Zone 2	BW-17		6.5		
Zone 1	BW-18		5.0		

**NOTES:**

	COMP, BLEED	COMP, OUTLET
ZONE 1	1.0	3.5
2	3.0	6.0
3	2.5	5.5

SORRY I MISSED MON. + TUES.



OPERATIONS & MAINTENANCE LOG (page 1)

Site Name: Campmarina / Worker's Water Steel Park  
 Project/Task Number: 1313/4.3  
 Site Location: 732 Water Street, Sheboygan, WI

Date of Site Visit: 11-14-2002  
 Arrival Time: 08:45  
 Departure Time: 09:15

Operator: JEFF WUNSCH

Signature: [Signature]

Is system operating upon arrival? NO upon departure? NO  
 If no, which alarm is signalled? NO

**BIOSPARGE COMPRESSOR**

VLS (Air/water Separator)

Record Compressor Temperature: 100 deg. F  
 Record Compressor Pressure: NOTES psi  
 Air bleed valve status: (~~Closed~~ / Partially open / ~~Full open~~)  
 Air Outlet valve status: (~~Closed~~ / Partially open / Full open)

Maintenance  
 : \_\_\_\_\_  
 : \_\_\_\_\_

**HDPE SUMP**

Water Level: 23" from BOTTOM  
 High Level Float Switch Setting: (Full Depth / Raised \_\_\_ feet)  
 Slice Gate Valve Setting: (~~Closed~~ / Partially open / Full open)  
 Noticable Odor: (~~Yes~~ / No)  
 PID Reading: \_\_\_\_\_ ppm  
 Air Sample Collected: (yes/no)  
 Maintenance  
 Inspect float switch operation: \_\_\_\_\_

**GENERAL MAINTENANCE**

Electric Meter reading: 07182 Kw-hrs  
 Check Operation of Heaters/Fans: OK  
 Noticable Odors Outside Building: NO

**BIOSPARGE WELLS**

Operation Zone	In Building		In Field		
	Well #	Valve Status (open, part. closed)	Pressure (psi)	Flow Vel. (ft/min act.)	Pressure (psi)
Zone 1	BW-01	OPEN	6.5		
Zone 2	BW-02	}	6.5		
Zone 3	BW-03		4.0		
Zone 1	BW-04		6.5		
Zone 2	BW-05		6.5		
Zone 3	BW-06		4.5		
Zone 1	BW-07		6.5		
Zone 2	BW-08		7.0		
Zone 3	BW-09		4.5		
Zone 1	BW-10		5.25		
Zone 2	BW-11		6.5		
Zone 3	BW-12		5.0		
Zone 1	BW-13		6.5		
Zone 2	BW-14		6.5		
Zone 3	BW-15		5.0		
Zone 1	BW-16		7.75		
Zone 2	BW-17		6.5		
Zone 3	BW-18		5.0		

**NOTES:**

	COMP. BLEED	COMP. OUTLET
ZONE - 1	2.0	4.0
- 2	4.0	6.0
- 3	3.0	5.5
SCROLL BAR →	01/03 BLOWER HI TEMP	
	02/03 COMPRESSOR HI TEMP	
	03/03 COMPRESSOR LO PRESS	

PAGE 01/01

WPSC SHEBOYGAN OF

9204513777

11/14/2002 09:22



**OPERATIONS & MAINTENANCE LOG**

PAGE 01/01

Site Name: Campmarina / Worker's Water Steet Park  
 Project/Task Number: 1313/4.3  
 Site Location: 732 Water Street, Sheboygan, WI

Operator: JEFF WUNSCH

Is system operating upon arrival? YES upon departure? \_\_\_\_\_  
 If no, which alarm is signalled? 1

**BIOSPARGE COMPRESSOR**

VLS (Air/water Separator)

Compressor Temperature: 113 deg. F  
 Compressor Outlet Pressure: Zone 1 3.0 psi  
 Zone 2 5.0 psi  
 Zone 3 5.5 psi

Compressor Bleed Pressure: 110 psi  
 Air Bleed valve status: (~~Closed~~ / Partially open / ~~Full open~~)  
 Air Outlet valve status: (~~Closed~~ / Partially open / Full open)

**Maintenance**

Lubrication (2 Points) - After every 10,000 operating hours  
 Internal Air Filters (2) - Changed half-yearly (Yes/No)  
 Air Intake Filter (1) - Changed half-yearly (Yes/No)  
 Blades - See O&M Manual  
 Couplings - See O&M Manual  
 Troubleshooting - See O&M Manual

**COMPRESSOR OVERVIEW**

Cumulative Run Hours: Valve 1 13.7 hours  
 Valve 2 12.5 hours  
 Valve 3 12.3 hours  
 Compressor 38.5 hours

**GENERAL MAINTENANCE**

Electric Meter reading: 07 214 Kw-hrs  
 Check Operation of Heaters/Fans: OK  
 Noticable Odors Outside Building: NONE

Post-it <sup>®</sup> Fax Note	7671	Date	# of pages
To	GLENN LUKE	From	JEFF WUNSCH
Co./Dept.		Co.	
Phone #		Phone #	
Fax #	262-523-9001	Fax #	

Date of Site Visit: 11-15-2002  
 Arrival Time: 07:50  
 Departure Time: 08:15

Signature: [Handwritten Signature]

**HDPE SUMP**

Water Level: 23" in. (Depth in Inches)  
 High Level Float Switch Setting: (Full Depth / Raised \_\_\_\_\_ feet)  
 Slice Gate Valve Setting: (~~Closed~~ / Partially open / Full open)  
 Noticable Odor: (~~Yes~~ / No)  
 PID Reading: \_\_\_\_\_ ppm  
 Air Sample Collected: (Yes/No)  
**Maintenance**  
 Inspect float switch operation - Checked half-yearly (Yes/No)

**BIOSPARGE WELLS**

Operation Zone	In Building		Pressure (psi)	Flow Vel. (ft/min)	In Field Pressure (psi)
	Well #	Valve Status (O,P,C)			
Zone 1	BW-03	OPEN	4.0		
Zone 1	BW-06	}	4.25		
Zone 1	BW-09		4.5		
Zone 1	BW-12		5.0		
Zone 1	BW-15		5.0		
Zone 1	BW-18		5.0		
Zone 2	BW-02		6.0		
Zone 2	BW-05		6.0		
Zone 2	BW-08		6.5		
Zone 2	BW-11		6.0		
Zone 2	BW-14		6.0		
Zone 2	BW-17		5.75		
Zone 3	BW-01		7.0		
Zone 3	BW-04		6.75		
Zone 3	BW-07	7.0			
Zone 3	BW-10	7.0			
Zone 3	BW-13	7.0			
Zone 3	BW-16	8.25			

NOTES: ZONE 3 -  
 WITH VALVE CLOSED  
 1 - 2.25  
 4 - 1.75  
 7 - 2.0  
 10 - 2.25  
 13 - 1.50  
 16 - 3.0

WFO SHEBOYGAN WI

11/15/02

08:30

7007/CT/TT

# OPERATIONS & MAINTENANCE LOG

Site Name: Campmarina / Worker's Water Street Park  
Project/Task Number: 1313/4.3  
Site Location: 732 Water Street, Sheboygan, WI

Operator: JEFF WUNSCH

Is system operating upon arrival? Yes upon departure? NO  
If no, which alarm is signalled? \_\_\_\_\_

## BIOSPARGE COMPRESSOR

### VLS (Air/water Separator)

Compressor Temperature: \_\_\_\_\_ deg. F  
Compressor Outlet Pressure: Zone 1 3.0 psi  
Zone 2 5.0 psi  
Zone 3 5.75 psi

Compressor Bleed Pressure: \_\_\_\_\_ psi  
Air Bleed valve status: (~~Closed~~ / Partially open / Full open)  
Air Outlet valve status: (~~Closed~~ / Partially open / Full open)

### Maintenance

Lubrication (2 Points) - After every 10,000 operating hours  
Internal Air Filters (2) - Changed half-yearly (Yes/No)  
Air Intake Filter (1) - Changed half-yearly (Yes/No)  
Blades - See O&M Manual  
Couplings - See O&M Manual  
Troubleshooting - See O&M Manual

## COMPRESSOR OVERVIEW

Cumulative Run Hours: Valve 1 17.8 hours  
Valve 2 16.9 hours  
Valve 3 16.5 hours  
Compressor 51.2 hours

## GENERAL MAINTENANCE

Electric Meter reading: \_\_\_\_\_ Kw-hrs  
Check Operation of Heaters/Fans: OK  
Noticable Odors Outside Building: NONE

Post-it® Fax Note	7671	Date	# of pages ▶
To	<u>GLENN LUKE</u>	From	<u>JEFF WUNSCH</u>
Co./Dept.		Co.	
Phone #		Phone #	
Fax #	<u>262-523-9001</u>	Fax #	

Date of Site Visit: 11-18-2002  
Arrival Time: 07:20  
Departure Time: \_\_\_\_\_

Signature: [Signature]

## HDPE SUMP

Water Level: 2.3 in. (Depth in Inches)  
High Level Float Switch Setting: (Full Depth / Raised \_\_\_\_\_ feet)  
Slice Gate Valve Setting: (~~Closed~~ / Partially open / Full open)  
Noticable Odor: (~~Yes~~ / No)  
PID Reading: \_\_\_\_\_ ppm  
Air Sample Collected: (Yes/No)

### Maintenance

Inspect float switch operation - Checked half-yearly (Yes/No)

## BIOSPARGE WELLS

Operation Zone	In Building		Pressure (psi)	Flow vel. (min/min)	In Field Pressure (psi)
	Well #	Valve Status (O,P,C)			
Zone 1	BW-03	<u>OPEN</u>	<u>3.5</u>		
Zone 1	BW-06	}	<u>4.25</u>		
Zone 1	BW-09		<u>4.25</u>		
Zone 1	BW-12		<u>5.0</u>		
Zone 1	BW-15		<u>5.0</u>		
Zone 1	BW-18		<u>5.0</u>		
Zone 2	BW-02		<u>6.25</u>		
Zone 2	BW-05		<u>6.25</u>		
Zone 2	BW-08		<u>6.5</u>		
Zone 2	BW-11		<u>6.25</u>		
Zone 2	BW-14		<u>6.25</u>		
Zone 2	BW-17		<u>6.0</u>		
Zone 3	BW-01		<u>6.5</u>		
Zone 3	BW-04		<u>6.5</u>		
Zone 3	BW-07		<u>6.75</u>		
Zone 3	BW-10		<u>7.0</u>		
Zone 3	BW-13		<u>7.0</u>		
Zone 3	BW-16	<u>8.25</u>			

NOTES:

PAGE 01/01

WPSU SHEBOYGAN UP

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74:10

11/18/02

**OPERATIONS & MAINTENANCE LOG**

Site Name: Campmarina / Worker's Water Street Park  
 Project/Task Number: 1313/4.3  
 Site Location: 732 Water Street, Sheboygan, WI

Operator: JEFF WUNSCH

Is system operating upon arrival? NO upon departure? NO  
 If no, which alarm is signalled? NO

**BIOSPARGE COMPRESSOR**

VLS (Air/water Separator)

Compressor Temperature: 96 deg. F  
 Compressor Outlet Pressure: Zone 1 4.0 psi  
 Zone 2 6.75 psi  
 Zone 3 6.5 psi

Compressor Bleed Pressure: 4.5 psi  
 Air Bleed valve status: ~~(Closed / Partially open / Full open)~~  
 Air Outlet valve status: ~~(Closed / Partially open / Full open)~~

**Maintenance**

- Lubrication (2 Points) - After every 10,000 operating hours
- Internal Air Filters (2) - Changed half-yearly (Yes/No)
- Air Intake Filter (1) - Changed half-yearly (Yes/No)
- Blades - See O&M Manual
- Couplings - See O&M Manual
- Troubleshooting - See O&M Manual

**COMPRESSOR OVERVIEW**

Cumulative Run Hours: Valve 1 19.3 hours  
 Valve 2 18.3 hours  
 Valve 3 18.0 hours  
 Compressor 55.7 hours

**GENERAL MAINTENANCE**

Electric Meter reading: 87370 Kw-hrs  
 Check Operation of Heaters/Fans: OK  
 Noticable Odors Outside Building: NONE

Date of Site Visit: 11-19-02  
 Arrival Time: 10:00  
 Departure Time: 10:15

Signature: [Signature]

**HDPE SUMP**

Water Level: 23 in. (Depth in Inches)  
 High Level Float Switch Setting: (Full Depth / Raised \_\_\_ feet)  
 Slice Gate Valve Setting: (~~Closed~~ / Partially open / Full open)  
 Noticable Odor: (~~Yes~~ / No)  
 PID Reading: \_\_\_\_\_ ppm  
 Air Sample Collected: (Yes/No)

**Maintenance**

Inspect float switch operation - Checked half-yearly (Yes/No)

**BIOSPARGE WELLS**

Operation Zone	In Building		Valve Status (O,P,C)	Pressure (psi)	Flow Vel. (ft/min)	In Field Pressure (psi)
	Well #					
Zone 1	BW-03		OPEN	4.0		
Zone 1	BW-06		}	4.5		
Zone 1	BW-09			4.5		
Zone 1	BW-12			5.0		
Zone 1	BW-15			5.0		
Zone 1	BW-18			5.0		
Zone 2	BW-02			6.5		
Zone 2	BW-05			6.75		
Zone 2	BW-08			7.0		
Zone 2	BW-11			6.5		
Zone 2	BW-14			6.5		
Zone 2	BW-17			6.25		
Zone 3	BW-01			7.0		
Zone 3	BW-04			7.0		
Zone 3	BW-07			7.0		
Zone 3	BW-10			7.25		
Zone 3	BW-13			7.25		
Zone 3	BW-16		8.5			

NOTES:

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Phone #		Phone #	
Fax #	262-523-9001	Fax #	

PAGE 01/01  
 WFSU SHEBOYGAN WI  
 11/19/02  
 10:47  
 7007/ET/RT

**OPER. DNS & MAINTENANCE LOG**

Site Name: Campmarina / Worker's Water Steet Park  
 Project/Task Number: 1313/4.3  
 Site Location: 732 Water Street, Sheboygan, WI

Operator: JEFF WUNSCH

Is system operating upon arrival? NO upon departure? NO  
 If no, which alarm is signalled? NO

**BIOSPARGE COMPRESSOR**

VLS (Air/water Separator)

Compressor Temperature: 94 deg. F  
 Compressor Outlet Pressure: Zone 1 4.0 psi  
 Zone 2 5.75 psi  
 Zone 3 6.5 psi  
 Compressor Bleed Pressure: 5.0 psi

Air Bleed valve status: (~~Closed~~ / Partially open / ~~Full open~~)  
 Air Outlet valve status: (~~Closed~~ / Partially open / Full open)

**Maintenance**

Lubrication (2 Points) - After every 10,000 operating hours  
 Internal Air Filters (2) - Changed half-yearly (Yes/No)  
 Air Intake Filter (1) - Changed half-yearly (Yes/No)  
 Blades - See O&M Manual  
 Couplings - See O&M Manual  
 Troubleshooting - See O&M Manual

**COMPRESSOR OVERVIEW**

Cumulative Run Hours: Valve 1 19.4 hours  
 Valve 2 18.4 hours  
 Valve 3 18.1 hours  
 Compressor 55.9 hours

**GENERAL MAINTENANCE**

Electric Meter reading: 07399 Kw-hrs  
 Check Operation of Heaters/Fans: OK  
 Noticable Odors Outside Building: NONE

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To <u>GLENN LUKE</u>	From <u>JEFF WUNSCH</u>		
Co./Dept.	Co.		
Phone #	Phone #		
Fax # <u>262-523-9001</u>	Fax #		

Date of Site Visit: 11-20-02  
 Arrival Time: 13:45  
 Departure Time: 14:00

Signature: [Signature]

**HDPE SUMP**

Water Level: 23 in. (Depth in Inches)  
 High Level Float Switch Setting: (Full Depth / Raised \_\_\_ feet)  
 Slice Gate Valve Setting: (~~Closed~~ / Partially open / Full open)  
 Noticable Odor: ~~Yes~~ / No)  
 PID Reading: \_\_\_\_\_ ppm  
 Air Sample Collected: (Yes/No)  
**Maintenance**  
 Inspect float switch operation - Checked half-yearly (Yes/No)

**BIOSPARGE WELLS**

Operation Zone	In Building		Valve Status (O,P,C)	Pressure (psi)	Flow Vel. (ft/min)	In Field Pressure (psi)
	Well #					
Zone 1	BW-03		<u>OPEN</u>	<u>4.0</u>		
Zone 1	BW-06		}	<u>4.5</u>		
Zone 1	BW-09			<u>4.5</u>		
Zone 1	BW-12			<u>5.0</u>		
Zone 1	BW-15			<u>5.0</u>		
Zone 1	BW-18			<u>5.0</u>		
Zone 2	BW-02			<u>6.0</u>		
Zone 2	BW-05			<u>6.25</u>		
Zone 2	BW-08			<u>6.5</u>		
Zone 2	BW-11			<u>6.0</u>		
Zone 2	BW-14			<u>6.25</u>		
Zone 2	BW-17			<u>6.0</u>		
Zone 3	BW-01			<u>7.0</u>		
Zone 3	BW-04			<u>7.0</u>		
Zone 3	BW-07			<u>7.0</u>		
Zone 3	BW-10			<u>7.25</u>		
Zone 3	BW-13			<u>7.0</u>		
Zone 3	BW-16		<u>8.25</u>			

NOTES:

PAGE 01/01  
WISCONSIN STATE LABORATORY OF  
TESTING

**OPERATIONS & MAINTENANCE LOG**

Site Name: Campmarina / Worker's Water Steel Park  
 Project/Task Number: 1313/4.3  
 Site Location: 732 Water Street, Sheboygan, WI  
 Operator: JEFF WUNSCH

Date of Site Visit: 11-21-2002  
 Arrival Time: 08:55  
 Departure Time: 09:10  
 Signature: [Signature]

Is system operating upon arrival? NO upon departure? NO  
 If no, which alarm is signalled? \_\_\_\_\_

**HDPE SUMP**  
 Water Level: 23 in. (Depth in Inches)  
 High Level Float Switch Setting: (Full Depth / Raised      feet)  
 Slice Gate Valve Setting: (~~Closed~~ / ~~Partially open~~ / Full open)  
 Noticable Odor: (~~Yes~~ / No)  
 PID Reading:      ppm  
 Air Sample Collected: (Yes/No)  
**Maintenance**  
 Inspect float switch operation - Checked half-yearly (Yes/No)

**BIOSPARGE COMPRESSOR**

**VLS (Air/water Separator)**  
 Compressor Temperature: 106 deg. F  
 Compressor Outlet Pressure: Zone 1 3.75 psi  
   Zone 2 5.25 psi  
   Zone 3 6.0 psi  
 Compressor Bleed Pressure: 3.5 psi

Air Bleed valve status: (~~Closed~~ / Partially open / ~~Full open~~)  
 Air Outlet valve status: (~~Closed~~ / Partially open / Full open)

**Maintenance**  
 Lubrication (2 Points) - After every 10,000 operating hours  
 Internal Air Filters (2) - Changed half-yearly (Yes/No)  
 Air Intake Filter (1) - Changed half-yearly (Yes/No)  
 Blades - See O&M Manual  
 Couplings - See O&M Manual  
 Troubleshooting - See O&M Manual

**COMPRESSOR OVERVIEW**

Cumulative Run Hours: Valve 1 28.4 hours  
                                   Valve 2 19.3 hours  
                                   Valve 3 19.2 hours  
 Compressor 58.9 hours

**GENERAL MAINTENANCE**

Electric Meter reading: 07953 Kw-hrs  
 Check Operation of Heaters/Fans: OK  
 Noticable Odors Outside Building: NO

**BIOSPARGE WELLS**

Operation Zone	In Building		Pressure (psi)	Flow Vel. (ft/min)	In Field Pressure (psi)
	Well #	Valve Status (O,P,C)			
Zone 1	BW-03	OPEN	4.0		
Zone 1	BW-06	}	4.5		
Zone 1	BW-09		4.5		
Zone 1	BW-12		5.0		
Zone 1	BW-15		5.0		
Zone 1	BW-18		5.0		
Zone 2	BW-02		6.0		
Zone 2	BW-05		6.0		
Zone 2	BW-08		6.5		
Zone 2	BW-11		6.0		
Zone 2	BW-14		6.0		
Zone 2	BW-17		6.0		
Zone 3	BW-01		6.75		
Zone 3	BW-04		6.75		
Zone 3	BW-07		6.75		
Zone 3	BW-10		7.0		
Zone 3	BW-13		7.0		
Zone 3	BW-16	8.25			

NOTES:

Post-it® Fax Note	7671	Date	# of pages ▶
To	GLENN LUKE	From	JEFF WUNSCH
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Fax #	262-523-9001	Fax #	

# OPERATIONS & MAINTENANCE LOG

Site Name: Campmarina / Worker's Water Street Park  
 Project/Task Number: 1313/4.3  
 Site Location: 732 Water Street, Sheboygan, WI

Operator: JEFF WUNSCH

Is system operating upon arrival? YES upon departure? NO  
 If no, which alarm is signalled? \_\_\_\_\_

## BIOSPARGE COMPRESSOR

### VLS (Air/water Separator)

Compressor Temperature: 115 deg. F  
 Compressor Outlet Pressure: Zone 1 2.5 psi  
   Zone 2 4.5 psi  
   Zone 3 5.5 psi

Compressor Bleed Pressure: <1 psi  
 Air Bleed valve status: (~~Closed~~ / Partially open / Full open)  
 Air Outlet valve status: (~~Closed~~ / Partially open / Full open)

### Maintenance

Lubrication (2 Points) - After every 10,000 operating hours  
 Internal Air Filters (2) - Changed half-yearly (Yes/No)  
 Air Intake Filter (1) - Changed half-yearly (Yes/No)  
 Blades - See O&M Manual  
 Couplings - See O&M Manual  
 Troubleshooting - See O&M Manual

## COMPRESSOR OVERVIEW

Cumulative Run Hours: Valve 1 21.9 hours  
                                   Valve 2 20.8 hours  
                                   Valve 3 20.5 hours  
 Compressor 63.1 hours

## GENERAL MAINTENANCE

Electric Meter reading: 07482 Kw-hrs  
 Check Operation of Heaters/Fans: OK  
 Noticable Odors Outside Building: NO

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To	<u>GLENN LUKE</u>	From	<u>JEFF WUNSCH</u>
Co./Dept.		Co.	
Phone #		Phone #	
Fax #	<u>262-523-9001</u>	Fax #	

Date of Site Visit: 11-22-2002  
 Arrival Time: 08140  
 Departure Time: 09105

Signature: [Signature]

## HDPE SUMP

Water Level: 23 in. (Depth in Inches)  
 High Level Float Switch Setting: (Full Depth / Raised \_\_\_ feet)  
 Slice Gate Valve Setting: (~~Closed~~ / Partially open / Full open)  
 Noticable Odor: (~~Yes~~ / No)  
 PID Reading: \_\_\_\_\_ ppm  
 Air Sample Collected: (Yes/No)

### Maintenance

Inspect float switch operation - Checked half-yearly (Yes/No)

## BIOSPARGE WELLS

Operation Zone	In Building		Valve Status (O,P,C)	Pressure (psi)	Flow vel. (ft/min)	In Field Pressure (psi)
	Well #					
Zone 1	BW-03		<u>OPEN</u>	<u>3.75</u>		
Zone 1	BW-06		}	<u>4.25</u>		
Zone 1	BW-09			<u>4.25</u>		
Zone 1	BW-12			<u>5.0</u>		
Zone 1	BW-15			<u>5.0</u>		
Zone 1	BW-18			<u>4.75</u>		
Zone 2	BW-02			<u>6.25</u>		
Zone 2	BW-05			<u>6.5</u>		
Zone 2	BW-08			<u>6.5</u>		
Zone 2	BW-11			<u>6.25</u>		
Zone 2	BW-14			<u>6.25</u>		
Zone 2	BW-17			<u>6.0</u>		
Zone 3	BW-01			<u>7.25</u>		
Zone 3	BW-04			<u>7.0</u>		
Zone 3	BW-07			<u>7.0</u>		
Zone 3	BW-10			<u>7.25</u>		
Zone 3	BW-13			<u>7.25</u>		
Zone 3	BW-16		<u>8.5</u>			

NOTES:

OPERATIONS & MAINTENANCE LOG

Site Name: Campmarina / Worker's Water Steet Park  
Project/Task Number: 1313/4.3  
Site Location: 732 Water Street, Sheboygan, WI

Operator: JEFF WUNSCH

Is System operating upon arrival? NO upon departure NO  
If no, which alarm is signalled? \_\_\_\_\_

BIOSPARGE COMPRESSOR

Compressor Temperature: 98 deg. F  
Compressor Outlet Pressure: Zone 1 4.0 psi  
Zone 2 5.75 psi  
Zone 3 7.25 psi  
Compressor Bleed Pressure: Zone 3 5.5 psi  
Air Bleed valve status: (~~Closed~~ / Partially open / Full open)  
Air Outlet valve status: (~~Closed~~ / Partially open / Full open)

COMPRESSOR OVERVIEW

Cumulative Run Hours: Valve 1 26.4 hours  
Valve 2 25.0 hours  
Valve 3 24.6 hours  
Compressor 76.6 hours

GENERAL MAINTENANCE

Electric Meter reading: 07586 Kw-hrs  
Check Operation of Heaters/Fans: OK  
Noticable Odors Outside Building: NONE

NOTES:

ATTENTION - GLENN LUKE

Date of Site Visit: 11-25-02  
Arrival Time: 12:35  
Departure Time: 13:05

Signature: *Jeff Wunsch*

HDPE SUMP

Water Level: 23 in. (Depth in Inches)  
High Level Float Switch Setting: (Full Depth / Raised \_\_\_ fee  
Slice Gate Valve Setting: (~~Closed~~ / Partially open / Full open)  
Noticable Odor: (~~Yes~~ / No)

BIOSPARGE WELLS

Operation Well # In Building Valve Status Pressure (psi)  
Zone (O,P,C)

Zone	Well #	In Building	Valve Status	Pressure (psi)
Zone 1	BW-03		Open	4.0
Zone 1	BW-06		Open	4.5
Zone 1	BW-09		Open	4.5
Zone 1	BW-12		Open	5.0
Zone 1	BW-15		Open	5.0
Zone 1	BW-18		Open	5.0
Zone 2	BW-02		Open	6.0
Zone 2	BW-05		Open	6.25
Zone 2	BW-08		Open	6.5
Zone 2	BW-11		Open	6.0
Zone 2	BW-14		Open	6.25
Zone 2	BW-17		Open	6.0
Zone 2	BW-19		Open	7.5
Zone 2	BW-20		Open	7.5
Zone 2	BW-21		Open	7.5
Zone 2	BW-22		Open	7.75
Zone 2	BW-23		Open	7.75
Zone 2	BW-24		Open	8.75

OPERATIONS & MAINTENANCE LOG

Site Name: Campmarina / Worker's Water Street Park  
 Project/Task Number: 1313/4.3  
 Site Location: 732 Water Street, Sheboygan, WI

Operator: JEFF WUNSCH

Is System operating upon arrival? NO upon departure NO  
 If no, which alarm is signalled? \_\_\_\_\_

BIOSPARGE COMPRESSOR

Compressor Temperature: 104 deg. F  
 Compressor Outlet Pressure: Zone 1 4.75 psi  
 Zone 2 6.0 psi  
 Zone 3 7.5 psi  
 Compressor Bleed Pressure: Zone 3 5.5 psi *ACTUALLY*  
 Air Bleed valve status: (~~Closed~~ / ~~Partially open~~ / ~~Full open~~)  
 Air Outlet valve status: (~~Closed~~ / ~~Partially open~~ / Full open)

COMPRESSOR OVERVIEW

Cumulative Run Hours: Valve 1 27.5 hours  
 Valve 2 26.0 hours  
 Valve 3 25.6 hours  
 Compressor 79.1 hours

GENERAL MAINTENANCE

Electric Meter reading: 07670 Kw-hrs  
 Check Operation of Heaters/Fans: OK  
 Noticable Odors Outside Building: NONE

NOTES:

**ATTENTION - GLENN LUKE**

Date of Site Visit: 11-26-02  
 Arrival Time: 07:30  
 Departure Time: 07:55

Signature: *Jeff Wunsch*

HDPE SUMP

Water Level: 23 1/4 in. (Depth in Inches)  
 High Level Float Switch Setting: (Full Depth / ~~Raised~~ \_\_\_ feet)  
 Slice Gate Valve Setting: (~~Closed~~ / ~~Partially open~~ / Full open)  
 Noticable Odor: (~~Yes~~ / No)

BIOSPARGE WELLS

Operation Well # In Building Valve Status Pressure (psi)  
 Zone (O,P,C)

Operation Well #	In Building	Valve Status	Pressure (psi)
Zone		(O,P,C)	
Zone 1	BW-03	OPEN	4.0
Zone 1	BW-06	}	4.5
Zone 1	BW-09		4.5
Zone 1	BW-12		5.0
Zone 1	BW-15		5.0
Zone 1	BW-18		5.0
Zone 2	BW-02		5.75
Zone 2	BW-05		6.0
Zone 2	BW-08		6.25
Zone 2	BW-11		5.75
Zone 2	BW-14		6.0
Zone 2	BW-17		5.75
			7.5
			7.5
			7.5
			7.5
			8.75



DATE TIME OPERATOR

# OPERATIONS & MAINTENANCE LOG

Site Name: Campmarina / Worker's Water Steet Park  
Project/Task Number: 1313/4.3  
Site Location: 732 Water Street, Sheboygan, WI

Operator: JEFF WUNSCH

Is System operating upon arrival? NO upon departure NO  
If no, which alarm is signalled? \_\_\_\_\_

## BIOSPARGE COMPRESSOR

Compressor Temperature: 106 deg. F

Compressor Outlet Pressure: Zone 1 4.25 psi  
Zone 2 5.5 psi  
Zone 3 7.0 psi

Compressor Bleed Pressure: 2.5 } 1.5 psi

Air Bleed valve status: (~~Closed~~ / Partially open / Full open)

Air Outlet valve status: (~~Closed~~ / Partially open / Full open)

## COMPRESSOR OVERVIEW

Cumulative Run Hours: Valve 1 29.1 hours  
Valve 2 27.5 hours  
Valve 3 27.1 hours  
Compressor 83.6 hours

## GENERAL MAINTENANCE

Electric Meter reading: 07726 Kw-hrs  
Check Operation of Heaters/Fans: GOOD  
Noticable Odors Outside Building: NONE

NOTES:

**ATTENTION - GLENN LUKE**

Date of Site Visit: 11-27-02

Arrival Time: 13:35

Departure Time: 14:00

Signature: [Signature]

## HDPE SUMP

Water Level: 23 in. (Depth in Inches)

High Level Float Switch Setting: (Full Depth / ~~Raised~~ fee

Slice Gate Valve Setting: (~~Closed~~ / Partially open / Full open)

Noticable Odor: (~~Yes~~ / No)

## BIOSPARGE WELLS

Operation Well # In Building Valve Status Pressure (psi)  
Zone (O,P,C)

Operation Well #	In Building	Valve Status	Pressure (psi)
Zone	(O,P,C)		
Zone 1	BW-03	<u>OPEN</u>	<u>4.0</u>
Zone 1	BW-06		<u>4.5</u>
Zone 1	BW-09		<u>4.5</u>
Zone 1	BW-12		<u>5.0</u>
Zone 1	BW-15		<u>5.0</u>
Zone 1	BW-18		<u>5.0</u>
Zone 2	BW-02		<u>5.75</u>
Zone 2	BW-05		<u>6.0</u>
Zone 2	BW-08		<u>6.25</u>
Zone 2	BW-11		<u>5.75</u>
Zone 2	BW-14		<u>6.0</u>
Zone 2	BW-17		<u>5.75</u>
Zone 2	BW-20		<u>7.5</u>
Zone 2	BW-23		<u>7.5</u>
Zone 2	BW-26		<u>7.5</u>
Zone 2	BW-29		<u>7.75</u>
Zone 2	BW-32		<u>7.5</u>
Zone 2	BW-35		<u>8.75</u>

18/101  
PAGE

# OPERATIONS & MAINTENANCE LOG

Site Name: Campmarina / Worker's Water Steet Park  
Project/Task Number: 1313/4.3  
Site Location: 732 Water Street, Sheboygan, WI

Date of Site Visit: 12-4-2002  
Arrival Time: 09:35  
Departure Time: 10:00

Operator: JEFF WUNSCH

Signature: [Signature]

Is System operating upon arrival? NO upon departure NO  
If no, which alarm is signalled? \_\_\_\_\_

HDPE SUMP  
Water Level: 23 in. (Depth in Inches)  
High Level Float Switch Setting: (Full Depth / ~~Raised~~ \_\_\_ feet)  
Slice Gate Valve Setting: (~~Closed~~ / Partially open / Full open)  
Noticable Odor: (~~Yes~~ / No)

## BIOSPARGE COMPRESSOR

Compressor Temperature: 112 deg. F  
Compressor Outlet Pressure: Zone 1 4.5 psi  
Zone 2 5.5 psi  
Zone 3 7.0 psi  
Compressor Bleed Pressure: Zone 3 3.5 psi  
Air Bleed valve status: (~~Closed~~ / Partially open / Full open)  
Air Outlet valve status: (~~Closed~~ / Partially open / Full open)

## BIOSPARGE WELLS

In Building  
Operation Well # Valve Status Pressure (psi)  
Zone (O,P,C)

## COMPRESSOR OVERVIEW

Cumulative Run Hours: Valve 1 38.7 hours  
Valve 2 37.0 hours  
Valve 3 36.4 hours  
Compressor 112.1 hours

Zone	Well #	Valve Status	Pressure (psi)
Zone 1	BW-03	OPEN	4.0
Zone 1	BW-06	[Hand-drawn wavy line]	4.5
Zone 1	BW-09		4.5
Zone 1	BW-12		5.0
Zone 1	BW-15		5.0
Zone 1	BW-18		5.0
Zone 2	BW-02		5.5
Zone 2	BW-05		6.0
Zone 2	BW-08		6.0
Zone 2	BW-11		5.5
Zone 2	BW-14		6.0
Zone 2	BW-17		5.5
Zone 2	BW-20		7.5
Zone 2	BW-23		7.5
Zone 2	BW-26		7.5
Zone 3	BW-29		8.0
Zone 3	BW-32	7.5	
Zone 3	BW-35	9.0	

## GENERAL MAINTENANCE

Electric Meter reading: 08018 Kw-hrs  
Check Operation of Heaters/Fans: OK  
Noticable Odors Outside Building: LIQNE

NOTES:

**ATTENTION - GLENN LUKE**

WFSU SHEBOYGAN WI

11/15/02

TC:RT 2002/400/27

**OPERATIONS & MAINTENANCE LOG**

Site Name: Campmarina / Worker's Water Steel Park  
 Project/Task Number: 1313/4.3  
 Site Location: 732 Water Street, Sheboygan, WI

Operator: JEFF WUNSCH

Is System operating upon arrival? NO upon departure NO  
 If no, which alarm is signalled? \_\_\_\_\_

**BIOSPARGE COMPRESSOR**

Compressor Temperature: 104 deg. F  
 Compressor Outlet Pressure: Zone 1 4.0 psi  
   Zone 2 5.0 psi  
   Zone 3 7.5 psi  
 Compressor Bleed Pressure: ZONE 3 5.0 psi  
 Air Bleed valve status: (~~Closed~~ / ~~Partially open~~ / ~~Full open~~)  
 Air Outlet valve status: (~~Closed~~ / ~~Partially open~~ / ~~Full open~~)

**COMPRESSOR OVERVIEW**

Cumulative Run Hours: Valve 1 48.8 hours  
                                   Valve 2 47.0 hours  
                                   Valve 3 46.1 hours  
                           Compressor 146.8 hours

**GENERAL MAINTENANCE**

Electric Meter reading: 18342 Kw-hrs  
 Check Operation of Heaters/Fans: GOOD  
 Noticable Odors Outside Building: NONE

**NOTES:**

**ATTENTION - GLENN LUKE**

Date of Site Visit: 12-11-02  
 Arrival Time: 13:15  
 Departure Time: 13:40

Signature: [Handwritten Signature]

**HDPE SUMP**

Water Level: 23 1/4 in. (Depth in Inches)  
 High Level Float Switch Setting: (Full Depth / ~~Raised~~ \_\_\_ fee  
 Slice Gate Valve Setting: (~~Closed~~ / ~~Partially open~~ / Full open)  
 Noticable Odor: (~~Yes~~ / No)

**BIOSPARGE WELLS**

Operation Well # In Building Valve Status Pressure (psi)  
 Zone (O.P.C)

Zone	Well #	In Building	Valve Status	Pressure (psi)
Zone 1	BW-03		<u>OPEN</u>	<u>4.0</u>
Zone 1	BW-06		<u>[Symbol]</u>	<u>4.5</u>
Zone 1	BW-09		<u>[Symbol]</u>	<u>4.5</u>
Zone 1	BW-12		<u>[Symbol]</u>	<u>5.0</u>
Zone 1	BW-15		<u>[Symbol]</u>	<u>5.0</u>
Zone 1	BW-18		<u>[Symbol]</u>	<u>5.0</u>
Zone 2	BW-02		<u>[Symbol]</u>	<u>5.5</u>
Zone 2	BW-05		<u>[Symbol]</u>	<u>5.5</u>
Zone 2	BW-08		<u>[Symbol]</u>	<u>6.0</u>
Zone 2	BW-11		<u>[Symbol]</u>	<u>5.5</u>
Zone 2	BW-14		<u>[Symbol]</u>	<u>5.5</u>
Zone 2	BW-17		<u>[Symbol]</u>	<u>5.5</u>
			<u>[Symbol]</u>	<u>8.0</u>
			<u>[Symbol]</u>	<u>7.5</u>
			<u>[Symbol]</u>	<u>8.0</u>
			<u>[Symbol]</u>	<u>8.0</u>
			<u>[Symbol]</u>	<u>8.0</u>
			<u>[Symbol]</u>	<u>8.0</u>

**OPERATIONS & MAINTENANCE LOG**

Site Name: Campmarina / Worker's Water Steet Park  
 Project/Task Number: 1313/4.3  
 Site Location: 732 Water Street, Sheboygan, WI

Operator: JEFF WUNSCH

Is System operating upon arrival? No upon departure NO  
 If no, which alarm is signalled? \_\_\_\_\_

**BIOSPARGE COMPRESSOR**

Compressor Temperature: 90 deg. F  
 Compressor Outlet Pressure: Zone 1 4.5 psi  
   Zone 2 6.0 psi  
   Zone 3 8.0 psi  
 Compressor Bleed Pressure: Zone 3 6.0 psi  
 Air Bleed valve status: (~~Close~~ / Partially open / ~~Full open~~)  
 Air Outlet valve status: (~~Close~~ / ~~Partially open~~ / Full open)

**COMPRESSOR OVERVIEW**

Cumulative Run Hours: Valve 1 56.8 hours  
                                   Valve 2 54.9 hours  
                                   Valve 3 54.0 hours  
                                   Compressor 165.8 hours

**GENERAL MAINTENANCE**

Electric Meter reading: 08553 Kw-hrs  
 Check Operation of Heaters/Fans: GOOD  
 Noticable Odors Outside Building: NONE

NOTES: MET WITH TECH.

**ATTENTION - GLENN LUKE**

Date of Site Visit: 12-17-02  
 Arrival Time: 0847  
 Departure Time: 0917

Signature: [Handwritten Signature]

**HDPE SUMP**

Water Level: 23 in. (Depth in Inches)  
 High Level Float Switch Setting: (Full Depth / ~~Raised~~ \_\_\_ feet)  
 Slice Gate Valve Setting: (~~Close~~ / ~~Partially open~~ / Full open)  
 Noticable Odor: (~~Yes~~ / No)

**BIOSPARGE WELLS**

Operation Well # In Building Valve Status Pressure (psi)  
 Zone (O,P,C)

Zone 1	BW-03	<u>OPEN</u>	<u>4.0</u>	
Zone 1	BW-06		<u>4.5</u>	
Zone 1	BW-09		<u>4.5</u>	
Zone 1	BW-12		<u>5.0</u>	
Zone 1	BW-15		<u>5.0</u>	
Zone 1	BW-18		<u>5.0</u>	
Zone 2	BW-02		<u>6.0</u>	
Zone 2	BW-05		<u>6.0</u>	
Zone 2	BW-08		<u>6.0</u>	
Zone 2	BW-11		<u>6.0</u>	
Zone 2	BW-14		<u>6.0</u>	
Zone 2	BW-17		<u>6.0</u>	
				<u>8.0</u>
				<u>8.0</u>
				<u>8.0</u>
				<u>8.0</u>
				<u>8.0</u>
				<u>8.0</u>

**OPERATIONS & MAINTENANCE LOG**

Site Name: Campmarina / Worker's Water Steet Park  
 Project/Task Number: 1313/4.3  
 Site Location: 732 Water Street, Sheboygan, WI

Operator: TIM FEDERER

Is System operating upon arrival? YES upon departure YES  
 If no, which alarm is signalled? \_\_\_\_\_

**BIOSPARGE COMPRESSOR**

Compressor Temperature: 100 deg. F  
 Compressor Outlet Pressure: Zone 1 3.75 psi  
   Zone 2 5 psi  
   Zone 3 7 psi  
 Compressor Bleed Pressure: 5 psi  
 Air Bleed valve status: (Closed / Partially open / Full open)  
 Air Outlet valve status: (Closed / Partially open / Full open)

**COMPRESSOR OVERVIEW**

Cumulative Run Hours: Valve 1 59.9 hours  
                                   Valve 2 37.9 hours  
                                   Valve 3 56.6 hours  
 Compressor 174.5 hours

**GENERAL MAINTENANCE**

Electric Meter reading: 18630 Kw-hrs  
 Check Operation of Heaters/Fans: OK  
 Noticable Odors Outside Building: NO

NOTES:

**ATTENTION - GLENN LUKE**

Date of Site Visit: 12-19-02  
 Arrival Time: 14:00  
 Departure Time: 14:30

Signature: T. Federer

**HDPE SUMP**

Water Level: 22 5/8" in. (Depth in Inches)  
 High Level Float Switch Setting: (Full Depth / Raised / fee  
 Slice Gate Valve Setting: (Closed / Partially open / Full open)  
 Noticable Odor: (Yes / No)

**BIOSPARGE WELLS**

Operation Well # In Building  
 Zone Valve Status Pressure (psi)  
 (O,P,C)

Zone 1	BW-03	0	3.75
Zone 1	BW-06	0	4.25
Zone 1	BW-09	0	4.25
Zone 1	BW-12	0	5
Zone 1	BW-15	0	5
Zone 1	BW-18	0	5
Zone 2	BW-02	0	5.5
Zone 2	BW-05	0	5.5
Zone 2	BW-08	0	6
Zone 2	BW-11	0	5.5
Zone 2	BW-14	0	5.75
Zone 2	BW-17	0	5.5
Zone 2	BW-01	0	7.75
Zone 2	BW-04	0	7.5
Zone 2	BW-07	0	7.75
Zone 2	BW-10	0	8
Zone 2	BW-13	0	8
Zone 2	BW-16	0	8

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OPERATIONS & MAINTENANCE LOG

Site Name: Campmarina / Worker's Water Steet Park  
 Project/Task Number: 1313/4.3  
 Site Location: 732 Water Street, Sheboygan, WI

Operator: TIM FEDERER

Is System operating upon arrival? YES upon departure \_\_\_\_\_  
 If no, which alarm is signalled? \_\_\_\_\_

BIOSPARGE COMPRESSOR

Compressor Temperature: 112 deg. F #3  
 Compressor Outlet Pressure: Zone 1 4 psi  
 Zone 2 5 psi  
 Zone 3 7 psi  
 Compressor Bleed Pressure: 4 psi #3  
 Air Bleed valve status: (Closed / Partially open / Full open)  
 Air Outlet valve status: (Closed / Partially open / Full open)

COMPRESSOR OVERVIEW

Cumulative Run Hours: Valve 1 70 hours  
 Valve 2 67.9 hours  
 Valve 3 66.3 hours  
 Compressor 204.2 hours

GENERAL MAINTENANCE

Electric Meter reading: 08927 Kw-hrs  
 Check Operation of Heaters/Fans: OK  
 Noticable Odors Outside Building: NONE

NOTES:

**ATTENTION - GLENN LUKE**

Date of Site Visit: 12-26-02  
 Arrival Time: 13:55  
 Departure Time: 14:20

Signature: T. Federer

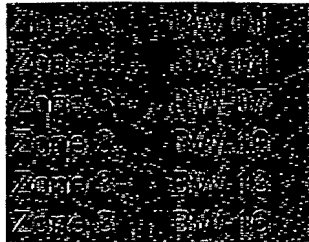
HDPE SUMP

Water Level: 22 5/8 in. (Depth in Inches)  
 High Level Float Switch Setting: (Full Depth) / Raised fee  
 Slice Gate Valve Setting: (Closed / Partially open / Full open)  
 Noticable Odor: (Yes / No)

BIOSPARGE WELLS

Operation Well # In Building Valve Status Pressure (psi)  
 Zone (O,P,C)

Zone	Well #	In Building	Valve Status	Pressure (psi)
Zone 1	BW-03		OPEN	3.75
Zone 1	BW-06			4.25
Zone 1	BW-09			4.25
Zone 1	BW-12			4.75
Zone 1	BW-15			4.75
Zone 1	BW-18			4.75
Zone 2	BW-02			5.5
Zone 2	BW-05			5.5
Zone 2	BW-08			5.75
Zone 2	BW-11			5.5
Zone 2	BW-14			5.75
Zone 2	BW-17			5.5
				7.75
				7.5
				7.5
				7.75
				7.75
				7.75



### OPERATIONS & MAINTENANCE LOG

Site Name: Campmarina / Worker's Water Street Park  
Project/Task Number: 1313/4.3  
Site Location: 732 Water Street, Sheboygan, WI

Operator: JEFF WUNSCH

Is System operating upon arrival? NO upon departure NO  
If no, which alarm is signalled? \_\_\_\_\_

### BIOSPARGE COMPRESSOR

Compressor Temperature: 110 deg. F  
Compressor Outlet Pressure: Zone 1 3.5 psi  
Zone 2 4.5 psi  
Zone 3 7.0 psi  
Compressor Bleed Pressure: Zone 3 4.0 psi  
Air Bleed valve status: (~~Closed~~ / Partially open / ~~Full open~~)  
Air Outlet valve status: (~~Closed~~ / Partially open / Full open)

### COMPRESSOR OVERVIEW

Cumulative Run Hours: Valve 1 81.6 hours  
Valve 2 79.2 hours  
Valve 3 77.3 hours  
Compressor 238.1 hours

### GENERAL MAINTENANCE

Electric Meter reading: 09256 Kw-hrs  
Check Operation of Heaters/Fans: Good  
Noticable Odors Outside Building: NONE

NOTES:

**ATTENTION - GLENN LUKE**

Date of Site Visit: 1-3-03  
Arrival Time: 12:50  
Departure Time: 13:10

Signature: [Signature]

### HDPE SUMP

Water Level: 22 3/4 in. (Depth in Inches)  
High Level Float Switch Setting: (Full Depth / ~~Raised~~ \_\_\_ feet)  
Slice Gate Valve Setting: (~~Closed~~ / ~~Partially open~~ / Full open)  
Noticable Odor: (~~Yes~~ / No)

### BIOSPARGE WELLS

In Building  
Operation Well # Valve Status Pressure (psi)  
Zone (O,P,C)

Zone	Well #	Valve Status	Pressure (psi)
Zone 1	BW-03	<u>OPEN</u>	<u>3.5</u>
Zone 1	BW-06		<u>4.0</u>
Zone 1	BW-09		<u>4.0</u>
Zone 1	BW-12		<u>4.5</u>
Zone 1	BW-15		<u>4.5</u>
Zone 1	BW-18		<u>4.5</u>
Zone 2	BW-02		<u>5.5</u>
Zone 2	BW-05		<u>5.5</u>
Zone 2	BW-08		<u>6.0</u>
Zone 2	BW-11		<u>5.5</u>
Zone 2	BW-14		<u>5.5</u>
Zone 2	BW-17		<u>5.5</u>
Zone 2	BW-19		<u>7.5</u>
Zone 2	BW-20		<u>7.5</u>
Zone 2	BW-21	<u>7.5</u>	
Zone 2	BW-22	<u>8.0</u>	
Zone 2	BW-23	<u>7.5</u>	
Zone 2	BW-24	<u>7.5</u>	

### OPERATIONS & MAINTENANCE LOG

Site Name: Campmarina / Worker's Water Steet Park  
Project/Task Number: 1313/4.3  
Site Location: 732 Water Street, Sheboygan, WI

Operator: JEFF WENISCH

Is System operating upon arrival? NO upon departure NO  
If no, which alarm is signalled? \_\_\_\_\_

#### BIOSPARGE COMPRESSOR

Compressor Temperature: 110° deg. F

Compressor Outlet Pressure: Zone 1 3.0 psi  
Zone 2 4.5 psi  
Zone 3 6.5 psi

Compressor Bleed Pressure: ZONE 3 4.0 psi

Air Bleed valve status: (~~Closed~~ / Partially open / ~~Full open~~)

Air Outlet valve status: (~~Closed~~ / Partially open / Full open)

#### COMPRESSOR OVERVIEW

Cumulative Run Hours: Valve 1 88.7 hours  
Valve 2 86.1 hours  
Valve 3 84.3 hours  
Compressor 259.1 hours

#### GENERAL MAINTENANCE

Electric Meter reading: 09458 Kw-hrs

Check Operation of Heaters/Fans: GOOD

Noticable Odors Outside Building: NONE

#### NOTES:

**ATTENTION - GLENN LUKE**

Date of Site Visit: 1-8-03

Arrival Time: 12:55

Departure Time: 13:15

Signature: [Signature]

#### HDPE SUMP

Water Level: 22 1/2 in. (Depth in Inches)

High Level Float Switch Setting: (Full Depth / ~~Partial~~ \_\_\_ feet)

Slice Gate Valve Setting: (~~Closed~~ / ~~Partially open~~ / Full open)

Noticable Odor: (~~Yes~~ / No)

#### BIOSPARGE WELLS

In Building  
Operation Well # Valve Status Pressure (psi)  
Zone (O,P,C)

Zone	Well #	Valve Status	Pressure (psi)
Zone 1	BW-03	OPEN	3.5
Zone 1	BW-06	S	4.0
Zone 1	BW-09		4.0
Zone 1	BW-12		4.5
Zone 1	BW-15		4.5
Zone 1	BW-18		4.5
Zone 2	BW-02		5.5
Zone 2	BW-05		5.5
Zone 2	BW-08		5.5
Zone 2	BW-11		5.5
Zone 2	BW-14		5.5
Zone 2	BW-17		5.5
Zone 2	BW-20		7.5
Zone 2	BW-23		7.5
Zone 2	BW-26		7.5
Zone 2	BW-29		7.5
Zone 2	BW-32		7.5
Zone 2	BW-35		7.5



**OPERATIONS LOG**

Site Name: Campmarina / Worker's Water Steel Park  
 Project/Task Number: 1313/4.3  
 Site Location: 732 Water Street, Sheboygan, WI

Is System operating upon arrival? YES upon departure YES  
 If no, which alarm is signalled? \_\_\_\_\_

**BIOSPARGE COMPRESSOR**

Compressor Temperature: 102 deg. F.  
 Compressor Outlet Pressure: Zone 1 4.25 psi  
   Zone 2 5.50 psi  
   Zone 3 8 psi  
 Compressor Bleed Pressure: Zone 1 3 psi  
   Zone 2 3.75 psi  
   Zone 3 5.50psi

Air Bleed valve status: (Closed / Partially open / Full open)  
 Air Outlet valve status: (Closed / Partially open / Full open)

**COMPRESSOR OVERVIEW**

Cumulative Run Hours: Valve 1 108.8 hours  
   Valve 2 106.2 hours  
   Valve 3 103.6 hours  
 Compressor: 318.6 hours

**GENERAL MAINTENANCE**

Electric Meter reading: 10223 Kw-hrs  
 Check Operation of Heaters/Fans: OK  
 Noticable Odors Outside Building: NONE

NOTES: \_\_\_\_\_

**ATTENTION - GLENN LUKE**

Operator: TIM FEDERER  
 Date of Site Visit: 1-22-03  
 Arrival Time: 13:50  
 Departure Time: 14:15  
 Signature: [Signature]

**HDPE SUMP**

Water Level: 22 3/8 in. (Depth in Inches)  
 High Level Float Switch Setting: (Full Depth / Raised \_\_\_\_\_ ft)  
 Slice Gate Valve Setting: (Closed / Partially open / Full open)  
 Noticable Odor: (Yes / No)

**BIOSPARGE WELLS**

Operation Zone	Well #	Valve Status (O,P,C)	Pressure (psi) In Building
Zone 1	BW-03	<u>OPEN</u>	<u>3.75</u>
Zone 1	BW-06	}	<u>4.25</u>
Zone 1	BW-09		<u>4.25</u>
Zone 1	BW-12		<u>4.75</u>
Zone 1	BW-15		<u>4.75</u>
Zone 1	BW-18		<u>4.75</u>
Zone 2	BW-02		<u>5.25</u>
Zone 2	BW-05		<u>5.50</u>
Zone 2	BW-08		<u>5.75</u>
Zone 2	BW-11		<u>5.50</u>
Zone 2	BW-14		<u>5.75</u>
Zone 2	BW-17	<u>5.50</u>	
Zone 2	BW-19	}	<u>8</u>
Zone 2	BW-20		<u>7.75</u>
Zone 2	BW-21		<u>8</u>
Zone 2	BW-22		<u>8</u>
Zone 2	BW-23		<u>8</u>

**OPERATIONS LOG**

Site Name: Campmarina / Worker's Water Steet Park  
 Project/Task Number: 1313/4.3  
 Site Location: 732 Water Street, Sheboygan, WI

Is System operating upon arrival? NO upon departure NO  
 If no, which alarm is signalled? \_\_\_\_\_

**BIOSPARGE COMPRESSOR**

Compressor Temperature: 111 deg. F.  
 Compressor Outlet Pressure: Zone 1 4.0 psi  
   Zone 2 5.0 psi  
   Zone 3 7.0 psi  
 Compressor Bleed Pressure: Zone 1 2.0 psi  
   Zone 2 2.5 psi  
   Zone 3 4.0 psi

Air Bleed valve status: (~~Closed~~ / Partially open / ~~Full open~~)  
 Air Outlet valve status: (~~Closed~~ / Partially open / Full open)

**COMPRESSOR OVERVIEW**

Cumulative Run Hours: Valve 1 113.6 hours  
   Valve 2 111.1 hours  
   Valve 3 107.6 hours  
 Compressor: 232.4 hours

**GENERAL MAINTENANCE**

Electric Meter reading: 10734 Kw-hrs  
 Check Operation of Heaters/Fans: GOOD  
 Noticable Odors Outside Building: None

NOTES: \_\_\_\_\_  
ATTENTION - GLENN LUKE

Operator: JEFF WUNSCH  
 Date of Site Visit: 1-29-03  
 Arrival Time: 13130  
 Departure Time: 13150

Signature: [Signature]

**HDPE SUMP**

Water Level: 22 1/4 in. (Depth in Inches)  
 High Level Float Switch Setting: (Full Depth / ~~Raised~~ \_\_\_\_\_ ft)  
 Slice Gate Valve Setting: (~~Closed~~ / Partially open / Full open)  
 Noticable Odor: ~~Yes~~ / No)

**BIOSPARGE WELLS**

Operation Zone	Well #	Valve Status (O,P,C)	Pressure (psi) In Building
Zone 1	BW-03	OPEN	3.5
Zone 1	BW-06	[Wavy Line]	4.0
Zone 1	BW-09		4.0
Zone 1	BW-12		4.5
Zone 1	BW-15		5.0
Zone 1	BW-18		4.5
Zone 2	BW-02		5.0
Zone 2	BW-05		5.5
Zone 2	BW-08		5.5
Zone 2	BW-11		5.5
Zone 2	BW-14		5.5
Zone 2	BW-17	5.0	
[Shaded]	[Shaded]	[Shaded]	7.5 <del>6.0</del>
[Shaded]	[Shaded]	[Shaded]	7.5
[Shaded]	[Shaded]	[Shaded]	7.5
[Shaded]	[Shaded]	[Shaded]	8.0
[Shaded]	[Shaded]	[Shaded]	7.5
[Shaded]	[Shaded]	[Shaded]	7.5

### OPERATIONS LOG

Site Name: Campmarina / Worker's Water Steet Park  
Project/Task Number: 1313/4.3  
Site Location: 732 Water Street, Sheboygan, WI

Operator: JEFF WUNSCH  
Date of Site Visit: 2-5-03  
Arrival Time: 12:35  
Departure Time: 12:50

Is System operating upon arrival? NO upon departure NO  
If no, which alarm is signalled? \_\_\_\_\_

Signature: [Signature]

### BIOSPARGE COMPRESSOR

Compressor Temperature: 109 deg. F.  
Compressor Outlet Pressure: Zone 1 4.0 psi  
Zone 2 5.0 psi  
Zone 3 8.0 psi  
Compressor Bleed Pressure: Zone 1 2.0 psi  
Zone 2 3.0 psi  
Zone 3 5.0 psi

### HDPE SUMP

Water Level: 22.5 in. (Depth in Inches)  
High Level Float Switch Setting: (Full Depth / ~~Raised~~ \_\_\_\_\_ ft)  
Slice Gate Valve Setting: (~~Closed~~ / Partially open / Full open)  
Noticable Odor: (~~Yes~~ / No)

Air Bleed valve status: (~~Closed~~ / Partially open / Full open)  
Air Outlet valve status: (~~Closed~~ / Partially open / Full open)

### BIOSPARGE WELLS

Operation Zone	Well #	Valve Status (O,P,C)	Pressure (psi) In Building
Zone 1	BW-03	<u>OPEN</u>	<u>3.5</u>
Zone 1	BW-06		<u>4.0</u>
Zone 1	BW-09		<u>4.0</u>
Zone 1	BW-12		<u>4.75</u>
Zone 1	BW-15		<u>4.75</u>
Zone 1	BW-18		<u>4.5</u>
Zone 2	BW-02		<u>5.25</u>
Zone 2	BW-05		<u>5.5</u>
Zone 2	BW-08		<u>5.75</u>
Zone 2	BW-11		<u>5.5</u>
Zone 2	BW-14		<u>5.5</u>
Zone 2	BW-17	<u>5.5</u>	
Zone 2	BW-20	<u>8.0</u>	
Zone 2	BW-23	<u>8.0</u>	
Zone 2	BW-26	<u>8.0</u>	
Zone 2	BW-29	<u>8.5</u>	
Zone 2	BW-32	<u>8.5</u>	
Zone 2	BW-35	<u>8.5</u>	

### COMPRESSOR OVERVIEW

Cumulative Run Hours: Valve 1 123.7 hours  
Valve 2 121.1 hours  
Valve 3 117.3 hours  
Compressor: 362.1 hours

### GENERAL MAINTENANCE

Electric Meter reading: 11040 Kw-hrs  
Check Operation of Heaters/Fans: GOOD  
Noticable Odors Outside Building: NONE

NOTES: \_\_\_\_\_  
ATTENTION - GLENN LUKE

### OPERATIONS LOG

Site Name: Campmarina / Worker's Water Steet Park  
Project/Task Number: 1313/4.3  
Site Location: 732 Water Street, Sheboygan, WI

Is System operating upon arrival? YES upon departure YES  
If no, which alarm is signalled? \_\_\_\_\_

#### BIOSPARGE COMPRESSOR

Compressor Temperature: 102 deg. F.  
Compressor Outlet Pressure: Zone 1 4.75 psi  
Zone 2 5.75 psi  
Zone 3 8 psi  
Compressor Bleed Pressure: Zone 1 4 psi  
Zone 2 4.5 psi  
Zone 3 6.25 psi

Air Bleed valve status: (Closed / Partially open / Full open)  
Air Outlet valve status: (Closed / Partially open / Full open)

#### COMPRESSOR OVERVIEW

Cumulative Run Hours: Valve 1 134.7 hours  
Valve 2 132 hours  
Valve 3 127.8 hours  
Compressor: 394.5 hours

#### GENERAL MAINTENANCE

Electric Meter reading: 11491 Kw-hrs  
Check Operation of Heaters/Fans: OK  
Noticable Odors Outside Building: NONE

NOTES: \_\_\_\_\_  
ATTENTION - GLENN LUKE

Operator: TIM FEDERER  
Date of Site Visit: 2-13-03  
Arrival Time: 7:55  
Departure Time: 8:15  
Signature: [Signature]

#### HDPE SUMP

Water Level: 22 1/4 in. (Depth in Inches)  
High Level Float Switch Setting: (Full Depth) Raised \_\_\_\_\_ ft)  
Slice Gate Valve Setting: (Closed / Partially open / Full open)  
Noticable Odor: (Yes / No)

#### BIOSPARGE WELLS

Operation Zone	Well #	Valve Status (O,P,C)	Pressure (psi) In Building
Zone 1	BW-03	<u>OPEN</u>	<u>3.75</u>
Zone 1	BW-06	}	<u>4.25</u>
Zone 1	BW-09		<u>4.25</u>
Zone 1	BW-12		<u>4.75</u>
Zone 1	BW-15		<u>4.75</u>
Zone 1	BW-18		<u>4.75</u>
Zone 2	BW-02		<u>5.25</u>
Zone 2	BW-05		<u>5.5</u>
Zone 2	BW-08		<u>5.75</u>
Zone 2	BW-11		<u>5.5</u>
Zone 2	BW-14		<u>5.5</u>
Zone 2	BW-17	<u>5.5</u>	
			<u>7.75</u>
			<u>7.5</u>
			<u>7.5</u>
			<u>7.75</u>
			<u>7.75</u>

**OPERATIONS LOG**

Site Name: Campmarina / Worker's Water Steet Park  
 Project/Task Number: 1313/4.3  
 Site Location: 732 Water Street, Sheboygan, WI

Is System operating upon arrival? NO upon departure NO  
 If no, which alarm is signalled? \_\_\_\_\_

**BIOSPARGE COMPRESSOR**

Compressor Temperature: 106 deg. F.  
 Compressor Outlet Pressure: Zone 1 4.5 psi  
   Zone 2 5.5 psi  
   Zone 3 7.5 psi  
 Compressor Bleed Pressure: Zone 1 4.0 psi  
   Zone 2 4.5 psi  
   Zone 3 5.5 psi

Air Bleed valve status: (~~Closed~~ / Partially open / ~~Full open~~)  
 Air Outlet valve status: (~~Closed~~ / ~~Partially open~~ / Full open)

**COMPRESSOR OVERVIEW**

Cumulative Run Hours: Valve 1 143.3 hours  
   Valve 2 140.7 hours  
   Valve 3 136.1 hours  
 Compressor: 420.0 hours

**GENERAL MAINTENANCE**

Electric Meter reading: 11816 Kw-hrs  
 Check Operation of Heaters/Fans: GOOD  
 Noticable Odors Outside Building: NONE

NOTES: \_\_\_\_\_  
**ATTENTION - GLENN LUKE**

Operator: JEFF WUNSCH  
 Date of Site Visit: 2-19-03  
 Arrival Time: 12:25  
 Departure Time: 12:40

Signature: [Signature]

**HDPE SUMP**

Water Level: 22 1/8 in. (Depth in Inches)  
 High Level Float Switch Setting: (Full Depth / ~~Reset~~ \_\_\_\_\_ ft)  
 Slice Gate Valve Setting: (~~Closed~~ / ~~Partially open~~ / Full open)  
 Noticable Odor: (~~Yes~~ / No)

**BIOSPARGE WELLS**

Operation Zone	Well #	Valve Status (O,P,C)	Pressure (psi) In Building
Zone 1	BW-03	<u>OPEN</u>	<u>3.75</u>
Zone 1	BW-06		<u>4.0</u>
Zone 1	BW-09		<u>4.0</u>
Zone 1	BW-12		<u>4.75</u>
Zone 1	BW-15		<u>4.75</u>
Zone 1	BW-18		<u>4.75</u>
Zone 2	BW-02		<u>5.25</u>
Zone 2	BW-05		<u>5.5</u>
Zone 2	BW-08		<u>5.5</u>
Zone 2	BW-11		<u>5.25</u>
Zone 2	BW-14		<u>5.5</u>
Zone 2	BW-17	<u>5.25</u>	
			<u>7.5</u>
			<u>7.5</u>
			<u>7.5</u>
			<u>7.75</u>
			<u>7.75</u>
			<u>7.75</u>

**OPERATIONS LOG**

Site Name: Campmarina / Worker's Water Steet Park  
 Project/Task Number: 1313/4.3  
 Site Location: 732 Water Street, Sheboygan, WI

Is System operating upon arrival? NO upon departure NO  
 If no, which alarm is signalled? \_\_\_\_\_

Operator: Jeff Wunsch  
 Date of Site Visit: 02-26-03  
 Arrival Time: 13155  
 Departure Time: 14:20

Signature: [Signature]

**HDPE SUMP**

Water Level: 2 3/4 in. (Depth in Inches)  
 High Level Float Switch Setting: (Full Depth / ~~Raised~~ \_\_\_\_\_ ft)  
 Slice Gate Valve Setting: (~~Closed~~ / ~~Partially open~~ / Full open)  
 Noticable Odor: (~~Yes~~ / No)

**BIOSPARGE COMPRESSOR**

Compressor Temperature: 109 deg. F.  
 Compressor Outlet Pressure: Zone 1 4.5 psi  
   Zone 2 5.5 psi  
   Zone 3 7.5 psi  
 Compressor Bleed Pressure: Zone 1 3.5 psi  
   Zone 2 4.0 psi  
   Zone 3 5.0 psi

Air Bleed valve status: (~~Closed~~ / Partially open / ~~Full open~~)  
 Air Outlet valve status: (~~Closed~~ / ~~Partially open~~ / Full open)

**COMPRESSOR OVERVIEW**

Cumulative Run Hours: Valve 1 153.4 hours  
   Valve 2 150.7 hours  
   Valve 3 145.8 hours  
 Compressor: 449.8 hours

**GENERAL MAINTENANCE**

Electric Meter reading: 12155 Kw-hrs  
 Check Operation of Heaters/Fans: Good  
 Noticable Odors Outside Building: None

NOTES: \_\_\_\_\_  
**ATTENTION - GLENN LUKE**

**BIOSPARGE WELLS**

Operation Zone	Well #	Valve Status (O,P,C)	Pressure (psi) In Building	
Zone 1	BW-03	OPEN	3.75	
Zone 1	BW-06	[Wavy line]	4.0	
Zone 1	BW-09		4.25	
Zone 1	BW-12		4.75	
Zone 1	BW-15		4.75	
Zone 1	BW-18		4.75	
Zone 2	BW-02		5.5	
Zone 2	BW-05		5.5	
Zone 2	BW-08		5.75	
Zone 2	BW-11		5.5	
Zone 2	BW-14		5.5	
Zone 2	BW-17		5.25	
Zone 1	BW-01			7.75
Zone 1	BW-04			7.5
Zone 1	BW-07		7.5	
Zone 1	BW-10		8.0	
Zone 2	BW-13		7.75	
Zone 2	BW-16		7.75	

01/01 PAGE WPSU SHEBOYGAN OP 5204513777 02/26/2003 15:04

PAGE 01/01  
WPSC SHEBOYGAN OP  
11/15/04  
03/05/03

### OPERATIONS LOG

Site Name: Campmarina / Worker's Water Street Park  
Project/Task Number: 1313/4.3  
Site Location: 732 Water Street, Sheboygan, WI

Is System operating upon arrival? NO upon departure NO  
If no, which alarm is signalled? \_\_\_\_\_

### BIOSPARGE COMPRESSOR

Compressor Temperature: 110 deg. F.  
Compressor Outlet Pressure: Zone 1 5.0 psi  
Zone 2 5.0 psi  
Zone 3 7.25 psi  
Compressor Bleed Pressure: Zone 1 3.0 psi  
Zone 2 3.5 psi  
Zone 3 4.5 psi

Air Bleed valve status: (~~Closed~~ / Partially open / ~~Full open~~)  
Air Outlet valve status: (~~Closed~~ / Partially open / Full open)

### COMPRESSOR OVERVIEW

Cumulative Run Hours: Valve 1 163.4 hours  
Valve 2 160.7 hours  
Valve 3 155.4 hours  
Compressor: 479.5 hours

### GENERAL MAINTENANCE

Electric Meter reading: 12494 Kw-hrs  
Check Operation of Heaters/Fans: GOOD  
Noticable Odors Outside Building: NONE

NOTES: Will read 1st Wed. of Month  
**ATTENTION - GLENN LUKE**

Operator: JEFF WUNSCH  
Date of Site Visit: 13100 03/05/03  
Arrival Time: 13100  
Departure Time: 13130

Signature: [Signature]

### HDPE SUMP

Water Level: 2 3/4 in. (Depth in Inches)  
High Level Float Switch Setting: (Full Depth / ~~Raised~~ \_\_\_\_\_ ft)  
Slice Gate Valve Setting: (~~Closed~~ / Partially open / Full open)  
Noticable Odor: (~~Yes~~ / No)

### BIOSPARGE WELLS

Operation Zone	Well #	Valve Status (O,P,C)	Pressure (psi) In Building
Zone 1	BW-03	<u>OPEN</u>	3.5
Zone 1	BW-06	}	4.0
Zone 1	BW-09		4.0
Zone 1	BW-12		4.5
Zone 1	BW-15		4.75
Zone 1	BW-18		4.5
Zone 2	BW-02		5.0
Zone 2	BW-05		5.5
Zone 2	BW-08		5.5
Zone 2	BW-11		5.25
Zone 2	BW-14		5.5
Zone 2	BW-17	5.25	
			7.75
			7.5
			7.75
			8.0
			7.75
			7.75

**OPERATIONS LOG**

Site Name: Campmarina / Worker's Water Steet Park  
 Project/Task Number: 1313/4.3  
 Site Location: 732 Water Street, Sheboygan, WI

Is System operating upon arrival? Yes upon departure Yes  
 If no, which alarm is signalled? \_\_\_\_\_

**BIOSPARGE COMPRESSOR**

Compressor Temperature: 108 deg. F.  
 Compressor Outlet Pressure: Zone 1 5 psi  
   Zone 2 5.5 psi  
   Zone 3 7.75 psi  
 Compressor Bleed Pressure: Zone 1 4 psi  
   Zone 2 4.25 psi  
   Zone 3 6 psi

Air Bleed valve status: (Closed / Partially open / Full open)  
 Air Outlet valve status: (Closed / Partially open / Full open)

**COMPRESSOR OVERVIEW**

Cumulative Run Hours: Valve 1 202.3 hours  
   Valve 2 199.2 hours  
   Valve 3 193.9 hours  
 Compressor: 595.4 hours

**GENERAL MAINTENANCE**

Electric Meter reading: 13529 Kw-hrs  
 Check Operation of Heaters/Fans: OK  
 Noticable Odors Outside Building: NONE

NOTES: \_\_\_\_\_  
**ATTENTION - GLENN LUKE**

Operator: Tim Federal  
 Date of Site Visit: 4-2-03  
 Arrival Time: 14:00  
 Departure Time: 14:20  
 Signature: T. Federal

**HDPE SUMP**

Water Level: 2 1/2 in. (Depth in Inches)  
 High Level Float Switch Setting: (Full Depth) / Raised (ft)  
 Slice Gate Valve Setting: (Closed / Partially open / Full open)  
 Noticable Odor: (Yes / No)

**BIOSPARGE WELLS**

Operation Zone	Well #	Valve Status (O,P,C)	Pressure (psi) In Building
Zone 1	BW-03	OPEN	4.25
Zone 1	BW-06		4.75
Zone 1	BW-09		4.75
Zone 1	BW-12		5.25
Zone 1	BW-15		5.25
Zone 1	BW-18		5.25
Zone 2	BW-02		5.25
Zone 2	BW-05		5.50
Zone 2	BW-08		5.75
Zone 2	BW-11		5.50
Zone 2	BW-14		5.75
Zone 2	BW-17		5.50
Zone 2	BW-18		7.75
Zone 2	BW-19		7.50
Zone 2	BW-20		7.50
Zone 2	BW-21		7.75
Zone 2	BW-22		7.75
Zone 2	BW-23		7.75

PAGE 01/01  
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 04/02/2003 14:41



**OPERATIONS LOG**

Site Name: Campmarina / Worker's Water Steet Park  
 Project/Task Number: 1313/4.3  
 Site Location: 732 Water Street, Sheboygan, WI

Is System operating upon arrival? No upon departure \_\_\_\_\_  
 If no, which alarm is signalled? \_\_\_\_\_

**BIOSPARGE COMPRESSOR**

Compressor Temperature: \_\_\_\_\_ deg. F.  
 Compressor Outlet Pressure: Zone 1 \_\_\_\_\_ psi  
   Zone 2 \_\_\_\_\_ psi  
   Zone 3 7 psi  
 Compressor Bleed Pressure: Zone 1 \_\_\_\_\_ psi  
   Zone 2 \_\_\_\_\_ psi  
   Zone 3 4 psi

Air Bleed valve status: (~~Closed~~ / Partially open / ~~Full open~~)  
 Air Outlet valve status: (~~Closed~~ / Partially open / Full open)

**COMPRESSOR OVERVIEW**

Cumulative Run Hours: Valve 1 217.2 hours  
   Valve 2 214.2 hours  
   Valve 3 208.6 hours  
   Compressor: 639.9 hours

*From Housing on top of Compressor  
 Large Inlet air filter - ?  
 no numbers*

**GENERAL MAINTENANCE**

Electric Meter reading: \_\_\_\_\_ Kw-hrs  
 Check Operation of Heaters/Fans: OK  
 Noticable Odors Outside Building: NONE

NOTES: \_\_\_\_\_

**ATTENTION - GLENN LUKE**

*mail  
 und Inlet Filter Ritetschle 731-142  
 - compressed airfilter " 731-148*

*00701 - Compressor Lo Press  
 00001 - Compressor HI Temp*

Operator: JEFF WUNSCH / GLENN LUKE  
 Date of Site Visit: 6-26-03  
 Arrival Time: 09:50  
 Departure Time: \_\_\_\_\_

Signature: *[Signature]*

**HDPE SUMP**

Water Level: 2 1/4 in. (Depth in Inches)  
 High Level Float Switch Setting: (Full Depth / ~~Raised~~ ft)  
 Slice Gate Valve Setting: (~~Closed~~ / Partially open / Full open)  
 Noticable Odor: (~~Yes~~ / No)

**BIOSPARGE WELLS**

Operation Zone	Well #	Valve Status (O,P,C)	Pressure (psi) In Building	
Zone 1	BW-03	<u>OPEN</u>		
Zone 1	BW-06			
Zone 1	BW-09			
Zone 1	BW-12			
Zone 1	BW-15			
Zone 1	BW-18			
Zone 2	BW-02			7.5
Zone 2	BW-05			7.5
Zone 2	BW-08			7.5
Zone 2	BW-11			7.5
Zone 2	BW-14		7.5	
Zone 2	BW-17		7.5	

*00002 System Fail*

**OPERATIONS LOG**

Site Name: Campmarina / Worker's Water Steet Park  
 Project/Task Number: 1313/4.3  
 Site Location: 732 Water Street, Sheboygan, WI

Is System operating upon arrival? No upon departure No  
 If no, which alarm is signalled? \_\_\_\_\_

**BIOSPARGE COMPRESSOR**

Compressor Temperature: 113 deg. F.  
 Compressor Outlet Pressure: Zone 1 3.0 psi  
   Zone 2 4.25 psi  
   Zone 3 6 psi  
 Compressor Bleed Pressure: Zone 1 0 psi  
   Zone 2 0 psi  
   Zone 3 2.5 psi

Air Bleed valve status: PARTIALLY OPEN (~~Closed / Partially open / Full open~~)  
 Air Outlet valve status: (~~Closed / Partially open / Full open~~)

**COMPRESSOR OVERVIEW**

Cumulative Run Hours: Valve 1 218.9 hours  
   Valve 2 215.8 hours  
   Valve 3 210.4 hours  
 Compressor: 645.1 hours

**GENERAL MAINTENANCE**

Electric Meter reading: \_\_\_\_\_ Kw-hrs  
 Check Operation of Heaters/Fans: OK  
 Noticable Odors Outside Building: NONE

NOTES: REPLACED FILTER 7-21-03 BACK ON-LINE

**ATTENTION - GLENN LUKE**

Operator: JEFF WUNSCH  
 Date of Site Visit: 12-2-03  
 Arrival Time: 12:30  
 Departure Time: 13:50

Signature: *Jeff Wunsch*

**HDPE SUMP**

Water Level: 2 1/2 in. (Depth in Inches)  
 High Level Float Switch Setting: (Full Depth / Raised \_\_\_\_\_ ft)  
 Slice Gate Valve Setting: (~~Closed / Partially open / Full open~~)  
 Noticable Odor: (~~Yes~~ / No)

**BIOSPARGE WELLS**

Operation Zone	Well #	Valve Status (O,P,C)	Pressure (psi) In Building
Zone 1	BW-03	<u>OPEN</u>	<u>3.5</u>
Zone 1	BW-06		<u>4.0</u>
Zone 1	BW-09		<u>4.0</u>
Zone 1	BW-12		<u>4.5</u>
Zone 1	BW-15		<u>4.5</u>
Zone 1	BW-18		<u>4.5</u>
Zone 2	BW-02		<u>4.75</u>
Zone 2	BW-05		<u>5.0</u>
Zone 2	BW-08		<u>5.0</u>
Zone 2	BW-11		<u>5.0</u>
Zone 2	BW-14		<u>5.0</u>
Zone 2	BW-17		<u>5.0</u>
Zone 2	BW-20		<u>6.5</u>
Zone 2	BW-23		<u>6.25</u>
Zone 2	BW-26		<u>6.5</u>
Zone 2	BW-29		<u>6.5</u>
Zone 2	BW-32		<u>6.5</u>
Zone 2	BW-35		<u>6.5</u>

### OPERATIONS LOG

Site Name: Campmarina / Worker's Water Steet Park  
 Project/Task Number: 1313/4.3  
 Site Location: 732 Water Street, Sheboygan, WI

Operator: JEFF WUNSCH  
 Date of Site Visit: 12/18/03  
 Arrival Time: 11:10  
 Departure Time: 11:45

Is System operating upon arrival? No upon departure \_\_\_\_\_  
 If no, which alarm is signalled? \_\_\_\_\_

#### BIOSPARGE COMPRESSOR

Compressor Temperature: 114 deg. F.  
 Compressor Outlet Pressure: Zone 1 4.25 psi  
   Zone 2 5.0 psi  
   Zone 3 6.5 psi  
 Compressor Bleed Pressure: Zone 1 4.25 psi  
   Zone 2 5.0 psi  
   Zone 3 6.0 psi

Air Bleed valve status: (~~Closed~~ / Partially open / ~~Full open~~)  
 Air Outlet valve status: (~~Closed~~ / Partially open / Full open)

#### COMPRESSOR OVERVIEW

Cumulative Run Hours: Valve 1 241.4 hours  
   Valve 2 238.3 hours  
   Valve 3 232.6 hours  
 Compressor: 712.3 hours

#### GENERAL MAINTENANCE

Electric Meter reading: 16751 Kw-hrs  
 Check Operation of Heaters/Fans: Yes  
 Noticable Odors Outside Building: NO

NOTES: New outlet + BLEED GAUGES  
ATTENTION - SPIROS FAFALIOS

#### HDPE SUMP

Water Level: 21.25 in. (Depth in Inches)  
 High Level Float Switch Setting: (Full Depth / ~~Raised~~ \_\_\_\_\_ ft)  
 Slice Gate Valve Setting: (~~Closed~~ / Partially open / Full open)  
 Noticable Odor: (~~Yes~~ / No)

#### BIOSPARGE WELLS

Operation Zone	Well #	Valve-Status (O,P,C)	Pressure (psi) In Building
Zone 1	BW-03	O	3.5
Zone 1	BW-06	}	4.0
Zone 1	BW-09		4.0
Zone 1	BW-12		4.5
Zone 1	BW-15		4.5
Zone 1	BW-18		4.5
Zone 2	BW-02		5.0
Zone 2	BW-05		5.5
Zone 2	BW-08		5.5
Zone 2	BW-11		5.25
Zone 2	BW-14		5.5
Zone 2	BW-17	5.0	
			6.75
			6.5
			6.5
			6.75
			6.75
			6.75

01/01 PAGE WPSC SHEBOYGAN OP 9204513777 12/18/2003 12:33

# FIELD NOTE SUMMARY

**Project Number** 1313 Task 4.0  
**Project Name** WPSC Camp Marina, Sheboygan WI

**Date/Time Onsite/ Time Offsite:** December 22, 2003/11:30am/12:45pm

**Work Scope:** Containment System Condition Inspection

**NRT Representatives:** Spiros L. Fafalios

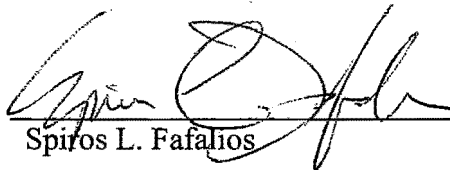
**Weather:** Sunny, lower to mid 40's (°F)

**Equipment:** Laser Level

**Field Comments:**

1. Surface covers for the monitoring wells, cleanouts and biosparge wells that were visible on the surface appeared to be intact. Monitoring wells MW-705, MW-709R, MW-701R,, and PZ-701 were inspected for integrity by opening well covers, inspecting the top of casing, and checking survey elevations. Two venting system cleanouts and one exterior (upgradient) drain cleanout were inspected for integrity and appeared to be in good condition. Biosparge building exterior is in good condition. Interior of the building was not observed, but is inspected frequently by Mr. Jeff Wunch, WPSC. Biosparge well cover BW-15 could not be located. BW-15 appeared to be located within the area of a landscape berm.
2. The cover above the geosynthetic cap has remained stable and has not shown any problems due to erosion or stability failure. Key location for inspection is cap area within Center Avenue Right of Way.
3. Overall, the site apperared in good condition. No surface erosion is evident. Grass or pavement covers the entire site. No settling of the cap or ponding of surface water was evident. Riprap appeared to be in good condition along the river.

SIGNATURE:

  
Spiros L. Fafalios

DATE:

December 29, 2003

AIR SAMPLING ANALYTICAL REPORT

APPENDIX E



**Corporate Office & Laboratory**  
1241 Bellevue Street, Suite 9 • Green Bay, WI 54302  
920-469-2436 • FAX: 920-469-8827 • 800-7-ENCHEM  
[www.enchem.com](http://www.enchem.com)

**- Analytical Report -**

**Project Name : WPSC CAMP MARINA**

**Project Number : 1313**

**Client: NATURAL RESOURCE TECH**

**WI DNR LAB ID : 405132750**

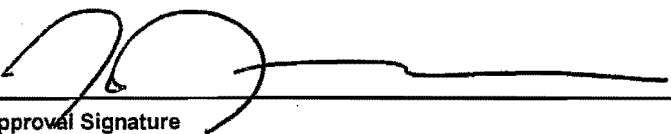
Sample No.	Field ID	Collection Date	Sample No.	Field ID	Collection Date
828289-001	SUMP AS-1	11/7/02			
828289-002	TRIP	11/7/02			


Please visit our Internet homepage at: [www.enchem.com](http://www.enchem.com)

The "Q" flag is present when a parameter has been detected below the LOQ. This indicates the results are qualified due to the uncertainty of the parameter concentration between the LOD and the LOQ.

Soil VOC detects are corrected for the total solids, unless otherwise noted.

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample comments. Release of this final report is authorized by Laboratory management, as is verified by the following signature. Reported results shall not be reproduced, except in full, without the written approval of the lab. The sample results relate only to the analytes of interest tested.

  
Approval Signature

  
Date

# En Chem, Inc. Cooler Receipt Log

Batch No. 828289

Project Name or ID 1313

No. of Coolers: 1 Temps: BOE

A. Receipt Phase: Date cooler was opened: 11/8/02 By: KAP

- 1: Were samples received on ice? (Must be  $\leq 6$  C)..... YES    NO<sup>2</sup>
- 2: Was there a Temperature Blank?.....YES     NO
- 3: Were custody seals present and intact? (Record on COC).....YES     NO
- 4: Are COC documents present?..... YES    NO<sup>2</sup>
- 5: Does this Project require quick turn around analysis?.....YES     NO
- 6: Is there any sub-work?.....YES     NO
- 7: Are there any short hold time tests?.....YES     NO
- 8: Are any samples nearing expiration of hold-time? (Within 2 days).....YES<sup>1</sup>     NO    Contacted by/Who \_\_\_\_\_
- 9: Do any samples need to be Filtered or Preserved in the lab?.....YES<sup>1</sup>     NO    Contacted by/Who \_\_\_\_\_

B. Check-in Phase: Date samples were Checked-in: 11/8/02 By: KAP

- 1: Were all sample containers listed on the COC received and intact?..... YES    NO<sup>2</sup>    NA
- 2: Sign the COC as received by En Chem. Completed..... YES    NO
- 3: Do sample labels match the COC? ..... YES    NO<sup>2</sup>
- 4: Check sample pH of preserved samples. (Not VOCs) Completed.....YES    NO     NA
- 5: Do samples have correct chemical preservation?..... YES    NO<sup>2</sup>    NA
- 6: Are dissolved parameters field filtered?.....YES    NO<sup>2</sup>     NA
- 7: Are sample volumes adequate for tests requested? ..... YES    NO<sup>2</sup>
- 8: Are VOC samples free of bubbles >6mm .....YES    NO<sup>2</sup>     NA
- 9: Enter samples into logbook. Completed..... YES    NO
- 10: Place laboratory sample number on all containers and COC. Completed..... YES    NO
- 11: Complete Laboratory Tracking Sheet (LTS). Completed.....YES    NO     NA
- 12: Start Nonconformance form. ....YES    NO     NA
- 13: Initiate Subcontracting procedure. Completed.....YES    NO     NA
- 14: Check laboratory sample number on all containers and COC. .... YES    NO    NA

**Short Hold-time tests:**

48 Hours or less Coliform (6 hrs) Hexavalent Chromium (24 Hrs) BOD Nitrite or Nitrate Low Level Mercury Ortho Phosphorus Turbidity Surfactants Sulfite En Core Preservation Color	7 days Flashpoint TSS Total Solids TDS Sulfide Free Liquids Total Volatile Solids Aqueous Extractable Organics- ALL Unpreserved VOC's Ash	Footnotes 1 Notify proper lab group immediately. 2 Complete nonconformance memo.
--	---	--

Rev. 9/5/2001, Attachment to 1-REC-5.  
 Subject to QA Audit.

Reviewed by/date LB 11/12/02

**- Analytical Report -**

Project Name : WPSC CAMP MARINA  
 Project Number : 1313  
 Field ID : SUMP AS-1  
 Lab Sample Number : 828289-001  
 WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH  
 Report Date : 11/13/02  
 Collection Date : 11/7/02  
 Matrix Type : AIR

**Organic Results**

BTEX - IMPINGER

Prep Method: SW846 5030B

Prep Date: 11/12/02

Analyst: JJB

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Toluene-d8	94				%Recov		11/12/02	SW846 8260B
Dibromofluoromethane	91				%Recov		11/12/02	SW846 8260B
4-Bromofluorobenzene	102				%Recov		11/12/02	SW846 8260B
Benzene	< 0.38	0.38	1.2		ug		11/12/02	SW846 8260B
Ethylbenzene	< 0.38	0.38	1.2		ug		11/12/02	SW846 8260B
Toluene	< 0.38	0.38	1.2		ug		11/12/02	SW846 8260B
Xylenes, -m, -p	< 0.38	0.38	1.2		ug		11/12/02	SW846 8260B
Xylene, -o	< 0.38	0.38	1.2		ug		11/12/02	SW846 8260B



- Analytical Report -

Project Name : WPSC CAMP MARINA  
 Project Number : 1313  
 Field ID : TRIP  
 Lab Sample Number : 828289-002  
 WI DNR LAB ID : 405132750

Client : NATURAL RESOURCE TECH  
 Report Date : 11/13/02  
 Collection Date : 11/7/02  
 Matrix Type : METHANOL

Organic Results

BTEX - METHANOL

Prep Method: SW846 5030B    Prep Date: 11/12/02    Analyst: JJB

Analyte	Result	LOD	LOQ	EQL	Units	Code	Analysis Date	Analysis Method
Toluene-d8	96				%Recov		11/12/02	SW846 8260B
Dibromofluoromethane	93				%Recov		11/12/02	SW846 8260B
4-Bromofluorobenzene	100				%Recov		11/12/02	SW846 8260B
Benzene	< 25	25	60		ug/L		11/12/02	SW846 8260B
Ethylbenzene	< 25	25	60		ug/L		11/12/02	SW846 8260B
Toluene	< 25	25	60		ug/L		11/12/02	SW846 8260B
Xylenes, -m, -p	< 25	25	60		ug/L		11/12/02	SW846 8260B
Xylene, -o	< 25	25	60		ug/L		11/12/02	SW846 8260B

(Please Print Legibly)  
 Company Name: Natural Resource Tech.  
 Branch or Location: Rewaunkee, WI  
 Project Contact: Chris Robb  
 Telephone: 262-522-1216  
 Project Number: 1313  
 Project Name: Camp Marina  
 Project State: Wisconsin  
 Sampled By (Print): CHRIS A. Robb



1241 Bellevue St., Suite 9  
 Green Bay, WI 54302  
 920-469-2436  
 FAX 920-469-8827

525 Science Drive  
 Madison, WI 53711  
 608-232-3300  
 FAX: 608-233-0502

### CHAIN OF CUSTODY

89007

Page 1 of 1

\*Preservation Codes  
 A=None B=HCL C=H2SO4 D=HNO3 E=EnCore F=Methanol G=NaOH  
 H = Sodium Bisulfate Solution I = Sodium Thiosulfate J = Other  
 FILTERED? (YES/NO)  
 PRESERVATION (CODE)\*

Lab # WPSL Quote # 2002  
 Mail Report To: CAR  
 Company: Natural Resource Tech

Address: 23713 W. Paul Rd  
Rewaunkee WI 53072

Invoice To: CAR  
 Company: NET

Address: 23713 W. Paul Rd  
Rewaunkee WI 53072

Mail Invoice To:

ANALYSES REQUESTED  
BTEX (8260)

TOTAL # OF BOTTLES SENT

Data Package Options - (please circle if requested)  
 Sample Results Only (no QC)  
 EPA Level II (Subject to Surcharge)  
 EPA Level III (Subject to Surcharge)  
 EPA Level IV (Subject to Surcharge)

Regulatory Program  
 UST  
 RCRA  
 SDWA  
 NPDES  
 CERCLA

Matrix Codes  
 W=Water  
 S=Soil  
 A=Air  
 C=Charcoal  
 B=Biota  
 Sl=Sludge

LABORATORY ID (Lab Use Only)	FIELD ID	COLLECTION		MATRIX	ANALYSES REQUESTED	TOTAL # OF BOTTLES SENT	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)
		DATE	TIME					
001	Sump AS-1	11/7/02		A	X			40ml F
002	TRIP	-	-	-				Enchem NeoH blank 11/8/02

Rush Turnaround Time Requested (TAT) - Prelim  
 (Rush TAT subject to approval/surcharge)  
 Date Needed: \_\_\_\_\_  
 Transmit Prelim Rush Results by (circle):  
 Phone  Fax  E-Mail  
 Phone #: \_\_\_\_\_  
 Fax #: \_\_\_\_\_  
 E-Mail Address: \_\_\_\_\_

Relinquished By: Bill Hottel Date/Time: 11/8/02 8:00  
 Relinquished By: Bill Hottel Date/Time: 11/8/02 12:10  
 Relinquished By: Clay Pozzello Date/Time: 11/8/02 16:00  
 Relinquished By: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Received By: Bill Hottel Date/Time: 11/8/02 11:30  
 Received By: Clay Pozzello Date/Time: 11/8/02 12:10  
 Received By: Karl Hankowski Date/Time: 11/8/02 16:00  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_

En Chem Project No: 828289  
 Sample Receipt Temp: ROI  
 Sample Receipt pH (Metals): N/A  
 Cooler Custody Seal: Present / Not Present  
 Present / Not Present: Present  
 Intact / Not Intact: \_\_\_\_\_

Samples on HOLD are subject to special pricing and release of liability